

The Impact Analysis of Debt to Equity Ratio (DER) and Company Size on Total Assets of Banking Companies on the IDX in 2015 – 2019

Irma Setyawati

Universitas Nasional, Indonesia

Email: irmasetyawati@civitas.unas.ac.id

Abstract:

This study's objective is to look into the effects of DER, business size, and total assets on Indonesia's banking system. Listed companies on the Indonesian Stock Exchange provide the data needed for this study to be completed. Using a population of 32 banks and a sample size of 9 firms that fit the criteria, this study employed purposive sampling. This study makes use of SPSS 21.0 for Windows for data processing and multivariate linear regression analysis, t and f tests, and other statistical tests. Although partly DER has little influence on overall assets, the size of the company has a big impact. In the study, total assets were found to be affected by both DER and firm size.

Keywords:

Debt to Equity Ratio (DER); company size; total assets; Banking; Indonesia stock exchange

I. Introduction

Economic growth is part of the national development of a nation. In order to carry out development, financial institutions are required to play a vital role (Machmud, 2015). Economic progress can also increase national income which in turn improves people's welfare. Thus, financial institutions are very important as a source of funding for a country's development (Lubis, 2010).

Banks are vital in the economy of a country, not only as financial intermediaries between owners of capital and users of money, but also as instruments of monetary policy (Sari & Abundanti, 2014). The financial system includes markets, organizations, regulations, and processes that determine interest rates and provide financial services globally (Siamat, 2004). The modern economy relies on the financial sector to bridge the gap between those who are financially short and those who have excess funds, and to provide essential services that risk sharing liquidity and information. The financial system includes banks, mutual funds, and pension funds (Negara & Febrianto, 2020).

The organization's long-time period intention is to decrease the organization's capital to maximise its price. When the price of the organization increases, so does the wealth of the owner (Setiawati & Lim, 2018). Company enlargement is the primary factor in figuring out utilization regulations that may be used to gain the centered organization price. More probably to be triumphant are corporations with big length and increase costs that may be without difficulty financed with the aid of using the marketplace (Jusriani & Rahardjo, 2013). In phrases of funding, big corporations are without difficulty catered for with the aid of using the capital marketplace and corporations with massive increase costs have proven that they could

manage to pay for to pay the hobby on loans. Consequently, it's far crucial to do not forget the connection among enterprise increase and proportion price whilst designing the capital structure (Kesuma, 2009).

Understanding company management requires efficiency and effectiveness in both getting and spending cash. To maximize return on investment, any money invested in assets should be used as efficiently as possible (Sunarto & Budi, 2009). To prevent small funds embedded in each asset from affecting liquidity and business that is too large, resulting in the movement of funds, the use of funds includes planning and controlling the use of current assets and fixed assets (Bismala, 2016). Proper allocation of funds is very important to reduce the amount of money deposited in the bank. Investment returns are directly and indirectly affected by the efficiency of the use of funds. Financial managers must be able to use funds to investigate other investments, assess returns, and make decisions about which alternative investments to invest in. Therefore, management must invest (Meidiawati & Mildawati, 2016).

II. Review of Literature

2.1 Leverage

Financially, leverage is defined as credit funds that can be used for leverage. Using capital funds derived from debt to reduce taxable income and generate profits is allowed (Henny, 2017). According to Weston & Copeland (1997), leverage becomes profitable and the return on capital adjustment grows when the use of debt is greater (the return) changes than the cost of debt. The reduction increases with leverage. As a result, leverage can increase profits while increasing losses in difficult times. Leverage magnifies both earnings and losses, and the more leverage a company uses, the more inaccuracy or volatility in profitability.

2.2 Company Size

Significant company size can be measured by looking at the overall assets owned by the company. Financial markets are more readily available to large companies. To raise a large amount of external capital, larger companies have an easier time than smaller ones, so investors want to invest in larger companies to increase their value (Sari & Haryanto, 2013). These funds make it easier for businesses to invest. According to Beaver et al (1970), the company's future prospects are influenced by the value generated by its assets. Long-term prospects will be an investor entity in the shares of a company.

2.3 Company Growth

External, internal and regional factors all have a role in the company's success. Along with the increase or decrease in the volume of the company, the result may experience growth (Wahyuni & Wahyuati, 2017). As a result, both internal and external stakeholders have high expectations of the company's growth. In the eyes of investors, the company's growth is an indication of the profitability and return on investment that investors can expect.

Syardiana et al (2015) found that information about company growth has a direct and beneficial effect on stock price movements, resulting in higher stock prices. In companies with low growth, the debt ratio is associated with firm value. On the other hand, high-growth business debt ratios have a negative impact on firm value. Thus, the impact of debt on firm value is highly dependent on growth prospects.

2.4 Research Framework

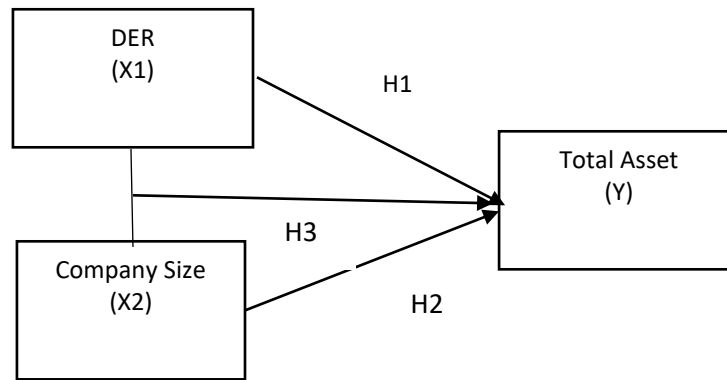


Figure 1. Thinking Framework

Hypothesis

1. It is suspected that DER (X1) has a positive and significant effect on total assets (Y).
2. It is suspected that company size (X2) has a positive and significant effect on total assets (Y).
3. Allegedly X1 and X2 simultaneously have a positive and significant effect on total assets (Y).

III. Research Methods

This study uses a quantitative methodology, which means that the data are numerical (numbers). This study examines data from stock exchange business players in Indonesia. Data were collected from the Indonesia Capital Market Directory (ICMD) between 2015 and 2019. The population in this study is the complete stock price of Indonesian Stock Exchange commercial banks from 2015 to 2019. The population of this study is 32 banks. Purposive sampling was used to collect samples from nine different companies. Multiple Regression, Classical Assumption Test, and Hypothesis Testing are data analysis methods available in SPSS 21.0 for Windows.

IV. Discussion

4.1 Results

Table 1. Description of Research Variables

	N	Minimum	Maximum	Sum	mean	Std. Deviation
	Statistics	Statistics	Statistics	Statistics	Statistics	Statistics
Total Asset Growth	45	14.67	20.41	803.94	17.8654	1.91501
Debt to Equity Ratio	45	303.00	1354.00	40229.00	893.9778	214.68100
Company Size	45	12.34	18.06	701.50	15,5890	1.90094
Shareholding	45	,00	1.00	15.00	,3333	,47673
Valid N (listwise)	45					

Source: processed by researchers

Based on the following figure, BKSW has the largest DER of 1354.00 percent in 2016 and the lowest (minimum) of 303.00 percent in 2017. Because the standard deviation is 214.68-100 percent smaller than the average (average) of 893.9778 percent, DER deviation is considered good. The banking world is inseparable from human life, because all human activities involve finance and require banking facilities (Tarigan, 2020). Bank is a company engaged in the financial sector, meaning that the banking business is always related to financial matters (Rosmika, 2019). The bank is simply defined as a financial institution whose business activities are collecting funds from the public and channeling these funds back to the community and providing other bank services (Dianto, 2020). In 2019, BRI's business had the largest company size (18.06%) and BKSW had the lowest company size (12.34%). The standard deviation is 1.90094 percent less than the mean (mean), or 15.5890 percent, so the variance of the data on Firm Size is good. BMRI had the highest total share assets (20.41%) in 2019 and the lowest BKSW (14.67%). The standard deviation is 1.91501 percent and the mean is 17.8654 percent. This means that the deviation of the asset data as a whole is good.

a. Classic Assumption Test

1. Normality Test

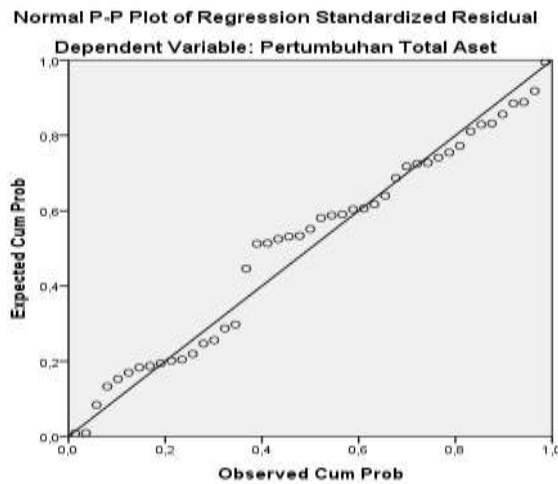


Figure 2. Normality Test Results

The assumption of normality is tested using the data in Figure 2. Based on the diagram above, the data in the regression model with the dependent variable Total Asset Growth is normal.

2. Multicollinearity Test

Table 2. Multicollinearity Test Coefficientsa

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Debt to Equity Ratio	,967	1.034
Company Size	,709	1,411
Shareholding	,729	1.371

a. Dependent Variable: Total Asset Growth

Based on table 2 above, all the VIF values for the three variables are < 10 so it can be stated no multicollinearity occurs.

3. Heteroscedasticity Test

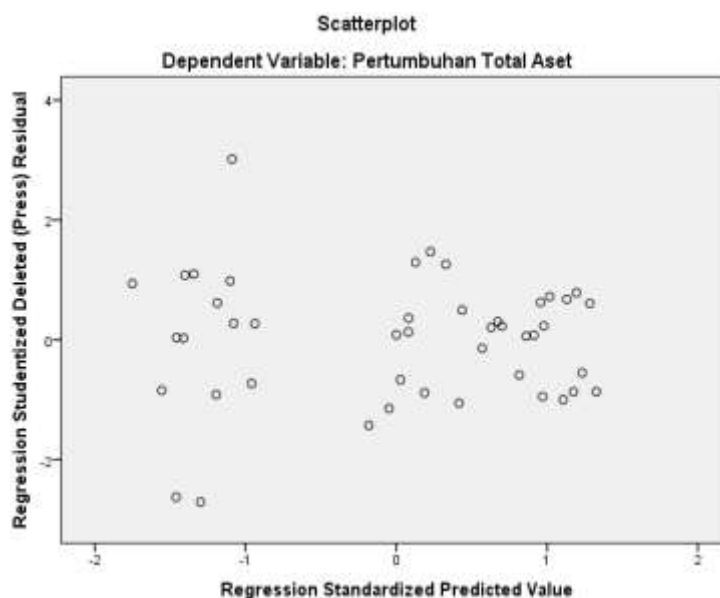


Figure 3. Heteroscedasticity Test Results

From figure 3, it can be seen that the points are scattered around the Y axis, both above and below the zero point. The regression model used is not problematic with heteroscedasticity.

b. Multiple Regression Analysis

Table 3. Multiple Regression Calculation Results

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
1 (Constant)	2,620	,274	
Debt to Equity Ratio	,001	,000	-,036
Company Size	,996	0.016	,989
Shareholding	,007	,061	,002

a. Dependent Variable: Total Asset Growth

The following regression equation can be derived from the data in the table above:

$$TA = 2.620 + 0.001 DER + 0.996 UP + 0.007 OWN$$

c. Hypothesis Testing

1. t test

Table 4. T-Test Results (Partial Test)

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2,620	,274		9.565			
1 Debt to Equity Ratio	,001	,000	-,036	-2,701	,967	,967	1.034
Company Size	,996	0.016	,989	63.879	,709	,709	1,411
Shareholding	,007	,061	,002	,108	,729	,729	1.371

The results of the t-test based on the data in table 12 above are as follows:

- 1) The sig column contains a value of 0.967, which is greater than or equal to a probability value of 0.05, and the DER variable contains a count of -2.701 with t table = 2.018, implying that t count < t table. When Ho is accepted, it indicates that the DER variable has no effect to total assets.
- 2) In Table 4, sig 0.967 is greater than or equal to the probability value of 0.05, and the Firm Size Variable has a t count of 63,879 with t table = 1.411 which indicates that t count > t table. As a result, H2 is accepted, which implies that size has a considerable impact on total assets.
- 3) The sig value is 0.729 from a probability value of 0.05 or a value of 0.729 > 0.05, and the share ownership variable is 0.108 with t table = 1.371, indicating that t count < t table indicates that Ho is accepted as share ownership does not have a significant effect on Total Assets.

2. f test

Table 5. F Test Results
ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	160,236	3	53,412	1949,586	,000b
Residual	1.123	41	,027		
Total	161,359	44			

a. Dependent Variable: Total Asset Growth

b. Predictors: (Constant), Shareholding, Debt to Equity Ratio, Company Size

F test results show that when sig 0.05, Ho is accepted and H1 is rejected, the model fits the data. Likewise, the calculated F value of 1,949,586 is smaller than the F table at a significant level of 5%, then Ho is accepted and H1 is rejected, proving that DER and business size have a large effect on total asset growth.

3. Coefficient of Determination Results

Table 6. Coefficient of Determination
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,997 ^a	,993	,993	,16552	1.013

The R2 value in Table 6 is 0.993, which indicates that company size, DER, and share ownership all have a 99.3 percent effect on total assets when considered together, while the remaining 0.7 percent is influenced by variables not considered.

4.2 Discussion

DER is often used as an early warning indication of a company's inability to meet short-term obligations and can act as an early predictor of this problem. On the other hand, companies with abnormally high DER do not necessarily show superior performance. A high DER, which indicates a high level of liquidity, also indicates that the business is less able to make money, which can reduce profitability. While stocks with a high level of liquidity make it easier for investors to acquire and sell them, there is no guarantee that a high DER indicates that the company's liabilities are current, because the debt to current assets ratio is not calculated when there is an additional cash balance or amount or inventory in the company too much space. The total debt-to-equity ratio increases with a higher DER value, which also promises larger loans to external parties (creditors), increasing the company's risk. Investors are more likely to put their money into companies with high returns on assets. This is due to the fact that higher ROA indicates better performance, i.e. higher ROA, higher stock prices, and better stock returns. Additional factors, such as inflation, economic growth, and the rate of movement, must also be taken into account when predicting stock returns for a company's stock.

V. Conclusion

The research described above produces several findings, including the following: Firm size has a positive and substantial partial effect on total assets, while DER has a partially positive and minor effect. According to this study, DER and firm size were also found to have a statistically significant impact on total assets over time. Other variables that have a significant effect on total assets include the DER variable, company size, and share ownership (dummy variable). Only 0.7 percent of the variables studied have an impact on total assets.

References

- Beaver, W., Kettler, P., & Scholes, M. (1970). The Association Between Market Determined and Accounting Determined Risk Measures. *The Accounting Review*, 45(4), 654-682.
- Bismala, L. (2016). Model Manajemen Usaha Mikro Kecil dan Menengah (UMKM) untuk Meningkatkan Efektivitas Usaha Kecil Menengah. *Jurnal Entrepreneur dan Entrepreneurship*, 5(1), 19-26.
- Dianto, E., et.al. (2020). BNI Marketing Strategy for Credit Cards in Dealing Global Competition in State Bank Indonesia (Persero) Tbk Banda Aceh Branch Office. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Vol 3 (2): 1134-1146.*

- Ghozali, I. (2006). Aplikasi analisis multivariate dengan program SPSS. Semarang: Universitas Diponegoro Press.
- Henny, L. A. (2017). Pengaruh Kebijakan Dividen, Leverage, dan Pertumbuhan Penjualan terhadap Profitabilitas pada Masa yang Akan Datang. *Jurnal Akuntansi Unesa*, 5(3), 125.
- Jusriani, I. F., & Rahardjo, S. N. (2013). Analisis Pengaruh Profitabilitas, Kebijakan Deviden, Kebijakan Utang, dan Kepemilikan Manajerial terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia Periode 2009–2011). *Diponegoro Journal of Accounting*, 168-177.
- Kesuma, A. (2009). Analisis Faktor yang Mempengaruhi Struktur Modal serta Pengaruhnya terhadap Harga Saham Perusahaan Real Estate yang Go Public di Bursa Efek Indonesia. *Jurnal Manajemen dan Kewirausahaan*, 11(1), 38-45.
- Lubis, I. (2010). Bank dan Lembaga Keuangan. USUpres.
- Machmud, S. (2015). Kajian Pemanfaatan Dana Corporate Social Responsibility Sebagai Alternatif Sumber Pembiayaan Pembangunan Daerah. *Jurnal Ekonomi, Bisnis & Entrepreneurship*, 9(1).
- Meidiawati, K., & Mildawati, T. (2016). Pengaruh Size, Growth, Profitabilitas, Struktur Modal, Kebijakan Dividen terhadap Nilai Perusahaan. *Jurnal Ilmu Dan Riset Akuntansi (JIRA)*, 5(2).
- Negara, A. K., & Febrianto, H. G. (2020). Pengaruh Kemajuan Teknologi Informasi Dan Pengetahuan Investasi Terhadap Minat Investasi Generasi Milenial Di Pasar Modal. *Business Management Journal*, 16(2), 81-95.
- Rosmika, T.E., Mulia, A., and Chairy, P. (2019). The Role of BRI Bank Medan Perjuangan Unit for Customer's Households, Indonesia. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Vol 2 (4): 363-374.*
- Sari, D. V., & Haryanto, A. M. (2013). Pengaruh Profitabilitas, Pertumbuhan Aset, Ukuran Perusahaan, Struktur Aktiva Dan Likuiditas Terhadap Struktur Modal Pada Perusahaan Manufaktur Di Bursa Efek Indonesia Tahun 2008–2010. *Diponegoro journal of Management*, 40-50.
- Sari, P. I. P., & Abundanti, N. (2014). Pengaruh pertumbuhan perusahaan dan leverage terhadap profitabilitas dan nilai perusahaan (Doctoral dissertation, Udayana University).
- Setiawati, L. W., & Lim, M. (2018). Analisis Pengaruh Profitabilitas, Ukuran Perusahaan, Leverage, Dan Pengungkapan Sosial Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2011--2015. *Jurnal Akuntansi*, 12(1).
- Siamat, D. (2004). Manajemen Lembaga Keuangan Edisi Keempat. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
- Sunarto, S., & Budi, A. P. (2009). Pengaruh Leverage, Ukuran dan Pertumbuhan Perusahaan Terhadap Profitabilitas. *Jurnal Ilmiah Telaah Manajemen*, 6(1).
- Syardiana, G., Rodoni, A., & Putri, Z. E. (2015). Pengaruh investment opportunity set, struktur modal, pertumbuhan perusahaan, dan return on asset terhadap nilai perusahaan. *Akuntabilitas*, 8(1), 39-46.
- Tarigan, N.M., and Setiawan, H. (2020). The Effect of Employee Competence on Increasing Employee Motivation in Sumut Bank of Sharia Unit, North Sumatera. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal) Vol 3 (2): 858-867.*
- Wahyuni, R. E., & Wahyuati, A. (2017). Pengaruh Struktur Modal dan Pertumbuhan Perusahaan Terhadap Harga Saham. *Jurnal Ilmu dan Riset Manajemen (JIRM)*, 6(4).
- Weston, F. J., & Copeland, T. E. (1997). *Financial Management Volume 2 Issue 9*. Jakarta: Binarupa Aksara.