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Research Paper

Du Pont Analysis Integrative Approach to Ratio Analysis at PT. Federal International Finance

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ABSTRACT

The aims of this research is to analyze financial performance with the analysis du pont using the ratio approach. To examines the phenomenon of the problem, namely the income statement in PT. Federal International Finance (FIF) in 2011 decreased and interest and financial expenses as well as operating expenses in PT. Federal International Finance (FIF) in 2011-2013 has increased. This research aims to determine the application of the analysis du pont Using ROI and ROE. The method used in this study is a comparative approach that compares between ROI and ROE to determine whether there may be differences between these ratios to analyze financial performance using a Du pont. T research results in sig (2-tailed) = 0,000 < α = 0.05, sig is greater than the level of error of 5%. So Ha accepted and H0 is rejected. It shows that there are significant differences between ROI and ROE in Dupont. Which means that the analysis using a Dupont better use ROE.

Keywords: *Return on investment, return on equity, Du pont*

INTRODUCTION

In general, the aim of a company from an economic point of view is to gain profit (profit oriented), maintain the viability, and sustainability of the company's operations, so that it is able to develop into a large and resilient company. The company's success in business can only be achieved through good management, especially financial management so that the capital owned can function as it should.

Along with the rapidly developing era of globalization, the level of competition of each company is getting tougher. Many companies grow in various business fields and sizes. Companies of various types of businesses compete with one another to meet market demands that demand better and more varied quality products or services. This provides enormous opportunities and potential for every business actor, including company management. Where they try to make changes and improvements to their business activities in order to achieve the maximum objectives, and always seek ways to maintain the survival of their businesses.

For a company, it is a big challenge that requires the right solution so that a company's business management can operate well. Good and qualified management skills are required in order to be able to produce a strategic plan to achieve maximum goals, where one of the main objectives of the company is to generate profits. Maximum profit or profit expected by the company from year to year, is inseparable from the planning and accurate strategies of the management.

These plans and strategies can be determined based on evaluating the company's performance from its financial statements. Financial performance is a work performance achieved by the company in a

certain period and presented in the financial statements of the company concerned. Financial statements are an effective media or tool used to analyze the performance or assess the health condition of a company.

The financial statements provide observations about the company's financial condition in the form of a balance sheet that reflects the value of assets, liabilities and own capital at a certain time, income statements that show operating income, other operating income, operating expenses, and other expenses and other statements of changes in equity (statements of change in equity), cash flow statements, and notes of financial reports. Munawir (2010: 5), in general, the financial statements consist of balance sheets and profit and loss statements and statements of changes in equity.

Measuring instruments used to analyze financial statements include ratio analysis, Market Value Added (MVA) analysis, Economic Value Added (EVA) analysis and Balance Score Card / BSC, Capital Asset Analysis, Management, Equity, and Liquidity (CAMEL) and Du Pont (Warsono, 2003: 24). In this study used to analyze the financial statements is Du Pont. This Du Pont analysis is comprehensive because it covers the level of efficiency of the company in the use of its assets and can measure the level of profit on the sale of products produced by the company.

The purpose of this analysis is used to determine the effectiveness of the company in turning its capital, so this analysis includes various ratios. This Du Pont combines activity / asset turnover ratios with profit / profit margin ratios on sales and shows how the two interact in determining Return on Investment (ROI) and Return On Equity (ROE), namely profitability of assets owned by the company. The ratio of return on sales (profit margin) is influenced by the level of sales and the resulting net profit. This means that the profit margin also covers all costs used in the company's operations. The activity ratio itself is influenced by sales and total assets. It can be said that this analysis focuses not only on the profits achieved, but also on the investments used to generate these profits.

These ROI and ROE figures will provide important information compared to the comparison used as a standard. So the comparison of ROI and ROE for several consecutive periods will be more accurate. Based on the trend of ROI and ROE, it can be assessed the development of the company's operational effectiveness, whether showing an increase or decrease.

Du Pont is more appropriate if applied to branch companies / divisions / departments / investment centers. Through this analysis the company can assess the financial performance of its divisions / departments / investment centers by looking at the effectiveness of the use of assets in obtaining net income, so that in the end the central company can take appropriate policies on its divisions / investment centers. To see and assess the level of operational effectiveness of a company, it not only uses the sensitivity and sharpness of managers qualitatively, but must use quantitative methods.

PT. Federal International Finance (FIF) is a well-known non-bank financing company in Indonesia. Amid increasingly fierce business competition, PT. Federal International Finance (FIF) implements a dual strategy that focuses on strengthening and development, PT. Federal International Finance (FIF) further strengthens its role in its core business, namely financing motorcycles, electronics, household furniture, and others. Through better policies and more satisfying customer service, PT. Federal International Finance (FIF) has also expanded its wings to seek and take advantage of new opportunities to continue to grow, constantly transforming itself to meet the challenges ahead.

In 2010 compared to 2009. But in 2011 it decreased by Rp. 95,050,000 or 8% compared to 2010 which amounted to Rp. 1,173,826,000. The decline in net profit in 2011 was due to an increase in operating

expenses needed to develop employee competencies and welfare as well as business networks in the form of branch offices and service points in order to anticipate future growth potential. Then in 2012 an increase of Rp. 1,125,116,000, an increase of Rp. 46,340,000 or 4% compared to 2011 which amounted to Rp. 1,078,776,000. The increase in net profit in 2012 was due to an increase in consumer financing income along with an increase in the number of consumer financing receivables amounting to Rp. 1,343,681,000 or 8% from Rp.15,850,877,000 in 2011 to Rp.17,194,558,000 in 2012. In 2013 there was an increase in amounting to Rp. 1,205,213,000 compared to 2012.

In 2010 there was an increase of Rp. 2,939,708,000 or around 32% compared to 2009 of Rp. 9,128,354,000. In 2011 there was an increase of Rp. 5,322,294,000 or 44% from a total of Rp. 12,068,062,000 in 2010 to Rp.17,390,356,000. This was mainly due to an increase in the number of consumer financing receivables in line with the increasing number of new motorcycle financing units by 20% from 1,379,570 units in 2010 to 1,658,950 units in 2011. In 2012 it had increased by Rp. 1,738,670,000 or 10% of the total Rp. 17,390,356,000 to Rp.19,129,026,000. In 2013 it increased again to Rp. 2,392,572,000 or 12% from a total of RP... 19,129,026,000 to Rp. 21,521,598,000.

The liability position in 2010 increased by Rp. 8,484,797,000 compared to 2009 in the amount of Rp. 6,223,190,000. Liabilities in 2011 amounting to Rp.13,919,570,000 increased by Rp. 5,434,773,000 or 64% compared to 2010. This was due to the increase in bank loans in line with the need for funds to be able to finance new Honda motorbikes which also increased from 1,379,570 units in in 2010 to be 1,658,950 units in 2011.

In 2012 amounted to Rp. 15,168,794,000, an increase of Rp. 1,249,224,000 or 9% compared to 2011. This was due to the increase in bonds issued by the company in line with the need for funds to be able to conduct new financing, in line with the funding strategy undertaken by companies by increasing the portion of their own funds in order to reduce the percentage of interest and financial costs. In 2013, it amounted to Rp. 17,180,065,000, an increase of Rp. 2,011,271,000 or 13% from Rp. 15,168,794,000 in 2012.

The equity position in 2009 increased to 2013. In 2013 it amounted to Rp. 4,341,533,000, an increase of Rp. 381,301,000 or 10% from the 2012 position of Rp. 3,960,232,000. This increase was due to an increase in the company's profit balance by 7% or Rp. 267,270,000, from Rp. 3,788,513,000 in 2012 to Rp. 4,055,783,000 in 2013.

LITERATURE REVIEW

According Rahardjo (2001: 45) Financial Statements are statements of the responsibility of managers or leaders of the company for the management of the company entrusted to him to parties outside the company, namely the owner of the company (shareholders), the government (tax authorities), creditors (banks or financial institutions), and other interested parties.

The profitability ratio (profitability ratio) according to Van Horne and Wachowicz (2005: 222) is "the ratio that connects earnings from sales and investment". From the profitability ratio can be seen how the level of profitability of the company. Every company wants a high level of profitability. To be able to carry on his life, the company must be in a favorable condition (profitable). If the company is in an unfavorable condition, it will be difficult for the company to obtain loans from creditors or investments from outside parties.

According to Lukman Syamsuddin (2001: 63), this ratio is a measurement of the company's overall ability to generate profits with the total amount of assets available in the company. The higher this ratio, the better the state of a company.

According to Lukman Syamsuddin (2001: 64), this ratio is a measurement of income available to company owners (both ordinary shareholders and preferred stockholders) for the capital they invest in the company. In general, of course, the higher the return or income obtained, the better the position of the company owner.

According to Lukman Syamsudin (2001) Return On Equity and Du Pont (ROE) is a ratio that shows the company's ability to generate net income for return on shareholders' equity. ROE is a financial ratio that is used to measure the level of profitability of equity. In general, of course, the higher the return or income the better the position of the company owner.

According to Lukman Syamsudin (2001) Return on investment (ROI) or often also referred to as "return on total assets" is a measurement of the company's overall ability to generate profits with the total amount of assets available in the company. The higher this ratio, the better the situation of a company.

By using the Du Pont system, it can be seen the return on investment generated through the multiplication of the profits from the sales components and the efficient use of total assets in generating these profits. Return on investment can be increased by enlarging both or one of the components mentioned above. The relationship between the two components that affect the return on investment or the size of the net profit margin and total assets turn over will immediately depend on the type of business of each company.

Total Assets to Total Debt Ratio / Debt Ratio, This ratio is the ratio between total debt and total assets. So this ratio shows the extent to which debt can be covered by assets. According to Sawir (2008: 13) debt ratio is a ratio that shows the proportion between the liabilities owned and the entire wealth owned.

If the debt ratio gets higher, while the proportion of total assets does not change, the debt held by the company will increase. The greater the total debt means the financial ratio or the ratio of the company's failure to repay loans is getting higher. And conversely if the debt ratio gets smaller then the debt owned by the company will also be smaller and this means that the financial risk of the company returning the loan will also be smaller.

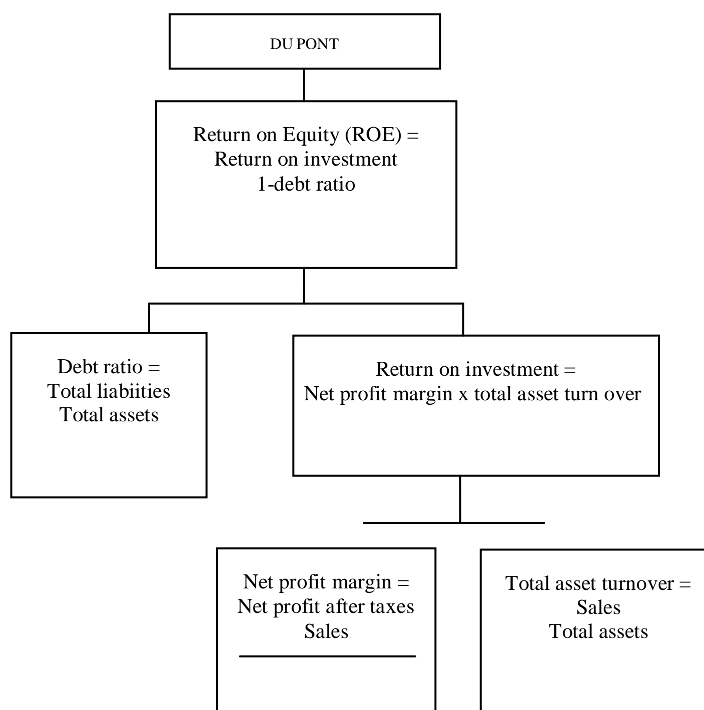

Figure 1: Conceptual frame work

The use of debt ratio to change return on investment (ROI) to return on equity (ROE) illustrates the effect of leverage (use of loan capital) on the return obtained by the company owner. Calculation of return on equity (ROE) using the modified Dupont system provides several benefits, because we can see directly the factors that affect return on equity, namely the profit on components of sales / income (net profit margin), efficiency of use assets (total asset turn over), and use of leverage (debt ratio).

Which can be described by using the Du Pont analysis is ROI (Rate of Return on Investment) and ROE (Rate of Return on Equity) which is a comparative figure or ratio between the profits obtained by the company and the amount of total asset.

Du Pont Chart is a chart designed to show the relationship between net profit margin, total assets turn over, return on investment (ROI), and debt ratio as well as return on equity (ROE) Du pont is a description of the ROI and ROE scheme.

Hypothesis

There is a significant difference between the Du Pont ratio on ROI and ROE.

MATERIALS & METHODS

This research is a comparative descriptive study. According to Rusiadi (2013: 14) descriptive research is research conducted to determine the value of an independent variable, either one or more variables (independent) without making comparisons, or linking with other variables.

The data used in this study are secondary data, namely data in the form of financial statements obtained from PT. Federal International Finance. Secondary data in this study are the 2009-2013 income statement and balance sheet.

In analyzing data, the author uses descriptive methods, namely by doing calculations that are relevant to the problem under study. The analysis technique used is Du Pont or ROI and ROE.

RESULT AND DISCUSSION

Discussion Du pont analysis integrative approach to ratio analysis

The results of the calculation of net profit margin, total asset turnover, ROI (Return on investment), debt ratio and ROE (Return on Equity) can be seen in the following table:

Net profit margin

From the calculation of PT Federal International Finance's net profit margin in 2009 was 20%, in 2010 it was 26%, in 2011 it was 21%, and in 2012 it was 20%, and in 2013 it was 21%. The results of calculations show that there was an increase in 2010 of 26% and a significant decrease in 2011 and 2012, but after that there was an increase again in 2013.

Total Asset Turnover

From the calculation of total assets turnover or total assets turnover of PT Federal International Finance in 2009 was 0.45 times, in 2010 was 0.37 times, in 2011 amounted to 0.28 times, and in 2012 amounted to 0.28 times, and in in 2013 amounted to 0.26 times. The results of this calculation indicate that asset turnover has decreased every year, which indicates that the company in managing asset turnover is still not good, and indicates the company's financial condition is not good.

Return on invesment (ROI)

From the calculation of Return on Investment (ROI) of PT Federal International Finance in 2009 it was 9%, in 2010 it was 10%, in 2011 it was 6%, and in 2012 it was 6%, and in 2013 it was 5%. This shows that PT Federal International Finance that the company's financial performance in managing its investment returns has declined and is not good.

Debt ratio

From the calculation of the debt ratio of PT Federal International Finance in 2009 was 68%, in 2010 it was 70%, in 2011 it was 80%, and in 2012 it was 79%, and in 2013 it was 80%. The results of this calculation show that the debt ratio has increased every year, which indicates that

the company's liability company has increased every year.

Return on equity (ROE)

From the calculation of Return on Investment (ROI) of PT Federal International Finance in 2009 was 28%, in 2010 it was 33%, in 2011 it was 30%, and in 2012 it was 28%, and in 2013 it was 25%. This shows that PT Federal International Finance that the company's financial performance in generating profits and return on equity declined and was not good.

Total asset turnover, net profit margin, and debt ratio are supporting tools to get the Dupont analysis results, namely ROI and ROE. The greater the value of ROI means a company has a good performance in generating net income for the return of total assets owned so that it influences the stock price, i.e. the stock price will rise. Sunariyah (2004) states that if a company is expected to have future prospects, the value of shares will be high.

The greater the ROE results, the better the company's performance. The increasing ratio shows that management performance has improved in managing operational funding sources effectively to generate net profit (increased profitability). And the results obtained from calculations with du pont analysis at PT. Federal International Finance (FIF) management or return on investment and company equity has decreased significantly every year, this can occur from the number of customers' bad loans, or there is management of funds for the development of branch offices so that the public / customers can be closer to PT. Federal international finance.

Analysis

The applicable provisions are adjusted to the hypothetical provisions with the assumptions: There is a significant difference between the Du Pont ratio on ROI and ROE

Table 4.1 Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	ROI	.07200	5	.021679	.009695
	ROE	.28800	5	.029496	.013191

Table 4.2 Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	ROI & ROE	5	.712	.178

Table 4.3 Paired Samples Test

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	ROI - ROE	-.216000	.020736	.009274	-.241748	-.190252	-23.292	4	.000

Based on the table above can be known:

Criteria for acceptance and rejection of hypotheses:

If sig (2-tailed) ≤ α = .05, then Ho is rejected and Ha is accepted

If sig (2-tailed) ≥ α = 0,05, hen Ho is accepted and ha is rejected.

To support the values of the T-Test results can be seen as follows:

The value of sig (2-tailed) calculation = 0,000 < α = 0,05.

Value α = 0,05

So based on the above criteria from the calculation results it can be seen that t arithmetic at sig (2-tailed) = 0,000 < α = 0,05, the sig value is greater than the error level of 5%. So Ha is accepted and H0 is rejected. This shows that there is a significant difference between ROI and ROE in Dupont. Which means that the analysis using Du Pont is better to use the ROE ratio because it will show there are differences from the results of the analysis. The results of this study are consistent with the results of previous studies Ryandra, Rahayu and Topowijono (2014) also found the same results where in using Du pont analysis it is better to use the ROE ratio because the results of the different tests conducted showed that there were significant differences between ROI and ROE in the analysis Dupont.

According to Lukman Syamsuddin (2001: 62), net profit margin is the ratio between net profit (net profit) that is sales after deducting all expenses including taxes compared to sales. The higher the net profit margin the better the operation of a company. A net profit margin that is said to be "good" will depend on the type of industry in which the company is trying.

According to Lukman Syamsuddin (2001: 62), total assets turnover shows the level of efficiency of the overall use of company assets in generating certain sales volumes. The higher the ratio of total assets turnover means the more efficient use of overall assets in generating sales. In other words, the same number of assets can increase sales volume if the total assets turnover is increased or enlarged. This total asset turnover is very important for creditors and company owners, but it will be even more important for company management, because this will indicate the efficient use of all assets in the company. According to Lukman Syamsudin (2001) the Du Pont System analysis is the ROI generated through the multiplication of profits from sales components and the efficient use of total assets in generating these profits.

According to Lukman Syamsudin (2011) Return On Equity and Du Pont System (ROE) is a ratio that shows the company's ability to generate net income to return shareholders' equity. ROE is a financial ratio that is used to measure the level of profitability of equity.

Which can be described by using the Du Pont analysis is ROI (Rate of Return on Investment) and ROE (Rate of Return on Equity) which is a comparative figure or ratio between the profits obtained by the company and the amount of total assets of the company (Soedoyono, 1991: 137).

CONCLUSION

Based on the result of research, discussion, and conclusions the suggestions that can be given are as follows :

1. Based on the Du Pont System analysis results show that during 2009-2013, financial performance can be said to be less good. Because based on the descriptive data above it can be seen that it turns out Return on Investment (ROI) at PT. Federal International Finance (FIF) for the period 2009-2013 decreased in 2011-2013, namely 6%, 6%, and 5%. The decrease in ROI is due to an increase in operating expenses needed to develop employee competency and welfare as well as business networks in the form of branch offices and service points in order to anticipate future growth potential by profits, funds and then followed by a decrease in the total assets.This decline indicates that companies are increasingly ineffective in managing assets to generate profits. When compared with the average non-bank financing company, PT. Federal International Finance (FIF) is said to be good because it is above the average of other finance companies in financial management.
2. For the acquisition of Return on equity (ROE) of PT. Federal International Finance (FIF) for 5 consecutive years is 28%, 33%, 30%, 28%, and 25% an increase in 2010 this shows that the level of net income earned by the company owner on the capital invested by the company increased and tended to decrease in 2011-2013 due to the decline in assets and net profit margins decreased.
3. Based on the above criteria from the calculation results it can be seen that t arithmetic at sig (2-tailed) = 0,000 $<\alpha =$ 0.05, the sig value is greater than the error level of 5%. So Ha is accepted and H0 is rejected. This shows that there is a significant difference between ROI and ROE in Dupont.

RECOMMENDATIONS

Based on the results of research, discussion, and conclusions the suggestions that can be given

are as good as the company should improve the management of the company's financial performance in generating profits (profit) so that PT. Federal international Finance can better manage corporate finances. And can be a better company, and advanced among other non-bank financing companies.

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