International Conference on Business Economics, Social Sciences & Humanities

# The Effect of Financial Performance on The Adjustment of Health Company Capital Structure

**Euis Bandawaty[1], Nugraha[2], Disman[3], Maya Sari[4]**
[1]Faculty of Economics and Business, As Syafi'iyah Islamic University, Indonesia Ph.D student of Faculty of Economics and Business, Education University of Indonesia, Indonesia
[2]Faculty of Economics and Business, Education University of Indonesia, Indonesia
[3] Faculty of Economics and Business, Education University of Indonesia, Indonesia

Email : euisbandawaty@upi.edu

**Abstract.** Adjustments to capital structure adjustments are an important part of business activities, because the capital structure is closely related to the company's activities in the future. Failure to adjust the capital structure has an impact on the company's debt which is increasing, then it has an impact on the company's bankruptcy. Various studies have examined the capital structure of companies in emerging market countries and developed countries. The research results show the same or not the same pattern of influence between previous studies. On that basis, this study focuses on examining the effect of financial performance on the speed of capital structure adjustment. The object of this study is the performance characteristics of health companies contained in financial performance reports, the approach used is quantitative with a causal-descriptive method. The results of this study show that growth opportunities, corporate taxes, and liquidity have an influence on capital structure. This means that the company's financial performance must be in good condition so that the capital structure can be achieved, this pattern also applies to companies and other countries based on various previous studies. This condition indicates that it is important for companies to be able to manage financial performance properly, so that the company's finances can be in a safe condition to run the business in the future. This situation also makes investors see positive signals from companies that are able to manage company finances well.

**Keywords:** Financial Peformance; Capital Structure, Health Company.

## 1. Introduction

The capital structure is a permanent expenditure that reflects the balance between total debt and own capital. Optimal capital structure is often a benchmark for companies in using funds from available capital sources. If the company is going to add the required capital, usually the company obtains the capital from the composition or components of the existing capital by always keeping the average cost of capital the same as the cost of capital before the additional capital. Meeting the company's funding needs from its own capital comes from share capital, retained earnings, and reserves. If the company's funding from its own capital is still experiencing a deficit, then it is necessary to consider external company funding, namely from debt (debt financing).

Higher risk tends to lower stock prices, but expectations of higher returns tend to increase stock prices. Therefore, the optimal capital structure must achieve a balance between risk and return so as to maximize the company's stock price. Thus, the capital structure is only a part of the financial structure. The financial structure reflects the balance both in absolute and relative terms between all foreign capital (both short term and long term) with the amount of own capital.

Based on prior research, Frank and Goyal (2008) carried out a study that considered several possible determinants for selecting capital structure. The market-to-book ratio, physical assets, firm profitability, company size, and anticipated inflation are some of these considerations. Since they were discovered, a large portion of the capital structure literature has employed them to some extent. Vo (2017) discovered that the factors influencing capital structure varied for long- and short-term indicators, showing that large companies often use long-term debt while small businesses typically use short-term debt to finance their investments. This might be the case because larger companies are less likely to take advantage of the leverage creditors or bankers have over them when it comes to long-term borrowing than smaller companies are; additionally, liquidity issues prevent companies from taking out long-term loans, and managing liquidity is crucial for success.

The results of previous research show that the acquisition of company growth (Growth) as a result of data processing sales and profitability of the two sample companies as a whole has increased which is influenced by one or both of the determinants of growth (growth), namely sales and profitability (Muktiadji & Kamage, 2009) . Muktiadji & Sastra (2013) conducted research at PT. Indocement Tunggal Prakasa, Tbk has been able to create profits resulting in company growth but at PT. Indocement Tunggal Prakasa, Tbk profit generated does not increase growth.

Prasetya (2014) profitability, firm size, development opportunity, liquidity, asset structure, business risk, and non-debt tax shield all have an impact on the capital structure of consumer products businesses listed on the Indonesia Stock Exchange (IDX) from 2008 to 2012. Profitability has an impact on the capital structure of consumer goods sub-sector businesses listed on the Indonesia Stock Exchange (IDX) from 2008 to 2012. Meanwhile, throughout the 2008-2012 period, partial company size, growth potential, liquidity, asset structure, business risk, and non-debt tax shield had little influence on the capital structure of consumer goods sub-sector businesses listed on the Indonesia Stock Exchange (IDX).

Setiadi and Indrajaya (2011) Asset structure, firm size, growth rate, profitability, and business risk are the variables examined in this study. The research sample consisted of mining sector businesses listed on the IDX, and the observation period lasted from 2004 to 2007. The findings revealed that asset structure and firm size had a positive and substantial influence on capital structure, but profitability had a negative and significant effect. The other two factors, growth rate and company risk, have no bearing on capital structure. The findings revealed that profitability has the biggest impact on capital structure. The five independent variables have a substantial influence on capital structure at the same time, as measured by the adjusted R-square value of the regression model for the study of 46.4%.

Titman and Wessels (1988), Chiarella et al. (1991), Brailsford, Oliver, and Pua (1993) are examples of research papers (2002). Inconclusive research has been conducted on the association between non-debt tax shelter and capital structure. Titman and Wessels (1988) included non-debt tax shields in their research and found no evidence that they had an influence on leverage. Chiarella et al. (1991) discovered

that the non-debt tax shield has a negative association with leverage that is statistically significant at the 1% level. As a result, the evidence regarding this factor is conflicting. Volatility is another component that has gained popularity in numerous research. Gregg, Jarrell and Kim (1984) discovered that income volatility is an essential element and is an inverse predictor of leverage.

Deviani and Sudjarni (2018) investigated the impact of growth rates, asset structure, profitability, and liquidity on the capital structure of mining firms listed on the Indonesia Stock Exchange from 2012 to 2015. An associative design with a quantitative approach is used in this investigation. The long term debt to equity ratio is used to construct capital structure, the asset structure is determined by comparing current assets to fixed assets, profitability is determined by return on equity, and liquidity is determined by the current ratio. Growth rates have a negative and significant influence on capital structure, asset structure has a negative but not significant effect on capital structure, and profitability and liquidity have a negative and substantial effect on capital structure, according to the findings of this study.

Dewi and Dana (2017) partially examined the effect of growth opportunity, liquidity, non-debt tax shield and fixed asset ratio on capital structure. The sample in this study consisted of 32 consumer goods companies on the IDX. Capital structure can be measured by comparing the total debt to total assets of the company. The study's findings indicate that there is a substantial negative relationship between growth potential and NDTS with capital structure. Fixed asset ratio has a significant positive effect on capital structure, while liquidity has an insignificant positive effect.

Wahyuni & Suryantini (2014) capital structure can be influenced by several factors including asset structure, management attitudes, taxes, operating leverage, sales stability, profitability, company size, business risk. The research results show that firm size and tax savings have a positive and significant effect on capital structure, while profitability has a negative and significant effect on capital structure. Lawi (2016) examines the factors that influence decision making on the capital structure of Islamic commercial banks in Indonesia in 2013-2014, one of which is Company Size, Profitability, Sales Growth, and Tax Rates. The number of Islamic commercial banks in Indonesia taken is eleven (11), with the research approach used is quantitative. Testing research using regression analysis. The results of this study indicate that company size and profitability have an effect on the capital structure of Islamic commercial banks in Indonesia in 2013-2014, while sales growth and tax rates have no effect on the capital structure of Islamic commercial banks in Indonesia in 2013-2014.

On the basis of theory and previous research, this research focuses on research cases in the health sector, which experienced good economic growth during the Covid pandemic, when most economic sectors experienced a decline.

## 2. Method

This analysis is primarily intended to evaluate growth opportunities, corporate taxes, liquidity, and the speed of capital structure adjustment. Researchers used two techniques, namely descriptive and causal methods according to the research objectives. The method used focuses on collected scientific evidence trying to characterize the objective factual description of the object under study. Causality analysis is a research technique that aims to clarify the causal relationship of the variables studied. This research was conducted to determine the differences in the effect of growth opportunities, corporate taxes, and liquidity

on capital structure in 2020, and to carry out an analysis by comparing it with developing market countries and developed market countries. The population in this study are health companies that have gone public on the Indonesia Stock Exchange (IDX) during 2020. The sample used in this study is a saturated sample, meaning that the entire population is used as a research sample with the qualifications of having complete financial reports. Researchers use the main data sources to be processed in this analysis such as financial reports issued by the IDX and supervised by the OJK. In addition, data from each paper is selected based on the needs of the study and then submitted as raw data into tables. Data analysis used the classical assumption test and multiple linear regression using the e-views9 application.

## 3. Results and Discussion

This study seeks to show the results of research in the form of the effect of financial performance on capital structure adjustments. This model adopts multiple linear regression, so that the research results can show the effect on each variable.

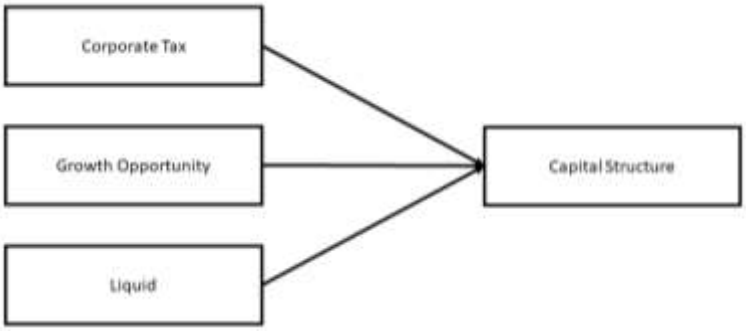


**Figure 1.** Research Model

The figure explains that there is a direct effect of corporate tax, growth opportunity, and liquid on capital structure. This model needs to be tested in research, so that the model is valid and can explain fluctuations in the capital structure of health companies.

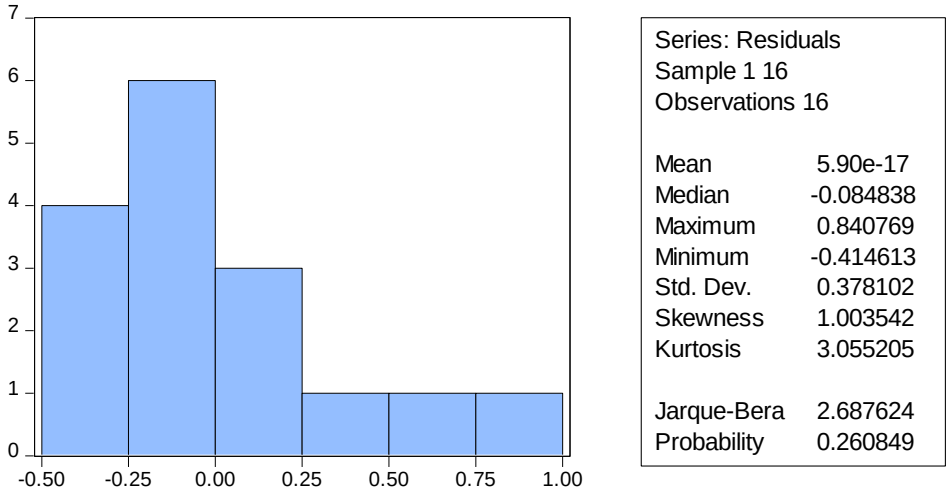


**Figure 2**. Normality Test

Just comparing the derived JB (Jarque-Bera) Probability value with an alpha level of 0.05 (5%) determines if the residuals are normally distributed. If the Prob. JB count is larger than 0.05, it may be inferred that the residuals are normally distributed; if the value is less than 0.05, there is insufficient evidence to conclude that the residuals are normally distributed. Prob Value JB count of 0.260849 > 0.05 indicates that the residuals are normally distributed, implying that the classical normality conditions have been fulfilled.

**Table 1.** Mukticollinearity Test

| Variable | Coefficient Variance | Uncentered VIF | Centered VIF |
|---|---|---|---|
| C | 0.023498 | 2.103900 | NA |
| Corporate_Tax | 9.29E-07 | 1.820703 | 1.115668 |
| Growth_Opportunity | 4.74E-11 | 1.355917 | 1.168334 |
| Liquid | 1.11E-06 | 1.169285 | 1.168574 |

The multicollinearity test results are shown in the Centered VIF column table. Because the VIF values for all variables are less than 5, there is no multicollinearity in the two independent variables. A good linear regression model is devoid of multicollinearity based on the traditional assumptions of linear regression with OLS. Hence, the given model is free from multicollinearity.

**Table 2.** Autocorrelation Test

| | | | |
|---|---|---|---|
| F-statistic | 0.374242 | Prob. F(2,10) | 0.6970 |
| Obs*R-squared | 1.114181 | Prob. Chi-Square(2) | 0.5729 |

The determined F probability value is also known as Prob Value F(2.10) of 0.6970. Prob Value F count is more than the alpha threshold of 0.05 (5%) hence, based on the hypothesis test, H0 is accepted, which suggests that there is no autocorrelation.

**Table 3.** Heteroscedasticity Test

| | | | |
|---|---|---|---|
| F-statistic | 2.626007 | Prob. F(3,12) | 0.0983 |
| Obs*R-squared | 6.341091 | Prob. Chi-Square(3) | 0.0961 |
| Scaled explained SS | 5.374757 | Prob. Chi-Square(3) | 0.1463 |

The Prob Value is used to determine whether or not heteroscedasticity exists in the linear regression model. F-statistic (F count) (F count). If the Prob. F count is larger than the alpha level of 0.05 (5%) then H0 is accepted which indicates there is no heteroscedasticity, but if the Prob. F count is less than the alpha level of 0.05 (5%) then H0 is rejected which implies there is heteroscedasticity. The probability value F count of 0.0983 is larger than the alpha level of 0.05 (5%), hence H0 is accepted based on the hypothesis test, indicating that there is no heteroscedasticity.

**Table 4.** Linearity Test

| | Value | df | Probability |
|---|---|---|---|
| t-statistic | 2.574567 | 11 | 0.2258 |
| F-statistic | 6.628394 | (1, 11) | 0.2258 |
| Likelihood ratio | 7.545850 | 1 | 0.1060 |

F-test summary:

| | Sum of Sq. | df | Mean Squares |
|---|---|---|---|
| Test SSR | 0.806317 | 1 | 0.806317 |
| Restricted SSR | 2.144422 | 12 | 0.178702 |
| Unrestricted SSR | 1.338105 | 11 | 0.121646 |

LR test summary:

| | Value |
|---|---|
| Restricted LogL | -6.625267 |
| Unrestricted LogL | -2.852342 |

If the Prob. F count is more than the alpha level of 0.05 (5%), the regression model fulfills the linearity assumption, and vice versa if the Prob. F count is less than 0.05, the model does not meet the linearity condition. The F-statistic row of the Probability column displays the Prob Value F count. In this case the value of 0.2258 is greater than 0.05 so it can be concluded that the regression model meets the assumption of linearity.

**Table 5.** Multiple Regression Test

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.470070 | 0.153291 | 3.066519 | 0.0098 |
| Corporate_Tax | -0.001428 | 0.000964 | -1.481250 | 0.0643 |
| Growth_Opportunity | 8.88E-06 | 6.88E-06 | 1.290089 | 0.0013 |
| Liquid | -0.001806 | 0.001054 | -1.713038 | 0.0124 |

| | | | |
|---|---|---|---|
| R-squared | 0.768192 | Mean dependent var | 0.274750 |
| Adjusted R-squared | 0.745239 | S.D. dependent var | 0.441988 |
| S.E. of regression | 44.22731 | Akaike info criterion | 1.328158 |
| Sum squared resid | 214.4422 | Schwarz criterion | 1.521306 |
| Log likelihood | -26.25267 | Hannan-Quinn criter. | 1.338049 |
| F-statistic | 1.465911 | Durbin-Watson stat | 2.131703 |
| Prob(F-statistic) | 0.000072 | | |

Based on these data, it shows that partially corporate tax has a negative effect on the speed of capital structure adjustment, meaning that the less corporate tax, the faster the speed of capital structure adjustment. Growth opportunities have a positive effect on capital structure, meaning that the greater the company's growth opportunities, the faster the speed of capital structure adjustment. Liquidity has a

negative effect on the speed of capital structure adjustment, meaning that the lower the company's liquidity, the faster the capital structure adjustment. This research model has an effect of 74% on changes in the speed of capital structure adjustment.

Theoretically, this research can be analyzed using the static trade off theory which predicts a negative relationship between growth opportunities and capital structure. Companies with high growth opportunities lose more value when experiencing financial difficulties. Pecking order theory, on the other hand, predicts a positive effect between growth opportunities and capital structure, because growing companies require more external funding sources (Frank and Goyal, 2008). The results of Sheikh and Wang's research (2011) show that opportunity has a negative effect on capital structure. Growth opportunities are measured by market to book ratio equity. Growth opportunities are predicted to have a negative effect on leverage.

According to La Rocca et al. (2009), there is a negative association between growth prospects and leverage since organizations must retain financial flexibility in order to borrow additional money, especially if they have significant growth potential. Since intangible assets lose value when a company goes bankrupt, companies with strong growth possibilities are reluctant to issue debt funding. Yet, according to the pecking order idea, development possibilities may have a positive connection with leverage. Companies with strong growth possibilities, according to Myers (1984), would prioritize their finance requirements by using internal money. Yet, because their own finances are insufficient to cover all of their investment requirements, they must seek outside funding. As a result, many companies choose debt as the first choice to fund projects and create higher leverage (Vo, 2017).

By using debt, companies get the benefit of tax reduction with taxshield obtained from loan interest, in addition to getting additional funds that can be used for company operational purposes. The value of companies with higher leverage, than the value of companies without leverage. In this study, before Covid-19 Corporate Tax Opportunity had no effect on the speed of adjustment of capital structure and during Covid-19 Corporate Tax Opportunity had a negative effect on the speed of adjustment of capital structure.

According to the research of De Angelo and Masulis (1980) and Moradi and Paulet (2019), the debt tax shield is measured using a total tax proxy (annual tax cost) for earnings before interest and taxes, because the amount of tax owed by companies is reduced by the size of total assets, providing an appropriate measure for comparing taxable capacities. Tax-deductible interest has a good influence on debt difficulties, according to De Angelo and Masulis (1980), Walsh and Ryan (1997), and Moradi and Paulet (2019).

From the view of the trade-off theory, companies that are liquid will use more debt because they have more ability to meet their obligations. From the pecking order theory view, liquid companies actually use less debt because liquid companies can use internal sources to fund new investments (Sheikh and Wang, 2011). Liquidity is measured by the current ratio, namely current assets divided by current liabilities. The higher the current ratio means the higher the company's ability to settle its current liabilities by multiplying its current assets. Liquidity is predicted to have a positive effect on leverage.

Businesses with high levels of liquidity (big short-term assets) have reduced liquidity risk and can borrow more debt because of their capacity to pay off debt. On the other hand, the pecking order theory

implies that organizations with high liquidity will be able to use their own money to finance their investments (Khemiri and Noubbigh, 2018).

## 4. Conclusion

Corporate tax has a negative effect on the speed of capital structure adjustment, meaning that the less corporate tax, the faster the speed of capital structure adjustment. Growth opportunities have a positive effect on capital structure, meaning that the greater the company's growth opportunities, the faster the speed of capital structure adjustment. Liquidity has a negative effect on the speed of capital structure adjustment, meaning that the lower the company's liquidity, the faster the capital structure adjustment. This research model has an effect of 74% on changes in the speed of capital structure adjustment.

## References

[1] Brailsford, T.J., Oliver, B.R., Pua, S.L.H., 2002, On the relationship between ownership structure and capital structure, Accounting and Finance 42, 2002, 1-26.

[2] Chiarella, C., Pham , T., Sim , A.B., Tan , M., 1991. Determinants of corporate capital structure: Australian evidence, working paper, University of Technology Sydney.

[3] De Angelo, H. and Masulis, R.W. (1980), "Optimal capital structure under corporate and personal taxation", Journal of Financial Economics, Vol. 8 No. 1, pp. 3-29.

[4] Deviani, M. Y., & Sudjarni, L. K. (2018). Pengaruh tingkat pertumbuhan, struktur aktiva, profitabilitas, dan likuiditas terhadap struktur modal perusahaan pertambangan di BEI. E-Jurnal Manajemen, 7(3), 1222-1254.

[5] Dewi, N. K. T. S., & Dana, I. M. (2017). Pengaruh Growth Opportunity, Likuiditas, Non-Debt Tax Shield Dan Fixed Asset Ratio Terhadap Struktur Modal. E-Jurnal Manajemen, 6(2), 772-801.

[6] Frank, M.Z. and Goyal, V.K. (2008), "Trade-off and pecking order theories of debt: In Handbook of empirical corporate finance", pp. 135-202.

[7] Gregg A. Jarrell, and E. Han Kim,"On the Existence of an Optimal Capital Structure: Theory and Evidence", The Journal of Finance, Volume 39, Number 3, July, Pages 857-78.

[8] Indrajaya, G., & Setiadi, R. (2011). Pengaruh Struktur Aktiva, Ukuran Perusahaan, Tingkat Pertumbuhan, Profitabilitas dan Risiko Bisnis Terhadap Struktur Modal: Studi Empiris Pada Perusahaan Sektor Pertambangan yang Listing di Bursa Efek Indonesia Periode 2004-2007. Akurat Jurnal Ilmiah Akuntansi, 2(06).

[9] Khemiri, W. and Noubbigh, H. (2018), "Determinants of capital structure: evidence from sub-Saharan African firms", The Quarterly Review of Economics and Finance, Vol. 70 No. 11, pp. 150-159.

[10] La Rocca, M., La Rocca, T., Gerace, D. and Smark, C. (2009), "Effect of diversification on capital structure", Accounting and Finance, Vol. 49 No. 4, pp. 799-826.

[11] Lawi, M. (2016). Analisis pengaruh ukuran perusahaan, profitabilitas, pertumbuhan penjualan, dan tingkat pajak terhadap struktur modal bank umum syariah di indonesia Tahun 2013-2014. Jurnal Pendidikan Akuntansi (JPAK), 4(3).

[12] Moradi, A. and Paulet, E. (2019), "The firm-specific determinants of capital structure–An empirical analysis of firms before and during the Euro Crisis", Research in International Business and Finance, Vol. 47 No. 1, pp. 150-161.

[13] Muktiadji, N., & Kamage, R. (2009). Pengaruh Penjualan Dan Profitabilitas Terhadap Pertumbuhan Perusahaan Studi Kasus Pada Pt. Gudang Garam, Tbk. Dan Pt. Bentoel Internasional Investama, Tbk. Jurnal Ilmiah Ranggagading, 9(1), 38-44.

[14] Muktiadji, N., & Sastra, H. (2013). Analisis Modal Kerja Dan Pengaruhnya Terhadap Pertumbuhan Perusahaan. Jurnal Ilmiah Manajemen Kesatuan, 1(3), 229-236.

[15] Myers, S., Majluf, N., 1984. Corporate financing and investment decisions when firms have information that investors do not have. J. Financ. Econ. 13, 187–221.

[16] Prasetya, B. T. (2014). Pengaruh Profitabilitas, Ukuran Perusahaan, Growthopportunity, Likuiditas, Struktur Aset, Resiko Bisnis Dan Non Debt Tax Shield Terhadap Struktur Modal Pada Perusahaan Sub-Sektor Barang Konsumsi. Jurnal Ilmu Manajemen (JIM), 2(4).

[17] Sheikh, Nadeem Ahmed and Zongjun Wang. 2011. Determinants of capital structure An empirical study of firms in manufacturing industry of Pakistan. Managerial Finance, 37 (2), pp: 117-133.

[18] Titman, S. and Wessels, R. (1988), "The determinants of capital structure", The Journal of Finance, Vol. 43 No. 1, pp. 1-19.

[19] Vo, X.V. (2017), "Determinants of capital structure in emerging markets: evidence from Vietnam", Research in International Business and Finance, Vol. 40 No. 4, pp. 105-113.

[20] Wahyuni, I. A. T., & Suryantini, N. P. S. (2014). Pengaruh Ukuran Perusahaan, Profitabilitas Dan Penghematan Pajak Terhadap Struktur Modal. E-Jurnal Manajemen, 3(5).

[21] Walsh, E.J. and Ryan, J. (1997), "Agency and tax explanations of security issuance decisions", Journal of Business Finance and Accounting, Vol. 24 Nos 7-8, pp. 943-961.