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Abstract
Firm ownership plays a vital role in emerging economies and has become important to influence decision making process. The primary aim of this paper is to investigate the impact of foreign and domestic ownerships on capital structure decision among quoted manufacturing firms in Sri Lanka during 2009 to 2011. The study adopts correlation and regression models to measure the relationship between ownership and capital structure and to test the operational hypotheses. The results revealed that foreign ownership has a strong positive association with leverage ($r = .569$), whereas leverage is negatively correlated with domestic ownership ($r = - .544$). According to regression model, ownership structure has an impact on leverage at the rate of 36% ($R^2=0.36$), which is insignificant at 0.05 levels. This study would hopefully benefit to the academicians, researchers, policy makers, and practitioners of Sri Lanka as well as other countries.

Keywords: Foreign Ownership, Domestic ownership, Capital Structure, Colombo Stock Exchange.

1. Introduction
Firm ownership is an increasingly influential form of corporate governance, although firms might be owned by different types of owners. In the corporate finance literature, the connection between ownership structure and capital structure has been the most debatable and ongoing issue. The relations between ownership structure and capital structure remain largely unexplored (Jensen and Meckling, 1976; Shleifer and Vishny, 1986; Morck, Shleifer and Vishny, 1988; Demsetz and Lehn, 1985; McConnell and Servaes, 1995; Claessens et al. 2002). Hence, it is important to understand the impact of ownership structure on capital structure, particularly in the context of foreign and domestic ownerships among manufacturing companies listed on Colombo Stock Exchange (CSE) in Sri Lanka.

Encyclopedia of Corporate Governance defines the ownership structure as the distribution of equity with regard to votes and capital but also by the identity of the equity owners. These structures are of major importance in corporate governance. Because they determine the incentives of managers and thereby the economic efficiency of the corporations they manage. There are several ways how ownership of the firm may affect the capital structure. Reduction in scope of managerial opportunism (Shleifer and Vishny, 1986), corporate debt policy as an internal control mechanism (Jensen, 1986), managerial incentives reduction due to managerial share - ownership (Jensen and Meckling, 1976), adverse effect on agency conflicts (Fama and Jensen, 1983; Demsetz, 1983) and managerial self-interests in continued viability of the firm are some of them. Further, the previous literatures have given mixed results in terms of relationship between ownership and capital structure. In Sri Lankan perspectives, no significant study has probed on the ownership structure and its impact on capital structure of manufacturing companies listed on the CSE. Therefore, this paper attempts to examine how ownership structure (foreign and domestic share holdings) affects capital structure using the panel data for the period of 2009 to 2011. Researcher utilized large-scale firm level data of quoted companies to monitor the roles of foreign and domestic share holders.

2. Research Problem
To what extent does ownership structure such as foreign and domestic affect capital structure of selected manufacturing companies quoted on Colombo Stock Exchange?

3. Objective of Study
The main objective of the study is to find out the impact of ownership (foreign and domestic) on capital structure of selected manufacturing companies listed on CSE and sub objectives are:
- to identify the relationship among foreign ownership, domestic ownership and capital structure
- to find out how share holdings of foreign and domestic holders are distributed among different portfolio sizes
- to identify the impact of foreign and domestic ownerships on capital structure.
4. Review of Literature and Development of Hypothesis

In today’s modern corporations, various forms of ownership exist. In Sri Lankan framework, quoted companies on the Colombo Stock Exchange have different types of shareholdings like individual share holdings (employees and managers), institutional share holdings (private and government), residents, and non-residents. Financial structure or capital structure of a firm can be a mix of debt, preferred stock, and equity capital which maximize the value of the firm. The capital structure is very essential for a firm. Because, the ability of the firm to meet the needs of its stakeholders is given by the capital structure. Modigliani and Miller (1958) were the first ones to landmark the topic of capital structure. This theory put forward by Modigliani and Miller (MM) explains the impact of taxation, bankruptcy costs, and agency costs on the determination of an optimal capital structure. They showed (1963) that their model is no more effective if tax was taken into consideration. Four theoretical approaches can be distinguished namely the irrelevance theory such as Modigliani and Miller (1958), the trade-off theory (Bradley et al., 1984), agency cost theory (Jensen and Meckling, 1976) and pecking order theory (Myers and Majluf, 1984). The three conflicting theories of capital structure such as trade-off theory, agency cost theory and pecking order theories have been developed after the establishment of Modigliani and Miller’s theory. The logic of the Modigliani and Miller (1958) analysis is still accepted, despite the contradiction of their theoretical conclusions with empirical evidence. Ownership structure is influential to corporate governance. Numbers of researches are available on corporate governance and capital structure (Velnampy, 2013, Velnampy and Pratheepkanth, 2013, and Velnampy and Aloy Niresh, 2012).

Most of the empirical research on the relationship between ownership and capital structures has been conducted using data from industrialized economies (Kester, 1986; Kang and Stulz, 1997; King and Santor, 2008). Theories of ownership and capital structure emphasize the role of debt in reducing agency problems between managers and shareholders. Jensen and Meckling (1976), Fama (1980), and Grossman and Hart (1982) argue that managers prefer lower financial leverage because it reduces the risk of bankruptcy and protects their under diversified human capital. By contrast, Stulz (1988) argues that firms with a controlling shareholder should exhibit higher financial leverage, as it increases their voting control for a given level of equity investment, reduces the risk of a hostile takeover, and increases the takeover premium embedded in the stock price. The majority of studies following Holderness and Sheehan (1988) find a negative relationship between managerial ownership and financial leverage, particularly for entrenched managers who are more likely to use equity and avoid high levels of leverage. Several studies by Kim and Sorenson (1986), among others, document the opposite result, with financial leverage increasing with either insider ownership or an index of manager entrenchment. According to Chaganti and Damanpour (1991), size of outside institutional stockholdings has a significant effect on the firm's capital structure and family and inside institutional owners' shareholdings moderate the relationship between outside institutional shareholdings and capital structure. Using an agency framework, Brailsford et al. (2002) argued that the distribution of equity ownership among corporate managers and external block holders may have a significant relation with leverage. They suggested that the relation between external block ownership and leverage varies across the level of managerial share ownership. Previous literatures have given mixed results in terms of relationship between ownership and capital structure. In relation to this, Gurunlu and Gursoy (2010) conducted a research on the influence of foreign ownership on capital structure of non-financial firms by using pooled data set of 143 firms listed in the Istanbul Stock Exchange (ISE) over the period from 2007 to 2008 and found that foreign ownership is significantly negatively related to long-term leverage. Gurunlu and Gursoy (2010) find that foreign ownership is significantly negatively related to long-term debt. Further, Aroob (2011) examines that the effects of foreign ownership on capital structure in the emerging economies context and finds that foreign ownership is significantly negatively related to total leverage based on book value of assets and short-term leverage based on each of book value of assets and market value of equity, demonstrating that firms with foreign shareholdings are becoming less reliant on external cash financing. Moreover, Kocenda and Svejnar, (2002) report a negative relationship between ownership by foreign investors and leverage measures. In contrast, there is a perspective that foreign shareholding can impose a positive influence on debt borrowing (Hussain and Nivorozhkin, 1997). Firms with foreign ownership perform better than firms with domestic ownership. In this context, Hussain and Nivorozhkin (1997) affirm that foreign-owned firms on average exhibit a significant higher debt ratio than their domestically owned counterparts in the host country. The study of Li et al. (2009) find that foreign ownership is negatively associated with all investigated leverage measures (book leverage, long-term debt and short-term debt) due that foreign-owned firms are subject to lower corporate tax rates than their domestically-owned counterparts. Further, the findings show that state ownership is positively associated with leverage and firm’s access to long-term debt. While it is acceptable that ownership influences capital structure decisions, the degree and direction of such relationship remain contestable (Ezeoha and Okafor, 2010). To support this, Huang and Song (2002) empirically established that ownership structure does not have any significant impact on firm’s capital structure. Pandey (2004) using data from Malaysia, finds out that there is a significant negative relationship between the total debt ratio and
Ownership structure is positive at 0.0867.

Following hypotheses were formulated in this study.

\( H_1 \): Foreign ownership positively associates with capital structure.

\( H_2 \): Domestic ownership positively associates with capital structure.

\( H_3 \): Foreign and domestic ownerships have an impact on capital structure.

5. **Conceptual Model**

The following conceptual model was formulated to depict the relationship between dependant and independent variables.

![Conceptual Model Diagram]

Where:

- OWN: Ownership
- LOIND: Local Individual Share Holdings
- LOINT: Local Institutional Share Holdings
- FOIND: Foreign Individual Share Holdings
- FOINT: Foreign Institutional Share Holdings
- FOWN: Foreign Ownership
- DOWN: Domestic Ownership
- CS: Capital Structure

6. **Methodology**

6.1. Variables in the Study

The most important variable used in this study is the ownership variable, which is the independent factor. This employs two explanatory variables such as foreign ownership (FOWN), and domestic ownership (DOWN). In the capital structure, leverage ratio is viewed as the key variable which determines the capital structure. The entire variable for this study is based on book value in line with the argument by Myers (1984) that book values are proxies for the value of assets in place.

According to research objective and research questions, this study has set the variables and their measurement is largely adopted from existing literatures. The following table shows the variables and their measures.

**Table 1: Design of Variables**

<table>
<thead>
<tr>
<th>No</th>
<th>Concept</th>
<th>Variable(s)</th>
<th>Indicator(s)</th>
<th>Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ownership Structure</td>
<td>Foreign ownership</td>
<td>Percentage of share holdings owned by non-resident</td>
<td>FOWN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domestic ownership</td>
<td>Percentage of share holdings owned by resident</td>
<td>DOWN</td>
</tr>
<tr>
<td>2</td>
<td>Capital Structure</td>
<td>Leverage Ratio</td>
<td>Debt/Total Assets</td>
<td>LR</td>
</tr>
</tbody>
</table>

6.2. Sampling Technique

There are around 287 companies representing 20 business sectors quoted on Colombo Stock Exchange as of 8th July 2013. The sample of the firms is drawn from the population of Sri Lankan quoted manufacturing companies on Colombo Stock Exchange during the period 2009 to 2011. Around 30% of the companies are qualified for this study and stratified random sampling technique was adopted. Following table shows the sample size determined for the purpose of data collection.
Table 2: Determination of Sample Size

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total Companies</th>
<th>Sampling with scale of 30 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>36</td>
<td>11</td>
</tr>
</tbody>
</table>

6.3. Data Sources and Mode of Analysis

The proposed period was from 2009 to 2011. Following Titman and Wessels (1988), this study used three year averages. Some necessary data were hunted from online (official website of CSE). Further, annual reports of the companies, books, journals, magazines, and research reports were also used for data collection. In this study, various statistical methods have been employed to analyze data collected from 11 companies listed on CSE. This includes both descriptive and inferential statistics. A well know statistical package called “SPSS” (Statistical Package for Social Science) version 16 has been used to analyze the data researcher collected. The upper level of statistical significance for hypotheses testing was set at 5%. All statistical test results were computed at the 2-tailed level of significance.

6.4. Model Specification

In this study, capital structure is a function of foreign and domestic ownership \[ f \text{ (foreign ownership, domestic ownership)} \]. The general form of the panel data model can be specified more compactly as follows:

\[ Y_{it} = \alpha + \beta X_{it} + \varepsilon_{it} \]

Researchers use multiple regression model to test the impact of independent variables on dependent variables and the model for this study takes the following form.

\[ LR_{it} = \beta_0 + \beta_1 FOWN_{it} + \beta_2 DOWN_{it} + \varepsilon \]

Where:
- \( LR_{it} \) - ratio of debt to total assets for firm \( i \) in period \( t \)
- \( \beta_0, \beta_1, \beta_2 \) - Model coefficients
- \( \varepsilon \) - Error term.
- \( FOWN_{it} \) - percentage of share holdings owned by non-resident for firm \( i \) in period \( t \)
- \( DOWN_{it} \) - percentage of share holdings owned by resident for firm \( i \) in period \( t \)

7. Empirical Results

7.1. Descriptive Statistics

Descriptive statistics provide information on the key variables used in this study. Table 3 provides the results of share holdings distributed among different portfolio sizes such as 1 to 1000 shares, 1001 to 10000 shares, 10001 to 100000 shares, 100001 to 1000000 shares and over 1000000 shares.

Table 3: Distribution of Share Holdings & Share Holders

<table>
<thead>
<tr>
<th>No</th>
<th>Portfolio Size</th>
<th>Mean Value of Share Holdings</th>
<th>Mean Number of Share Holders</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 - 1000 shares</td>
<td>.038488</td>
<td>3677</td>
</tr>
<tr>
<td>2</td>
<td>1001 - 10000 shares</td>
<td>.054489</td>
<td>1394</td>
</tr>
<tr>
<td>3</td>
<td>10001 - 100000 shares</td>
<td>.067510</td>
<td>302</td>
</tr>
<tr>
<td>4</td>
<td>100001 - 1000000 shares</td>
<td>.133116</td>
<td>45</td>
</tr>
<tr>
<td>5</td>
<td>Over 1000000 shares</td>
<td>.705045</td>
<td>8</td>
</tr>
</tbody>
</table>

According to the table, on average, port folio size 1 to 1000 shares consists of 3.8 % of share holdings with mean number of 3677 holders. The largest port folio category shows that eight share holders own over 1,000,000 shares. It can be clearly observed from the table that a few number of share holders have a larger share holdings (70% share holdings on manufacturing companies), whereas majority of share holders own a very small proportion from the share holdings (3.8% & and 5.4%).

Table 4 describes statistics of foreign ownership, domestic ownership, and capital structure for the sample of eleven manufacturing companies.

Table 4: Statistics of Dependent and Independent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Ownership</td>
<td>.0015</td>
<td>.6838</td>
<td>.252296</td>
<td>.2640745</td>
</tr>
<tr>
<td>Domestic Ownership</td>
<td>.3162</td>
<td>.9985</td>
<td>.687098</td>
<td>.2775806</td>
</tr>
<tr>
<td>Leverage Ratio</td>
<td>.0694</td>
<td>.7733</td>
<td>.399981</td>
<td>.2060844</td>
</tr>
</tbody>
</table>

According to the table, the mean values of foreign and domestic ownerships are 0.2522 and 0.6870. These averages explain that 25 % and 68 % of share holdings are owned by non-resident and resident of Sri Lanka respectively. From this, it is understood that majority of investment made on manufacturing companies are from
individuals and institutions based in Sri Lanka. The mean leverage ratio is 0.3999 with standard deviation of 0.2060. This means that capital of manufacturing companies in Sri Lanka consisted on average of debt on 39.99%. In other words, more than 39 per cent of manufacturing companies in Sri Lanka are financed by debt.

7.2. Correlation Analysis

Correlation analysis was computed to find out the degree of relationship between two independent and dependent variables. The results are given in table 5.

<table>
<thead>
<tr>
<th>Variables (correlation)</th>
<th>Foreign Ownership</th>
<th>Domestic Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage Ratio</td>
<td>.569</td>
<td>-.544</td>
</tr>
<tr>
<td>Leverage Ratio (sig. 2-tailed)</td>
<td>.068</td>
<td>.084</td>
</tr>
</tbody>
</table>

The results indicate a strong positive relationship between foreign ownership and leverage (r = .569). This supports to the hypothesis (H1) that foreign ownership positively associates with capital structure. However, estimated coefficient of foreign ownership is statistically insignificant (P > 0.05). In contrast, leverage is negatively correlated with domestic ownership (r = -.544). But, the relationship is not statistically significant (P > .084), rejecting the hypothesis (H2) that domestic ownership positively associates with capital structure.

7.3. Multiple Regression Analysis

The multiple regression analysis was carried out in order to investigate the simultaneous impacts of all the independent variables on the dependent variable. The results of foreign and domestic ownerships against capital structure are given below.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.600*</td>
<td>.360</td>
<td>.200</td>
<td>.1843287</td>
<td>2.250</td>
<td>.168*</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), DOWN, FOWN  
b. Dependent Variable: LR

Table 6 clearly exhibits that f-value and R square to understand overall significance of the regression model. R square value of .360, which is in the model, denotes that 36% of observed variability in leverage can be explained by the differences in the independent variables such as foreign and domestic ownerships. This supports to the hypothesis (H3) that foreign and domestic ownerships have an impact on capital structure. However, the model is statistically insignificant (P > 0.05). The unexplained proportion of the variation is around 64 %.

The beta coefficients, standard error, and t statistics of foreign and domestic ownerships are shown in table 7.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.468</td>
<td>.280</td>
<td>-</td>
<td>1.672</td>
</tr>
<tr>
<td>FOWN</td>
<td>.288</td>
<td>.321</td>
<td>.369</td>
<td>.898</td>
</tr>
<tr>
<td>DOWN</td>
<td>-.205</td>
<td>.305</td>
<td>-.276</td>
<td>-.670</td>
</tr>
</tbody>
</table>

a. Dependent Variable: LR

From the above table, t values of the independent variables are insignificant. From the regression coefficients of the independent variables, an ordinary least squares (OLS) equation can be constructed as

\[ \text{Leverage} = 0.468 + (0.288) (\text{FOWN}) + (-0.205) (\text{DOWN}) \]

This equation explains the relationship between leverage and independent variables. If FOWN and DOWN are equal to zero, leverage is equal to 0.468. If the independent variables are increased by 1, leverage will be increased by 0.083, which is around 0.551. Hence, it can be explained that foreign ownership influence more on the leverage of manufacturing companies listed on the CSE.

Three hypotheses have been formulated in this study and table given below provides the summary of acceptance or rejection of them.
Table 8: Testing of Hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Tools used to test</th>
<th>Results</th>
<th>Statistical Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁</td>
<td>Correlation</td>
<td>Accepted</td>
<td>Not significant (p &gt; 0.05)</td>
</tr>
<tr>
<td></td>
<td>(r = .569)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H₂</td>
<td>Correlation</td>
<td>Rejected</td>
<td>Not significant (p &gt; 0.05)</td>
</tr>
<tr>
<td></td>
<td>(r = -.544)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H₃</td>
<td>Regression</td>
<td>Accepted</td>
<td>Not significant (p &gt; 0.05)</td>
</tr>
<tr>
<td></td>
<td>(R² = .360)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Conclusion
The research specifically analyzes how ownership has affected on capital structure of selected manufacturing companies listed on Colombo Stock Exchange during the period 2009 -2011. The study employed mean analysis, correlation analysis and multiple regression models to find the conclusion. Based on the panel data methodology, empirical results show that a few number of shareholders have a larger share holdings (70% share holdings on manufacturing companies), whereas majority of shareholders own a very small proportion from the share holdings (3.8% & and 5.4%). Further, majority of investment made on manufacturing companies are from individuals and institutions based in Sri Lanka.
Correlation analysis indicates a strong positive relationship (r = .569) between foreign ownership and leverage. But, this association is insignificant. This finding is consistent with Hussain and Nivorozhkin (1997), indicating foreign shareholding can impose a positive influence on debt borrowing. On the other hand, findings of Aroob (2011), Kocenda and Svejnar, (2002) and Li et al. (2009) are not in line with the finding of the researcher. Moreover, A negative relationship exists between domestic ownership and leverage ratio (r = -.544). However, relationship between them is not statistically significant (P > .084).
Although ownership structure such as foreign and domestic has an impact on leverage decisions at the rate of 36 %, the model is insignificant (P > 0.05). This finding is corroborated with the empirical conclusion established by Huang and Song (2002), explaining that ownership structure does not have any significant impact on firm’s capital structure. By using ordinary least squares (OLS) equation, it was found that leverage ratio increases when foreign ownership is added into the equation assuming domestic ownership is zero. In contrast, leverage ratio decreases as domestic ownership increases with an assumption of zero foreign ownership. Overall, foreign ownership influence more on the leverage decision of the manufacturing companies listed on the CSE. While the study is limited to the sample of manufacturing companies quoted on the CSE, the findings from this research could be generalized to the companies similar to this category.

9. References
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