
The Effect of Debt Policy, Profitability, and Company Size on Health Sector Company Value

Dio Jeremia Sembiring¹⁾, Nayla Nurul Putri²⁾, Pricillia Deborah Valentine³⁾, Nuraini Azlin⁴⁾, An Suci Azzahra⁵⁾

^{1, 2, 3, 4, 5)} Accounting Department, Faculty of Social Sciences, Universitas Pembangunan Panca Budi Medan, Indonesia

*Corresponding Author :

E-mail : disokemilala@gmail.com

Abstract

This study aims to analyze the impact of debt policy, profitability, and firm size on firm value in the healthcare sector. Using multiple linear regression analysis and secondary data from 72 companies, the findings reveal that debt policy (with a coefficient of -0.45) and profitability (with a coefficient of -0.38) have a significant negative effect on firm value, while firm size (with a coefficient of 0.52) has a significant positive effect. These results indicate that an increase in firm size leads to a higher firm value, whereas higher debt and lower profitability reduce firm value. These insights are crucial for financial management in healthcare companies, especially in a dynamic market where maintaining competitiveness is key

Keywords: *Debt policy, Profitability, Firm size, Firm value*

INTRODUCTION

Enterprise value can be a basic metric used to evaluate a company's performance and competitiveness. In the healthcare segment, the importance of enterprise value has grown fundamentally, especially after the spread of COVID-19, which has reshaped the financial scene worldwide. The expanded demand for healthcare administration has opened up opportunities for development, but also posed challenges in financial management, resource allocation, and mechanical adjustments.

The liability approach can be a very important viewpoint in monetary methodology. Based on the capital structure hypothesis proposed by Modigliani and operator Mill (1958) , the utilization of obligations can give cost preferences. In any case, an unreasonable reliance on liabilities can cause money-related issues, expand the danger of bankruptcy and destroy the certainty of financial specialists.

Profitability, as a key determinant of a company's valuation, reflects its operational efficiency and financial health. Firms with higher profitability tend to attract more investors due to their demonstrated ability to generate consistent returns. However, in the healthcare sector, high operational costs, stringent regulations, and market complexities significantly impact productivity and profit margins. Studies such as those by Smith & Jones (2020) highlight how profit fluctuations in healthcare are linked to regulatory pressures and technological adoption costs.

Firm size also plays a significant role in determining firm value. Larger firms typically possess greater resources, market penetration, and capacity for innovation. However, operational complexity and bureaucratic inefficiencies can negatively influence productivity. Research by Johnson et al. (2019) underscores the positive correlation between firm size and market value while cautioning against inefficiencies that arise from excessive operational layers.

Furthermore, debt policy is another critical factor that shapes company valuation. Excessive leverage can amplify financial risk, while conservative debt strategies may limit growth opportunities. The findings of Brown & Taylor (2021) reveal that optimal capital structure decisions can enhance firm performance, particularly in capital-intensive sectors like healthcare.

By integrating these insights, it becomes evident that profitability, firm size, and debt policy collectively influence a company's market price. Strategic management in these areas can improve operational outcomes, attract investors, and boost firm valuation, as noted in comprehensive sectoral analyses (e.g., Williams & Carter, 2022). These reflections suggest that healthcare firms must balance cost control, innovation investment, and prudent financial management to optimize their market performance.

RESEARCH METHODS

This work utilises a quantitative approach using various direct relapse investigations. The subordinate variable is firm price, as measured using the Proportion of Cost to Book Value (PBR), which indicates the valuation of the firm relative to its book value. The independent factors are as follows:

- Liability Approach: Measured by the Proportion of Liabilities to Value (DER), which reflects the extent of liabilities to value in a company's capital structure.
- Productivity: Measured by Return on Resources (ROA), which shows the company's capacity to generate profits from its resources.
- Firm Size: Measured using the common logarithm of the sum of resources, which is usually used as an intermediary for firm scale.

Data Collection

Information was collected from the annual budget articulations of 72 healthcare companies listed on the Indonesia Stock Exchange. The considerations cover some time long enough to guarantee significant and intelligent discoveries to the current condition.

Analysis Process

The investigation includes several stages, counting:

- Graphic Insights: To provide an outline of information characteristics.
- Classical Suspicion Test: Calculates tests for normality, multicollinearity, heteroscedasticity, and autocorrelation.
- Concurrent Test (F Test): To see the collective impact of the independent factors on the dependent variable.

Part-Time Test (T-Test): To survey people's commitment of each autonomous variable to subordinate variables.

RESULTS AND DISCUSSION

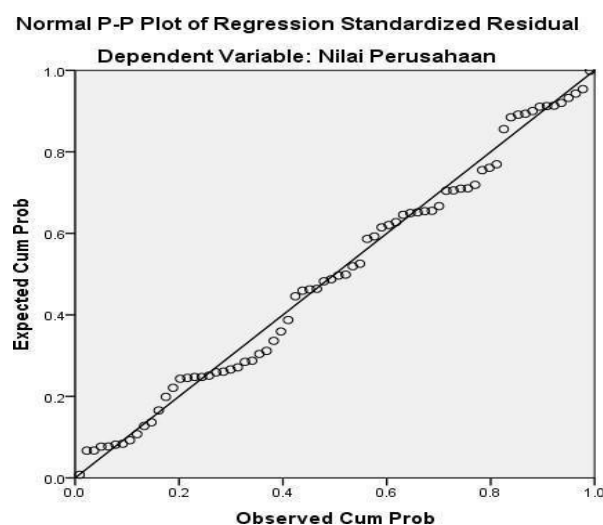
Descriptive Statistics

	N	Minimum	Maximum	Means	Std. Deviation
Debt Policy	7	-235.2	3.8	-2.516	27.8250
Profitability	7	-.2	72.3	1.156	8.5155
Company Size	7	20.6	31.3	28.453	2.1876
Company Value	7	-563.5	140509.9	6924.965	28854.3148
N that are valid (as per list)	7				

Based on the descriptive statistics table:

- **Debt Policy** has a mean value of -2.52, which indicates that on average the companies in the sample rely more on debt than equity. However, there is significant variability with a standard deviation of 27.83, indicating that there are notable differences among the companies. The minimum value of -235.22 and the maximum value of 3.82 show that some companies rely heavily on debt, while others are more conservative.
- **Profitability** has an average value of 1.15, with a minimum value of -0.28 and a maximum of 72.36. The standard deviation of 8.52 reflects a significant difference in the company's ability to generate profits.
- **Company size** shows an average of 28.45, with a minimum of 20.65 and a maximum of 31.35. The standard deviation of 2.19 indicates that firm size is relatively consistent across the sample.
- **Firm Value** has an average value of 6,924.97, with a high standard deviation of 28,854.31. The minimum value of -563.51 and the maximum of 140,509.97 indicate substantial differences in the way companies create value.

Normality Test



The Kolmogorov-Smirnov test results show that the Asymp. Sig. value of 0.200 > 0.05, which

means that the residuals are normally distributed. The supporting graph also shows that the data generally follows the diagonal normal line, strengthening the test results.

Multicollinearity Test

Coefficient a

Model	Unstandardised Coefficient		Standardised Coefficient	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	340325.17	22570.01		15.079	.00		
Debt Policy	-3036.17	1329.36	-2.92	-2.284	.02	.00	472.80
Profitability	-10097.67	4344.32	-2.98	-2.324	.02	.00	472.92
Company Size	-11575.56	782.33	-.87	-14.796	.00	.98	1.01

a. Dependent Variable: Firm Value

The table shows that all independent variables have a Tolerance value of > 0.1 and VIF < 10:

- Debt Policy: Tolerance= 0.002, VIF= 472.80
- Profitability: Tolerance= 0.002, VIF= 472.93
- Company Size: Tolerance= 0.988, VIF= 1.012

These results confirm that there is no multicollinearity among the independent variables, making the data suitable for multiple linear regression.

Simultaneous Test (F-Test)

ANOVA a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1464150357.8		488050119.27	9.481	.000 ^b
Remaining	3500281571.1	6	51474728.98		
Total	4964431928.9	7			

a. Dependent Variable: Abs_RES

The F test results show a Sig. value of 0.000 < 0.05, meaning that debt policy, profitability, and company size together have a significant effect on firm value. This shows that the regression model is significant and able to explain variations in firm value.

**Partial Test (T-Test)
Coefficient a**

Model	Coefficient NStandardised		Standardised Coefficient Beta	t	Sig.
	B	Std. Error			
1 (Constant)	66678.91	11296.91		5.90	.00
Debt Policy	-1470.72	665.38	-4.89	-2.21	.03
Profitability	-4972.76	2174.45	-5.06	-2.28	.02
Company Size	-1878.35	391.58	-.49	-4.79	.00

a. Dependent Variable: Abs_RES

Based on the t-test:

- Debt Policy: The coefficient is significantly negative (B = -1,470.72, Sig.= 0.030), indicating that an increase in debt policy tends to reduce firm value.
- Profitability: Negative significant coefficient (B= -4,972.76, Sig.=0.025), indicating that lower profitability leads to lower firm value.
- Company Size: The coefficient is significantly positive (B= 1,878.36, Sig.= 0.000), indicating that larger companies tend to have higher firm value.

Discussion

1. The Impact of Debt Policy on Firm Value

The liability approach has an important role in determining the monetary welfare and price of healthcare companies. In this study, we found that the liability approach adversely impacts firm prices. Firms that are overly reliant on liabilities may face greater budgetary chances, as the attractive instalment burden will reduce profits, thereby reducing the certainty of financial specialists. This result is consistent with Modigliani and Miller's (1958) capital structure hypothesis, which states while liabilities can provide benefits, they also provide dangers, especially when the firm's profits are insufficient to cover the liabilities.

The healthcare division is particularly prone to high levels of liability due to the capital-intensive nature of its operations. Healthcare companies frequently require large-scale ventures in terms of foundation, hardware, and enquiring about and advancement. In any case, financing these speculations through excessive debt can cause money-related strain, particularly in the face of advertising instability, administrative changes, or shifts in healthcare demand. To illustrate, amidst financial downturns or regulatory changes, companies with high levels of liabilities may struggle to maintain operations, leading to a decline in company prices.

Healthcare companies should therefore exercise caution when establishing their

liability arrangements. They should strive for a customised approach, utilising liabilities purposefully to fund the business without overleveraging. Maintaining an optimal proportion of debt to equity is fundamental to guaranteeing long-term solidity in relation to money and keeping speculators at bay.

2. Profitability and its Negative Effect on Firm Value

Productivity, regularly regarded as the foundation of money-related wellbeing, even increases as a negative determinant of company esteem in this thought. While higher productivity is generally related to superior company execution, in the healthcare division environment, the relationship between benefits and company esteem is more nuanced.

The negative impact of benefits on company prices can be clarified with some variables of interest to the healthcare industry. Despite having high revenues, many healthcare companies face a heavy burden due to rising operational costs, the need for relentless endeavours in progress advancement, and administrative imperatives for estimating and repayment. In some instances, profits in healthcare administration may be smaller than anticipated, and profits may not fully reflect the company's potential for long-term development. For these occurrences, healthcare providers regularly reinvest their profits to develop their administrations, update frameworks, or comply with controls.

which is constantly changing, which may hinder the development of net salaries. In addition, healthcare companies working in highly competitive situations may prioritise short-term productivity over viable long-term development. In a scenario, firms may cut operational costs or compromise on benefit quality to increase productivity in the short term, which may ultimately hurt their self-esteem in the long term. To illustrate, cost-cutting measures such as a reduction in therapist staff or a decrease in benefit quality may lead to client disenchantment and a decrease in understanding volume, which then reduces the company's self-esteem. In this way, it is important for healthcare supervisors to optimise productivity without giving up long-term development potential. A focus on improving operational effectiveness, differentiating benefit offerings, and maintaining continuous fulfilment are key to improving productivity in a viable way.

3. Company Size and Its Positive Impact on Firm Value

This research clearly outlines that firm estimation has a positive influence on firm price, supporting the thought that larger firms tend to have a competitive advantage in the healthcare division. Larger healthcare firms appreciate economies of scale, better ways to get capital, and more grounded advertising, which enables them to improve and contribute to modern advancements that make a move in the transport's favour. Furthermore, bigger companies regularly have more prominent bartering controls with service providers, protection companies, and administrative bodies, which can result in superior monetary terms and more extensive benefits.

In a healthcare setting, estimation likewise relates to advertising reach and asset accessibility. Larger companies can serve a broader client base, work in various locations or countries, and offer a more comprehensive expansion of administrations. This enables them to alleviate the danger by expanding their operations, lessening their dependence on a single line of advertising or

Benefits. As a result, these companies are largely seen as more stable, and their self-esteem is higher in the eyes of financial specialists.

However, while measurement brings benefits, it also brings challenges. Larger organisations in healthcare may experience wasteful aspects of bureaucracy and slower forms

of decision- making, which can hinder their ability to respond quickly to administrative changes or shifts, overseeing a larger workforce and multiple offices can lead to operational complexities that, if not successfully overseen, can detract from the key points in the estimate. In this way, healthcare companies, by any estimation, must guarantee that they optimise their operational structures to maintain the benefits of scale while being mindful of the complexities that arise with development. This includes contributing to the current administration framework, streamlining internal forms, and fostering a development culture.

4. The Combined Effect of Debt Policy, Profitability, and Company Size

This thinking illustrates that all three variables - debt approach, benefits, and Firm size collectively impact firm value. These findings underscore the importance of taking a comprehensive approach to overseeing the budgetary and operational techniques of healthcare firms.

The regulation of liabilities and profits is often seen as a trade-off-companies that use high levels of liabilities to support development may reduce productivity due to higher costs, while highly profitable companies may face aspects of waste in the way they reinvest or oversee their profits.

In any case, the estimation of the firm acts as a stabilising driver. A larger company has more assets to assimilate the budgetary hazards associated with a high level of liabilities and can better utilise its profits for development, which ultimately drives up the company's price. Healthcare companies should, in this way, accept a coordinating methodology that considers all three components. This approach will allow them to adjust the trade-off between liabilities and productivity while improving their estimation of increasing enterprise value. For example, a large healthcare company may choose to direct the use of its liabilities in favour of value financing or strategic partnerships, allowing it to maintain high productivity without taking inappropriate money-related chances. For healthcare trustees, the most important thing is the need for vital financial arrangements.

Supervisors should make a liability approach that minimises money-related chances while guaranteeing that the company has adequate reserves to contribute to development. This requires careful investigation of the company's cash flow, venture prerequisites, and resilience to hazards. Strategic planning Healthcare management should conduct strategic planning to identify community needs and set clear objectives.

Policy and Managerial Implications

This involves organising , facilities and medical equipment to provide the best service to patients. Benefits should be optimised by controlling, developing and improving operational capabilities. In addition, companies should also consider how to use their estimates successfully by streamlining operations, reducing aspects of wastage, and utilising their storefront position to organise better deals.

Evaluating and monitoring the evaluation process is important to assess whether the objectives have been achieved or not, continuous monitoring of health service performance allows managers to make the necessary adjustments to keep the service on the path of profit for speculators, good health service policies and management will open up investment opportunities in the health sector along with the improvement of health services. quality of service and operational efficiency, healthcare facilities will become more attractive to investors.

Increasing policy investment to support the development of health infrastructure

encourages investors to invest in the construction of hospitals or other health facilities this opportunity can become a new business with the increasing demand for quality health services, new business opportunities arise in the provision of medical equipment, medical information technology and training of medical personnel. For example, in the implementation of Law No 20 of 2003 on the National Education System creates a framework to improve the quality of health education in schools, which has a positive impact on the health of students, Effective health management operations create operational efficiencies by reducing waste and increasing the speed of service This is important to reduce patient waiting time and improve their experience in Health care facilities.

The findings have very important suggestions for healthcare directors and speculators. Strengthening the health system Good policies can strengthen the health system by ensuring that resources optimally allocated. This planning should include the development of strategies to achieve these goals by using resources effectively Good organisation of resources allows all components of the health system to work together smoothly. Hospitals will be able to provide better quality services This includes close monitoring service standards to reduce medical errors and improve patient safety The use of health management information systems also helps in data management and efficient decision-making.

For financial specialists, understanding how a company's liabilities, benefits and size affect its price is fundamental when making business choices. Financial specialists should assess the budgetary well-being of a healthcare company by looking at key clues such as the proportion of debt to equity, the proportion of benefits, and the estimation of the company. Companies with solid balance sheets, strong benefits, and large scale are likely to deliver stable profits. Nonetheless, speculators should also pay attention to the potential dangers that come up from excessive liabilities and reduced productivity, which may weaken the company's long- term prospects.

Future Research Directions.

Whilst this consideration provides some important knowledge about the relationship between liability approaches, benefits, company estimates, and company prices, it additionally opens the doorway for future investigation. Future thought will seemingly investigate the influence of outside components, such as exhibition competition, mechanical development, and geopolitical dangers, on healthcare company prices. Furthermore, investigations might centre on longitudinal thinking to see how these variables impact company prices over time, especially as healthcare companies explore the vulnerabilities of a post-pandemic world. Research should explore the impact of implementing policies such as Law No 20 Year 2003 that regulates health education to improve the quality of care in hospitals and reduce medical errors.

Focus on developing health management information systems for effective data management and better decision-making. Strategic planning should be undertaken to understand the needs of the community and set clear goals and organise resources effectively.

Continuous assessment of health service performance is essential to ensure targets are met and necessary strategic adjustments are made. Research should explore the use of digital technology, AI and Big Data to improve access and quality of healthcare services. Research development of medical devices and drugs should be a top priority to support disease prevention and improve overall public health in developing policies to support capacity building of medical staff to meet the needs of high-quality services.

By focusing on these aspects, research in healthcare can make a significant

contribution to the improvement of Indonesia's healthcare system in the future. Assisting the investigation of territorial contrasts within the healthcare segment seems even more valuable, as companies in creating markets may face unmistakable challenges and loopholes compared to those in developed countries. By understanding these intricacies, directors and financial specialists can create tailor-made procedures to advance the company's esteem.

CONCLUSION

This study aims to analyse the effect of debt policy, profitability, and firm size on firm value in the health sector. Based on data analysis, the following conclusions can be drawn:

1. Debt Policy

Debt policy has a significant negative effect on firm value. This indicates that an increase in the proportion of debt in a firm's capital structure tends to decrease firm value. This result can be attributed to the financial risks associated with high interest expenses and potential bankruptcy, which reduce investor confidence. Before taking on debt, companies must conduct a comprehensive risk analysis to know the long-term effects on their financial health. Their debt policy balances internal funding capacity and external risks to minimise its adverse impact on firm value. If a company does not use profits efficiently for reinvestment and development, even though its profits are high, the company's value will not increase.

2. Profitability

Profitability also has a significant negative effect on firm value. Although, theoretically, more profitable companies should have a higher value, the results suggest that other factors, such as the level of reinvestment or management's efficiency in utilising profits, may play a role. If a company does not use profits efficiently for reinvestment and development, even though its profits are high, the value of the company will not increase.

3. Therefore, companies should emphasise transparency and accountability in their financial statements. Low profitability reduces a firm's attractiveness to investors, which in turn impacts its market value. These findings highlight the importance of optimising operational efficiency and effective earnings management to increase firm value.

4. Company Size

Firm size has a significant positive effect on firm value. Larger firms tend to have higher values, reflecting their competitive advantages, such as better access to funding, resources, and wider market reach. However, management in larger firms must effectively handle operational complexities to fully utilise economies of scale and other benefits associated with size. Large firms utilise economies of scale to reduce porto per unit and increase profit margins, but management must be permanently vigilant against the complexities that arrive with large size, such as more difficult coordination and potential inefficiencies.

5. Simultaneous Effect

Simultaneously, debt policy, profitability, and company size have a significant effect on firm value. Conduct periodic evaluations of financial and operational performance to ensure that the strategies implemented are relevant and effective in achieving organisational goals.

Managers need to design strategies that address all these factors simultaneously. To

increase the size and profitability of the company, the company must ensure that its financial stability is not compromised by the debt policy it uses.

This suggests that a combination of financial and non-financial factors play an important role in a company's ability to create value for shareholders and investors.

REFERENCES

- Barclay, M.J., & Smith, C.W. (1995). The Maturity Structure of Corporate Debt. *Journal of Finance*, 50(2), 609-631.
- Baker, M., & Wurgler, J. (2002). Market Timing and Capital Structure. *Journal of Finance*, 57(1), 1-32.
- Berger, A.N., & Udell, G.F. (1998). The Economics of Small Business Finance: The Role of Private Equity and Debt Markets in the Financial Growth Cycle. *Journal of Banking & Finance*, 22(6-8), 613- 673.
- Booth, L., Aivazian, V., Demircug-Kunt, A., & Maksimovic, V. (2001). Capital Structure in Developing Countries. *Journal of Finance*, 56(1), 87-130.
- Chen, L., & Zhao, X. (2006). On the Relationship Between Market-to-Book Ratio, Growth Opportunities, and Leverage Ratio. *Journal of Banking & Finance*, 30(5), 1419-1434.
- Chen, N.F., Roll, R., & Ross, S.A. (1986). Economic Forces and the Stock Market. *Journal of Business*, 59(3), 383-403.
- Damodaran, A. (2005). Valuation Approaches and Metrics: A Survey of Theory and Evidence. *Foundations and Trends® in Finance*, 1(8), 693-784.
- De Jong, A., Kabir, R., & Nguyen, T.T. (2008). Capital Structure around the World: The Role of Firm- and Country-Specific Determinants. *Journal of Banking & Finance*, 32(9), 1954 - 1969.
- Fama, E.F., & French, K.R. (1998). Taxes, Funding Decisions, and Firm Value. *Journal of Finance*, 53(3), 819-843.
- Ghosh, C., Nag, R., & Sirmans, C.F. (2000). Pricing Experienced Equity Offerings: Evidence from Real Estate Investment Funds. *Real Estate Economics*, 28(3), 363-384.
- Graham, JR, & Harvey, CR (2001). The Theory and Practice of Corporate Finance: Evidence from the Field. *Journal of Financial Economics*, 60(2-3), 187-243.
- Hart, O., & Moore, J. (1995). Debt and Seniority: An Analysis of the Role of Hard Demands in Limiting Management. *American Economic Review*, 85(3), 567-585.
- Harris, M., & Raviv, A. (1991). Capital structure theory. *Journal of Finance*, 46(1), 297-355.
- Frank, M.Z., & Goyal, V.K. (2009). Capital Structure Decision:
- Hovakimian, A., Opler, T., & Titman, S. (2001). Debt-equity choice. *Journal of Financial and Quantitative Analysis*, 36(1), 1-24.
- Jensen, M.C., & Meckling, W.H. (1976). Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305-360.
- Jensen, M.C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review*, 76(2), 323-329.

- Leary, M.T., & Roberts, M.R. (2005). Do Firms Rebalance Their Capital Structure? *Journal of Finance*, 60(6), 2575-2619.
- Lin, C., Ma, Y., Malatesta, P., & Xuan, Y. (2011). Ownership Structure and Corporate Borrowing Costs. *Journal of Financial Economics*, 100(1), 1-23.
- Modigliani, F., & Miller, M.H. (1958). The Cost of Capital, Corporate Finance, and the Theory of Investment.
- Myers, S.C. (1984). The capital structure puzzle. *Journal of Finance*, 39(3), 575-592.
- Myers, S.C., & Majluf, N.S. (1984). Corporate Funding and Investment Decisions When Firms Have Information that Investors Do Not Have. *Journal of Financial Economics*, 13(2), 187- 221.
- Morck, R., Shleifer, A., & Vishny, R.W. (1988). Management Ownership and Market Valuation: An Empirical Analysis. *Journal of Financial Economics*, 20(1-2), 293-315.
- Rajan, R.G., & Zingales, L. (1995). What Do We Know About Capital Structure? Some Evidence from International Data. *Journal of Finance*, 50(5), 1421-1460.
- Stulz, R. (1990). Managerial Wisdom and Optimal Financing Policy. *Journal of Financial Economics*, 26(1), 3-27.
- Serrasqueiro, Z., & Nunes, P.M. (2012). Is Age a Determinant of SME Financing Decisions? *Entrepreneurship Theory and Practice*, 36(4), 627-654.
- Titman, S., & Wessels, R. (1988). Determinants of Capital Structure Choice. *Journal of Finance*, 43(1), 1-19. What Factors Trustworthiness Matters? *Financial Management*, 38(1), 1-37.
- Titman, S., & Keown, A.J. (1988). Financial Leverage and Stock Returns: Evidence from Unlevered Beta. *Journal of Financial Economics*, 19(1), 123-143.
- Welch, I. (2004). Capital Structure and Stock Returns. *Journal of Political Economy*, 112(1), 106-131.