

**Unobservable Effect, Time Effect and Determinants of  
Capital Structure: Evidence from Quoted Public  
Manufacturing Companies in Sri Lanka**

**By**

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**By**

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## Declaration

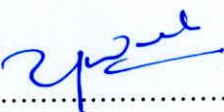
The work described in this thesis/research/project was carried out by me under the supervision of Prof. Y.K. Weerakoon Banda and a report on this has not been submitted in whole or in part to any university or any other institution for another Degree/ Diploma.



N.L. Erandi Abeywardana

## Supervisor Approval

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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## **List of Abbreviations**

ANCOVA = Analysis of Covariance Analysis

BTD = Book Leverage

BV = Book Value

CSE = Colombo Stock Exchange

DV = Dependent Variable

EARVOL = Earnings Volatility

EBIT = Earnings before Interest and Tax

FE = Fixed Effect

GROWTH = Firm Growth

LIQ = Liquidity

MTD = Market Leverage

NDTS = Non Debt Tax Shield

OLS = Ordinary Least Square

PROF = Profitability

SIZE = Firm Size

STRETURN = Stock Return

TA = Total Assets

TANG = Tangibility

TD = Total Debts

TGFA = Total Gross Fixed Assets

VIF = Variance Inflation Factor

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## **Unobservable Effect, Time Effect and Determinants of Capital Structure:**

### **Evidence from Quoted Public Manufacturing Companies in Sri Lanka**

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#### **ABSTRACT**

The determinants of capital structure has been a widely discussed notion in finance studies and it leads to investigate the factors affecting the firm's capital structure. However, the recent empirical studies question the validity of such studies due to the absence of unobservable effect in models and the explanatory power of the determinants of capital structure. Importantly, these contradictories are subject to the argument of unobservable effect affecting to the capital structure explains a high proportion of the variation of leverage than the observable determinants of capital structure. Hence, the study tested the impact from unobservable effect on capital structure of Sri Lankan firms. To answer this research problem, three objectives were formulated. They are to: explore the importance of unobservable effect in the capital structure, to identify the determinants of capital structure in manufacturing firms of Sri Lanka and to measure the variance decomposition of capital structure pattern attributable to unobservable effect, time effect and determinants. In order to achieve these objectives the study analyzed the selected variables of quoted public manufacturing companies within the time period of 2003 to 2012. The study used panel data analysis which has an advantage of accounting unobservable effect into the model. The study revealed that there is an unobservable effect affecting the capital structure in Sri Lankan firms and after accounting unobservable effect into the model the study found profitability, size and liquidity as determinants of book leverage and growth, profitability, size, earnings

volatility and stock return as determinants of market leverage. Further, after employing Analysis of Covariance (ANCOVA), the study found a robust result that the unobservable effect explains most of the cross sectional variation in leverage, and the power of usual determinants to explain such variation is fairly limited.

*Keywords:* Analysis of Covariance, Determinants of Capital Structure, Leverage, Manufacturing firms, Sri Lanka, Unobservable Effect,