

Effect of operating leverage and financial leverage on earnings per share

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ABSTRACT

This study aims to determine the partial and stimulant effect of operating leverage and financial leverage on earnings per share in food and beverage sub-sector companies listed on the IDX in 2018-2022. This type of research is quantitative associative research using panel data with financial analysis techniques, multiple regression analysis, fixed effect, random effect, hausman test, t test, F test, and coefficient of determination test with a significance of 0.05 and processed using Eviews software 10. The sample in this study used purposive sampling with certain criteria and produced a sample of 4 companies. The results of this study stated that operating leverage partially had no effect on earnings per share, while financial leverage partially had an effect on earnings per share. Operating leverage and financial leverage both simultaneously affect earning per share.

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1. Introduction

Current economic developments can create tough competition for companies. With this competition, companies are required to be able to adapt to the times. Companies are required to generate maximum profits by properly controlling and managing assets and sources of funds.

The success of a company can be seen from its ability to properly manage its assets and sources of funds which are displayed in its financial statements. Sources of funds used can come from internal capital and external capital. Internal capital is in the form of retained earnings and depreciation, while external capital is in the form of debt. The external capital needed by the company is in the form of *leverage* (Sibarani & Bukhari, 2020) .

Leverage refers to a company's ability to effectively use funds at fixed costs or debt to achieve an optimal level of business income (Aditya & Nyale, 2022) . Companies use *operating leverage* and *financial leverage* with the aim of increasing profits and can pose risks (Sa'adah & Sulistiyo Wati Ningsih, 2022) . Experienced companies *leverage* tall caused by ratio debt that is greater than the value of the assets owned by the company. Ratio increased *leverage* _ Also tend raise opportunistic management activities , such as engaging in earnings management to protect performance in the eyes of stockholders and the public (Qurrotulaini & Anwar, 2021) .

Operating leverage appear because company in activity the operation utilise assets keep coming up burden still For company in the form of depreciation (Purnomo, 2022) . *leverage* operational considered profitable when a company can cover fixed costs on the use of assets or sales, after deducting marginal costs, it results in a higher amount of fixed costs. Meanwhile , *leverage* operational considered charge when A the company cannot meet fixed costs on its debt (Thhohirin, 2021) . The increase in *operating leverage* affects the high level of capitalization (return) . The level of capitalization (return) is visible from the value of *earnings per share* .

Leverage refers on size fixed financial obligations used by a company (Agustina, 2018) . *leverage* financial appears due exists cost financial still in form obligatory debt _ paid by A company with objective increase impact from change in Earning Before Interest and Taxes (EBIT) to change *Earning per share* (EPS) (Pringgabayu, 2019) . The greater the company's financial resources, the greater the systemic risk it faces. When a company lends more money, it has to pay more in fixed costs, such as interest and fees on loans (Syafira & Zainul, 2021) .

Potential investors will target companies whose earnings per *share* (EPS) value movement has increased. Investors take into account EPS with the aim of investing the funds are for stock . This can be seen t getting higher total shares outstanding then the hope of obtaining *earnings per share* (EPS) is also increasing high.

Earnings per share (EPS) refers to the net profit available for distribution to shareholders divided by the total number of shares of the company. Earnings per share (EPS) refers to the distribution of profits given to shareholders for each share they own (Ramadan & Napitupulu, 2021) . Earnings per share (EPS) are very important because they serve as a measure of a company's success and as a guide for investors when deciding where to put their money. (Karnila, 2018) .

Investors will pay attention how a company uses it *debt* and earn *profit* company. The company is called healthy and able to raise EPS if *the profit* earned is more than the return on interest expenses . Meanwhile, if the profit is less than the return on interest expenses, it becomes a company cannot raise EPS or the company is called unhealthy.

Based on the description stated above, then the researcher captivated For do study about “*Effect of operating leverage and financial leverage on earnings per share*”.

2. Research Method

This research uses a quantitative associative method (Abdukareem & Meghanathi, 2020) . According to (Sugiyono, 2015) the quantitative method is a method used to determine a random population or sample. The associative method according to (Sugiyono, 2015) in (Kurniati et al., 2022) is a method that can show the effect of two or more independent variables. The population in this study is the food and beverage sub-sector companies listed on the IDX totaling 47 companies.

The sampling technique in this study used *purposive sampling* (Purnomo, 2022) . With the criteria set by companies in the food and beverage sub-sector that are registered on the IDX for 2018-2022, companies that have issued financial reports for the last 5 years, and companies in the food and beverage sub-sector that have produced a positive EAT during 2018-2022. From these criteria, 4 companies were found to be suitable.

This research data collection technique uses documentation in the form of company financial data and company history obtained from (Www.idx.com, nd) , Idn Financial and britama.com (Mustadirham, Haeruddin, M Ikhwan Maulana, 2023) .

The data analysis technique used in this study involves financial analysis and multiple regression analysis of panel data using Eviews 10 software. Panel data analysis means review data with combination of data collected from time to time (*time series*) with cross section data (*cross data*) (Sa'adah, 2023) .

3. Results And Discussions

Table 1. Calculation of DOL

| Code | DOL | | | | | Average |
|------|--------|--------|--------|--------|--------|---------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | |
| CEKA | 0937 | -9,357 | 1.114 | 0.031 | 1,353 | -1,630 |
| ROTI | 0.03 8 | 4.154 | 14,364 | 57,156 | 2,656 | 15,674 |
| GOOD | 2,184 | -0.068 | 4,861 | 6.151 | 0.338 | 2.69 |
| ICBP | 3,022 | 1,519 | 3,301 | -0.010 | -1,723 | 1,221 |

Source: Data processed 2023

Seen in the table above largest DOL average value namely PT. Nippon Indosari Corporindo Tbk with the issuer code ROTI is 15.674 % . ROTI DOL of 15,674, can concluded that level elasticity operational

on sales output to EBIT is 156.74%. This show that If sale ROTI company increased 10%, then profit operational will experience an increase of 156.74% of improvement. Otherwise, if sale decreased by 10%, EBIT as well will decrease $15.674 \times 10\% = 156.74\%$.

Meanwhile the smallest average DOL value is PT. Cahaya Wilmar Indonesia Tbk with the issuer code CEKA is -1.630 % . CEKA DOL of -1.630 means can concluded that level elasticity operational on sales output to EBIT is 16.30 % . This show that If sale ROTI company increased 10%, then profit operational will experience enhancement 16.30 % of improvement. Otherwise, if sale decreased by 10%, EBIT as well will decreased $15.674 \times 10\% = 16.30\%$.

As the level of DOL generated by a company increases, there will be a proportional increase in fluctuations in operating profit with respect to changes in sales volume. The greater the company's operational *leverage* , the greater the ratio of EBIT to sales. If there are fluctuations in the EBIT rate, this will affect the EPS rate (Ekuitas & Khotimah, 2020) .

Table 2. Calculation of DFL

| Code | DFL | | | | | Average |
|------|-------|-------|-------|---------|-------|---------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | |
| CEKA | 1 | 1 | 0.844 | 1,754 | 0.916 | 1.104 |
| ROTI | 3,497 | 0.882 | 0.502 | 0.250 | 1,067 | 1,240 |
| GOOD | 0.605 | 1,586 | 0.909 | -0.779 | 0.052 | 0.475 |
| ICBP | 0.850 | 0.664 | 0.908 | -62,479 | 1622 | -11.69 |

Source: Data processed 2023

Based on the table above, it can be seen that the average value of the largest DFL is PT. Nippon Indosari Corporindo Tbk with the issuer code ROTI, which is 1.240%. ROTI's DFL is 1.240, meaning that if the ROTI company's EBIT increases by 10%, EPS will increase by $1.240 \times 10\% = 12.40\%$. Conversely, if EBIT decreases by 10%, EPS will also decrease by $1.240 \times 10\% = 12.40\%$.

Conversely , the lowest DFL average value is at PT. Indofood CBP Sukses Makmur Tbk with the issuer code ICBP, which is 11.69%. ICBP's DFL is -11.69 meaning that if ROTI's EBIT increases by 10%, EPS will increase $-11.69 \times 10\% = 116.9\%$. Conversely, if EBIT decreases by 10%, EPS will also decrease by $-11.69 \times 10\% = 116.9\%$.

DFL has a high influence to generate EPS. If the level of *financial leverage* (DFL) increases, there will be an increase in earnings per share (EPS), and vice versa, if the level of *financial leverage* (DFL) decreases, there will be a decrease in earnings per share (EPS). (Ambaranny et al., 2021) .

Table 3. EPS calculation

| Code | EPS | | | | | Average |
|------|--------|--------|--------|--------|--------|---------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | |
| CEKA | -0.138 | 1,320 | -0.154 | 0.026 | 0.181 | 0.247 |
| ROTI | 0.014 | 0.756 | -0.270 | 0.337 | 0.558 | 0.279 |
| GOOD | 0.100 | -0.005 | -0.377 | -0.670 | 0.003 | -0.190 |
| ICBP | 0.202 | 0.102 | 0.308 | 0.147 | -0.393 | 0.073 |

Source: Data processed 2023

From the table it can be seen that the average percentage value of the largest EPS at PT. Nippon Indosari Corpindo Tbk with the issuer code ROTI, which is 0.279%, on the other hand, the average percentage change from the smallest EPS is PT. Garudafood Putra Putri Jaya Tbk with the issuer code GOOD of -0.190%.

If the level of earnings per share (EPS) of a company increases, this will attract more investors to acquire shares of that company, which in turn will lead to an increase in share price. Meanwhile, if the level of earnings per share (EPS) of the company is low , fewer investors will want to invest in these shares, thus making the stock price low (Hidayat & Galib, 2019) .

Table 4. Random Effects

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-----------------------|--------------------|-------------|----------|
| C | 211.9842 | 86.49677 | 2.450776 | 0.0254 |
| DOL | -0.430043 | 1.252666 | -0.343302 | 0.7356 |
| DFL | -3.294594 | 1.080244 | -3.049861 | 0.0072 |
| | Effects Specification | | | S.D. |
| Cross-section random | | | 170.3474 | 0.8844 |
| Idiosyncratic random | | | 61.59400 | 0.1156 |
| | Weighted Statistics | | | |
| R-squared | 0.343582 | Mean dependent var | | 34.69665 |
| Adjusted R-squared | 0.266357 | S.D. dependent var | | 74.01110 |
| S.E. of regression | 63.39272 | Sum squared resid | | 68316.82 |
| F-statistic | 4.449070 | Durbin-Watson stat | | 1.496264 |
| Prob(F-statistic) | 0.027928 | | | |
| | Unweighted Statistics | | | |
| R-squared | 0.186823 | Mean dependent var | | 217.3575 |
| Sum squared resid | 646156.2 | Durbin-Watson stat | | 0.158197 |

Source: Output Views 10

$$Y = 211.9842 - 0.430043 X_1 - 3.294594 X_2$$

Based on the panel data regression equation formed, it can be seen that the value is a constant of 211.9842 means that if the DOL and DFL are equal to zero then there is an effect on EPS. The DOL value is - 0.430043 It means if the DOL increases by one unit, the effect on EPS will decrease by 0.430043 with a presumption other variables are zero. The DFL value is -3.294594 meaning that if the DFL increases by one unit, the effect on EPS will decrease by 3.294594 with the assumption that other variables are zero.

Results of testing t test shows mark *operating leverage probability* (0.7356 > 0.05). this means *operating leverage* no in a manner significant no influence to *earnings per share*. And testing t test shows mark *financial leverage probability* (0.0072 <0.05). this means *financial leverage* in a manner significant influence *earnings per share*. The probability values F indicates that the *probability value* is smaller than the significance level, namely 0.027928 <0.05. This means that the DOL and DFL variables simultaneously influence the EPS variable.

The results of this study are in line with research (Mudawanah, 2019) which states that *operating leverage* does not affect the amount of *earnings per share* . And this is also in line with research (Tasdin et al., 2022) which states that *financial leverage* affects *earnings per share*. *Operating leverage* and *financial leverage* also have a stimulant effect on *earnings per share* (Yunus, 2020) .

R-Square value (R2) obtained in this study was 0.343. This proves that *earnings per share* is affected by *operating leverage* and *financial leverage* of 34.3% and the remaining 65.7% is affected with variables that do not exist in this study.

4. Conclusion

Of the 4 companies studied, the highest average DOL value was ROTI. This is because the EBIT generated is mostly positive so that the DOL generated is large. And the highest average DFL score is ROTI. This is because the resulting EBIT is mostly positive so that the resulting DFL is large and causes an increase in EPS. *R-Square* value (R2) obtained in this study was 0.343. This proves that *earnings per share* is affected by *operating leverage* and *financial leverage* of 34.3% and the remaining 65.7% is affected with variables that do not exist in this study . So have to add other variables to improve the results. The probability value F indicates that the probability value is smaller than the significance level (0.027928 <0.05). This implies that both *operational leverage* and *financial leverage* simultaneously have an influence on the EPS variable. The measurement results from the t test show that *operational leverage* does not significantly affect *earnings per share*, which is shown by the test results showing the probability value of *operational leverage* (0.7356 > 0.05). *Financial leverage* also affects *earnings per share* significantly , as indicated by the results of the t test showing the probability value of *financial leverage* (0.0072 <0.05). For future research, researchers can add other variables such as ROA, ROE, DER, or *Managerial Decisions* to find out more specifically the effect on *Earning Per Share*.

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