Accounting and bussiness Journal

The Effect of Inventory Turnover and Receivables Turnover on Profitability in Coal Sub-Sector Companies Listed on The Indonesia Stock Exchange (BEI)

M Syukrillah Putra[1], Kristin Natalia Doloksaribu[2], Tesalonika Tampubolon[3], Dwi Saraswati, S.Pd., M.Si[4]

University Pembangunan Panca Budi
E-mail: syukrillahputra30@gmail.com

Abstract

In the field of capital markets at panca budi university (UNPAB), this research aims to find out how the inventory turnover and receivables turnover methods influence the profitability of coal sub-sector companies listed on the indonesian stock exchange (BEI). Participants in this research were steel industry. The research samples were ADRO, GEMS, HRUM, ITMG and PTRO companies. Individually, the inventory turnover has no effect on profitability. Individually, receivables turnover has a positive and significant influence on profitability. Together, inventory turnover and receivables turnover have a positive and significant influence on profitability.

Keywords: *Inventory turnover, Receivable turnover, Profitability, Coal company, BEI*

1. INTRODUCTION

Financial reports act as a communication tool that connects the company with interested parties. The existence of this report is also very important as a form of managerial accountability for the use of resources owned by the owner (Asniwati et al., 2022). One of the main indicators in financial reports to assess managerial performance is profit. Therefore, profit is considered the most important element in financial reports, because it is generally considered to reflect management performance during a certain period (Garcinia, 2022).

One factor that influences profitability is inventory turnover. Profitability ratios function to assess the effectiveness of company management in achieving profits from sales and investment income. The higher this ratio, the better the picture of the company's ability to gain profits (Harahap & Nurjannah, 2020).

Delays in fulfilling consumer orders can be detrimental to the company, especially related to image degradation. The faster inventory turnover, the smaller the risk of loss due to price reductions or changes in consumer preferences. In addition, this can also reduce inventory storage and maintenance costs. Apart from that, receivables turnover is also a factor that influences profitability (Jufrizen & Sari, 2019).

Receivables turnover describes the relationship between a company's receivables and credit sales volume (Nainggolan, 2020). This helps reduce costs or risks related to uncollectible receivables or losses due to unpaid receivables. After the receivables are paid off, the funds received can be reused for selling credit or providing new loans, so that the amount of credit provided can increase. The return of cash as a result of repayment of receivables is very profitable for the company, because cash funds will always be available and can be reused, maintaining smooth operations and the company's financial condition (Rialdy, 2021).

Table 1. Profitability of Coal Sub-Sector Companies for the 2019-2023 Period

No	CODE	2019	2020	2021	2022	2023	Average
1	ADRO	0.060	0.025	0.136	0.172	0.270	0.133
2	GEMS	0.086	0.188	0.427	0.616	0.403	0.330
3	HRUM	0.045	0.121	0.112	0.297	0.120	0.139
4	ITMG	0.105	0.033	0.285	0.454	0.228	0.221
5	PTRO	0.057	0.061	0.064	0.069	0.017	0.054
Amount		0.353	0.428	1.024	1.608	1.038	0.877
Average		0.071	0.086	0.205	0.322	0.208	0.175

Source: www.idx.co.id

Profitability value of companies in the coal sub-sector from 2019 to 2023 has increased in 2022, reaching 0.322. The average profitability obtained is 0.175, which means there are three companies with values below the average, namely ADRO, HRUM, and PTRO. Meanwhile, two companies have values above the average, namely GEMS and ITMG.

Table 2. Inventory Turnover of Coal Sub-Sector Companies for the 2019-2023 Period

No	CODE	2019	2020	2021	2022	2023	Average
1	ADRO	383,06	-159,46	193,78	110,29	-231,74	59.186
2	GEMS	355,75	-329,63	147,57	231,60	-1250,25	-168.992
3	HRUM	-13,82	-36,57	35,96	40,63	26,44	10.636
4	ITMG	-323,94	-27,99	933,82	108,08	1262,26	390.446
5	PTRO	-193,75	-144,30	85,58	50,45	840,78	127.752
Amount		207.840	-697.950	1.396.710	541.050	647.490	419.028
Average		41.57	-139.59	279.34	108.21	129.50	83.81

Source: www.idx.co.id

Inventory turnover value for companies in the coal sub-sector from 2019 to 2023 has increased in 2021, reaching 279.34. The average recorded inventory turnover is 83.81, which means there are three companies with values below the average, namely ADRO, GEMS, and HRUM. Meanwhile, two companies showed values above the average, namely ITMG and PTRO.

Table 3. Receivables Turnover for Coal Sub-Sector Companies for the 2019-2023 Period

No	CODE	2019	2020	2021	2022	2023	Average
1	ADRO	-57.08	-29.41	17.52	41.52	-51.46	-15.78
2	GEMS	53.52	-64.19	53.38	55.20	29.47	25.48
3	HRUM	-20.83	-11.25	8.79	20.28	23.92	4.18
4	ITMG	-20.09	-17.92	18.02	39.47	-33.50	-2.81
5	PTRO	-24.10	-11.77	27.59	15.60	7.55	2.97
Amount		-68.580	-134.540	125.300	172.070	-24.020	14.040
Average		-13.72	-26.91	25.06	34.41	-4.80	2.81

Source: www.idx.co.id

Receivable turnover for companies in the coal sub-sector from 2019 to 2023 has increased in 2022, with the figure reaching 34.41. The average recorded receivables turnover is 2.81, which means there are two companies with values below the average, namely ADRO and ITMG. Meanwhile, three companies have scores above the average, namely GEMS, HRUM, and PTRO.

2. LITERATURE REVIEW

Profitability

The profitability ratio is an indicator used to assess the extent to which company management can generate profits from sales and investment income. The higher the value of the profitability ratio, the better the company's ability to achieve large profits (Sari, 2023). High profitability will support the optimal smooth running of the company's operations. In carrying out operations, every company needs resources, including capital, which is divided into working capital such as cash, receivables and inventory, as well as fixed capital in the form of fixed assets. This capital is an important factor in supporting the company's smooth operations to achieve its stated goals (Sari & Andriyani, 2021).

Inventory Turnover

Inventory turnover reflects the company's operational performance. The higher the inventory turnover rate, the greater the company's opportunity to make a profit (Sianggaran & Sianggaran, 2021). Inventory is an important asset for a company, consisting of materials or equipment used in the production process or providing services. The higher the inventory turnover rate, the faster or more efficient the time required between investment in inventory and sales transactions, and vice versa (Susanti, 2021).

Receivables Turnover

Receivables turnover describes the relationship between the company's receivables and credit sales volume. That the funds tied up in receivables can be returned quickly. This helps reduce costs or risks related to uncollectible receivables or losses due to these receivables. With fast repayment of receivables, these funds can be reused for credit sales or providing new loans, which in turn increases the amount of credit provided. The return of cash from repayment of receivables is very profitable for the company, because it ensures that cash is always available to support the company's smooth operations and finances (Ammy, 2020).

3. RESEARCH METHOD

To test secondary data obtained from documents by browsing Indonesia Stock Exchange (BEI), this research uses several linear regression models. Numerical information that can be measured and calculated is the basis of investigation. The proposed hypothesis is tested and the data is analyzed using statistical techniques.

Population is the total number of analytical units to be studied which have certain quantities (numbers) and characteristics applied by researchers to be studied (Sugiyono, 2018). Participants in this research were Steel Industry. The sampling method used was Purposive Sampling. This approach allows anyone who meets the researcher's criteria and is met by chance to be included as part of the sample (Sugiyono, 2012). The research samples were ADRO, GEMS, HRUM, ITMG and PTRO companies.

4. RESULTS AND ANALYSIS

Data analysis

1. Classical Assumption Test

a. Data Normality Test

Data normality is very important because normality distributed data is considered to represent the population well test (Santoso, 2019).

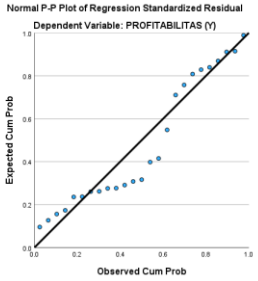


Figure 1. Normality Test

Source: SPSS Data Processing 29.00 (2024)

Based on Figure 1, The points on the normal probability plot are distributed along the diagonal line and align with its trajectory. This indicates that the regression model meets the normality assumption and that the residuals follow a normal distribution.

b. Multicollinearity Test

A perfect or almost perfect linear relationship between the independent variables in the regression model is determined by the multicollinearity test (Purnomo, 2017).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.175	.030		5.892	<.001		
	PERPUTARAN PERSEDIAAN (X1)	-3.143E-5	.000	-.094	-.498	.624	.996	1.004
	PERPUTARAN PIUTANG (X2)	.002	.001	.468	2.481	.021	.996	1.004

a. Dependent Variable: PROFITABILITAS (Y)

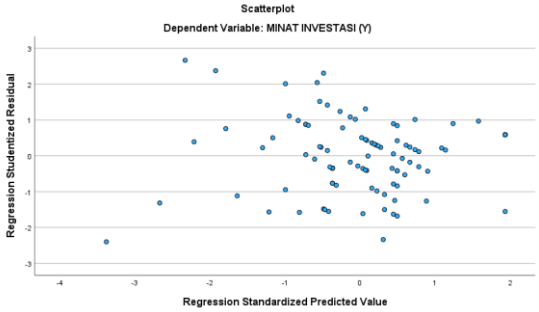
Source: SPSS Data Processing 29.00 (2024)

There is no association between independent variables, as indicated by the tolerance values of > 0.10 for each independent variable in Table 2. Likewise, the VIF computations show that every

independent variable has a VIF value less than or equal to 10. Consequently, it can be said that multicollinearity is not present.

c. Heteroscedasticity Test

Finding out if there is unequal variance in the residuals of the regression model between observations is the goal of the heteroscedasticity test (Juliandi, 2015). A regression model meets the criteria when it demonstrates homoscedasticity, meaning the residual variance remains consistent across all observations. The scatterplot diagram in Figure 2, derived from the SPSS output, illustrates this.



Source: SPSS Data Processing 29.00 (2024)

Figure 2. Heteroscedasticity Test

It is evident from Figure 2 above there is no discernible pattern or shape to the points result, which are dispersed in randomly top and bottom.

Simple Linear Regression

A basic linear regression model is for figuring out how the independent factors affect the dependent variable.

$$\mathbf{Y = a + \beta 1X1 + \beta 2X2 + Ɛ}$$

Y = Profitability
a = Constant
β = Regression Coefficient
X1 = Inventory Turnover
X2 = Receivables Turnover
Ɛ = Standard Error
The following is a table which is the output of SPSS.

Table 5. Simple Linear Regression Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.175	.030		5.892	<.001		
	PERPUTARAN PERSEDIAAN (X1)	-3.143E-5	.000	-.094	-.498	.624	.996	1.004
	PERPUTARAN PIUTANG (X2)	.002	.001	.468	2.481	.021	.996	1.004

a. Dependent Variable: PROFITABILITAS (Y)

Source: SPSS Data Processing 29.00 (2024)

a. A constant value of 0.175 indicates that the Accounting Treatment of Inventory Turnover and Receivables Turnover is in a constant condition, where there is no change or is considered zero, so that Profitability has a value of 0.175.

b. Investment Interest rise by - 3.143 if the Inventory Turnover increases, providing all other independent variables remain constant, according to the positive Inventory Turnover coefficient value of - 3.143.

c. The Receivables Turnover coefficient value is 0.002 in a positive direction, indicating that if Receivables Turnover increases, then Profitability will increase by 0.002, assuming the other independent variables are considered constant.

Hypothesis Testing

1. Partial Test (t-Test)

One way to determine how much impact variable X has on variable Y is to use a partial t-test. Typically, this t-test has a significance level of 0.05, or 5%.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.175	.030		5.892	<.001		
	PERPUTARAN PERSEDIAAN (X1)	-3.143E-5	.000	-.094	-.498	.624	.996	1.004
	PERPUTARAN PIUTANG (X2)	.002	.001	.468	2.481	.021	.996	1.004

a. Dependent Variable: PROFITABILITAS (Y)

Source: SPSS Data Processing 29.00 (2024)

1. The Effect of Inventory Turnover On Profitability

Based on the findings of the partial relationship test, Profitability has no effect on Inventory Turnover.

2. The Influence of Receivables Turnover On Profitability

Based on the findings of the partial relationship test, Profitability is positively and significantly impacted by Receivables Turnover.

3. F Test (Simultaneous)

Investment Interest is the dependent variable, and the F test seeks to determine how the independent variables Goodwill Accounting Treatment and Investment Knowledge effect it concurrently.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.133	2	.066	3.136	.063[b]
	Residual	.466	22	.021		
	Total	.599	24			

a. Dependent Variable: PROFITABILITAS (Y)

b. Predictors: (Constant), PERPUTARAN PIUTANG (X2), PERPUTARAN PERSEDIAAN (X1)

This illustrates how profitability is significantly impacted simultaneously by inventory turnover and receivables turnover.

Coefficient of Determination Test (R-Square)

According to (Sugiyono, 2012), Basically, the coefficient of determination shows how well the changes in the dependent variable can be explained. Evaluating the role of the independent variable (X) in predicting the value of Y is another method to determine whether a linear regression model is appropriate.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.471[a]	.222	.151	.145566	1.425

a. Predictors: (Constant), PERPUTARAN PIUTANG (X2), PERPUTARAN PERSEDIAAN (X1)

b. Dependent Variable: PROFITABILITAS (Y)

Source: SPSS Data Processing 29.00 (2024)

According to Table 8, the correlation between the variables is 15.1%, with an R value of 0.222 and an Adjusted R Square of 0.151. This shows that Inventory Turnover and Receivables Turnover, independent factors, account for 15.1% of the variation in the dependent variable, Profitability. As a result, Inventory Turnover and Receivables Turnover account for 15.1% of the explanation of Profitability, other factors not covered by this study model accounting for the remaining 15.1% (100% - 15.1%= 84,9%).

5. CONCLUSION

The following conclusions can be drawn from the research's findings:

1. Individually, Inventory Turnover has no effect influence on Profitability.
2. Individually, Receivables Turnover has a positive and significant influence on Profitability.
3. Together, Inventory Turnover and Receivables Turnover have a positive and significant influence on Profitability.

6. REFERENCE

Ammy, B., & Hasibuan, J. S. (2020). The Influence Of Current Ratio And Debt To Equity Ratio On Return On Assets In Construction And Building Companies Listed On The Indonesia Stock Exchange. *International Journal of Economic, Technology and Social Sciences (Injects)*, 1(2), 117–128.

Asniwati, A., Adrianah, A., & Nginang, Y. (2022). Pengaruh Perputaran Kas, Perputaran Piutang, dan Perputaran Persediaan terhadap Rentabilitas pada PT. Cipta Karya Makmur Bersama di Kota Makassar. *YUME: Journal of Management*, 4(3), 1–12.

Garcinia, I. (2022). Pengaruh Perputaran Kas, Perputaran Piutang Dan Perputaran Persediaan Terhadap Return on Assets (Roa) Pada Perusahaan Sub Sektor Rokok Yang Terdaftar Di Bei Tahun 2013-2020. *Journals of Economics and Business*, 2(1), 1–12.

Hanum, Z. (2020). Pelatihan Penyusunan Laporan Keuangan Usaha Mikro Kecil Menengah (UMKM) Desa Pantai Labu Pekan Kabupaten Deli Serdang. *Liabilities (Jurnal Pendidikan Akuntansi)*, 2(3), 237–242.

Hanum, Z., & Febyola, F. (2023). The Effect of Leverage, ProfitabilityAnd Company Size on Tax Avoidance in Automotive Companies. *Proceeding Medan International Conference on Economic and Business*, 1, 2446–2460.

Harahap, S. H., & Nurjannah, N. (2020). Pengaruh Intellectual Capital Terhadap Profitabilitas Pada Perusahaan Plastik Dan Kemasan Yang Terdaftardi Bursa Efek Indonesia. Jurnal Riset Akuntansi Dan Bisnis, 20(2), 234–246.

Jufrizen, J., & Sari, M. (2019). Pengaruh Current Ratio, Debt to Equity Ratio, dan Firm Size Terhadap Return On Equity. *Jurnal Riset Akuntansi Aksioma*, 18(1), 156–191.

Nainggolan, E. P. (2020). Determinan Return on Asset Pada Perusahaan Subsektor Pertambangan Batubara Yang Terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi Dan Keuangan Kontemporer (JAKK)*, 3(2), 91–102.

Rialdy, N. (2021). Pengaruh Perputaran Kas, Perputaran Persediaan Perputaran Piutang Terhadap Profitabilitas Pada Perusahaan Manufaktur Yang Terdaftar di BEI Tahun 2013-2017. *Seminar Nasional Teknologi Edukasi Sosial Dan Humaniora*, 1(1), 833–843.

Sari, I. N. (2023). Analisis Pengaruh Perputaran Kas, Piutang, dan Persediaan Terhadap Return On Assets pada Industri Rokok yang Terdaftar di BEI. COMSERVA: Jurnal Penelitian Dan Pengabdian Masyarakat, 3(1), 346–359.

Sari, M., & Andriyani, A. (2021). Analisis Perputaran Kas dan Perputaran Persediaan Dalam Meningkatkan Profitabilitas. Seminar Nasional Teknologi Edukasi Sosial Dan Humaniora, 1(1), 528–539.

Sijabat, J., & Sijabat, M. I. (2021). Pengaruh Perputaran Kas, Perputaran Piutang, Dan Perputaran

Persediaan Terhadap Profitabilitas (Studi Empiris Pada Perusahaan Manufaktur Sektor Barang Konsumsi yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2016-2019). Visi Sosial Humaniora, 2(1), 17–30.

Susanti, A. W. (2021). Pengaruh Perputaran Persediaan, Perputaran Piutang, Dan Pertumbuhan Penjualan Terhadap Profitabilitas Perusahaan Sub Sektor Makanan & Minuman Yang Terdaftar Di Bursa Efek Indonesia Tahun 2015- 2019. *Jurnal Ilmiah Mahasiswa Akuntansi*, 1(3), 213–225.