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# The Effects of Operating Cash Flow, Funding and Investment on Financial Performance of Mining Companies in Metal and Other Mineral Sub-sector Listed on Indonesia Stock Exchange

Varrika Sari Rahma Mukadar, Andi Basru Wawo, La Utu
Program Magister of Management Program, Sekolah Tinggi Ilmu Ekonomi Enam-Enam Kendari, Indonesia

**Abstract**—The hypotheses in this study are: (1) Does operating cash flow affect on the financial performance of mining companies in the metal and other mineral sub-sectors listed on the Indonesia Stock Exchange. (2) Does the funding cash flow affect on the financial performance of mining companies in the metal and other mineral sub-sector listed on the Indonesia Stock Exchange. (3) Does the investment cash flow affect on the financial performance of mining companies in the metal and other mineral sub-sectors listed on the Indonesia Stock Exchange. The results of the study are (1) Operational Cash Flow has positive and insignificant effects on the financial performance of mining companies in the metal and other mineral sub-sectors listed on the Indonesia Stock Exchange. (2) Investment Cash Flow has positive and significant effects on the financial performance of mining companies in the metal and other mineral sub-sectors listed on the Indonesia Stock Exchange. (3) Funding Cash Flows have positive and insignificant effects on the financial performance of other metal and mineral sub-sector mining companies listed on the Indonesia Stock Exchange.

**Index Terms**— Financial Performance, Operating Cash Flow, Funding and Investment

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## 1 Introduction

A company has main targets namely to maximize company values by maximizing profits. Company ability to create profit is seen as the key for its success in order to achieve good performance. To achieve the targets, it is necessary for a company to make financial report analysis so that it can determine whether the company has been run effectively and efficiently or not. Financial report is information illustrating a company financial conditions, and moreover, the information can be used as illustration for the company financial performance (Fahmi, 2013)

To determine company development, it is necessary for company performance assessment from year to year. According to Jumingan (2009: 239), financial performance is an illustration for financial conditions from certain period both related to fund collection and distribution aspects which commonly are measured by indicators of capital coverage, liquidity and profitability. In this research, financial performance is measured by using profitability indicators, namely Return on Asset (ROA) and Return on Equity (ROE).

A company still has opportunity to be bankrupt though it has more assets than loans, if it cannot create more cash to meet its current liabilities. Investors focus their attention on cash flow of operational results since they have to focus their attention on company ability to pay dividend. Otherwise, a company with a great number of cash showing its inability to manage cash maximally is caused by the cash should be used to utilize discount cash of raw material or stock, or to invest (Sugiono and Untung, 2016: 32).

Cash flow reports give details on sources of cash acceptance and expenditure based on operation, investment and financing activities. By this cash flow report, it can determine any information related to company performance during certain periods which is presented briefly. The cash flow report can also be used as a tool to analyze whether company plans related to investment and financing have been implemented as it is expected (Hery, 2017: 214).

Positive operating cash flow allows company to pay off debt, pay dividends and dividends in cash and fund growth through investment activities. Negative operating cash flow as a result of operating activity failure requires the company to look for other alternative sources of cash (Hery, 2017: 245).

Not-properly managed cash flows will result in an imbalance of cash inflows and cash outflows. This will have impacts on company cash flow, which if company cash is too small, it will result in fund shortage which can cause disruption of company operational activities and company liquidity against unexpected costs, but if the cash in the company is too large, it will cause excess funds which can lead to waste so that it can harm the company (Kaunang, 2013).

Based on the explanation on the background, it can formulate several research problems (1). Does operating cash flow affect on the company financial performance (2). Does funding cash flow have positive effect on the company financial performance and (3). Does the investment cash flow affect on the financial performance of mining companies in the metal and other mineral sub-sectors listed on the Indonesia Stock Exchange.

## 2 Literature Review

### 2.1 Financial Stage

According to Irham Fahmi (2018) financial performance is an analysis taken to determine the level of a company to have implemented by using rules of financial implementation appropriately and correctly. Meanwhile according to Thessalonica (2016), financial performance is determination of certain sizes which can measure success of an organization or company in creating profit.

Financial performance is an effort to create results through company operational consisting of a number of activities by assisting leaders to improve employee work effectiveness and certainly by giving appropriate rewards. It can be seen that financial performance is a description on company or institution financial conditions by using financial analysis tools so it can determine the level of good or bad of company financial conditions in certain period.

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### 2.2 Profitability Ratio

Profitability ratio is a ratio to assess company ability in creating profits. This ratio also gives measurement of effectiveness level of a company management. This shown by resulted profits from sales and investment incomes. Basically this ratio use shows company efficiency.

Profitability ratio has goals and benefits, it is not only for business owners and management, but also for any parties outside the company, mainly any parties having relations or interests with the company.

In practice, the types of profitability ratios that can be used are:

1) Net Profit Margin
This ratio is used to measure company ability to create net profit from sales made by the company. Net profit margin is a measure of profit by comparing profit after interest and taxes with sales. This ratio shows company net income on sales. Bigger ratio means better company condition because it is considered that the company's ability to earn profits is quite high.
Formula of net profit margin is:

$$NetProfitMargin = \frac{Nett\ Profit\ After\ Taxes}{\text{Nett Sales}}$$

2) Return on Assets (ROA)
ROA shows company ability to use all of its assets to generate after-tax profits. This ratio is important for the management in order to evaluate effectiveness and efficiency of company management in managing all company assets. Greater ROA means more efficient use of company assets or in other words, with the same number of assets, company can generate greater profits, and vice versa.
Formula of return on assets is:

$$ReturnonAssets = \frac{Net\ Profit\ After\ Taxes}{Total\ Assets}$$

3) Return on Equity (ROE)
ROE shows company ability to generate after-tax profits by using company own capital. This ratio is important for shareholders to determine effectiveness and efficiency of management in managing their own capital carried out by the company management. Higher ratio means more efficient use of own capital by company management.
Formula of return on equity is:

$$ReturnonEquity = \frac{Net\ Profit\ After\ Taxes}{Total\ Owner's\ equity}$$

### 2.3 Classification of Cash Flow

Statement of cash flows (cash flows) classifies each acceptance and expenditure into categories of operating activities. According to Harahap (2004) cash inflows and outflows of a company in one period can be classified into 3 categories, namely:

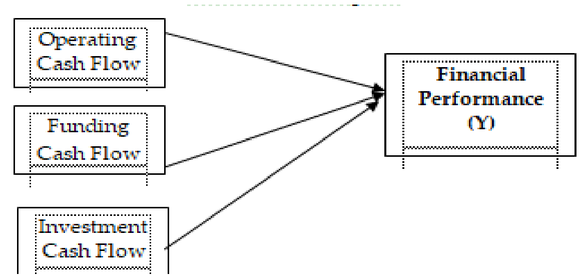
1. Operating Activities
All transactions related to profit reported in income statements are included in operating activities. The amount of cash flow from operating activities is an indicator that determines whether company operations can generate sufficient cash flow to pay off loans, maintain company operating capabilities, pay dividends, and make new investments without relying on external funding sources.
2. Financing Activities
Financing activities are activities that result in changes in the amount and composition of company long-term liabilities (debt) and capital (equity). Examples of cash inflows from financing activities are as issuing new shares and issuing bonds.
3. Investing Activities
Investing activities are activities to acquire or dispose of long-term assets (non-current assets) and investments that are not included in the definition of cash equivalents. Examples of cash inflows from investing activities are sales of fixed assets and sales of long-term investments.

## 3 Conceptual Framework and Hypotheses

### 3.1 Conceptual Framework

The effects of cash flow variables as measured by operating, investment, and funding cash flows on financial performance as measured by Return on Assets (ROA) and Return On Equity (ROE) can be seen in the conceptual framework of the study in Figure 3.1.

Chart 3.1. conceptual framework




### 3.2 Research Hypotheses

Based on the problem formulation on the background above, the assumptions as the hypotheses in this study are:

1. Operating cash flow has positive and significant effects on financial performance of mining companies

in the metal and other mineral sub-sector listed on the Indonesia Stock Exchange.
2. Funding cash flow has positive and significant effects on financial performance of mining companies in the metal and other mineral sub-sector listed on the Indonesia Stock Exchange.
3. Investment cash flow has positive and significant effects on financial performance of other metal and mineral sub-sector mining companies listed on the Indonesia Stock Exchange.

## 4 Research Method

### 4.1 Research Objects

The object of this research is t analysis of financial performance with a cash flow mechanism approach in mining companies in the metal and other mineral sub-sectors listed on IDX in the period of 2015-2019.

### 4.2 Population and Samples

The populations in this study are all mining companies in the metal and other mineral sub-sector registered at IDX until 2019. Meanwhile, the samples are companies that meet the criteria set, namely:

a. Mining companies of metal and other mineral sub-sector companies listed on IDX
b. Having necessary data in the research, especially regarding the variables used in research.
c. The company publishes financial reports and publishes them continuously.

Based on these criteria, there are 7 companies meeting the criteria, namely:

**Table 4.1 List of Mining Companies in Metals and Other Minerals Sub-Sector As the Research Samples**

| No | Share Codes | Names of Issuers | Date of IPO |
|---|---|---|---|
| 1 | INCO | Vale Indonesia Tbk | 16-May-1990 |
| 2 | TINS | Timah (Persero) Tbk | 19-Oct-1995 |
| 3 | ANTM | Aneka Tambang (Persero) Tbk | 27-Nov-1997 |
| 4 | DKFT | Central Omega Resources Tbk | 21-Nov-1997 |
| 5 | CITA | Cita Mineral Investindo Tbk | 20-Mar-2002 |
| 6 | PSAB | J Resources Asia Pasific Tbk | 01-Dec-2007 |
| 7 | SMRU | Smr Utama Tbk | 10-Oct-2011 |

Data source: Indonesia Stock Exchange (IDX), processed in 2021

### 4.3 Types of Data

The type of data used in this study is secondary data in the form of financial statements of mining companies in metals and other mineral sub-sectors listed on the Indonesia Stocks Exchange (IDX) as December 31 during the period of 2015 – 2019. The analytical tool used to process the data is Partial Least Square (PLS).

## 5 Results

### 5.1 Analysis Results

Referring to significance value of the Effects of Changes in Cash Flow on the Financial Performance of Mining Companies in Metal and other Mineral Sub-Sector, namely by looking at the parameter coefficient values and the t statistical significance value; the output of SmartPLS using calculate-PLS Bootstrapping is as follows:

**Table 5.4.** ***Path Coefficients, T Statistic*** **and P Value**

| | Path Coefficients | T Statistic (\|O/STDEV\|) | P Values |
|---|---|---|---|
| OPERATING CASH FLOW -> FINANCIAL PERFORMANCE | 0,194 | 0,508 | 0,612 |
| FINANCAING CASH FLOW -> FINANCIAL PERFORMANCE | 0,278 | 1,110 | 0,267 |
| INVESTMENT CASH FLOW -> FINANCIAL PERFORMANCE | 0,111 | 2,333 | 0,020 |

*Source: PLS data processed Results , 2021*

The results of Path Coefficients in table 5.4 show that Operating Cash Flow on financial performance has positive and insignificant effects. This can be seen from the path coefficient of 0.194 and the value of p value > from alpha 0.05 so it can be concluded that there is a positive but insignificant effect.

Furthermore, the results of Path Coefficients of Funding Cash Flows on financial performance have positive and insignificant effects. This can be seen from the path coefficient of 0.278 and the value of p value > from alpha 0.05 so that it can be concluded that it has a positive but insignificant effect.

The results of Path Coefficients in the table show that the Investment Cash Flow variable on financial performance shows the Path Coefficients value of 0.111 and the p-value of 0.020 < from alpha 0.05, thus, the Investment Cash Flow variable has positive and significant effects on financial performance.

### 5.2 Discussion

#### 5.2.1 Effects of Operating Cash Flow on Financial Performance

Based on the analysis results, it was found that operating cash flow had positive but insignificant effects on financial performance.

Operating cash flow is cash flow related to company operational in certain period. Commonly, operating cash flow includes cash acceptance from consumers or account receivable income, loan payment, payment of employee costs (salary and protection), acceptance of interest, payment of taxes and other expenditure related to operational activities. Number of cash flow taken from operational activities is an indicator to determine whether organizational operational activities can create adequate cash flow. This includes paying off loans, maintaining organizational operational ability, dividend payment, and new making investment without depending on external sources of funding. Since operating cash flows are taken from organizational main activity namely generating revenue, they generally arise from transactions and other events that give effect on determination of net profit or loss.

The variable of operating cash flow has no effect on financial performance because the average value of operating cash flow is negative or -2.416, because majority of companies as these study samples experienced operating losses as a result of fluctuating prices of mining products in the observation period, and there is a government regulation that temporarily stops exports of mining products so mining companies experience losses.

### 5.2.2 Effects of Funding Cash Flow on Return On Asset (ROA) and Return On Equity (ROE)

Based on the analysis results using SmartPLS, it can also be concluded that the Funding Cash Flow variable has positive and insignificant effects on the financial performance variable. This means that the second hypothesis is rejected.

Cash flow from financing activities (CFF) is part of the company's cash flow statement, which shows net cash flows used to finance the company. Financing activities include debt, equity, and dividend transactions. Cash flows from financing activities provide investors with information about company financial strength and the level of company capital structure management.

Cash flow from financing activities represents the flow of money between the business and its suppliers of capital (shareholders and creditors). From this section, you will determine how a business finances its long-term operations. If the cash flow from financing activities is positive, it indicates that the business is receiving cash. It increases company capital, as well as its assets. Conversely, if the number is negative, it indicates the business is paying for capital.

Financing activities provide view on health of financial and business targets. In general, positive cash flow of financing activities can show expansion intension and business growth. Money flows in more number to the company so the assets increase. The company can use it to finance capital asset buying or developing new production facility. O, financing activities inform you how a company finances its business in long term using external sources. Furthermore, cash flow of financing activities covers expansion financing using internal funds since there is no change on equity and liability accounts.

Both investors and creditors look at this part to determine who a company finances its long term growth. If a company relies on more debts than equity, it increases financial leverage. Excessively aggressive levels of leverage increase financial risk and default. Companies spend money regularly to pay debts. If, income weakens, it reduces ability to repay loans and can lead to default. Therefore, companies usually take on debt when they have a stable and large enough cash flow. So, debt may not be suitable for some newer or developing companies. New companies usually have a relatively small customer base. Their income is relatively limited so they have weak cash inflow from their core business. Therefore, funding from stocks is a safe route to give them the cash to grow. The issuance of shares has no regular payment consequences. It only has impacts on changes in the composition of company ownership.

### 5.2.3 Effects of Investment Cash Flow on Financial Performance

Based on the analysis results using SmartPLS, it can be concluded that the Investment Cash Flow variable has positive and significant effects on the Return On Equity (ROE) variable. This means that the third hypothesis is accepted.

Definition of Cash Flow from Investment Activity is cash inflows and cash outflows related to company long term company investment. It includes one of the three parts of cash flow reports. Others are cash flow from operating activity and cash flow from funding activities. Long term investment activity includes buying and selling fixed assets such as property, factory and equipments. Buying equity effects or other company debts also includes in category of investment activity but by some requirements. It does not only report cash flow, the accounts can also be seen in current assets in the balance.

In an outline manner, investment activities are related to growing business and bringing profits to long term company. Buying activity contributes to improvement of business size and capacity of company production. If adding new machine, company can create more output. Also, if company acquisition other companies (buying shares), company operational scale also increases. Both includes in the category of investment activity.

When company operation scale increases, we expect that the company will create higher level of income in the future. Then the company will be more efficient through improvement of operational economic scale. Thus, there will be more parties, mainly share investors who determine negative cash flow of investment activity as a good signal for company growth in the future.

## 6 Conclusion and Recommendation

### 6.1 Conclusion

Based on the analysis results and discussion of this research, it can be concluded that:

1. Operating Cash Flow has positive and insignificant effects on the financial performance of mining companies in the metal and other mineral sub-sector listed on the Indonesia Stock Exchange.
2. Funding Cash Flows have positive and insignificant effects on the financial performance of other metal and mineral sub-sector mining companies listed on the Indonesia Stock Exchange.
3. Investment Cash Flow has positive and significant effects on the financial performance of mining companies in the metal and other mineral sub-sectors listed on the Indonesia Stock Exchange.

### 6.2 Recommendations

Based on the research results, the authors recommend:

1. It is necessary for mining companies in the metal and other mineral sub-sector to continuously improve their operational performance. Because from the observations, there was a decline in the company's financial performance in the study year, in addition to that, investment and funding cash flows from mining companies in the metal and other mineral sub-sector were still negative.
2. Further research is recommended to add other independent variables such as stock prices or can add indicators of financial performance such as net income.

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