ADJUSTMENT SPEED TOWARDS TARGET CAPITAL STRUCTURE AND ITS DETERMINANTS IN PAKISTAN

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ITS DETERMINANTS IN PAKISTAN

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This study investigates the dynamism of the capital structure of the non-financial listed firms in Pakistan for the period from 2003 to 2012. Specifically, the main objectives of the study are to estimate the adjustment speed towards target capital structure, determining the factors affecting the adjustment speed towards target capital structure, and identifying the factors affecting the target capital structure. Firm specific and country specific factors are used to investigate the determinants of adjustment speed and target capital structure. Difference Generalized Method of Moments (GMM) is used as the estimation technique to avoid the endogeneity and serial correlation problems. The study confirms the existence of optimal capital structure for Pakistani non-financial listed firms, and concludes that firms make full adjustment towards optimal capital structure in 1.46 years to 2.03 years, depending upon the proxy of target debt used. Similarly, factors affecting adjustment speed towards target are also found to be dependent upon the proxy of debt used. Firms’ profitability, stock market development, and distance are found to be relatively consistent determinants of the adjustment speed. Firm and country specific factors affecting target capital structure are also found to vary across the proxies of debt used. However, tangibility, earning volatility, cash, and industry median leverage appear consistently and significantly affecting the target leverage. Interest rate, the only country specific factor, is found to affect target debt when total liabilities to total assets and total debt to total assets are used as measure of the debt. This study contributes in the existing literature of the capital structure by providing evidence regarding the existence of target capital structure in Pakistan. In addition, this is the first attempt that estimates the adjustment speed towards target capital structure, and identifies factors affecting adjustment speed towards target capital structure for Pakistan using four different proxies of leverage.

**Keywords:** dynamic capital structure, speed of adjustment, generalized method of moments

*Kata kunci: struktur modal dinamik, penyesuaian halaju, generalized method of moments.*
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May Allah SWT shower His countless blessings and keep all of us on right path.
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LIST OF ABBREVIATIONS

ASEAN  Association of South East Asian Nations
CBA    Collective Bargaining Agency
CEE    Central and Eastern European
CEO    Chief Executive Officer
CPI    Corruption Perception Index
CV     Coefficient of Variation
EBIT   Earnings Before Interest and Taxes
EBITDA Earnings Before Interest Taxes Depreciation and Amortization
FMOLS  Fully Modified Ordinary Least Square
GDP    Gross Domestic Product
GMM    Generalized Method of Moments
HLM    Hierarchical Linear Modeling
IFS    International Financial Statistics
ISE    Islamabad Stock Exchange
KSE    Karachi Stock Exchange
LSE    Lahore Stock Exchange
LTD    Long Term Debt
MM     Modigliani-Miller
MTB    Market-to-Book
NDTS   Non Debt Tax Shield
NPV    Net Present Value
OD     Observed Debt
OLS    Ordinary Least Square
R&D    Research and Development
ROA    Return on Assets
ROE    Return on Equity
SBP    State Bank of Pakistan
SEM    Structural Equation Modeling
SMEs   Small and Medium Enterprises
STD    Short Term Debt
TA     Total Assets
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CHAPTER ONE

INTRODUCTION

1.1 Background and Motivation of the Study

The debate on the issue of optimal capital structure began after the founding research study by Modigliani and Miller (1958). In this paper they conclude that under the restrictive set of assumptions the capital structure is irrelevant. That means financing with debt or equity doesn’t affect the firm’s value (Modigliani & Miller, 1958). After 5 years of this irrelevance theory, Modigliani and Miller (1963) considered the corporate taxes and favored the use of 100 percent debt in capital structure due to tax deductibility of interest expense. Kraus and Litzenberger (1973) further advanced the Modigliani and Miller’s work and considered both the benefits of using debt and the bankruptcy costs that could incur due to use of the excessive debt, and suggested an optimal capital structure.

Since then numerous research studies, mainly focusing on developed countries, have been conducted investigating the factors determining the optimal capital structure, and many theories have emerged from these studies. Worth mentioning theories are: Trade-off theory, Dynamic trade-off theory, Agency theory, Market Timing theory, and Pecking order theory. The applicability of the theories of capital structure, formulated on the basis of empirical evidences from developed countries, need to be investigated and understood.

1 The term optimal capital structure is also referred as the target capital structure, optimal leverage, target leverage, target debt, and optimal debt. These terms have been used interchangeably in this document.
The contents of the thesis is for internal user only
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