ANALYSIS OF CHANGES IN ACCOUNTING PROFIT
AND OPERATIONAL CASH FLOW ON STOCK RETURNS

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ABSTRACT

This study aims to determine the analysis of changes in accounting profit and changes in operating cash flow on the return of shares listed on the Indonesia Stock Exchange (IDX). The sample selection technique used was the purposive sampling method, obtaining a sample of 18 companies with 5 years of observation from 2017-2021, so that the total results of the observation data were 90 data. The data analysis method used is descriptive statistics, panel data estimation model selection, model suitability test, classic assumption test, panel data regression analysis and hypothesis testing using Eviews software version 12. Based on the results of the study partially, it shows that changes in accounting profit have no significant effect on stock returns and changes in operating cash flow have no significant effect on stock returns.
Keywords: Changes in accounting profit, operating cash flow, stock return.

1. INTRODUCTION

The mining industry is a very important sector. Share prices in the mining industry experience declines and increases in share prices (fluctuating) in companies which are caused by factors in companies, both micro and macro (Aldin, 2021).

The following is a table that shows the phenomenon of fluctuations in stock returns every year in a company. At the company PT. Adaro Energy Indonesia Tbk experienced an increase in stock returns from 2017 of 2.2727 and 2018 of 3.7863, then decreased in 2019 of 0.1028, and again experienced an increase in stock returns from 2020 to 2021, PT. Aneka Tambang Tbk in 2017, 2019 and 2021 continued to experience an increase, while in 2018 and 2020 it experienced a decline.

Based on the problems described in the background above, the writing formulates the problem in this regard as follows : 1. Do Changes in Accounting Profits Affect Stock Returns in Mining Sub-Sector Companies Listed on the Indonesia Stock Exchange (IDX) in 2017-2021? . 2. Do Changes in Operating Cash Flows Affect Stock Returns in Mining Sub-Sector Companies Listed on the Indonesia Stock Exchange (IDX) in 2017-2021? 3. Do Profits from Changes in Accounting and Operating Cash Flows Affect Stock Returns in Mining Sub-Sector Companies Listed on the Indonesia Stock Exchange (IDX) in 2017-2021?.

2. LITERATURE REVIEW
2.1. Signal Theory
Signal theory is that information published as an announcement will be a signal in making investment decisions. The market is expected to react when an information announcement is received if the announcement contains positive value. One type of information released by a company that can be a signal for parties outside the company, especially for investors, is the annual financial report (Tandelilin, 2017).

2.1.1. Stock *Returns*
Stock returns are also referred to as stock returns or changes in share value for the current period with the previous period. This means that the higher the profit changes in stock prices, the higher the stock returns that will be generated later (Fahmi, 2017). Explains that the level of calculating stock returns is as follows (Hartono, 2017) :

$$R_t = \frac{P_t - p_{t-1}}{p_{t-1}}$$

Keterangan:

R_t = Stock Returns

P_t = Closing Share Prices This Year

P_{t-1} = Previous Year Closing Share Price

2.1.2. Accounting Profit

Accounting profit is income obtained that is greater than all costs incurred according to accounting records. This accounting profit is reflected in the net profit after tax which is reported in the financial statements (Sugeng, 2017). Measuring accounting profit can be calculated using the following formula (Mahardi et al., 2019) :

$$LAK = \frac{LAK_t - LAK_{t-1}}{LAK_{t-1}}$$

Keterangan:

LAK = Changes In Accounting Profit

LAK_t = Accounting Profit for this Year's Period

LAK_{t-1} = Accounting Profit for the Previous Year Period

2.1.3. Operating Cash Flow

Operating Cash Flow Information regarding specific elements of historical cash flows, together with other information, is useful in predicting future operating cash flows. Cash flow from operating activities is mainly obtained from the company's main revenue-generating activities. Therefore, these cash flows generally come from transactions and other events that affect the determination of net profit or loss (Indonesian Accounting Association, 2018).

2.2 Framework Of Thought
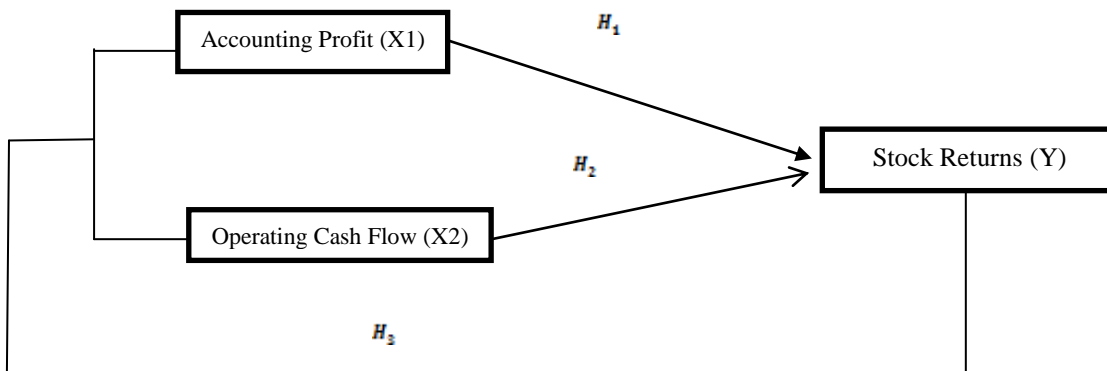
Gambar 2.2 framework of thought

2.3 Hypothesis Development
2.3.1 The Effect of Changes in Accounting Profit on Stock Returns

Thus, an increase in accounting profits will encourage an increase in company share prices and stock returns (Razak & Syafitri, 2018). Based on the description of the influence of accounting profits on stock returns, the following hypothesis can be formulated in this research:

H_1: Accounting Profit Influences Stock Returns.

2.3.2 The Effect of Changes in Operating Cash Flow on Stock Returns

The relationship between cash flow and share prices, as follows: Company cash flow data can provide investors with a deeper understanding of changes in share prices that will occur (Tandelilin, 2017). Operating cash flow is the primary income-generating activity and other activities unrelated to investing and financing activities. Operating cash flow can be generated sufficient to repay loans, maintain the company's ability to operate, pay dividends, and make new investments without relying on external financing.

The results of research conducted by Setia (2018) and Ander et al., (2021) prove that operating cash flow has an effect on stock returns. Based on this description, a research hypothesis can be formulated:

H_2: Operating Cash Flow has no effect on Stock Returns

2.3.3 The Effect of Changes in Accounting Profit and Operating Cash Flow on Stock Returns

These results are in line with research by Novi Darmayanti (2018) which concluded that accounting profit and operating cash flow do not have a significant effect on stock returns. Based on the explanation above, the following hypothesis can be formulated:

H_3: Accounting Profit and Operating Cash Flow Have No Effect on Stock Returns.

3. RESEARCH METHODOLOGY

3.1 Population and Sample

Population is a generalization area consisting of objects/subjects with certain characteristics and characteristics determined by the researcher for further research and conclusions. The population in this research is all Mining Sub Sector companies listed on the Indonesia Stock Exchange in 2017-2021.

sample is part of the number and characteristics of a population. The type of pattern can be an attribute, entity, phenomenon. The sampling technique used was purposive sampling. Purposive sampling is a data sampling method based on certain considerations (Sugiyono, 2017). Several considerations used by researchers are :

Table Sample Criteria

No.	Keterangan	Jumlah
1.	Perusahaan Sub Sektor Pertambangan yang terdaftar di Bursa Efek Indonesia (BEI) selama tahun penelitian yaitu 2017-2021.	62
2.	Perusahaan yang pindah sub sektor selama tahun penelitian yaitu 2017-2021.	(25)
3.	Perusahaan Sub Sektor Pertambangan yang mengalami kerugian selama tahun penelitian yaitu 2017-2021.	(16)
4.	Perusahaan sub sektor pertambangan yang menerbitkan dan mempublikasikan laporan keuangan yang telah diaudit selama periode pengamatan, dinyatakan dalam mata uang rupiah sehingga dapat memberikan informasi yang valid selama penelitian yaitu 2017-2021.	(21)
5.	Jumlah Sampel	18

source : processed data,2023

3.2 Panel Data Regression Analysis

The panel data regression model is an analysis model that uses combined data between time series data and cross section data (Sujarweni, 2019). So the panel regression model equation formed is as follows :

$$Yit = \alpha + \beta1X1it + \beta2X2it + e$$

Information :
Yit = Stock Return
α = Constant
β = Regression Coefficient
X_1 = Change in Accounting Profit
$X2$ = Change in Operating Cash Flow
i = i-th entity
t = 1st Period
e = Standard Error.

4. RESULT AND DISCUSSION

4.1 Data Analysis Results

4.1.1 Descriptive Analysis Results

Table Descriptive Statistics

Variables	N = 90			
	Mean	*Maximum*	*Minimum*	*Standard Deviation*
RT	0.703732	9.200000	-6.229962	2.802246
LAK	1.142169	17.76265	-57.90159	7.791739
AKO	1.576909	20.36159	-10.72557	3.971945

source : processed data,2023

Based on the results of descriptive statistical calculations from the data above, it can be explained that:
1. Variable Change in Accounting Profit (X1) has a sample (N) of 90, with a minimum value of -57.90159, for a maximum value of 17.76265, for the mean (average) value of accounting profit obtains 1.142169 and obtains a standard deviation of 7.791739 value This means that the mean value is smaller than the standard value so that there is no deviation from the data which is less diverse.
2. The Variable Change in Operating Cash Flow (X2) has a sample (N) of 90, with a minimum (smallest) value of -10.72557 for the smallest value, maximum (largest) value of 20.36159, mean (average) value of 1.576909 and standard deviation (deviation) 3.971945 this value means that this value means that the mean value is smaller than the standard value so that there are no data deviations that are less diverse.
3. The Stock Return variable has a sample (N) of 90, with a minimum (smallest) value of -6.229962, a maximum (smallest) value of 9.200000, a mean (average) value of Stock Return of 0.703732 and a standard deviation of 2.802246 this value means that This value means that the mean value is smaller than the standard value so that there is no deviation from the data which is less diverse.

4.2 *Best Model Selection Test*
4.2.1 Test Chow

Table of Test Results Chow

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.280656	(17,70)	0.2308
Cross-section Chi-square	24.372256	17	0.1097

Source: Data processed with Eviews 12, 2023.

Based on the Chow test results in the table above, the probability value of F and Chi-square > 0.05 is 0.2308. The probability value of F and Chi-square > 0.05 means that the common effect model is more appropriate to use than the fixed effect.

4.2.2 Hausman Test

Table of Test Results Hausman

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	2.817061	2	0.2445

Source: Data processed with Eviews 12, 2023.

Based on the Hausman Test in the table above, the p-value is > 0.05, namely 0.2445. The probability value is > 0.05, which means that the random effect model is more appropriate to use compared to the fixed effect.

4.2.3 Lagrange Multiplier Test (LM)

Table of Test Results Lagrange Multiplier

|	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	0.338898	1.303904	1.642803
	(0.5605)	(0.2535)	(0.1999)

Source: Data processed with Eviews 12, 2023.

Based on the Lagrange Multiplier (LM) Test in the table above, the p-value is > 0.05, which is 0.1999. The probability value is > 0.05, which means that the common effect model is more appropriate to use than the random effect. So for the Lagrange Multiplier (LM) test it can be concluded that the common effect model is more appropriate to use in this study.

4.3 Classic assumption test

4.3.1 Normality Test

Normality Test Image
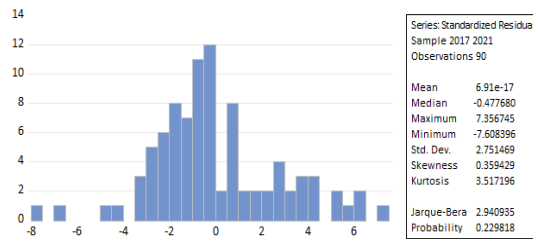
Source: Data processed with Eviews 12, 2023.

Based on the picture above it shows that the probability value is > 0.05 which is equal to 0.229818, it can be concluded that the regression model is normally distributed.

4.3.2 Multicollinearity Test

Table of Multicollinearity Test Results

	LAK	AKO
LAK	1.000000	0.048116
AKO	0.048116	1.000000

Source: Data processed with Eviews 12, 2023.

Based on the table, the results of the multicollinearity test show that there are no results from the two independent variables that produce a correlation coefficient of less than 0.08. So it can be concluded that in this model there is no multicollinearity.

4.3.3 Heteroscedasticity Test

Table of Heteroscedasticity Test Results

Heteroskedasticity Test: Glejser

Null hypothesis: Homoskedasticity

F-statistic	2.624570	Prob. F(2,87)	0.0782
Obs*R-squared	5.121159	Prob. Chi-Square(2)	0.0773
Scaled explained SS	5.689178	Prob. Chi-Square(2)	0.0582

Source: Data processed with Eviews 12, 2023.

Based on the heteroscedasticity test carried out using the Glejser test above, it shows that the probability value of the independent variable accounting profit or LAK (0.0773) is > 0.05, so it can be concluded that there is no heteroscedasticity in this regression model.

4.3.4 Autocorrelation Test

Table of Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 2 lags

F-statistic	1.209922	Prob. F(2,85)	0.3033
Obs*R-squared	2.491265	Prob. Chi-Square(2)	0.2878

Source: Data processed with Eviews 12, 2023.

Based on the test above, from the autocorrelation test results above, the prob value is 0.2878 > 0.05, it can be concluded that there are no autocorrelation symptoms in this research model.

4.4 Panel Data Regression Analysis

Table Regression Test Results Panel Data Common effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.572493	0.318095	1.799755	0.0754
LAK	0.064698	0.037903	1.706944	0.0914
AKO	0.036364	0.074354	0.489062	0.6260

Source: Data processed with Eviews 12, 2023.

Based on the table above, it can be entered into the panel data equation as follows:

$$Return\ Saham = 0.572493 + 0.064698\,X1 + 0.036364\,X2 + \text{€}$$

The panel data regression model equation is explained as follows:

1. Constant.

The constant value (a) has a positive value of 0.572. This value can be interpreted as if the two independent variables (accounting profit and operating cash flow) have a value of 0 (zero) or are constant then it can increase the stock return value by 0.572.

2. Coefficient Variable for Changes in Accounting Profit.

The regression coefficient value of the change in accounting profit variable is positive, namely 0.064. This shows that every time an increase in accounting profit changes by one unit, it can result in an increase in stock returns of 0.064, assuming that the other independent variables in this regression model have fixed values.

3. Variable Regression Coefficient for Changes in Operating Cash Flow.

The regression coefficient value of the change in operating cash flow variable is positive, which is equal to 0.036. This shows that every decrease in changes in operating cash flow by one unit can result in an increase in stock returns of 0.036 assuming the other independent variables in this regression model have fixed values.

4.5. Discussion Hypothesis testing

4.5.1 Partial Regression Coefficient Test (*t* test)

Table of Test Results *t*

Variabel	t_{hitung}	t_{tabel}	Signifikasi	Batas Signifikasi	Keterangan
C	1,799	1,988	0,0754	0,05	
LAK	1,706	1,988	0,0914	0,05	Tidak Berpengaruh Signifikan
AKO	0,489	1,988	0,6260	0,05	Tidak Berpengaruh Signifikan

Source: Data processed with Eviews 12, 2023.

Based on the results of the table above, the following decisions can be concluded :

1. Accounting Profit Variable (X1) Accounting profit variable has a t_count of 1.706 and a t_table of 1.988, then the value of t_count < t_table is 1.706 < 1.988 and a significance value of 0.0914 > 0.05 with a significance of more than 0.05, so the hypothetical result is Accounting profit has no effect on stock returns.
2. Operating Cash Flow Variable (X2) The operating cash flow variable has a t_count of 0.489. Then the value of t_count < t_table is 0.489 < 1.988, and the significance value is 0.6260 > 0.05 with a significance of more than 0.05, so the hypothetical result is that operating cash flow has no effect on stock returns.

4.5.2 Simultaneous Regression Coefficient Test (*f* test)

Table of Test Results f

Hannan-Quinn criter.	4.951243	F-statistic	1.620339
Durbin-Watson stat	1.496600	Prob(F-statistic)	0.203744

Source: Data processed with Eviews 12, 2023.

Based on the table above the results of the F test were carried out with a value of dfl = 2 and df = 87, the results obtained by F_{table} were 3.100. While the F_{count} value is 1.620 with a significant value of 0.203 which is greater than 0.05. So F_{count} < F_{table} = 1,620 < 3,100. This means that the independent variables, namely accounting profit and operating cash flow, simultaneously or together have no significant influence on stock returns. So the hypothesis result is that accounting profit and operating cash flow do not have a significant effect on stock returns.

4.5.3 Determinant Coefficient (R2)

Table of Determination Coefficient Test Results

Root MSE	2.736140	R-squared	0.035911
Mean dependent var	0.703732	Adjusted R-squared	0.013749

Source: Data processed with Eviews 12, 2023.

Based on the table above, it explains the results of the model summary, which consists of the results of the adjusted coefficient of determination (Adjusted R-squared), including:

The coefficient of determination test value (Adjusted R-squared) is 0.013749, this shows the contribution of the variable influence of changes in accounting profit and changes in operating cash flow to stock returns of 1.3749%. Adjusted R-squared is used because the variables in the study are more than one variable.

4.6 Discussion

1. The Effect of Changes in Accounting Profits on Stock Returns
Based on the results of partial data processing, it shows that changes in accounting profit do not affect stock returns. This research is in line with Rachmawati's research (2016). Because in this study the accounting profit used is net profit after tax, it should use gross profit. The gross profit figure is better able to provide a better picture of the relationship between earnings and stock prices which are also closely related to the Expected Return of Stocks.

2. Effect Of Changes In Operating Cash Flow On Stock Returns.
Based on the results of partial data processing, it shows that changes in operating cash flows do not have a significant effect because the information regarding where the increase in profits occurs is not followed by the amount of operating cash flows so that investors do not use the information as a basis for predicting stock returns. These results are in line with research by Oktofia et al., (2021), which shows that operating cash flow does not have a significant effect on stock returns.

3. The Effect of Changes in Accounting Profit and Changes in Operating Cash Flow on Stock Returns.

Based on the results of data analysis, it shows that simultaneously the F test is carried out with a value of dfl = 2 and df = 87, then the results obtained by F_table are 3.100. Meanwhile, the calculated F_value is 1.620 with a significant value of 0.203 which is greater than 0.05. So F_count < F_table = 1,620 < 3,100. This is the result of the analysis of the coefficient of determination which shows that accounting profit and operating cash flow only contribute 0.06% in influencing the ups and downs of stock returns. This means that there are still many other internal and external factors that influence stock returns.

5. CONCLUSIONS AND RECOMMENDATIONS
5.1. Conclusion
Based on the results of research data analysis and the discussion that has been described, regarding changes in accounting principles and operating cash flow on stock returns in mining sub-sector companies listed on the Indonesia Stock Exchange (BEI) in 2017-2021. Researchers draw the following conclusions:
1. The influence of changes in accounting profit and operating cash flow partially has an insignificant influence on stock returns in mining sub-sector companies listed on the Indonesia Stock Exchange (BEI) in 2017-2021.

2. From the results of simultaneous testing, the variables accounting profit and operating cash flow simultaneously have no significant influence on stock returns in mining sub-sector companies listed on the Indonesia Stock Exchange (BEI) in 2017-2021. This is because changes in accounting profit

and operating cash flow sometimes provide conflicting information, namely an increase in profit can be followed by a decrease in cash flow.

5.2. Suggestions

Several suggestions that researchers can find regarding the research results are:

1. For investors, with this research, investors who want to invest should pay attention to the company's steps and performance and information to generate accounting profits, optimize operating cash flow and quality asset management so that investors are interested in investing in the company.
2. For companies, with this research, they should pay more attention to accounting profits and operating cash flow because these two variables provide information for investors when investing.
3. For future researchers to conduct research using a longer period, this is done in order to expand the research results. Apart from that, future research needs to consider adding samples other than sub-mining or samples from other sector companies such as banking companies and manufacturing companies. Not only that, for further research it is also recommended to research further into things that can influence Stock Returns and also add other variables that can influence Stock Returns, such as Company Size, Liquidity, and ROE.

REFERENCES

[1] Ikatan Akuntansui Indonesia (IAI), (2018). Pernyataan Standar Akuntansi Kuangan (PSAK) No 2 : Laporan Arus Kas. Jakarta : Selemba Empat.

[2] Aldin, I. U. (2021). Mengapa Harga Saham-saham Farmasi Anjlok Hingga 34% dalam Sepekan. [Accessed 05 Juli 2021]. Katadata.com.

[3] Fahmi, I. (2017). Analisis Laporan Keuangan. Bandung: Alfabeta.

[4] Ghozali, I. (2018). Aplikasi Analisis Multivariate dan Ekonometrika Teori,Konsep dan Aplikasi Dengan Eviews 10. BPFEE Universitas Ponogoro.

[5] Hartono, J. (2017). Teori Portofolio dan Analisis Investasi Kas. Yogyakarta : BPFE.

[6] Kasmir. (2018). Analisis Laporan Keuangan. Depok : Rajawali Pers.

[7] Mahardi, Werner, & R. (2019). Analisis Laporan Keuangan Proyeksi dan Valuasi. Selemba Empat.

[8] Nursita, M. (2021). Pengaruh Laba Akuntansi, Arus Kas Operasi, Arus Kas Investasi, Arus Kas Pendanaan, Dan Ukuran Perusahaan Terhadap Return Saham. *Riset Akuntansi*.

[9] Oktofia, L., Ibrohim, & Kartika, R. (2021). Pengaruh arus kas operasi, arus kas investasi, dan arus kas pendanaan terhadap return saham pada perusahaan manafaktur sektor makanan dan minuman. 2(1).

[10] Rachmawati, R. (2016). Pengaruh Arus Kas Operasi Dan laba Akuntansi Terhadap Return Saham. 1(2), 140–157.

[11] Sugeng, B. (2017). Manajemen Keuangan Fundamental. Deepublish.

[12] Sugiyono. (2017). Metode Penelitian Pendidikan : Pendekatan Kuantitatif, Kualitatif, dan R&D. Bandung : Alfabeta.

[13] Sujarweni, V. W. (2019). Penghantar Akuntansi 2. Yogyakarta : PT Pustaka Baru.

[14] Tandelilin, E. (2017). Portofolio dan Investasi Teori dan Aplikasi..Depok. PT. Kanisius.