

THE INFLUENCE OF FIXED ASSET INVESTMENTS, SOLVENCY ON THE PROFITABILITY OF MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE PERIOD 2017-2020

Juni Sasmiharti *¹

¹ Industrial Engineering, Gunadarama University, Indonesia

*e-mail: jsasmiharti@gmail.com

Abstract

This research aims to investigate the effect of fixed asset investment and solvency level on the profitability of manufacturing companies listed on the Indonesia Stock Exchange in the 2017-2020 period. Through analysis of company financial data, this research obtained significant findings regarding the relationship between these variables. The research results show that fixed asset investment has a positive influence on the profitability of manufacturing companies. Companies that are able to make efficient investments in fixed assets tend to achieve increased profitability because they can increase production capacity and operational efficiency. Furthermore, the company's solvency level is also proven to influence profitability. Companies with a balanced level of solvency tend to have better financial stability, which supports profitability growth. In the context of economic and policy changes in the 2017-2020 period, this research highlights the importance of understanding external factors that can influence the relationship between fixed asset investment, solvency and profitability.

Keywords: Fixed Asset Investment, Solvency, Profitability of Manufacturing Companies, Indonesian Stock Exchange (BEI)

INTRODUCTION

The growth of the manufacturing sector in Indonesia has made a significant contribution to national economic growth. According to the Ministry of Industry, the manufacturing sector grew by 6.91% in a certain period, despite experiencing pressure due to the pandemic. This sector is also a contributor to national economic growth, with significant export growth. Apart from that, the manufacturing industry also has an important role in absorbing labor, contributing to Gross Domestic Product (GDP), and national economic growth (Kehek et al., 2021).

Investments in fixed assets, such as machinery and production facilities, play an important role in the growth strategy of manufacturing companies. Fixed assets can increase production capacity and operational efficiency, which in turn can have an impact on a company's profitability. A study examining the effect of fixed asset investment on the profitability of manufacturing companies listed on the Indonesia Stock Exchange (BEI) in the 2015-2020 period shows that the lower the fixed asset investment, the lower the company's profitability (Salsabila, 2022). Apart from that, other research states that increasing assets has a positive but not significant influence on profitability, while increasing profitability has a positive and significant influence (Widjaja, 2014). Thus, investment in fixed assets can potentially increase the profitability of a manufacturing company, however, this can also depend on a number of other factors such as asset management and overall investment (Prasyoho et al., 2017). The role of fixed asset investment in increasing the profitability of manufacturing companies is a relevant topic in the context of the growth of the manufacturing sector in Indonesia, which has made a significant contribution to national economic growth.

The level of solvency is an important factor in determining a company's financial stability. Solvency reflects a company's ability to meet its financial obligations in the long term. The balance between debt and equity can affect a company's financial stability. Solvency analysis can provide an overview of financial risks and their impact on profitability. Several studies show that solvency has a significant effect on company value and profitability (Rinofah et al., 2022). Therefore,

companies need to pay attention to their solvency level in making investment decisions and financial management in order to maintain financial stability and increase their profitability.

Several studies highlight the impact of fixed asset investment and solvency level on the profitability of manufacturing companies. A study shows that the lower the fixed asset investment, the lower the company's profitability, because fixed asset investment is directly proportional to profitability. Apart from that, the level of solvency also affects profitability, where the balance between debt and equity can have an impact on the company's financial stability and its ability to gain profits from operational activities (Widjaja, 2014). Therefore, analysis of solvency and fixed asset investment is important in understanding the factors that influence the profitability of manufacturing companies.

External factors, such as fluctuations in global financial markets, changes in government policies, and industry dynamics, can influence the performance of manufacturing companies during the 2017-2020 period. The growth of the manufacturing industrial sector in Indonesia has contributed significantly to national economic growth. For example, in the second quarter of 2021, growth in the manufacturing industry reached. The export performance of the manufacturing sector increased, which had an impact on the trade balance surplus and sector excise revenues. The manufacturing industry is the main support for the economy, and is targeting growth of 4-4.5 percent in 2021 (www.kemenperin.go.id, 2021). By understanding these factors, it is hoped that this research can contribute to the understanding of how fixed asset investment and solvency levels play a role in shaping the profitability of manufacturing companies on the Indonesia Stock Exchange.

METHOD

This research uses a quantitative method because it contains numerical values starting from the data collection process to its interpretation, so the method is quantitative because the aim of this method is to use mathematical models and hypothetical theories related to a phenomenon.

Population and Sample

This research aims to examine cause-and-effect relationships (causality) by explaining the influence of independent variables, namely Fixed Asset Investment, Solvency, on the dependent variable, namely Profitability. The population has been determined, namely all manufacturing companies on the Indonesian Stock Exchange for the 2017-2020 period. The data analyzed in this research is secondary data in the form of company financial reports contained on the Indonesia Stock Exchange for the 2017-2020 period.

Research Instrument

The instrument used in this research is a document instrument used in collecting quantitative research data as data collection or data recapitulation which consists of value data in the form of numbers and is usually selected using statistics.

Fixed Asset Investment (X1)

$$FATR = \frac{\text{Sales}}{\text{Total Fixed Assets}}$$

Fixed Assets turnover is a ratio used to measure how many times funds are invested (invested) in fixed assets in one period. Fixed asset turnover is the comparison between net sales and fixed assets in one period

Solvency (X2)

Solvency ratio, also known as leverage ratio, is a ratio used to assess a company's ability to pay short-term or long-term obligations if the company is dissolved or liquidated. This ratio measures the extent to which the company's assets are financed by debt, and is a measure of the company's ability to pay all its obligations, both short and long term. The leverage ratio also reflects how much debt the company carries compared to its assets.

$$\text{Solvency} = \frac{\text{Total Amount of debt}}{\text{Total Assets}}$$

The higher the solvency ratio, the higher the risk of loss that will occur, but there is also the opportunity to gain large profits. Conversely, a low solvency ratio can result in low returns. There are several types of solvency ratios, such as Debt to Assets Ratio (DAR), Debt to Equity Ratio (D/E), and Debt to Capital Ratio, which are used to measure various aspects of a company's solvency.

Profitability

Profitability is a company's ability to generate profits or profits in a certain period. The profitability measurements used in this research are Return on Assets (ROA) and Return on Equity (ROE). ROA describes the company's ability to utilize its assets to generate profits, while ROE measures the company's ability to obtain profits from the capital invested by the company owners. The profitability ratio is a comparison to determine the company's ability to earn profits from revenue. This profitability ratio will reveal the final results of all financial policies and decisions taken by the company.

$$\text{ROA} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}}$$

RESULTS AND DISCUSSION

This research focuses on manufacturing companies listed on the 2017-2020 Indonesia Stock Exchange, totaling 149 companies. Of the 149 manufacturing companies listed on the IDX in 2017-2020, there are 30 companies that publish financial reports using currencies other than the rupiah, 3 manufacturing companies that are listed on the Indonesia Stock Exchange (BEI) in 2017-2020 whose financial reports cannot be found. and 1 company with suspension status. Apart from that, 58 companies had outlier data. The following is a summary table of the research sample selection presented in table 1.

Table 1. Details of Research Sample Selection Stages

No	Kriteria	Jumlah
1	Manufacturing companies that were successively listed on the Indonesia Stock Exchange (BEI) in 2017-2020.	149
2	Companies publish financial reports using currencies other than the Rupiah	(30)
3	Manufacturing companies that were successively listed on the Indonesia Stock Exchange (BEI) in 2017-2020 whose financial reports cannot be found	(3)
4	Companies currently under Suspension on the Indonesian Stock Exchange. Number of manufacturing companies that meet the criteria	(1)
		115
5	Companies that contain outliers	(58)
6	Number of samples of manufacturing companies registered on the IDX during 2017-2020 (84 companies x 4 years)	57
7	Number of samples used in research	228

Research Data Processing

Descriptive Statistical Analysis

Table 2. Results of Descriptive Statistical Analysis Tests

	N	Minimum	Maximum	Mean	Std. Deviation
FATR	228	.0013	3.2723	1.616692	.8002945
DAR	228	.0076	.9913	.374230	.1819621
WCT	228	-5.4859	10.6232	3.298720	2.3983001
FCFM	228	-.2776	1.1353	.054829	.1570009
ROA	228	-.2293	.2575	.053195	.0741706
Valid N (listwise)	228				

Table 2 shows the results of descriptive statistical analysis tests on Fixed Asset Investment using the Fixed Asset Turnover Ratio (FATR) showing a minimum value of 0.0013. shows the results of descriptive statistical analysis tests on solvency using the Debt to Asset Ratio (DAR) showing a minimum value of 0.0076.

Normality Test Results

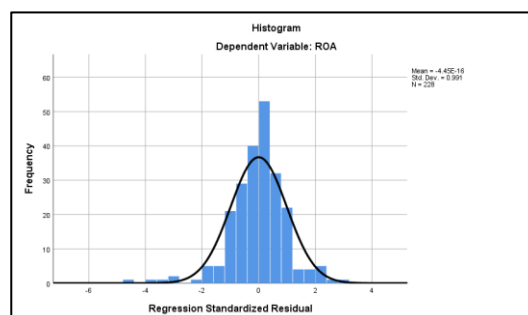


Figure 1. Normality Test Results with Normal Histogram

In Figure 1 you can see that the histogram graph above depicts a symmetrical shape, this histogram graph means it does not deviate to the right or left. it can be concluded that the data in this study is normally distributed.

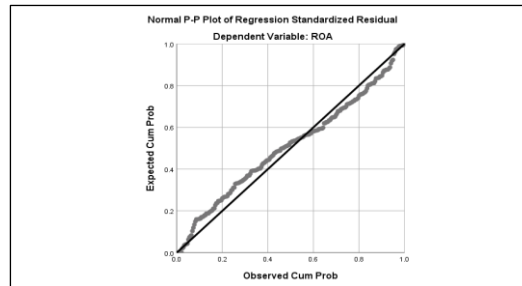


Figure 2. Normality Test Results with Normal Probability Plot Graphs

In Figure 2, it can be seen that on the normal probability plot graph above the points are spread out and also coincide around the diagonal line. Based on the normal probability plot graph in Figure 2 above, the data results are normally distributed.

Multicollinearity Test Results

Table 3. Multicollinearity Test Results

Coefficients ^a								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.064	.015		4.239	.000		
	FATR	.023	.006	.247	4.019	.000	.899	1.112
	DAR	-.138	.025	-.338	-5.535	.000	.909	1.100
	WCT	.000	.002	-.008	-.125	.901	.873	1.146
	FCFM	.085	.029	.181	2.945	.004	.898	1.114
a. Dependent Variable: ROA								

a. Dependent Variable: ROA

Tabel 3. bahwa hasil uji multicollinearitas di atas show bahwa nilai tolerance > 0.1 dan VIF < 10. Dapat disimpulkan bahwa variabel bebas dalam peresikaan tidak saling berkorelasi atau tidak tadida symptoma multicollinearitas antar variable.

The Effect of Fixed Asset Investment (IAT) on Company Profitability

It can be seen that Fixed Asset Investment has a t count of 4.019 with a significance level of 0.00. This shows that the significance level is below or < alpha ($\alpha = 0.05$). This research also shows a positive direction with an unstandardized beta value of 0.023. With this, the results of the research show that H1 is accepted, which means that fixed asset investment has an effect on company profitability. This research is in line with research conducted by Herawati and Fajar that fixed asset investment has a positive and significant effect on profitability because part of every profit a company makes will be invested in fixed assets (Herawati & Fajar, 2016). Apart from that, this research also supports research conducted by Olatunji that there is a positive correlation between company profits and fixed assets, this implies that an increase in company profits results from an increase in fixed asset investment (Olatunji & Adegbite, 2014).

The rate of return on Fixed Asset Investment affects the level of profit in the company. Fixed assets must be used effectively and productively to increase profitability in order to satisfy the expectations of investors (principals) in agency relationship work contracts.

The Effect of Solvency on Company Profitability

It can be seen that Solvency has a t count of -5.535 with a significance level of 0.000. This shows that the significance level is below or $< \alpha$ ($\alpha = 0.05$). This research also shows a negative direction with an unstandardized beta value of -0.138. With this, the results of the research show that H1 is accepted, which means that solvency influences the company's profitability (Ghozali, 2016). The results of this research support research conducted by (Lilia, 2018) that solvency has a significant effect on company profitability, the increase in DER (debt to equity ratio) is directly proportional to the increase in profitability.

If a company has high solvency, then the company has a large risk of loss but also has the opportunity to gain large profits from the role of external parties. If the company has a high level of liabilities, this will affect the company's financial performance and make it difficult to obtain funds from other third parties. Meanwhile, this research is not in line with research conducted by Rosniawati and Pasaribu that partially Solvency (DAR) has no effect on company profitability because companies can still rely on working capital internally to carry out company activities to earn profits.

CONCLUSION

The results of the analysis show that fixed asset investment has a significant influence on the profitability of manufacturing companies. Companies that make smart investments in fixed assets tend to experience increased profitability because they can increase production capacity and operational efficiency. The company's solvency level also plays an important role in determining profitability. Companies with a balanced level of solvency tend to have better financial stability, which in turn can support profitability growth. External factors, including economic conditions and government policies, can influence the relationship between fixed asset investment, solvency and profitability. Therefore, the context of the 2017-2020 period needs to be considered in depth when interpreting research results. Company management needs to pay close attention to the fixed asset investment ratio and solvency level to maximize profitability. Investment decisions and financial policies must be in line with the company's long-term goals.

BIBLIOGRAPHY

- Ghozali, I. (2016). *Aplikasi analisis multivariete dengan program IBM SPSS 23*.
- Herawati, T., & Fajar, T. W. N. (2016). Pengaruh Modal Kerja Dan Investasi Aktiva Tetap Terhadap Profitabilitas (Studi Kasus Pada PT Astra Internasional Tbk). *STAR*, 13(3), 9–23.
- Kehek, C. C., Cipta, W., & Suci, N. M. (2021). Pengaruh Ukuran Perusahaan, Earning Per Share dan Return On Asset Terhadap Nilai Perusahaan Sub Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia Tahun 2016-2018. *Jurnal Akuntansi Profesi*, 12(1), 176–184.
- Lilia, W. (2018). Pengaruh Good Corporate Governance, Modal Kerja, Solvability, Aset Turnover, Dan Biaya Operasional Terhadap Profitabilitas Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Pada Periode 2013-2015. *JRAM (Jurnal Riset Akuntansi Multiparadigma)*, 5(1).
- Olatunji, T. E., & Adegbite, T. A. (2014). Investment in fixed assets and firm profitability: Empirical evidence from the Nigerian banking sector. *Asian Journal of Social Sciences and Management Studies*, 1(3), 78–82.
- Prasyoho, E., Wahyuni, O., & Laju, I. K. (2017). Pengaruh Asset, Investment dan Pengelolaannya Terhadap Profitabilitas PT. MAF Logistik. *Dinamika Bahari*, 8(1), 1786–1797.

- Rinofah, R., Kusumawardhani, R., & Fadhilah, I. N. (2022). Pengaruh profitabilitas, liquiditas, dan solvabilitas terhadap nilai perusahaan pada perusahaan manufaktur terdaftar di bursa efek Indonesia. *Jurnal Manajemen*, 14(3).
- Salsabila, S. (2022). *Pengaruh Investasi Aset Tetap Terhadap Profitabilitas Yang Diprosikan Dengan Return On Investment Pada Perusahaan Logam Yang Terdaftar Di Bursa Efek Indonesia Periode 2015-2020 (Doctoral dissertation, Universitas Medan Area)*. <https://repositori.uma.ac.id/jspui/bitstream/123456789/18799/2/178330279%20-%20Syarifah%20Salsabila%20-%20Fulltext.pdf>
- Widjaja, I. (2014). Dampak peningkatan asset, profitabilitas dan likuiditas terhadap leverage perusahaan. *Jurnal Akuntansi*, 18(3), 459–474.
- www.kemenperin.go.id. (2021, December 29). *Tahun 2021, Menperin: Sektor Industri Masih Jadi Penopang Utama Ekonomi*. <https://www.kemenperin.go.id/Artikel/23048/Tahun-2021,-Menperin:-Sektor-Industri-Masih-Jadi-Penopang-Utama-Ekonomi>.