EFFECT OF LIQUIDITY, OPERATING PROFIT GROWTH AND OPERATING MARGIN ON PROFITABILITY OF COMPANIES IN RESTAURANT, HOTEL AND TOURISM INDUSTRY

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Abstract

The impact of corporate performance on corporate profitability is a central issue of research in financial studies. This research examines the influence of liquidity, operating profit growth and operating margin on profitability of companies in restaurant, hotel and tourism industry listed in Indonesia Stock Exchange. This research uses combined data, which consists of time series analysis and cross section analysis. Final result indicates that liquidity and operating margin influence profitability positively but not significantly. Besides, operating profit growth influences profitability positively and significantly.

Keywords: liquidity, operating profit growth, operating margin, profitability, restaurant hotel and tourism industry

INTRODUCTION

The role of capital markets is very important in the economy of a nation, this is due to the economic functioning of capital markets as well as financial functions (Husnan, 2001). Investors in the stock market very concerned about the financial performance of the company. The company's performance is the most important factor for profitability. Financial performance can be seen from the company's financial statements. Financial statements is one of the important information in the course of business, especially for management decision making. Wild, Subramanyam and Halsey (2006) describes the financial report is the result of the financial reporting process is governed by rules and accounting standards, intensive management, and implementation and monitoring mechanisms that have been set.

Warren, Reeve and Fess (2005) explains that the objective of financial statements is used to evaluate a company's financial condition at this time and predict the results of operations and cash flows of the company in the future. The components contained in the financial statements according to Warren, Reeve and Fess (2005), namely the income statement, statement of owner's equity, balance sheet, cash flow statement and notes to the financial statements. Skousen, Stice and Stice (2000) explain the meaning of financial statement analysis is the examination of the relationship between the two figures in the financial statements and the ongoing trend over time. According to Bodie, Kane and Marcus (2005), return on equity (ROE) is the ratio between the net income and equity is one of the two basic factors in determining the growth rate of corporate earnings.

Research Objectives
1) To examine the effect of liquidity on the profitability of companies in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.
2) To examine the effect of operating income growth on the profitability of companies in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.
3) To examine the effect of operating margin on the company's profitability in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.

4) To examine the effect of liquidity, operating income growth and operating margin together on the profitability of companies in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.

The conceptual framework

Liquidity factor is one important factor for a company. Good liquidity will expedite cash flow. A smooth cash flow will improve the way the company's operations, which in turn will increase the company's profitability.

Growth in operating income is an important source for generating high profitability. A high operating margin will also likely push higher the profitability. Because of the importance of these three factors on the profitability of the company, the study will examine the effect of liquidity, growth in operating income and operating margin on the company's profitability in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.

Based on the theories and concepts that can be built following hypotheses:

H1: there is an effect from liquidity on the profitability of companies in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.

H2: there is an effect from operating income growth on the profitability of the company's profitability in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.

H3: there is an effect from operating margin on the profitability of the company's profitability in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.

H4: there is an effect from liquidity, growth in operating income and operating margin together on the profitability of companies in the restaurant industry, the hotel and tourism listed on the Indonesia Stock Exchange.
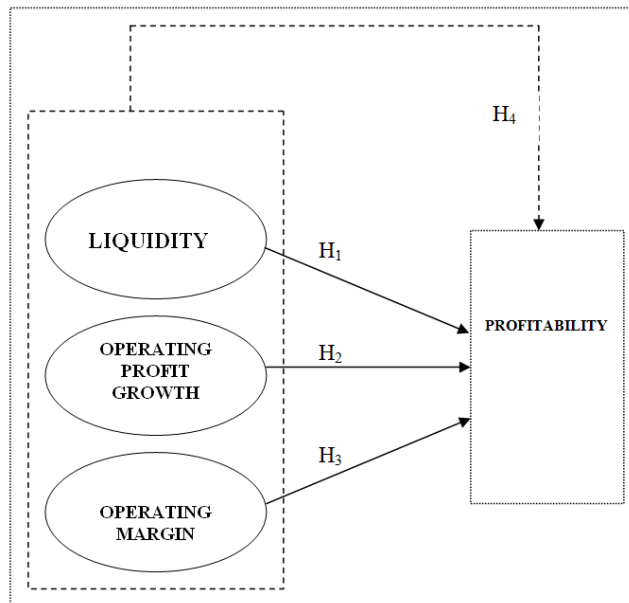

Figure 1. Chart of Conceptual Framework

METHOD

Samples in this study include companies in the restaurant, hotel and tourism industry listed on the Indonesian Stock Exchange were collected from sources including the Indonesia Stock Exchange website. Data collected for this study is in the form of secondary data covering the period 2009 to 2010.

The dependent variable in this study is:
Return On Equity (ROE) as a proxy of profitability, formula: net income divided by equity. ROE formula can be written as follows:

ROE = net income / total shareholders equity

The independent variables in this study are:
1) Asset Turnover (ATO) as a proxy of liquidity, formula: total of sales divided by total of assets.
2) growth in operating income (PLU), which is operating income growth over the last three years.
3) Operating Profit Margin (OPM) as a proxy of the operating margin, which is calculated by the formula: operating income divided by sales.

The analysis model used to analyze the effect of liquidity (ATO), growth in operating income (PLU) and operating margin (OPM) to profitability (ROE) of the company in the restaurant, hotel and tourism industry listed in the Indonesia Stock Exchange is a multiple linear regression models. The model used is as follows:

$$ROE_{it} = b_0 + b_1 ATO_{it} + b_2 PLU_{it} + b_3 OPM_{it} + e$$

Where:
b_0 = intercept
$b_{1,2,3}$ = linear regression coefficient that measures the effect of the independent variables, assuming other variables unchanged
e = error term

The research model in this study using ordinary least squares estimation method (least squares method) and using panel data. According to Pindyck and Rubinfeld (1998) basic assumption that must be met include the following:
a) The model equations are linear in parameter models.
b) Error has expected value 0 (zero) for all observations.
c) The independent variable is no exact linear relationship between two or more of them (No. multicollinearity).
d) Error of different observations are independent and therefore not correlated (No autocorrelation).
e) Errors have constant variance for all observations (No. heteroscedasticity).
f) Normally distributed errors.
Preliminary data analysis and cross-sectional or time series must first be done through test assumptions of normality and test three classics: mutikolinearity test between the independent variables, autocorrelation test, and a test of heteroscedasticity that the resulting model is valid and unbiased. (Gujarati, 2003).
Normality test data can be done with the normal probability plot test or other alternative way is the Kolmogorov-Smirnov test contained in the SPSS program. In this

case the normality tests performed to test whether the data have a normal or near-normal distribution with a normal probability plot to see where if the data spread around the diagonal line and follow the direction of the diagonal line of the regression model to meet the assumptions of normality (Ghozali, 2007). Ghozali (2007), states multicollinearity test aims to test whether the regression model found a correlation between the independent variables (independent). A good regression model should not happen correlation between the independent variable.

To detect the presence or absence of multicollinearity seen from tolerance and variance inflation factor (VIF). An autocorrelation test is used to determine whether the regression equation obtained contains correlation or not (Gujarati, 2003). Some of the problems arising from the presence of autocorrelation (Pratisto, 2004), namely:
1) standard error estimates assess the variability of the error becomes lower
2) The confidence interval and testing using t and F distributions can no longer be applied appropriately.
3) standard errors of the regression coefficients assess the variability of the regression coefficients underestimated.

Ways that are often used to test whether there is autocorrelation is to see the value of Durbin-Watson test. One way to reduce the autocorrelation is to do a logarithmic transformation (Nachrowi and Usman, 2002). Heteroskedasticity testing done to see if all the residuals have the same variance. According to Santoso (2001) conclusions were drawn based on the scatter-plot that is if there is a specific pattern like dots form a pattern of regular, then alleged to have occurred heteroscedasticity. If the points do not form a clear pattern and spread, then homoskedastis.

The F-test. The F-test was used to verify whether all the independent variables have an influence on the dependent variables together.
The hypothesis is as follows:
Ho: liquidity (ATO), growth in operating income (PLU) and operating margin (OPM) jointly have no effect on profitability (ROE) of the company in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.
$b_1, b_2, b_3 = 0$
Ha: liquidity (ATO), growth in operating income (PLU) and operating margin (OPM) jointly affect the profitability (ROE) of the company in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.
$b_1, b_2, b_3 \neq 0$

Goodness of Fit Test. Existence of the coefficient of determination (methods) are used to measure how much variation in the dependent variable can be explained by variations in the independent variable while the remaining unexplained variation is the part that is explained by other variables that are not included in the regression models were tested. (Ghozali , 2007).

T-test is used to examine the relationship of each independent variable on the dependent variable. The hypothesis are as follows:
1. Effect of liquidity (ATO) to profitability (ROE)
   Ho1: liquidity (ATO) has no effect on profitability (ROE)
   $b_1 = 0$
   Ha1: liquidity (ATO) has an influence on profitability (ROE)
   $b_1 \neq 0$

2. Effect of growth in operating profit (PLU) to profitability (ROE)

Ho2: operating income growth (PLU) has no effect on profitability (ROE)

$b_2 = 0$

Ha2: operating income growth (PLU) has an influence on profitability (ROE)

$b_2 \neq 0$

3. Effect of operating margin (OPM) to profitability (ROE)

Ho3: operating margin (OPM) has no effect on profitability (ROE)

$b_3 = 0$

Ha3: operating margin (OPM) has an influence on profitability (ROE)

$b_3 \neq 0$

RESULTS AND DISCUSSION

Based on available data, the amount of data used for research object numbered fifteen companies in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange during two years (2009 and 2010) so that the total of thirty observations.

Table 1. List of Samples

No	Company
1	Anta Express Tour & Travel Service Tbk
2	Bayu Buana Tbk
3	Destinasi Tirta Nusantara Tbk
4	Grahamas Citrawisata Tbk.
5	Hotel Mandarine Regency Tbk
6	Hotel Sahid Jaya International Tbk
7	Indonesian Paradise Property Tbk
8	Island Concepts Indonesia Tbk.
9	Panorama Sentrawisata Tbk
10	Pembangunan Graha Lestari Indah Tbk
11	Pembangunan Jaya Ancol Tbk
12	Pioneerindo Gourmet International Tbk
13	Plaza Indonesia Realty Tbk
14	Pudjiadi & Sons Estate Tbk
15	Pusako Tarinka Tbk.

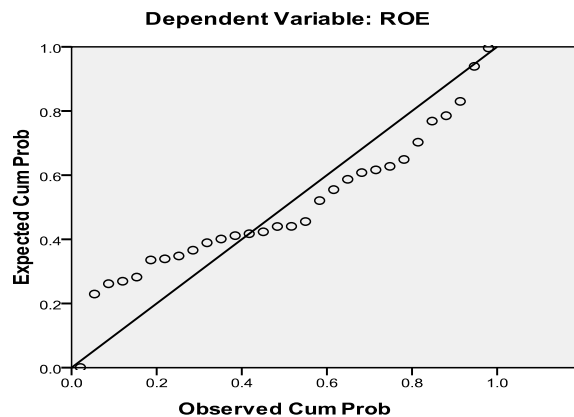**Normal P-P Plot of Regression Standardized Residual**

Figure 2. Normality Test Results

From the above results of normality test is known that the data are around the diagonal line and follow the direction of the diagonal line, it can be concluded that the data met the assumptions of normality.

One-Sample Kolmogorov-Smirnov Test

		Standardized Residual
N		30
Normal Parameters[a,,b]	Mean	.0000000
	Std. Deviation	.94686415
Most Extreme Differences	Absolute	.184
	Positive	.143
	Negative	-.184
Kolmogorov-Smirnov Z		1.006
Asymp. Sig. (2-tailed)		.264

a. Test distribution is Normal.

b. Calculated from data.

hypothesis:

H0 = normally distributed sample

H1 = sample is not normally distributed

If Asymp Sig (2-tailed)> (0.05), then H0 is accepted.

If Asymp Sig (2-tailed) <(0.05), then H0 is rejected.

Asymp value Sig (2-tailed)> (0.05), then H0 is accepted so that it can be concluded that the data were normally distributed.

Table 3: Test Results multicollinearity

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.164	6.888		.024	.981		
	ATO	1.900	2.545	.129	.746	.462	.974	1.027
	PLU	.138	.055	.431	2.498	.019	.977	1.023
	OPM	.206	.238	.150	.866	.395	.969	1.032

a. Dependent Variable: ROE

From the test results , all independent variables have VIF values less than 10. So there is no multicollinearity in the regression model used.

Testing the assumptions of classical autocorrelation performed using Durbin-Watson test. Figures obtained Durbin-Watson is at 1.280. After adjusting the value of the table then it does not happen autocorrelation.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.494[a]	.244	.157	26.6271428	1.280

a. Predictors: (Constant), OPM, PLU, ATO

b. Dependent Variable: ROE

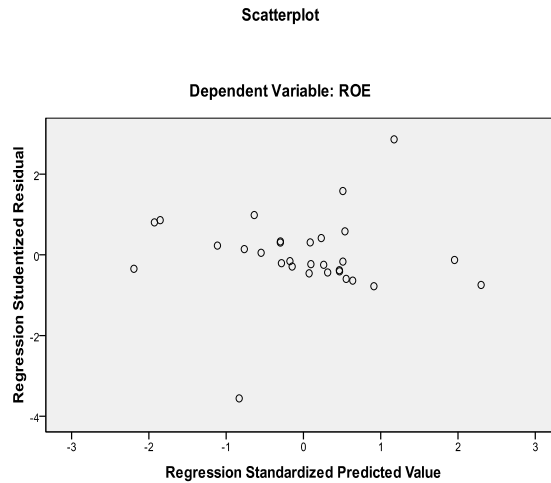**Scatterplot**

Dependent Variable: ROE

Figure 3. Scatter Plot

Based on the scatter-plot graph above, it is scattered dots which means no symptoms heterocedastisity.

Table 4. F Test Result

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5943.657	3	1981.219	2.794	.060[a]
	Residual	18434.123	26	709.005		
	Total	24377.780	29			

a. Predictors: (Constant), OPM, PLU, ATO

b. Dependent Variable: ROE

From the F test results above it is known that the F value of significance of 0.06 <α0, 10. which means that there is an effect of liquidity (ATO), growth in operating income (PLU) and operating margin (OPM) jointly on profitability (ROE) of the company in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange.

Table 5. Results of t-test

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.164	6.888		.024	.981		
ATO	1.900	2.545	.129	.746	.462	.974	1.027
PLU	.138	.055	.431	2.498	.019	.977	1.023
OPM	.206	.238	.150	.866	.395	.969	1.032

a. Dependent Variable: ROE

Research Model results of the regression is:

$$\text{ROE} = \quad \textbf{0,164} \quad + \quad \textbf{1,900 ATO} \quad + \textbf{0,138 PLU} \quad + \textbf{0,206 OPM}$$
$$\quad\quad (0,024) \quad\quad (0,746) \quad\quad\quad (2,498)** \quad\quad (0,866)$$

Adjusted R^2 = 0.157
 ***Significant at the 0.01 level
  **Significant at the 0.05 level

Effect of liquidity (ATO) to profitability (ROE) is positive but not significant, look at the value of t-statistic = 0.746 with a 0.462 probability value greater than α = 0.05 or 95% confidence level. Effect of growth in operating profit (PLU) to profitability (ROE) is positive and significant looks at the value of t-statistic = 2.498 with a probability value of 0.019 which is smaller than α = 0.05 or 95% confidence level. Effect of operating margin (OPM) to profitability (ROE) is positive but non-significant look at the value of t-statistic = 0.866 with a 0.395 probability value greater than α = 0.05 or 95% confidence level.
In the regression equation shows the value of adjusted R2 is 0.157, meaning that using the model, profitability (ROE) is not enough to simply be explained by the independent variables of liquidity (ATO), growth in operating income (PLU) and operating margin (OPM).

CONCLUSION

From the results of this study concluded that the growth in operating income showed a positive and significant effect on the profitability of companies in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange. So based on the findings of this study, for investors in Indonesia Stock Exchange in particular in investing in the restaurant, hotel and tourism industry listed on the Indonesia Stock Exchange need to know about operating profit growth of the company before investing.

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