

Study of Return on Assets in Indonesia Stock Exchange

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Abstract: This study aims to determine the effect of debt ratio (DR), current ratio (CR), and working capital turnover (WCT) on return on assets (ROA) at companies listed on Indonesia Stock Exchange tourism, hotels and restaurants sector period of 2012-2016. Sample selection in this study using purposive sampling method and got 6 companies which are suitable with the criteria. The research data is obtained from Indonesia Stock Exchange. The method used in this research is panel data regression analysis and it is found that the more appropriate model used is random effect. From the result of research got the value of adjusted R-Square equal to 9.13%. It indicated that current ratio variable has significant positive effect on return on assets (ROA) with regression coefficient equal to 0,0286. However, the variable debt ratio (DR) has insignificant negative effect on return on assets (ROA) with the regression coefficient of 0,6852 and working capital turnover (WCT) variable does not positively influence dividend policy with the regression coefficient of 0,6768.

Keywords: debt ratio, current ratio, debt ratio, returns on assets, working capital turnover.

INTRODUCTION

Tourism has built the pace of the Indonesian economy. It is proven in 2016, the acquisition of foreign exchange in the tourism sector is estimated to reach Rp 184 trillion and exceeded the target of Rp 172 trillion. As a result, the tourism sector contributed to an increase in gross domestic product (GDP) of 11.5% from the initial target of 11%.

Foreign exchange earnings increased by 27.78% from 2015 and able to absorb the workforce to 11.7 million workers. The tourism sector has great investment opportunities where many companies in the tourism, restaurants and hotels sectors contribute directly to the tourism sector. These companies contribute to the provision of services such as travel and travel agents, accommodation, and fast food restaurants. According to UNWTO [35] tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes. These people are called visitors (which may be either tourists or excursionists; residents or nonresidents) and tourism has to do with their activities, some of which involve tourism expenditure. So the tourism sector becomes one of the sectors with great prospects in the future. The tourism sector is also referred to as the invisible export of goods and services of tourism that can strengthen the balance of income and participate in developing the tourism industry sector, hotels, and restaurants.

During 2011, tourism, restaurants, and hotels sectors experienced some obstacles such as data and investment profile in the tourism areas are still limited, inadequate infrastructure, inefficient government bureaucracy, limited access to finance, licensing constraints in investing, threats to security such as the threat of terrorism, the low competitiveness of Indonesian tourism products has an impact on the low prices to be paid and the failure of Bank Indonesia as a regulator in reducing bank interest rates. So it affects the decrease in net profit obtained by the company even PT Pusako Tarinka Tbk (PSKT) engaged in the field of hospitality loss of 4.19%. During 2012, companies in the tourism, restaurants, and hotels sector have not experienced a significant increase. This is caused by obstacles such as the global crisis in Europe and the United States, the limitations of water seat capacity and direct flights, partnerships, and cooperation between the government and private sector, including the public is still not optimal, negative issues concerning the security and environmental conditions occurring in Indonesia. However, by 2013, the tourism, restaurants, and hotels sectors experienced an increase in average return on assets of 2% to 7% where every drafting of Ministerial Regulation on Tourism Business Standards obliges every tourism business to apply minimum standards in operation, tourist attraction reaches 29 locations, advocacy of Tourism Business Signature in order to facilitate regulation in investing tourism sector,

and create policy for protection of creative economy business activity to increase national GDP. With these efforts, the tourism, restaurants, and hotels sectors have higher net income or gain on assets compared to 2012. However, by 2014, the average net income decreased by 4% to 3%. The decline was caused by Indonesia's political stability in some areas less support to invest in tourism and interest rates in Indonesia in 2014 amounted to 7.54% which decreased investor interest to invest. In 2014 there are 10 companies in tourism, restaurants, and hotels sector have a ratio of net profit or gain on assets under 3%, including: BUVA (PT Bukit Uluwatu Villa Tbk), GMWC (PT Grahama Citrawisata Tbk), HOME (Hotel Mandarine Regency Tbk), ICON (Islands Concepts Tbk), INPP (Indonesian Paradise Property Tbk), JIHD (Jakarta International Hotels and Developments), MAMI (Mas Murni Indonesia Tbk), PGLI (Pembangunan Graha Lestari Tbk), PSKT (PT Red Planet Indonesia Tbk), SHID (Hotel Sahid Jaya Tbk). Furthermore, by 2015 the average decreases in the ratio on assets by 2% to 1%. The decline in the ratio on assets due to the unpreparedness of human resources as well as the tourism, restaurants, and hotels sectors are still not ready to face the Asian Economic Community 2015. Such limitations are excellent service in providing the best services to tourists and the accuracy of the preparation of financial statements that still require training accompaniment. In 2015, hospitality companies like PT Grahama Citrawisata suffered a loss of 5.71% and PT Pusako Tarinka suffered a loss of 15.33%. Not only companies that are engaged in perraa that accept losses, PT Pioneerindo Gourment International Tbk which is engaged in fast food restaurants experience a loss of 0.54%.

This poses a new problem that the major hospitality industry sector has to keep operating with a minimal amount of profit. So the hotel industry sector borrowed additional funds as working capital to fund various operational activities. A similar occurrence occurred in PANR's tourism industry sector where many tourism businesses have sprung up, such as Traveloka, Agoda, Trivago, and pegipegi.com offering low prices and additional facilities. In the process of borrowing funds, the company must also be able to measure its ability in paying current liabilities or short-term liabilities using current assets. So we need an analysis to find out how far the company can pay off the financial obligations before maturity and as an evaluation for the company to make improvements to the level of liquidity for the future.

Mashadi *et al.*, [1], debt ratio variable have positive effect to return on assets. While Vatavu [2], Akeem *et al.*, [3], Enekwe [4], Xu Fengju *et al.*, [5], Bokhari and Khan [6] found that debt ratio has insignificant and negative impact to return on assets. Selcuk [7], Ulzanah *et al.*, [8], Alavinasab and Davoudi [9] and Nazari *et al.*, [10] stated that current ratio variable has positive effect to return on assets. However, According to Warrad [11], Sutanto and Pribadi [12] variable of working capital turnover positive effect on return on assets. While Fitri *et al.*, [13], Widiyanti and Bakar [14] stated that variable of working capital turnover negatively affects return on assets. Bulin and Basit [15], Cahyaning *et al.*, [16], Warrad and Omari [11] found that working capital turnover have no effect to return on assets.

LITERATURE REVIEW

State of The Art

Based on the phenomom, the return on assets of the company in the tourism, restaurants, and hotels sector listed on the Indonesia Stock Exchange where currently the sector is a primadonna and trend as one of the sector boosted the economic growth of Indonesia.

Financial statements

According to Brigham and Houston [17], the financial statements are several sheets of paper with numbers written on it, but it is also important to think about the real assets behind those numbers. The financial statements report what actually happened to assets, profits, and dividends over the past few years. In other words, the financial statements provide information and description about the financial condition of a company at a certain period for investors. Horngren, Harrison, and Bamber [18] provide the following definition of financial statements: "Documents that report on a business in monetary amounts, providing information to help people make informed business decisions." The financial statements are the structured presentation of the financial position and financial performance of the entity (Statement of Accounting Standard No.1,2015:1). This report displays the history of quantified entities in monetary value. Warren and Fees [19] stated that the financial statements are after the transactions are recorded and summarized, then prepared for the user of accounting reports that generate information. According Milkovic and Boedreau [20] that the internal environment of the Organization include the condition of the strategies and objectives of the Organization, financial conditions, technology and corporate culture, the ability to affect human resources the effectiveness of the organization. And Wood [36] describes the variables that represent the internal factors of the company are the characteristics of the Organization, performance measurement, activity, and employee training, quality management and finance.

Meanwhile, according to Munawir [21], the financial statements can also be defined as two lists prepared by the Accountant at the end of the period for a company. The second list is a list of balance sheets or lists of financial position and income list or profit and loss list. In recent times it has become customary for corporations to add a third list of surplus lists or undistributed earnings lists. According to Brigham and Houston [17], the financial statements consist of

several types, namely: A balance sheet is a report on a company's financial position at a certain point, the income statement is a report that summarizes the income and expenses of a company during one accounting period, usually one-quarter or one year, net cash flows are actual net cash, in contrast to accounting earnings (net income), generated by an enterprise during a specified period, cash flow statement is a report that reports the impact of operating activities, investments and financing of a company on cash flows throughout the accounting period, retained earnings statement is a report that presents how much the company's profits are held in the business and not paid as dividends.

Brigham and Houston [17] said that financial statements provide a wealth of positive information that managers, investors, creditors, customers, suppliers, and regulators can use. Financial analysis can be used to forecast strategic decisions, such as the sale of a division, changes in credit or inventory policy or bank expansion will affect the performance of the company in the future. Financial reports are used by managers to improve performance; by creditors to evaluate the possibility of collectible loans, and by shareholders to forecast earnings, dividends, and stock prices. The financial analysis involves (1) comparison of firm performance with other companies, especially those engaged in the same industry, and (2) evaluating the trend of the company's financial position over the years. So the financial statements can be defined as a report on the results of the company's operations, the company's financial position, and the company's equity containing information for economic decision-making.

Ratio analysis is a method of analysis to know the relation of certain items in the balance sheet or income statement individually or in the combination of both reports. Financial ratio analysis is a form or common way used in financial statement analysis. Ratio analysis is useful for internal analysts to help management make an evaluation of its operating results, correct errors and avoid situations that can cause financial hardship. Ross, Westerfield, and Jordan [22] found that another way of avoiding problems that arise in comparing companies with different sizes is to calculate and compare financial ratios. These ratios are a way to compare and investigate the relationships that exist between various pieces of financial information. The use of the ratio will eliminate the size problem because the size will be effectively divided. Financial ratios are usually grouped into the following categories: Short-term or liquidity ratios of solvability, long-term ratios or financial leverage, turnover or asset management ratios, profitability ratios, market value ratios.

According to Brigham and Houston [17], profitability ratios are a group of ratios that show a combination of liquidity influence, asset management, and debt on operating results. While Ross, Westerfield, and Jordan [22] found that this ratio is intended to measure how efficiently a company has used assets and manages its operations. The focus of the profitability ratio is the final result, ie net income. Sugiyono [23] said that this ratio aims to measure the effectiveness of management as reflected in rewards or investment returns through the activities of the company or in other words measure the overall performance of the company and efficiency in managing the obligations and capital. According to Sartono [24], profitability ratio is a ratio to measure the ability of companies to earn profits in relation to sales, total assets, and own capital. Meanwhile, Kasmir [25] found that the ratio of profitability is the ratio to assess the ability of a business in the search for profit. This ratio also provides a measure of the level of management effectiveness of a business. This is shown by the profits generated from sales and investment income. Thus, the theory of profitability is a reference in measuring the amount of profit becomes so important to know whether the company has run its business efficiently. The efficiency of a new business can be known after comparing the profits obtained with the assets or capital that generate the profit.

According to Kasmir [25], the purpose of using profitability ratios for a business or for outsiders, namely: To calculate or measure the profit earned in a given period, to assess the position of the previous year's earnings by the current year, to assess the progress of profit over time, to assess the amount of net profit after tax with own capital, to measure the productivity of all corporate funds used either loan capital or own capital, to measure the productivity of all funds used either loan capital or own capital. The benefits derived from the use of profitability ratios are to know; the level of profit earned in one period, the position of the previous year's profit by the current year, the growth of profit over time, the amount of net profit after tax with own capital, the productivity of all funds used either loan capital or own capital.

By looking at the benefits and objectives of profitability, then profitability measurement can be done with several ratios. According to Brigham and Houston [17], the profitability ratio reflects the final outcome of all financial policies and operational decisions. The profit margin on sales, which is calculated by dividing net income by sales, gives the profit rate per sales dollar stated below:

- 1) The profit margin on sales, which is calculated by dividing net income by sales, gives the profit rate per sales dollar stated below:

$$\text{Profit margin on sales} = \frac{\text{Earnings after tax}}{\text{Sales}} \quad \dots(1)$$

- 2) Return on assets, the ratio of net income to total assets measures return on total assets after interest and taxes.(2)

$$\text{Return on assets} = \frac{\text{Earning after tax}}{\text{Sales}}$$

- 3) Basic earning power, it can be calculated by dividing the number of earnings before interest and taxes by total assets.(3)

$$\text{Basic earning power} = \frac{\text{Earning before interest and tax}}{\text{Total assets}}$$

- 4) Return on common equity, the ratio of net income to equity, measures the rate of return on shareholder investment.(4)

$$\text{Return on common equity} = \frac{\text{Earning After Tax}}{\text{Equity}}$$

Horne and Wachowicz [26] said that turn on assets measures the overall effectiveness in generating profits through available assets; power to generate profits from invested capital. Riyanto [27] found that the term return on assets with net earning power ratio (rate of return on investment), which is the ability of the capital invested in the overall assets to generate a net profit. The net profit he means is the net profit after tax. According to Gitman and Zutter [28], return on assets measures the overall effectiveness of management in generating profits using existing assets. Thus, the greater the value of return on assets, showing the company's performance is getting better too because the rate of return on investment is greater. This ratio is used to measure the capability of the capital invested in the overall asset to generate profit for all investors. The calculation results of this ratio show the effectiveness of management in generating profits related to the availability of company assets.

Debt ratio or total to assets debt. Brigham and Houston [17] stated that companies using financing through debt (financial leverage) will provide three important impacts: 1) raising funds through debt, shareholders can control the company with a limited amount of equity investment, 2) creditors see the equity or funds provided by owner as a safety limit. Thus, the higher the proportion of total capital given by shareholders, the less the risk faced creditor, 3) if the results obtained from the assets of the company is higher than the interest rate paid, then the use of debt will "leverage" or increase the return on equity or ROE. There are two reasons behind the impact of leverage: 1) because interest can be a tax deduction, the use of debt will reduce tax liabilities and leave a substantial operating profit for corporate investors. 2) if the operating profit as a percentage of the asset exceeds the expected interest rate on the debt, then the firm can use the debt to buy the asset, pay interest on the debt, and still get the remainder as a "bonus" for the shareholders. Thus, firms with relatively high debt ratios have higher returns forecast when the economy is normal, but will run the risk of losses when the economy enters a period of recession. The ratio of total debt to assets is one leverage ratio. The ratio of total debt to assets, commonly called the debt ratio, measures the percentage of funds granted by creditors.(6)

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}}$$

Total debt includes all current liabilities and long-term debt. Creditors prefer low debt ratios as the lower the debt ratio, the greater the protection against creditor losses in the event of liquidation. On the other hand, shareholders may want more leverage because it will enlarge the expected profit. According to Sawir [29], debt ratio is a ratio that shows the proportion of the liabilities owned and all owned wealth. If the debt ratio is higher, while the proportion of total assets does not change then the debt owned by the larger company. The greater the debt amount means the financial ratios or the failure ratio of firms to repay loans is higher. And vice versa, if the debt ratio is smaller than the debt owned by the company, will also be smaller and this means the financial risk of the company return the loan is also getting smaller. Sutrisno [30] said that debt to total assets or debt ratio is the balance of debt owned by the company with its own capital is less than the debt. For the company should the amount of debt should not exceed its own capital so that the fixed burden is not too high. According to Syamsuddin [31], debt to assets ratio (DAR) is used to measure how much the company's assets are financed by creditors. The higher the debt ratio the greater the amount of loan capital used in generating profits for the company. Harahap [32] said that this ratio shows the extent to which the debt can be covered by a larger asset ratio is more secure (solvable). Can also be read some portion of debt compared to assets. Thus, debt ratio or debt to total assets is a financial ratio that can be used to measure debt or liability proposition owned by the company and the ability of the company to guarantee liabilities with overall assets. This ratio can also be used by creditors to see

the company's ability to recover its obligations in a timely manner. So this ratio is used as a measurement to know the risks faced and the benefits to be gained company.

Current ratio According to Brigham and Houston [17], liquid assets are assets that can be converted to cash quickly without reducing the asset price too much. The liquidity ratio shows the relationship between cash and current assets of other companies with current liabilities. The current ratio is the ratio calculated by banning current assets with current liabilities. This ratio shows the extent to which current liabilities are covered by assets that are expected to be converted into cash in the near future.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} \quad \text{.....(7)}$$

If a company is experiencing financial difficulties, the company starts to slowly pay bills (business debt), bank loans and other obligations that will increase current liabilities. If current liabilities rise faster than current assets, the current ratio will decrease, and this is a sign of a problem. According to Ross, Westerfield, and Jordan [22], the current ratio is one of the well-known and widely used ratios. For a creditor - especially a short-term lender such as a supplier - the higher the current ratio the better. For companies, high current ratio shows liquidity, but also shows the inefficient use of short-term cash and short-term assets. Sartono [24] found that the higher current ratio means the greater the company's ability to meet short-term financial obligations. Current assets include cash, accounts receivable, securities and inventories. According to Sutrisno [30], current ratio is a ratio that compares between current assets owned by companies with short-term debt. Short-term debt includes trade payables, notes payable, bank debts, salary debts and other debts that should be repaid immediately. Kasmir [25] said that the current ratio is a ratio to measure a company's ability to pay short-term liabilities or debts that are due sooner upon collect. In other words, how much current assets are available to cover short-term liabilities or debts are due soon. Thus this ratio indicates a company's ability to pay off short-term liabilities in which the current amount of the company's assets can guarantee current liabilities or indicate the short-term security of the creditor.

Working capital turnover ratio. According to Ross, Westerfield, and Jordan [22], this ratio measures how much "work" can be done from working capital. Riyanto [27] said that working capital is always in a state of rotation or operating within the company as long as the company concerned is in a business state. The working capital turnover period begins when cash is invested in the working capital compensation when it comes to cash back into cash. The shorter the period means the faster the rotation or the higher the turnover rate.

$$\text{Working capital turnover} = \frac{\text{Sales}}{\text{Current asset} - \text{current liabilities}} \quad \text{.....(8)}$$

Sawir [29] found that the working capital turnover is the ratio of business activity to the current assets surplus over current liabilities and shows the number of sales (in rupiah) that the company can earn for each working capital. While according to Riyanto [27], working capital turnover is the ability of working capital (net) rotates within a period of cash cycle (cash cycle) of the company. Ardiyos [33] stated that sales divided by the average working capital. This comparison shows the effectiveness of business entities in using working capital to obtain revenue. So, it can be said that velocity of working capital shows the relationship between sales with working capital used to assess the effectiveness of a company's working capital in generating revenue or sales. According to Kasmir [25], the working capital turnover is one of the ratios to measure or assess the effectiveness of working capital during a given period. This means how much working capital spins over a period or in a period. To measure this ratio, we compare between sales with working capital or with average working capital. Thus, working capital is always in a state of operation or spin within the company during the company concerned in a business situation. The working capital turnover period starts from the moment when cash is invested in the components of working capital up to where it is back into cash. The shorter the period means the faster the rotation or the higher the turnover (turnover rate). How long is the period of working capital turnover depends on how long the rotation period of each component of the working capital.

RESEARCH METHODS

This study uses a survey to analyze the influence of Debt Ratio, Current Ratio and Working Capital Turnover on Return on Assets. The survey was conducted in Indonesia, the population in this research is the tourism, hotels and restaurants sector listed in Indonesia Stock Exchange amounted to 23 companies and the sample is 21 companies. The constellation model the effect of independent and dependent variables can be described as follows:



Fig-1: Research Model

- Hypothesis 1: Presumed debt ratio has a significant negative effect on return on assets.
- Hypothesis 2: Presumed current ratio has a significant positive effect on return on assets.
- Hypothesis 3: Presumed working capital turnover has a significant positive effect on return on assets.

FINDINGS AND ARGUMENT

According to Gujarati and Porter [34], testing stationary data is one of the important types of data used in empirical analysis is time series data. The stationary test can be done by unit root test. There are two kinds of root test units that can be generally chosen include Augmented Dickey Fuller (ADF) and Philips Peron (PP). Here is the result of the stationary test:

Table-1: Stationary Test

Variables	Unit root test in	ADF test statistics	Prob.	Critical value 5%	Information
ROA	1st difference	-6.623.737	0.0000	-2.971.853	Stationary
DR	1st difference	-4.909.907	0.0005	-2.971.853	Stationary
CR	1st difference	-7.953.413	0.0000	-2.971.853	Stationary
WCT	1st difference	5.294.054	0.0002	-2.971.853	Stationary

Source: Data processed (2017)

Based on table-1 the results of the ADF test above, if probability smaller or equal to 0,05 then the time series data is stationary, otherwise if probability greater than 0,05 then the time series data is not stationary. From the test results obtained that all variables in this study have been stationary on the degree of level integration. With the explanation as follows:

- Probability ROA (0,0000) < alpha (0,05), then the data is stationary.
- Probability DR (0,0005) < alpha (0,05), then the data is stationary.
- Probability CR (0,0000) < alpha (0,05), then the data is stationary.
- Probability WCT (0,0002) < alpha (0,05), then the data is stationary.

The Common Effect or Ordinary Least Square (OLS) approach is the simplest approach to estimating panel data model parameters by combining cross-section and time series data as a whole and without regard to time and individual differences. From the Eviews 9.0 processing the following results are obtained:

Table-2: The Test Result of Common Effect

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.022838	0.032350	0.705954	0.4865
DR	0.007629	0.072672	0.104974	0.9172
CR	0.011332	0.007894	1.435532	0.1631
WCT	0.001024	0.001523	0.672021	0.5075
R-squared	0.080117	Mean dependent var		0.053833
Adjusted R-squared	-0.026023	S.D. dependent var		0.031813
S.E. of regression	0.032225	Akaike info criterion		-3.908606
Sum squared resid	0.026999	Schwarz criterion		-3.721780
Log likelihood	62.62909	Hannan-Quinn criter.		-3.848838
F-statistic	0.754821	Durbin-Watson stat		0.875938
Prob (F-statistic)	0.529582			

Source: Data processed (2017)

By using the common effect in table above, it can be seen that the adjusted R-squared is -0,006961 or -0,69%, so it can be interpreted that the independent variables in this study cannot describe the dependent variable, dividend policy is -0,69% while the 100% accumulated value is explained by other studies.

Random effect model is an estimation method of panel data regression model with the assumption of regression coefficient (slope) constant and intercepts different between time and between individual (random effect). Random effect assumes that each company has the different intercept, which is a random variable. This test takes into account that errors may be correlated along the cross-section and time series. This problem can be solved by using error variables that may arise in inter-time and inter-firm relationships known as random effects models. This model will estimate panel data in which interference variables may be interconnected between time and between individuals. From the processing of Eviews 9.0 obtained the following results:

Table-3: The Result of Random Effect

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.025821	0.031491	0.819931	0.4197
DR?	-0.028027	0.068370	-0.409931	0.6852
CR?	0.017393	0.007507	2.317077	0.0286
WCT?	0.000699	0.001658	0.421556	0.6768
Random Effects (Cross)				
BAYU--C	0.000603			
FAST--C	0.019979			
INPP--C	-0.027353			
KPIG--C	-0.014973			
PNSE--C	0.018640			
PUDP--C	0.003105			
Effects Specification				
			S.D.	Rho
Cross-section random			0.021834	0.4116
Idiosyncratic random			0.026104	0.5884
Weighted Statistics				
R-squared	0.185290	Mean dependent var		0.025382
Adjusted R-squared	0.091285	S.D. dependent var		0.028008
S.E. of regression	0.026699	Sum squared resid		0.018534
F-statistic	1.971065	Durbin-Watson stat		1.127841
Prob(F-statistic)	0.143064			
Unweighted Statistics				
R-squared	-0.010197	Mean dependent var		0.053833
Sum squared resid	0.029650	Durbin-Watson stat		0.704995

Source: data processed (2017)

Based on the result of random effect test in table 3, it can be seen that the result of adjusted R square equal to 0,091285 or 9,13%. So it can be interpreted that the independent variables in this study can describe the related variables, return on assets of 9,13% while the remaining 90,87% is explained by other studies. Based on these results, it can be seen that the variable with probability value $< \alpha$ (0,05) stated significant is Current Ratio (CR), while the variable Debt Ratio (DR) and Working Capital Turnover (WCT) is not significant. The assumed significant assertion of the alpha value is 0,05 or 5% with a 95% confidence level where the variable has a probability value $< \alpha$ (0,05). If the alpha value $> 0,05$ then the level of confidence does not reach 95% so if the value of the variable has alpha $> 0,05$ then the variable does not affect the independent variables studied.

Table-4: The Result of Chow Test

Effects Test	Statistic	d.f.	Prob.	
Cross-section F	3.724654	(5,21)	0.0143	
Cross-section Chi-square	19.046823	5	0.0019	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.022838	0.032350	0.705954	0.4865
DR?	0.007629	0.072672	0.104974	0.9172
CR?	0.011332	0.007894	1.435532	0.1631
WCT?	0.001024	0.001523	0.672021	0.5075
R-squared	0.080117	Mean dependent var		0.053833
Adjusted R-squared	-0.026023	S.D. dependent var		0.031813
S.E. of regression	0.032225	Akaike info criterion		-3.908606
Sum squared resid	0.026999	Schwarz criterion		-3.721780
Log likelihood	62.62909	Hannan-Quinn criter.		-3.848838
F-statistic	0.754821	Durbin-Watson stat		0.875938
Prob(F-statistic)	0.529582			

Source: Data processed (2017)

Based on the results of chow test conducted in table above, it can be seen that the value of chi-square $<$ alpha (0,05) is equal to 0,0019, thus H_a accepted so that the right model is to follow the fixed effect. In other words, fixed effect model is better used in estimating panel data compared with common effect. Then proceed with Hausman effect to choose whether to use fixed effect or random effect model to use in panel data regression.

Hausman test is used to select the most precise estimation between fixed effect approach and random effect approach in panel data regression. If the Chow test shows the result of selection in the common effect, the Hausman test is used to select the fixed effect or random effect in the panel data regression. Hausman test is an alternative to determine the regression of panel data to be used. Because in analyzing panel data regression there are 2 stages of panel data regression selection that is chow and Hausman test. The research is enough to use the regression panel selection step in chow test result only. In this test is done with the following hypothesis:

H_0 : Random effect model (REM)

H_a : Fixed effect model (FEM)

The basis of the decision is to compare the calculated chi-square value with the chi-square table, if the chi-square value counts $<$ chi-square table, then H_0 is rejected and H_a is accepted. The fixed effect, but if the chi-square count $>$ chi-square table, then H_0 is accepted and H_a is rejected, which means more appropriate model used is the random effect.

The effect of debt ratio (DR) to return on assets (ROA), debt ratio variable obtained the t-statistic value of -0,409931 $<$ t-table of 1,706 with a probability value of 0,6852 greater than the level of significance that is 0,05 then H_0 is accepted and H_1 is rejected. This shows that the debt ratio variable has debt ratio has insignificant negative effect on return on assets in the period of 202-2016.

The effect of current ratio (CR) on return on assets, variable of current ratio obtained by the t-statistic value equal to 2,317077 $>$ t-table equal to 1,706 with probability value equal to 0,0286 smaller than the level of significance that is 0,05 where H_0 is rejected and H_1 is accepted. This shows that current ratio has a significant positive effect on return on assets in the period 2012-2016.

The effect of working capital turnover (WCT) to return on assets (ROA), working capital turnover variable obtained the t-statistic value of 0,421556 $<$ t-table of 1,706 with the probability value of 0,6768 greater than the level of significance that is 0,05 then H_0 is accepted and H_1 is rejected. This shows that the working capital turnover has insignificant positive effect on return on assets in the period 2012-2016.

The coefficient of determination (R^2) is to measure the model's ability to explain the variation of the dependent variable. The coefficient of determination used to know the effect of independent variables namely profitability, liquidity and capital structure to the dependent variable is dividend policy. Random effect test result of 9,13%, it can be

interpreted that debt ratio (DR), current ratio (CR) and working capital turnover (WCT) can explain its relation to return on assets (ROA) while the rest of 90,87% is explained by other variables outside the research model.

Panel data regression analysis (the regression equation model):

$$\text{Return on Assets (ROA)} = 0.025821 - 0.028027 \text{ Debt Ratio (DR)} + 0.017393 \text{ Current Ratio (CR)} + 0.000699 \text{ Working Capital Turnover (WCT)}$$

Based on the above equation, it can be described as follows:

- The constant of 0.025821 states that if the debt ratio (DR), current ratio (CR), and working capital turnover (WCT) are 0, then the return on assets (ROA) is 0.025821.
- Current ratio coefficient ratio (CR) of 0.017393 states that each addition of 1 of the current ratio factor, the number of dividend policies will increase by 0.017393 with the assumption that other independent variables of the regression model remain.

CONCLUSION

Based on the analysis of the influence of debt ratio (DR), current ratio (CR), and working capital turnover (WCT) on return on assets (ROA) listed in Indonesia Stock Exchange can be concluded; 1). Debt ratio (DR) has insignificant negative effect on return on assets (ROA) in the tourism sector, hotels and restaurants period of 2012-2016, 2). The current ratio has a significant positive effect on return on assets (ROA) in the tourism sector, hotels and restaurants period of 2012-2016, 3). Working capital turnover (WCT) has no effect on return on assets (ROA) on the tourism sector, hotels and restaurants period of 2012-2016.

REFERENCES

1. Mashady, D. (2014). Pengaruh Working Capital Turnover (Wct), Current Ratio (Cr), Dan Debt to Total Assets (Dta) Terhadap Return on Investment (Roi)(Studi Pada Perusahaan Farmasi Yang Terdaftar Di Bursa Efek Indonesia Tahun 2009-2012). *Jurnal Administrasi Bisnis*, 7(1).
2. Sorana, V. (2015). Determinants of Return on Assets in Romania: a Principal Component Analysis. *Timisoara Journal of Economics and Business*, 8(s1), 32-47.
3. Akeem, L. B., Terer, E. K., Kiyanjui, M. W., & Kayode, A. M. (2014). Effects of capital structure on firm's performance: Empirical study of manufacturing companies in Nigeria. *Journal of Finance and Investment analysis*, 3(4), 39-57.
4. Enekwe, C. I., Agu, C. I., & Eziedo, K. N. (2014). The effect of financial leverage on financial performance: evidence of quoted pharmaceutical companies in Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 5(3), 17-25.
5. Fengju, X., Yari Fard, R., Ghassab Maher, L., & Akhteghan, N. (2013). The relationship between financial leverage and profitability with an emphasis on income smoothing in Iran's capital market. *European Online Journal of Natural and Social Sciences*, 2(3 (s)), pp-156.
6. Bokhari, H. W., & Khan, M. A. (2013). The impact of capital structure on firm's performance (A case of non-financial sector of Pakistan). *European Journal of Business and Management*, 5(31), 111-137.
7. Akben-Selcuk, E. (2016). Factors affecting firm competitiveness: Evidence from an emerging market. *International Journal of Financial Studies*, 4(2), 9.
8. Ulzanah, A. A., & Murtaqi, I. (2015). The impact of earnings per share, debt, equity and current ratio towards the profitability of companies listed in LQ45 from 2009 to 2013. *Journal of Business and Management*, 4(1), 18-27.
9. Alavinasab, S. M., & Davoudi, E. (2013). Studying the relationship between working capital management and profitability of listed companies in Tehran stock exchange. *Business Management Dynamics*, 2(7), 01-08.
10. Nazari, A., Moradi, M., Shams Koloukhi, A., & Parsian, H. (2014). The Role of Economic Factors in Profitability of Accepted Companies in Stock Exchange of Tehran.
11. Warrad, L., & Al Omari, R. (2015). The Impact of Turnover Ratios on Jordanian Services Sectors' Performance. *Journal of Modern Accounting and Auditing*, 11(2), 77-85.
12. Sutanto, J. E., & Pribadi, Y. (2010). Efficiency of working capital on company profitability in Generating Roa (Case studies in CV. Tools Box in Surabaya).
13. Fitri, M. C., Supriyanto, A., & Oemar, A. (2016). Analysis of debt to equity ratio, firm size, inventory turnover, cash turnover, working capital turnover and current ratio to profitability company (study on mining companies listed in bei period 2010-2013). *Journal Of Accounting*, 2(2).
14. Widiyanti, M., & W BAKAR, S. A. M. A. D. I. (2014). Pengaruh working capital turnover, cash turnover, inventory turnover dan current ratio terhadap profitabilitas (roa) perusahaan property dan real estate yang terdaftar di bei. *Jurnal manajemen dan bisnis sriwijaya*, 12(2), 111-126.
15. Bulin, S., Basit, A., & Hamza, S. M. (2016). Impact of working capital management on firm's profitability.

16. Cahyaning, M. (2016). Analysis of Debt to Equity Ratio, Firm Size, Inventory Turnover, Cash Turnover, Working Capital Turnover and Current Ratio to Profitability Company (Study On Mining Companies Listed in BEI Period 2010-2013). *Journal of Accounting: Volume 2, Number 2*.
17. Brigham, E. F., & Houston, J. F. (2012). *Fundamentals of financial management*. Cengage Learning.
18. Horngren, C. T., Harrison, W. T., Willis, B., Jones, B., & Bamber, L. S. (2002). *Accounting: Activebook Version 1.0*. Prentice Hall.
19. Carl, S., Waren, M., James, R. E., Philip, F. (2009). "Introduction of Accounting", Edition 21. Jakarta: Salemba Empat.
20. Milkovich, G. T., & Newman, J. M. (2005). Compensation (8th). *New York: MacGraw-Hill*.
21. Munawir. (2010). Analysis of financial report. Yogyakarta: Liberty.
22. Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2009). Pengantar Keuangan Perusahaan. *Jakarta: salemba empat*.
23. Sugiyono, D. (2008). Qualitative Quantitative Research Methods and R & D. Bandung: Alfabeta.
24. Sartono, A. (2010). Financial Management Theory and Applications. Yogyakarta: BPFE.
25. Kasmir. (2013). Financial Statement Analysis. Jakarta: Rajawali Pers.
26. Horne, V., James, C., & Wachowicz, J. M. (2009). Fundamentals of Financial Management, 13.
27. Bambang, R. (2008). Fundamentals of Company Spend. Yogyakarta: Penerbit GPFE.
28. Zutter, C. J., & Gitman, L. J. (2011). *Principles of Managerial Finance, Brief*. Pearson Higher Ed.
29. Sawir, A. (2009). Financial Performance Analysis and Financial Planning Company. Jakarta: PT. Gramedia Pustaka Utama.
30. Sutrisno. (2012). Financial Management Theory, Concepts and Applications. 8th Edition. Yogyakarta: Ekonisia.
31. Lukman, S. (2009). Corporate Finance Management: Application Concepts in Planning, Supervision, and Decision Making. Jakarta: PT Raja Grafindo Persada.
32. Harahap, S. S. (2010). Critical Analysis of Financial Statements. Jakarta: Rajawali Persada.
33. Ardiyos. (2003). Big Dictionary of Accounting. Jakarta: Putra Grafika.
34. Gujarati and Porter (2012). Fundamentals of Econometrics. Jakarta: Salemba Empat.
35. UNWTO, T. O. (2014). Tourism Highlights, 2014 edition. *World*.
36. Wood, S. (2006). *Generalized additive models: an introduction with R*. CRC press.