

The Effect of Activity Ratio, Profitability, Liquidity, and Firm Size on Profit Growth

N K Agnes Trisna Milena ^{1*}, I Nyoman Sugiarta ², L Mei Wahyuni ³

¹ Managerial of Accounting Undergraduate Study Program, Accounting Department, Bali State Polytechnic

² Managerial of Accounting Undergraduate Study Program, Accounting Department, Bali State Polytechnic

³ Managerial of Accounting Undergraduate Study Program, Accounting Department, Bali State Polytechnic

agnestrisna16@gmail.com ^{1*}, n.sugiarta@yahoo.com ², meiwahyuni@pnb.ac.id ³

Abstract: The purpose of this research was to determine the effect of the activity ratio, profitability, liquidity, and firm size either partially or simultaneously on the profit growth of PT Pelabuhan Indonesia (Persero) Cabang Benoa for the 2013-2020 period. The type of research used is quantitative research. The type of data used in this study was secondary data. The population used is the annual income statement and balance sheet for the 2013-2020 period and the sampling technique uses a saturated sampling method. The analysis technique use multiple linear regression analysis. The results of the research showed that simultaneously the activity ratio, profitability, liquidity, firm size have a significant effect on profit growth at PT Pelabuhan Indonesia (Persero) Cabang Benoa for the 2013-2020 period. Partially, the activity ratio, profitability, and firm size have a positive and significant effect on profit growth. While the liquidity ratio partially has a negative and significant impact on profit growth.

Keywords: Activity Ratio, Profitability, Liquidity, Firm Size, and Profit Growth

Article information: Submit to Repository on September 2022

Introduction

PT Pelabuhan Indonesia (Persero) Cabang Benoa is a logistics company that focuses on port management and development. As a company that becomes the entry and exit route for goods from a region or country, up and down passengers, where ships dock and loading and unloading goods, of course, we expect maximum profit. The value of the activity ratio, profitability, liquidity, and profit growth in the 2013-2020 period has fluctuated based on the yearly income statements and balance sheets data which is can be seen in Table 1 as follows:

Table 1. Activity Ratio, Profitability, Liquidity, Firm Size, and Profit Growth of PT Pelabuhan Indonesia (Persero) Cabang Benoa for the 2013-2020 period

Year	Activity Ratio (Time)	Profitability Ratio (%)	Liquidity Ratio (%)	Firm Size (Rp)	Profit Growth (%)
2013	0,47	0,10	0,83	25,31	-0,02
2014	0,48	0,14	0,85	25,52	0,85
2015	0,55	0,17	1,37	25,60	0,29
2016	0,74	0,30	1,66	26,26	2,40
2017	0,46	0,20	1,57	26,50	-0,14
2018	0,42	0,06	1,26	27,54	-0,21
2019	0,20	0,03	0,92	27,60	-0,38
2020	0,09	0,02	0,73	27,64	-0,30

Source: Secondary data processed, 2022

The value of the activity ratio, profitability, liquidity, and profit growth has fluctuated according to Table 1. This fluctuation indicates that the company has not been able to utilize its assets optimally to generate profits. Profit growth at PT Pelabuhan Indonesia (Persero) Cabang Benoa in 2013-2020 period have fluctuated. The highest profit growth occurred in 2016 at 2,40% and the lowest profit growth occurred in 2019 at -0,38%. The Covid-19 pandemic phenomenon in the 2019 and 2020 period made resulted in the closure of port terminal activities, which reduced the company's revenue, causing the company's profit to decline. Even though during the 2020 pandemic, the company's profits still decreased compared to 2019, profit growth was able to increase from the previous year of 0.08%. Based on this issue, the authors will examine how the activity ratio, profitability, liquidity, and firm size affect PT Pelabuhan Indonesia (Persero) Cabang Benoa potential to increase profit growth.

As for several studies on the activity ratio using the Total Assets Turnover measurement tool, Nasution & Sitorus (2022), Gulo et al., (2021), and Agustina & Mulyadi (2019) where the activity ratio has a significant positive effect on profit growth. On profitability ratios with Return on Assets indicators conducted by Amelia et al., (2022),

Septiyarina (2022), and Meidiyustiani et al., (2021) where profitability has a positive and significant effect on profit growth. The liquidity ratio with the Current Ratio indicator conducted by Rahayu & Sitohang (2019) where liquidity has a positive and significant effect on profit growth. Research by Petra et al., (2020) and Alfitri & Sitohang (2018) shows that firm size has a significant positive effect on profit growth. Based on this issue, the authors will examine how the activity ratio, profitability, liquidity, and firm size affect PT Pelabuhan Indonesia (Persero) Cabang Benoa potential to increase profit growth.

Method

The research was carried out in a state-owned company engaged in the logistics port, namely PT Pelabuhan Indonesia (Persero) Cabang Benoa located on Jalan Raya Pelabuhan Benoa Denpasar. The time used includes six months from February 2022 to July 2022. Quantitative research is the kind of research that is used. This research, the type of data using secondary data. The population used are the annual income statements and balance sheets for the 2013-2020 period and the saturated sampling method is the sampling technique on this research. The data collection technique used in obtaining secondary data is documentation. The variables in this study include the activity ratio with the Total Assets Turnover indicator, the profitability ratio with Return on Assets indicator, the liquidity ratio with Current Ratio indicator, the firm size with Logaritma Natural indicator and profit growth. The analysis technique use including multiple linear regression analysis.

Result and Discussion

Description of Research Results

Based on Table 2, each variable used in this research can be described as follows:

Table 2. Descriptive Statistical

	N	Unit	Minimum	Maximum	Mean	Std. Deviation
Activity Ratio	8	Times	0,09	0,74	0,4273	0,20057
Profitability Ratio	8	%	0,02	0,30	0,1286	0,09554
Liquidity Ratio	8	%	0,73	1,66	1,1508	0,36160
Firm Size	8	Rp	25,31	27,64	26,4943	0,98870
Profit Growth	8	%	-0,38	2,40	0,3098	0,93180
Valid N (listwise)	8					

Source: Results of data processing with SPSS, 2022

**Table 3. Normality Test
One-Sample Kolmogorov-Smirnov Test**

	Unstandardized Residual
N	8
Normal Parameters ^{a,b}	Mean Std. Deviation
	0,0000000 0,17265627
Most Extreme Differences	Absolute Positive Negative
	0,147 0,147 -0,120
Test Statistic	0,147
Asymp. Sig. (2-tailed)	0,200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: Results of data processing with SPSS, 2022

According to Table 3, the normality test have a significance value of 0,200 > 0,05. So it shows that the data is normally distributed.

Table 4. Multicollinearity Test Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	Activity Ratio	0,125	8,003
	Profitability Ratio	0,143	6,998
	Liquidity Ratio	0,157	6,372
	Firm Size	0,235	4,257

a. Dependent Variable: Profit Growth

Source: Results of data processing with SPSS, 2022

According to Table 4, each independent variable's tolerance value is less than 0,1 and the VIF value is less than 10. It shows that there are no signs of multicollinearity in the regression model.

Table 5. Heteroscedasticity Test

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	66,825	50,720		1,318	0,279
	Activity Ratio	-12,317	13,083	-1,081	-0,941	0,416
	Profitability Ratio	-4,841	25,682	-0,202	-0,189	0,863
	Liquidity Ratio	7,185	6,476	1,137	1,110	0,348
	Firm Size	-2,796	1,936	-1,210	-1,445	0,244

a. Dependent Variable: LnRes_2

Source: Results of data processing with SPSS, 2022

According to Table 5, it can be seen that the significance value of each independent variable is > 0,05. So, it means that there is no symptom of heteroscedasticity in the regression model.

Table 6. Autocorrelation Test Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,983 ^a	0,966	0,920	0,26374	1,796

a. Predictors: (Constant), Firm Size, Liquidity Ratio, Profitability Ratio, Activity Ratio

b. Dependent Variable: Profit Growth

Source: Results of data processing with SPSS, 2022

In Table 6 the Durbin-Watson value is 1,796. That indicates the value of D-W is between -2 to +2. This criterion is used when the population and sample are small. Therefore, it means that there is no autocorrelation issue with the regression equation model.

Table 7. Multiple Linear Regression Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-23,526	5,451		-4,316	0,023
	Activity Ratio	5,077	1,406	1,093	3,611	0,036
	Profitability Ratio	13,782	2,760	1,413	4,994	0,015
	Liquidity Ratio	-3,372	0,696	-1,309	-4,846	0,017
	Firm Size	0,897	0,208	0,952	4,314	0,023

a. Dependent Variable: Profit Growth

Source: Results of data processing with SPSS, 2022

The following multiple linear regression equation based on table 7 is obtained:

$$Y = -23,526 + 5,077X_1 + 13,782X_2 + -3,372X_3 + 0,897X_4$$

Table 8. Coefficient of Determination Model Summary^b

Model	R	R Square	Adjusted R Square
1	0,983 ^a	0,966	0,920

a. Predictors: (Constant), Firm Size, Liquidity Ratio, Profitability Ratio, Activity Ratio

b. Dependent Variable: Profit Growth

Source: Results of data processing with SPSS, 2022

According to Table 8, the Adjusted R Square value is 0.920, which indicates that 92% of the independent variables have an effect on the dependent variable, the remaining 8% being influenced by additional variables that were not studied for this research.

Table 9. F Test ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,869	4	1,467	21,095	0,016 ^b
	Residual	0,209	3	0,070		
	Total	6,078	7			

a. Dependent Variable: Profit Growth

b. Predictors: (Constant), Firm Size, Liquidity Ratio, Profitability Ratio, Activity Ratio

Source: Results of data processing with SPSS, 2022

The calculated F value is 21,095 > F table 9,117 and the significance value is 0,016 < 0,05. So, it means that together the activity ratio, profitability, liquidity, and firm size have a significant effect on profit growth.

Table 10. t-Test Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-23,526	5,451		-4,316	0,023
	Activity Ratio	5,077	1,406	1,093	3,611	0,036
	Profitability Ratio	13,782	2,760	1,413	4,994	0,015
	Liquidity Ratio	-3,372	0,696	-1,309	-4,846	0,017
	Firm Size	0,897	0,208	0,952	4,314	0,023

a. Dependent Variable: Profit Growth

Source: Results of data processing with SPSS, 2022

Based on Table 10 it can be concluded:

a. The Effect of Activity Ratio on Profit Growth

According on Table 10, the t-count value is 3,611 > t-table 2,353 and the significance level obtained is 0,036 < 0,05. Therefore, it means that the activity ratio has a significant positive effect on profit growth. These results indicate that the higher the value of the activity ratio, the more profit growth will increase. This means that the available assets can be utilized properly and can be managed effectively and efficiently, so the company's operational activities will increase and have an effect on revenue so that the profits obtained will also increase.

b. The Effect of Profitability Ratios on Profit Growth

According on Table 10, the t-count value is 4,994 > t-table 2,353 and the significance level obtained is 0,015 < 0,05. Therefore, it means that the profitability ratio has a significant positive effect on profit growth. According to this analysis, the company's assets have been utilized to their full potential to maximize sales and profit growth.

c. The Effect of Liquidity Ratio on Profit Growth

According on Table 10, the t-count value is -4,846 < t-table 2,353 and the significance level obtained is 0,017 < 0,05. Therefore, it means that the liquidity ratio has a significant negative effect on profit growth. The fact means that low liquidity occurs because the current debt that must be fulfilled is more than the current assets. This means that management is less able to operate the company's activities properly, especially in the use of funds owned.

d. The Effect of Firm Size on Profit Growth

According on Table 10, the value of t arithmetic is 4,314 > t table is 2,353 and the significance level obtained is 0,023 < 0,05. Therefore, it means that the size of the company has a significant positive effect on profit growth. Every year, the firm size of PT Pelabuhan Indonesia (Persero) Cabang Benoa has grown, and its sizable total assets show that it has reached a mature stage. In comparison to businesses with smaller total assets, the firm at this level is thought to have strong potential, to be more stable and lucrative.

Conclusion

The following conclusions can be drawn from the findings of the research and discussion previously described: 1) The activity ratio as measured by Total Assets Turnover has a significant positive effect on profit growth. 2) The profitability ratio as measured by Return on Assets has a significant positive effect on profit growth. 3) The liquidity ratio as measured by the Current Ratio has a significant negative effect on profit growth. 4) Firm size as measured by Natural Logarithm has a significant positive effect on profit growth. 5) The activity ratio, profitability, liquidity, and firm size together have a significant effect on profit growth.

Acknowledgment

The author is aware that finishing this research would be extremely challenging without the direction and support from several people. The author acknowledges that while writing this journal, has picked up knowledge from numerous sources. As a result, the author would like to use this opportunity to show their sincere thanks to PT Pelabuhan Indonesia (Persero) Cabang Benoa, the first and second mentor lecturers, the first and second examiner lecturers, as well as everyone else who helped make this journal possible.

Reference

- Alfitri, ID, & Sitohang, S. (2018). The Effect of Profitability Ratios, Activity Ratios, and Firm Sizes on Profit Growth. *Journal of Management Science and Research*, 7(6), 1-17.
- Amelia, D., Purwandari, D., & Marliani, S. (2022). The Effect of Current Ratio, Debt to Equity Ratio, and Return on Assets on Profit Growth in Basic and Chemical Industry Sector Companies Listed on the Indonesia Stock Exchange (Period 2016-2018). *Student Journal of Management and Accounting*, 2(1), 221-242.
- Gulo, A., Gaol, IL, Tampubolon, M., & Sari, IR (2022). The Influence of Firm Size, Liquidity, Leverage, and Activities on Profit Growth in Trading, Service and Investment Sector Companies Listed on the Indonesia Stock Exchange for the 2016-2019 Period. *Journal of Economics, Business, and Accounting*, 5(1), 169-181, <https://doi.org/10.31539/costing.v5i1.2589>.
- Kasmir. (2016). *Financial Statement Analysis*. Jakarta: PT. King Grafindo Persada.
- Kusoy, NA, & Priyadi, MP (2020). Effect of Profitability, Leverage and Activity Ratio on Profit Growth. *Journal of Accounting Science and Research*, 9(7), 1-16.
- Martini, RS, & Siddi, P. (2021). Effect of Return on Assets, Debt to Equity Ratio, Total Assets Turnover, Net Profit Margin, and Managerial Ownership on Profit Growth. *Journal of Accounting and Finance*, 18(1), 99-109.
- Meidiyustiani, R., Oktaviani, RF, & Niazi, HA (2021). Analysis of Profitability, Liquidity, Leverage, and Firm Size on Profit Growth (Empirical Study on Manufacturing Companies in the Consumer Goods Industry Sector Listed on the Indonesia Stock Exchange for the 2014–2018 Period). *Journal of Accounting and Finance*, 2(2), 49-59.
- Nasution, Y., & Sitorus, G. (2022). The Effect of Current Ratio (CR), Debt to Equity Ratio (DER), and Total Assets Turnover (TATO) on Profit Growth in Manufacturing Companies in the Basic and Chemical Industry Sector Listed on the Indonesia Stock Exchange in 2017-2020. *USNI Journal of Management*, 6(2), 61-72, <https://doi.org/10.54964/manajemen/>.
- Petra, BA, Apriyanti, N., Agusti, A., Nesvianti, & Yulia, Y. (2020). Effect of Firm Size, Current Ratio, and Inventory Turnover on Profit Growth. *Online Journal of Accountants*, 5(2), 197-214.
- Rahayu, PD, & Sitohang, S. (2019). The Effect of Profitability, Leverage, Liquidity, and Firm Size on Profit Growth. *Journal of Management Science and Research*, 8(6), 1-18.
- Septiyarina, P. (2022). Effect of Current Ratio, Total Asset Turnover, and Return on Assets on Profit Growth. *Journal of Financial Scholar*, 1(1), 57-69, <https://doi.org/10.32503/jck.v1i1.2268>.
- Susyana, FI, & Nugraha, NM (2021). Effect of Net Profit Margin, Return on Assets, and Current Ratio on Profit Growth. *Journal of Banking Management Economics*, 3(1), 56-69.