Effect Of Firm Size, Debt Equity Ratio and Current Ratio to Return on Asset (Study on Hotel, Restaurant and Tourism Companies Listed on IDX)

Adhi Widyakto\textsuperscript{1,}\textsuperscript{*}, M Sigit Taruna\textsuperscript{2}, Fredericho Mego Sundoro\textsuperscript{3}

\textsuperscript{1,3}Faculty of Economics of Semarang University, Semarang, Indonesia
\textsuperscript{2}Faculty of Economics and Business, Pekalongan University, Pekalongan, Indonesia

Abstract

This research aims to find out the influence of Firm Size, Debt Equity Ratio (DER), and Current Ratio (CR) on Return on Assets (ROA) on hotel, restaurant and tourism companies listed on Indonesia Stock Exchange (IDX). Research on profitability in companies engaged in the tourism sector is necessary because currently, the sector has a high opportunity to move the community's economy. This research will reveal variations in the role of company size, solvability, and liquidity to profitability in the tourism sector. The sample used in this study amounted to 10 of the 48 Hotel, Restaurant, and Tourism sub-sector companies listed on the IDX in the period 2018-2020. The selection of such samples using purposive sampling techniques, in which researchers set specific provisions tailored to the purpose of the study. The data analysis techniques used are multiple linear regression, classical assumption test, t-test, F test and coefficient of determination. Based on simultaneous tests, it was found that the variables Firm Size, Debt Equity Ratio (DER), and Current Ratio (CR) significantly affect the return on asset (ROA) in hotel, restaurant and tourism sub-sectors listed on the IDX.

Keywords:
Current Ratio; Debt Equity Ratio; Firm Size; Return on Assets
INTRODUCTION

Indonesia is one of the world's destinations that is quite a lot in the world by the global community. Some factors that can affect the people outside and within the country to enjoy the beauty of Indonesia is its strategic location which consists of islands and very beautiful land, where elements of culture, history, and natural attractions have their characteristics. In this case, social media is also very active in providing information about things that happen in an area so that it can be so fast in the development process, both in the economic, development and political sectors (Fernández-Miguélez et al., 2020). The tourism sector also greatly helps boost regional economic growth and affects state revenues, as do hospitality and restaurants. This phenomenon makes business people and investors see it as a business opportunity growing rapidly in Indonesia (Wira, 2021). Business people are competing to provide the best quality of the company both in terms of appearance, service, and quality of the product or service itself. Their hope in doing so is to be able to provide satisfaction to customers as well as the occurrence of company repurchases and promotions that will indirectly impact their company's development.

Generally, companies that go public in developing their business utilize capital markets to get sources of funds or alternative financing for the company's benefit. The existence of capital markets can be used as a tool to reflect the company's performance and financial condition. Osadchy et al., (2018) Before investing in a company, investors and creditors will always see the company's financial condition first. Therefore, analysis and prediction of the company's financial condition are very important. The market will respond positively through an increase in the company's stock price if the company's financial condition and performance are good.

Profit is one of every company's main goals in running a business. Because corporate profits can affect the development and survival of a company, as said (Indonesian Accounting Association 2012: 12) "Net income (profit) is often used as a measure of performance or basis for other measures". However, sometimes these goals can not be realized properly because the company also often faces problems and challenges that cause the company to experience losses.

Losses suffered by the company will affect the structure of the business financing. The existence of debt or loans from creditors will threaten the assets owned by the company. As Januri (2021) says, "Liquidity ratio is useful for assessing a company's ability to pay liabilities. The ability to pay will guarantee the creditors to provide the next loan." Therefore, this will also force the company to increase its profitability, where its profits will be reallocated to pay obligations and reuse assets owned.

Using funds from debt productively can positively influence the increase in the company's profitabilities and vice versa (Lestari et al., 2020). If the company cannot manage funds obtained from debt productively, it can have a negative influence and have an impact on the decline in the profitability of the company. In general, debt is a financial risk for the company. Therefore, in this case, it is very important to the ability of managers to allocate funds, plan, and use strategies effectively and efficiently. Based on the research
objectives and Based on the research objectives and theoretical frameworks outlined above, it can be concluded a temporary hypothesis from this research that is:

**Effect of firm size on return on asset (ROA)**

The company's size is projected with the company's total assets each year. Companies with large sizes can absorb large sources of capital as well. A large source of capital can make it easier for companies to buy inventory of merchandise for sale. The number of sales made by the company will certainly increase the company's profit. Research conducted by Abeyrathna & Priyadarshana, (2019) and Warrad & Oqdeh, (2018) states that firm size has a significant effect on Return on assets (ROA). Based on the above description, the first hypothesis can be built, namely:

H1: Firm Size has a positive effect on Return on Asset (ROA) in Hotel, Restaurant and Tourism Companies listed on the Indonesia Stock Exchange (IDX) for the period 2018-2020.

**Effect of Debt o Equity ratio (DER) on return on asset (ROA)**

The debt projects the capital structure of the study to the Equity Ratio (DER). A high debt ratio will increase the company's bankruptcy threat, so this emphasizes the company to be more careful and not waste shareholders' money. The use of high debt will also cause fixed costs in the form of interest expense and the principal budget of loans to be paid; the greater the fixed costs can result in a decrease in the company's profit. Declining profits of companies with the same total assets will cause profitability to decrease as well. Research conducted by Mahardhika & Marbun, (2016) and Rifai et al., (2017) states that the Debt to Equity Ratio (DER) has a significant effect on Return on Asset (ROA). Based on the description above, the second hypothesis can be built, that is:

H2: Debt to Equity Ratio (DER) has a negative effect on Return on Assets (ROA) in Hotels, Restaurants and Tourism listed on the Indonesia Stock Exchange (IDX) for the 2018-2020 period.

**Effect of current ratio (CR) on return on asset (ROA)**

The current Ratio (CR) compares current assets with current debt. The higher a company’s Current Ratio (CR) means, the less risk of failure of the company in meeting its short-term obligations. As a result, shareholders will bear risks that are also getting smaller. Research conducted by Mahardhika & Marbun, (2016), Utama Cahya & Muid, (2014); Purba & Mahendra, (2022) and Jasmani, (2019) states that the current ratio has a significant effect on Return on Asset (ROA). Based on the above description, the third hypothesis can be built, namely:

H3: Current Ratio (CR) has a positive effect on Return on Asset (ROA) in Hotel, Restaurant and Tourism Companies listed on the Indonesia Stock Exchange (IDX) for the period 2018-2020.
Hypotheses Formulation
X1: Firm Size has a positive effect on Return on Asset (ROA)
X2: Debt to Equity Ratio (DER) has a negative effect on Return on Assets (ROA)
X3: Current Ratio (CR) has a positive effect on Return on Asset (ROA)

METHODS
A research method is a scientifically performed way or procedure to solve a problem with a specific purpose and usefulness. The methods used in this study are descriptive. Descriptive methods are studies conducted to find the value of independent variables, either one or more, without making a comparison (Sugiyono 2010: 11). This research was conducted at PT. IDX with sub-sectors of hotels, restaurants, and tourism by accessing www.idx.co.id sites. The objects conducted in this study are capital structure by using the Current Ratio and Debt to Assets Ratio indicators as free variables and Return on Assets as bound variables during the 2014 period-2017.

RESULTS AND DISCUSSIONS
In this study, data collection techniques were conducted using documentation and literature studies. Companies listed on the IDX in the hotel, restaurant, and tourism sub-sectors were the population in the study. While using a purposive sampling approach, the sample used as many as 10 companies. Determination of the number of samples used under certain conditions, namely the company must be registered with the IDX and have financial statements in the period 2018-2020, as well as the availability of data reports on Size, DER and CR against ROA. Data processing results by using the statistical package for the social sciences (SPSS) for windows version 23 on the influence of Size, DER and CR on ROA on hotel, restaurant and tourism companies listed on the IDX, can be seen in the table 1. Based on the table 1. Multiple Linear Regression Test Results. which shows the coefficients above in the unstandardized coefficients column, it can be known that the linear regression equations for two models, namely CR and DER variables are as follows:

\[ Y = -0.704 + 0.021X_1 + 0.007X_2 + 0.005X_3 \]
Table 1. Multiple Linear Regression Test Results

| Model        | Unstandardized Coefficients | Standardized Coefficients | t     | Sig. |
|--------------|-----------------------------|---------------------------|-------|------|
| (Constant)   | -.704                       | 1.406                     | -.501 | .620 |
| SIZE         | .021                        | .006                      | .555  | .025 |
| DER          | .007                        | .025                      | .041  | .267 |
| CR           | .005                        | .002                      | .345  | .003 |

a. Dependent Variable: ROA; Source: Data Processing Results (2020)

The acquisition of a constant of -0.704 in the direction of the negative relationship indicates that if the independent variables Size, DER and CR are assumed to be zero then the ROA value is -0.704. The Size Coefficient value is 0.021, with the direction of the positive relationship indicating that if the Size variable increases by 100% then the ROA increases by 2.1% assuming other independent variables are worth zero. The DER coefficient value is 0.007, with the direction of the positive relationship indicating that if the DER variable increases by 100% then the ROA rises by 0.7% assuming other independent variables are zero. The CR coefficient value is 0.005, with the direction of the positive relationship indicating that if the CR variable increases by 100% then the ROA rises by 0.5% assuming other independent variables are zero.

In this study, the t test was conducted to find out how much the level of relationship and the influence of independent variables individually on bound variables. For the test, using spss for windows data processing version 23 can be seen in the following table:

Table 2. Test Results t Coefficientsa

| Model        | Unstandardized Coefficients | Standardized Coefficients | t     | Sig. |
|--------------|-----------------------------|---------------------------|-------|------|
| (Constant)   | -.704                       | 1.406                     | -.501 | .620 |
| SIZE         | .021                        | .006                      | .555  | .025 |
| DER          | .007                        | .025                      | .041  | .267 |
| CR           | .005                        | .002                      | .345  | .003 |

a. Dependent Variable: ROA, Source: Data Processing Results (2020)

The results of the t-test in the table 2. can be known the value of the acquisition of coefficient as follows: \(t_{\text{count}} = 3.585\), \(t_{\text{table}} = 2.042\) With the criteria of decision-making: \(H_0\) is rejected, if: \(t_{\text{count}} > t_{\text{table}}\) Ha accepted, if: \(t_{\text{count}} < t_{\text{table}}\) At \(\alpha = 5\%

**The effect of size on ROA**

Based on the results of the test table t above, the influence between the size variable on the ROA variable is obtained by \(n = 37 - 2 = 35\) of 2,042 and the thitung value of 3,585 with the meaning that \(t_{\text{count}} > 3.585 > 2.042\) with a significant value of 0.001 < 0.05. From these results it can be concluded that \(H_0\) was rejected. This shows that there is a significant
influence between the Size variable and the ROA variable in hotel, restaurant and tourism companies listed on the IDX.

**The effect of debt equity ratio on ROA**

Based on the results of the test table t above, the influence between der variables on ROA variables is obtained with $n = 37 - 2 = 35$ by $t_{count} = 0.267$ with the meaning that $0.267 < 2.042$ with a significant value of $0.791 \geq 0.05$. From these results it can be concluded that $H_0$ is accepted. This indicates that there is no positive influence of DER variables on ROA variables on hotel, restaurant and tourism companies listed on the IDX.

**The effect of current ratio on ROA**

Based on the results of the test table t above, the influence between the CR variable on the ROA variable is obtained by $n = 37 - 2 = 35$ by $t_{count} = 0.518$ with the meaning that $0.518 < 2.042$ with a significant value of $0.201 \geq 0.05$. From these results it can be concluded that $H_0$ is accepted. This indicates that there is no positive influence of CR variables on ROA variables on hotel, restaurant and tourism companies listed on the IDX.

The F (simultaneous) test is performed to find out whether the free variables together have a significant effect on varaible bound. The following is the result of the F test on data processed using the SPSS for windows version 23 program:

| Model     | Sum of Squares | df | Mean Square | F     | Sig.  |
|-----------|----------------|----|-------------|-------|-------|
| Regression| 57.614         | 2  | 28.807      | 6.434 | .005a |
| Residual  | 129.842        | 29 | 4.477       |       |       |
| Total     | 187.456        | 31 |             |       |       |

a. Predictors: (Constant), SIZE, DER, CR  
b. Dependent Variable: ROA  
Source: Data Processing Results (2020)

To test the statistical hypothesis above, the F test is carried out at the level of $\alpha = 5%$.  
The $F_{count}$ value for $n = 37$ is provided by the following conditions:

$$F_{table} = n - k - 1 = 32 - 2 - 1 = 34$$

$$F_{count} = 6.434 \text{ and } F_{table} = 3.33$$

The criteria of the hypothesis are: $H_0$ rejected, if: $F_{count} > F_{table}$  
Ha is accepted, if: $F_{count} < F_{table}$. Based on simultaneous testing results using $F_{count}$ and $F_{table}$ tests.

The effect of SIZE, DER and CR on ROA is obtained $6.434 > 3.33$ While simultaneous testing results using the signification level are obtained $0.005 \leq 0.05$. From these results it can be concluded that $H_0$ is rejected, this indicates that the influence of SIZE, DER and CR on ROA is significant. In other words SIZE, DER and CR simultaneously affect ROA rates directly on idx-listed hotel, restaurant and tourism companies.

Determination coefficient testing serves to determine the magnitude of the percentage of influence between independent variables and dependent variables. To find
out the extent of the contribution and effect of size, DER and CR variables on ROA variables. The coefficient of determination is determined by the value R square then it can be known through the following table:

| Model | R   | R Square | Adjusted R Square | Std. Error of Estimate |
|-------|-----|----------|-------------------|------------------------|
| 1     | .554a | .307     | .260              | 2.11597                |

a. Predictors: (Constant), SIZE, DER, CR  
b. Dependent Variable: ROA  
Source: Data Processing Results (2020)

Based on the results of the test, it can be known the value of the coefficient of determination in this study is R Square 0.307 which means that the correlation between dependent variables namely ROA and independent variables namely SIZE, DER and CR has a fairly high relationship level, amounting to:

\[ D = R^2 \times 100\% \]
\[ D = 0.307 \times 100\% \]  
D = 30.7%

This suggests that a 30.7% variation in ROA values is determined by the role of the variation in SIZE, DER and CR values, while the remaining 69.3% is a contribution from other variables not included in the study.

The Effect of SIZE on Return on Assets
Firm Size has a positive and significant effect on Return on Asset (ROA). In other words, the increasing Firm Size will further increase Return on Asset (ROA), conversely if firm size decrease then return on asset (ROA) will decrease. The size of a company represents the size of a company. Large companies usually have large assets. The higher the total assets that show the property owned by the company indicates that the company belongs to a large company. The greater the total assets shows that the larger the assets owned by the company so that investors will be safer in investing in the company. The size of the company is projected with the Total Assets of the company each year. Companies with large sizes can absorb large sources of capital as well. A large source of capital can make it easier for companies to buy inventory of merchandise for sale. The number of sales made by the company will certainly increase the company's profit. In addition, companies with large sizes can produce low cost products, where low cost levels are one element to achieve profit (Di Bucchianico, 2021). The increase in profit will cause profitability to increase as well. The results of this study are in line with the findings of Abeyrathna & Priyadarshana, (2019) and Harisa et al., (2019)

The Effect of Debt to Equity Ratio on Return on Asset
Based on the results of tests that have been conducted it was found that DER has no influence on ROA on hotel, restaurant and tourism sub-sector companies listed on the IDX.
The results of this study are in line with the findings of Mahardhika & Marbun, (2016); Mawarsih et al., (2020); Rusli & Yolanda, (2017; Utama Cahya & Muid, (2014) and Vidyasari et al., (2021). Mawarsih et al., (2020) shows that DER has an effect on ROA. From the results of the study can be concluded DER has a positive and significant effect on ROA. From the above statement it can be concluded that DER partially has a significant influence on ROA, or in other words the increase in financial leverage as measured using DAR is not followed by an increase in the value of the company's ROA, or in other words the increase in the amount of debt the company has is not followed by an increase in the value of ROA in hotel, restaurant and tourism companies listed on the IDX.

**The Effect of Current Ratio on Return on Assets**

Based on the results of tests that have been conducted it was found that CR has an influence on ROA on hotel, restaurant and tourism sub-sector companies listed on the IDX. CR has an important role in funding ROA in increasing corporate profits, where THE CR then the company's ROA will be better because the more efficient all assets used to support the company's activities. The results of this study are in accordance with the results of research that has previously been conducted by Bintara, (2020); Christina et al., (2019) The results showed that CR had a positive and significant effect on ROA. Gultom et al., (2020) and Januri, (2021) concluded that there is a positive influence between the current ratio on return on assets in Various Industrial Sector Companies listed on the Indonesia Stock Exchange. It can then be concluded that CR partially has a significant influence on ROA, or in other words the increasing value of the company's activity ratio as measured by CR value is followed by an increase in the value of ROA in hotel, restaurant and tourism companies listed on the IDX.

**CONCLUSIONS**

Based on the results of this research analysis and the discussion in the previous chapter, the conclusions of this study shows that firm size, debt to equity ratio, and current ratio have positively and significantly affect Return On Asset (ROA). Its means that all of independent variable give a direct impact on profitability. Companies should pay attention to their profitability performance by focusing more on increasing the company's size, solvency, and liquidity. Increased firm size, solvency, and liquidity are believed to significantly increase profitability. This study has limited use of indicators in research, which should be able to use more varied indicators such as debt to asset ratio, cash ratio, quick ratio or return on equity or return on investment. Based on these conclusions, this study can be used as an alternative teaching source for material related to related courses. Besides for the Company, the results of this research can be used for information and input materials to increase Return on Asset (ROA) to be better in the future. This can be done by increasing firm size and emphasizing or drinking debt equity ratio (DER), current ratio (CR) so that return on asset (ROA) can be optimized. For further researchers who want to further examine the influence of Firm Size and drink or suppress Debt to Equity
Ratio (DER) and Current Ratio (CR) to Return on Asset (ROA) can be done by adding data based on the year to get results that are in accordance with the actual reality and add mediation or moderation variables such as inflation and interest rates.

**REFERENCE**

Abeyrathna, S. P. G. M., & Priyadarshana, A. J. M. (2019). Impact of Firm size on Profitability. *International Journal of Scientific and Research Publications (IJSRP)*, 9(6), p9081. https://doi.org/10.29322/ijsrp.9.06.2019.p9081

Bintara, R. (2020). The Effect of Working Capital, Liquidity and Leverage on Profitability. *Saudi Journal of Economics and Finance*, 04(01), 28–35. https://doi.org/10.36348/sjef.2020.v04i01.005

Christina, C., Monica, M., Aurelia, A., Fitria, S., Lina, L., & Panggabean, M. S. (2019). Pengaruh Current Ratio, Working Capital Turnover, Debt To Equity Ratio, Dan Total Assets Turnover Terhadap Return on Investment Pada Perusahaan Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia. *Going Concern : Jurnal Riset Akuntansi*, 14(4), 408–422. https://doi.org/10.32400/gc.14.4.26336.2019

Di Bucchianico, S. (2021). The Impact of Financialization on the Rate of Profit. *Review of Political Economy*, 33(2), 303–326. https://doi.org/10.1080/09538259.2020.1835109

Fernández-Miguélez, S. M., Díaz-Puche, M., Campos-Soria, J. A., & Galán-Valdivieso, F. (2020). The impact of social media on restaurant corporations’ financial performance. *Sustainability (Switzerland)*, 12(4), 1–14. https://doi.org/10.3390/su12041646

Gultom, D. K., Datuk, B., & Indriani, M. (2020). THE EFFECT OF CURRENT RATIO, DEBT TO ASSETS RATIO AND WORKING CAPITAL TURNOVER ON RETURN ON ASSETS IN PLASTIC COMPANIES AND PACKING LISTED ON INDONESIA STOCK EXCHANGE. *International Journal of Educational Reglement & Society |IJERLAS*, 7(2), 21–28.

Harisa, E., Adam, M., & Meutia, I. (2019). Effect of Quality of Good Corporate Governance Disclosure, Leverage and Firm Size on Profitability of Isalmic Commercial Banks. *International Journal of Economics and Financial Issues*, 9(4), 189–196. https://doi.org/10.32479/ijefi.8157

Januri. (2021). Effect of Current Ratio and Debt to Equity Ratio on Return on Assets at PT Pertamina (Persero) Marketing Operational Region I. *International Journal Reglement & Society*, 2(1), 1–10.

Jasmani, J. (2019). The Effect of Liquidity and Working Capital Turnover on Profitability at PT. Sumber Cipta Multiniaga, South Jakarta. *PINISI Discretion Review*, 3(1), 29. https://doi.org/10.26858/pdr.v3i1.13269

Lestari, R. I., Wahyudi, S., Muharam, H., & Ariyanto, E. (2020). The effect of profit efficiency toward banks performance: Does bond issuance matter? *Test Engineering and Management*, 83(March-April), 5537–5549.

Mahardhika, P., & Marbun, D. (2016). Pengaruh Current Ratio Dan Debt To Equity Ratio.
Mawarsih, S., Ramadhani, F., Irawati, L., & Fadillah, N. (2020). Total Assets Turn Over, Debt to Assets Ratio, dan Debt to Equity Ratio terhadap Return on Assets pada Perusahaan Sub Sektor Asuransi. Al-Mashrafiyah: Jurnal Ekonomi, Keuangan dan Perbankan Syariah, 4(1), 34–45.

Osadchy, E. A., Akhmetshin, E. M., Amirova, E. F., Bochkareva, T. N., Gazizyanova, Y. Y., & Yumashev, A. V. (2018). Financial statements of a company as an information base for decision-making in a transforming economy. European Research Studies Journal, 21(2), 339–350. https://doi.org/10.35808/ersj/1006

Purba, I. R., & Mahendra, A. (2022). PENGARUH WORKING CAPITAL TURNOVER (WCT), CURRENT RATIO (CR), DEBT TO EQUITY RATIO (DER), DAN RETURN ON ASSET (ROA) TERHADAP NILAI PERUSAHAAN PADA PERUSAHAAN PROPERTI DAN REAL ESTATE YANG TERDAFTAR DI BURSA EFEK INDONESIA PERIODE 2017-2020. Angewandte Chemie International Edition, 6(11), 951–952., 8(1), 61–76.

Rifai, M., Arifati, R., & Magdalena, M. (2017). Pengaruh Ukuran Perusahaan, Struktur Modal Dan Pertumbuhan Perusahaan Terhadap Profitabilitas Studi Pada Perusahaan Manufaktur di BEI Tahun 2010-2012. Jurnal Of Accounting, 1(1), 1–8.

Rusli, J., & Yolanda, D. (2017). Pengaruh Working Capital Turnover dan Debt To Equity Ratio Terhadap Return On Assets Pada Pt.Kalbe Farma Tbk Dari Tahun 2003-2015. Jurnal Manajemen FE-UB, 005(001), 122–137.

Utama Cahya, A., & Muid, A. (2014). Pengaruh Current Ratio, Debt Equity Ratio, Debt Asset Ratio, Dan Perputaran Modal Kerja Terhadap Return on Asset Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010-2012. Diponegoro Journal of Accounting, 03(2), 1–13.

Vidyasari, S. A. M. R., Mendra, N. P. Y., & Saitri, P. W. (2021). Pengaruh Struktur Modal, Pertumbuhan Penjualan, Ukuran Perusahaan, Likuiditas Dan Perputaran Modal Kerja Terhadap Profitabilitas. Jurnal Kharisma, 6(5), 2–19.

Warrad, L. H., & Oqdeh, S. K. (2018). Do Liquidity and Firm Size Affect Profitability and Does Capital Structure Play a Moderator Role : Study Based on Jordanian Data. International Research Journal of Finance and Economics, 170, 27–40.

Wira, V. (2021). The Effects of Financial Performance toward Firm Value on Tourism, Hotel and Restaurant, and Transportation Sectors Listed on Indonesia Stock Exchange. Inovbiz: Jurnal Inovasi Bisnis, 9(1), 141. https://doi.org/10.35314/inovbiz.v9i1.1903

https://www.knic.co.id/id/perkembangan-industri-manufakturindonesia (diakses pada tanggal 12 April 2020)

www.idx.co.id (diakses April 2022)