THE IMPACT OF CAPITAL STRUCTURE TOWARD FIRM PERFORMANCE: THE MODERATING ROLE OF AGENCY COST IN THE TECHNOLOGY SECTOR

THESIS

To fulfill some of the requirements to obtain a Bachelor's degree
Study Program of Management

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FOREWORD

Praise be to the presence of God Almighty, for His blessings and mercy, the author was able to complete the thesis titled "The Relationship between Capital Structure and Firm Performance: The Moderating Role of Agency Cost in the Technology Sector". This thesis was prepared as one of the requirements for completing studies in the Undergraduate Program (S1) in Management, Faculty of Economics and Business, Gadjah Mada University.

The author realizes that the process of preparing this thesis is not free from various challenges. Fortunately, with support and guidance from various parties, these challenges were able to be overcame. Thus, the author would like to express his deepest thanks to:

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The author hopes that this thesis can make a positive contribution to the development of science, especially in the field of financial management, and can be useful for parties in need. The author is also open to constructive criticism and suggestions for future improvements.

Yogyakarta, 23 Desember 2024

Natanael Kevin Adiyatma Wibawa

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ABSTRACT

This study examines the impact of capital structure on firm performance in Indonesia's technology sector, focusing on the moderating role of agency cost. Using panel data from 28 listed technology companies (2018–2023), the analysis explores how Debt-to-Assets Ratio (DTA) and Debt-to-Market Capitalization Ratio (DTMC) affect Return on Assets (ROA), Tobin's Q, and Earnings Per Share (EPS). Results show that DTA negatively impacts ROA, while DTMC positively affects it. However, DTMC negatively influences Tobin's Q and EPS. Agency cost, measured by Asset Utilization Ratio (AUR), significantly moderates the relationship between capital structure and ROA and Tobin's Q but not EPS. The findings emphasize the importance of balancing leverage and operational efficiency to optimize firm performance.

Keywords: Capital Structure, Agency Cost, Firm Performance, Technology Sector

Supervisor : I Wayan Nuka Lantara

ABSTRAK

Studi ini menguji dampak struktur modal terhadap kinerja perusahaan di sektor teknologi Indonesia, dengan fokus pada peran moderasi biaya keagenan. Dengan menggunakan data panel dari 28 perusahaan teknologi yang terdaftar (2018–2023), analisis ini mengeksplorasi bagaimana Debt-to-Assets Ratio (DTA) dan Debt-to-Market Capitalization Ratio (DTMC) mempengaruhi Return on Assets (ROA), Tobin's Q, dan Laba Per Saham (EPS). Hasil penelitian menunjukkan bahwa DTA berdampak negatif terhadap ROA, sedangkan DTMC berpengaruh positif. Namun, DTMC berpengaruh negatif terhadap Tobin's Q dan EPS. Biaya agensi, diukur dengan Asset Utilization Ratio (AUR), secara signifikan memoderasi hubungan antara struktur modal dan ROA dan Tobin's Q tetapi tidak dengan EPS. Temuan ini menekankan pentingnya menyeimbangkan leverage dan efisiensi operasional untuk mengoptimalkan kinerja perusahaan.

Kata kunci: Struktur Modal, Biaya Agensi, Kinerja Perusahaan, Sektor Teknologi

Supervisor : I Wayan Nuka Lantara

CHAPTER I
INTRODUCTION

I.1. Background

The choice of capital structure is one of the most critical decisions that a firm must make, as it directly impacts its performance, risk profile, and overall value. In modern financial theory, understanding the how to balance the mix of debt and equity is vital for firm survival and growth. However, the relation between capital structure and firm performance is influenced by several factors, one of which is agency cost, which have been found to significantly moderate and mediate the capital structure-firm performance nexus (Ronoowah & Seetanah, 2024; Sdiq & Abdullah, 2022). Agency cost exist from the conflicts of interest between managers (agents) and shareholders (principals), often resulting in inefficiencies that can undermine firm value. Interestingly, increasing debt levels can keep agency costs suppressed and enhance firm performance (Amanj Mohamed Ahmed et al., 2023). This makes it essential to study the role of agency costs as a moderating factor when analysing the impact of capital structure on firm performance.

The technology sector and its industry, characterized by rapid growth, high levels of innovation, and varied financing needs, offers a unique context for this study. A 2023 report from the Indonesia Stock Exchange (IDX) reveals that 47 technology companies are currently listed under the industry sector classification, collectively contributing to Indonesia's digital economy growth. As shown in Figure 1 here, technology companies represent approximately 5% of all listed firms on the IDX, highlighting their niche but rapidly growing contribution to the economy.

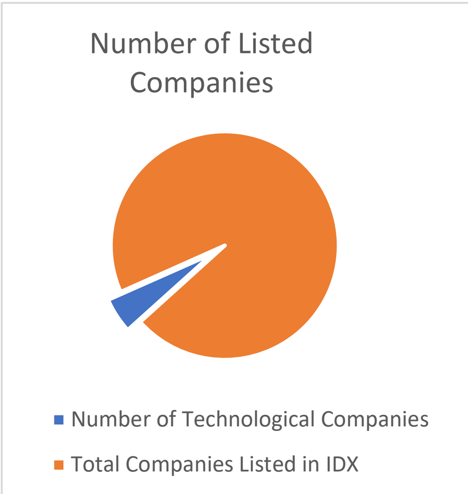

Figure 1 Proportion of Technology Companies on the IDX in 2024

Recent data highlights the rapid expansion of Indonesia's Information and Communication Technology (ICT) sector, underscoring its importance to the nation's economy. The Indonesian ICT market is projected to reach USD 45.20 billion in 2024 and is expected to grow at a compound annual growth rate (CAGR) of 8.20%, reaching USD 67.56 billion by 2029. This remarkable growth reflects the increasing reliance on digital technologies and innovation across industries, further amplifying the role of technology firms in driving economic development. Such expansion reinforces the necessity of examining how capital structure decisions impact firm performance, particularly in this fast-evolving sector.

Figure 2 ICT Market Size

Unlike firms in traditional industries, technology companies often require substantial capital for research and development (R&D), leading them to adopt diverse capital structures at different stages of their growth. In the early stages, Tech firms tend to use equity financing more as a source of fund due to higher information asymmetry and growth opportunities (Castro et al., 2015). As firms mature, they gradually substitute equity with debt (Schultz, 2011). This is further supported with previous research that state a nonlinear relationship exists between R&D intensity and debt usage where firms with low R&D, in this case companies in the mature stage (who tend to have lower needs to do more than the necessary R&D compared to startups), use more debt while debt decreases as R&D intensity increases (Aghion et al., 2004).

Moreover, the innovation-driven nature of the technology sector amplifies agency costs. Managers in tech firms, incentivized by potential high rewards from innovation, may take on excessive risk or fail to align their decisions with shareholder interests, especially when faced with asymmetric information. Then, Canarella & Miller (2019) find a U-shaped relationship between agency costs and both firm size and R&D activity in ICT (Information and Communication