International Business Management 10 (4): 423-428, 2016
ISSN: 1993-5250

The Effect of Margin Profit and Total Assets Towards Sustainable Growth Rate of the Distributor and Trade Company

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Abstract: This research aims to find out the cause of decreasing company profitability and the factors affecting profitability of distributor and trade company. This research uses relevant financial ratio combined with DuPont analysis towards the sales revenue by using per component analysis R/L and by looking at the increasing trend and examining the sustainable growth rate of the company in the course of 5 years (2010-2014). Meanwhile, in order to analyze the relationship of each component, the reseracher uses regretion and correlation analysis. The research result shows the factors causing descending company profitability due to the increasing component of the cost of goods sold and other costs. Meanwhile, the most influencing factors are the administration cost and general cost. The whole factors reflected in the profit margin collectively with assets turn over then influence the achievement level of the company. The correlation between ROL variable reflected in the profit margin and Total Assets Turn Over (TATO) which collectively affect Sustainable Growth Rate (SGR) of the company indicate the strong correlation between them. This can be seen from the coefficient value of (R^2) determination which accounts for 0.780 (78%) and the remaining value which accounts for 22% as the result of other affecting factor.

Key words: Assets, profitability, growth, TATO, SGR

INTRODUCTION

The liberation of economics and trade has worn out the protection and subsidizing policy. Through, the course of the past five decades, the protection and subsidizing policy has become commonly used strategy for a country both to protect and develop the enterpreneur in the country, either for large scale or small scale business (SWA, No. II/X/Feb./12).

The recent deregulation issued by the Indonesian government is done in order to lessen the protection and subsidy (Lesmana, 2003). This is due to the awareness of the government that the more open trade system will lead to more unimpeded goods and services flow in and out of Indonesia (Ross *et al*., 2001). On this basis, the business person in Indonesia has to return to the underlying business principle, namely achieving superior human resources, productivity, cost efficiency in the tight business competition leading to a profitable business in the long term in order to contribute to the development of the nation (Kennedy and McMullen, 1995). The well growing and developing business sector is a vital indicator of the economic advancement and prosperity of a country and a nation (Helfert, 1997).

The business company is most commonly established to gain some level of profits and so does the raw asphalt distributor and trade company PT Bumi Sarana Utama (PT BSU) Makassar officially based in Makassar and having a branch office in Palu, Samarinda, Banjarmasin and Kendari which becomes the research object. However, in the later course of business, the financial performance of the company which is mainly evaluated through its profitability aspect within the past 5 years (2010-2014) has shown some problems in achieving the profitable financial performance eventhough, the company has attempted at its best to gain satisfactory profit to fare its operating expenses in order to provide the best service for the society. Thus, the research is aimed at knowing and analyzing the most dominant factors causing the decreasing company profitability and knowing the most dominant factor affecting the profitability of the distributor and trade company.

MATERIALS AND METHODS

This research is conducted in PT Bumi Sarana Utama (PT BSU) Makasar which is officially based in Makassar and having many branches in Palu, Samarinda, Banjarmasin and Kendari for 4 months, since January to April 2015. The company is a raw asphalt distribution and trade from Pertamina.

In the research, the reseracher uses to types of data, namely primary and secondary data which consist of the primary data are obtained through field survey and direct interview of the directors and staff of the company and the secondary data are obtained through many sources such as the report of the company management which includes balance report, loss and income statement, financial statement analysis for the period of 5 years (2010-2014).

Meanwhile, the analysis method uses Gross Profit Margin = The bigger is the gross profit margin, the better is the company operation and the profit quality. Operating Profit Margin = The higher the ratio the more succesful the company management in minimizing the operation cost. Net Profit Margin = The greater the net ratio the better the performance of the company, Return on Investment (ROI) = The higher the ROI ratio, the better the performance of the company (Boediono, 2001).

DuPont analysis: DuPont analysis is collective method towards financial ratio analysis. The usage of this analysis is aimed at sharpening the previous financial ratio analysis in order to know the affecting factors towards the increasing or decreasing profitability of the company.

Correlation and regretion analysis: Pearson correlation analysis is used to know the course of the interrelation between SGR (Y) as dependent variable towards the independent variable which consist of: profit margin (X_1) and total assets turnover (X_2). Meanwhile, the double linier regression analysis is formulated as:

$$Y = b_0 + b_1X_1 + b_2X_2 + e$$

Where:

Y = SGR (Sustainable Growth Rate)
X_1 = PM (Profit Margin)
X_2 = TATO (Total Assets Turnover)
b_0 = Constant
b_1, b_2 = Regression coefficient
e = Error standard

Then, to understand the correlation between SGR and ROI the reseracher uses Pearson correlation. The untuk melihat adanya hubungan antara SGR dengan ROI digunakan korelasi Pearson. The calculation process is conducted by utilizinng computer program application SPSS 19.0 for Windows.

Growth rate analysis: The growth rate of the company indicates the good quality of profit. This analysis refers to the formula developed by C. Higgins, according to Ross *et al.* (2001) as follows:

$$SGR = \frac{p(1\text{-}d)\,(1+L)}{T\text{-}[p(1\text{-}d)\,(1+L)]}$$

Where:

SGR = Sustainable Growth Rate
p = Net profit margin of the sales
d = Devident pay-out ratio
L = Total liabilities ratio towards total assets
T = Total assets ratio towards the sales

RESULTS AND DISCUSSION

Profitability ratio: Profitability ratio of PT Bumi Sarana Utama Makassar of the past 5 years can be seen through the recapitulation table of the reatio analysis result as presented in Table 1.

Gross profit margin: This ratio is aimed at measuring the gross profit margin of the sales. Gross profit margin ratio of PT Bumi Sarana Utama Makassar of the past 5 years (2010-2014) as presented above, respectively are 20.35, 20.77, 29.76, 28.45 and 28.01%. On the basis of those ratio, we can see that there is no sharp decrease. Still, the company management needs to keep eyes open since compared to the achieved ratio in 2010, there is a relatively decreasing trend since 2011 through 2014 (Wild *et al*., 2001; White *et al*., 1998).

Operating profit margin: Based on the ratio data presented in Table 1, there is a relatively decreasing trend of PT Bumi Sarana Utama Makassar in the course of past 5 years towards the ratio of operating profit margin in the last 2 years that is since 2011 and 2014. If in 2010 the company management is relatively succesful in raising the operating profit ratio from the negative value of (-4.17%) in 2010 to positive value of (3.53%) and significantly rises to 14.01% in 2010. However, during the past 2 years the operating profit margin ratio trend tends to decrease.

Net profit margin: From Table 1, we can see that there is a relatively fluctuated trend of the net profit margin ratio of the company in the past observed 5 years. In 2010, the net profit margin ratio of the company was negative (-31.98%), yet in the following year (2011) the management succeeded in raising the ratio significantly to positive level of (16.40%). Unluckily in 2012, the company net profit margin ratio dropped sharply to 4.63%. Afterwards

Table 1: Performance and profitability recapitulation, year 2010-2014

	Percentage				
Profitability ratio	2010	2011	2012	2013	2014
Gross profit margin	20.35	20.71	29.76	28.45	28.01
Operating profit margin	4.17	3.53	14.01	13.68	9.32
Net profit margin	31.98	16.43	4.63	10.40	4.60
Return on Investment (ROI)	18.22	7.79	4.12	8.32	3.22

PT. BSU makassar (processed data)

in 2013, the ratio significantly rose to 10.40% as compared to the previous year (2012). In 2014, the net profit margin ratio went down to 4.60%.

Return on Investment (ROI): Return on investment ratio in 2010-2014 indicates fluctuated trends. In 2010, the ROI rate was negative (-18.22%) which rose in 2011 to 7.79% indicating the better performance and the trend dropped sharply to only 4.12 in 2012. Meanwhile, in 2013 the ROI ratio of the company soared highly to 8.32% and unluckily it fell dramatically to only 3.22% in 2014.

DuPont system: DuPont Formula or DuPont System is conducted by making DuPont frame whose elements have analysed in the above financial ratio analysis and is shortly presented in Table 2 and Fig. 1:

According to the DuPont chart above, the rising trend of sales in 2011, 202 and 2013 is insignificant because the increasing sales also decreases the Return on Investment (ROI). This is so because the increasing sales is followed by the sharp increase of the total cost. ROI will rise if the increasing sale is greater than the increasing total cost (Mendenhall and Reinmuth, 1998).

Analysis of revenue profitability

Analysis of sales revenue: The analysis of the effect of sales revenue change towards gross selling profit is presented in Table 3.

Table 3 indicates the increasing gross profit of the company from IDR. The 4.258 million in 2010 and respectively to IDR 4.706 million in 2011, IDR 16.759

Table 2: The elements of DuPont formula of PT Bumi Sarana Makassar period 2010-2014

	(Rp 000)				
Explaination	2010	2011	2012	2013	2014
Current assets	21,005,319	24,626,108	35,275,099	42,146,773	28,752,614
Fixed assets	16,004,760	23,311,374	28,014,497	30,720,996	34,553,762
Total assets	37.010.079	47.937.482	63.289.595	72.867.769	63.306.376
Sales	20.926.682	22.772.638	56.316.060	58.579.461	44.421.950
Total assets turnover	0.57	0.48	0.89	0.80	0.70
Net income	-6.692.970	3.733.705	2.607.304	6.089.874	2.043.089
Profit margin (net)	-31.98	16.40	4.63	10.40	4.60
Total cost	27.619.652	19.038.933	53.708.756	52.489.587	42.378.861
ROI	18.22	7.79	4.12	8.32	3.22

Processed data

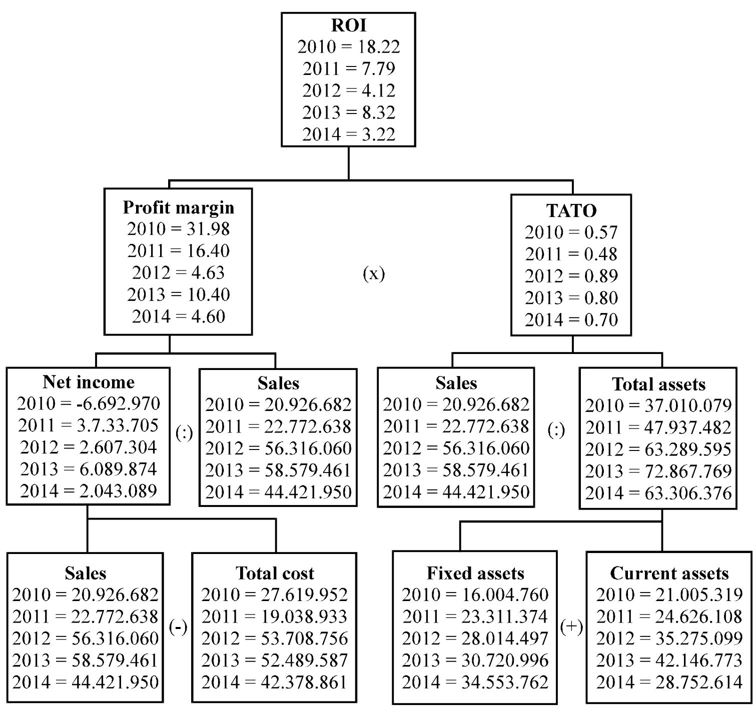

Fig. 1: Bagan DuPont has been modified

Table 3: Trend of the sales revenue change and its effect towards the gross selling profit, year 2010-2014

	Total (Rp juta)					Trend (%)				
Description	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Sales revenue	20.927	22.773	56.316	58.579	44.422	100	108.8	269.1	279.9	212.3
Sales revenue change	16.669	18.067	39.557	41.912	31.980	100	108.4	237.3	251.4	191.9
Gross profit	4.258	4.706	16.759	16.667	12.442	100	110.5	393.6	391.4	292.2

Processed data

Table 4: Operating ratio trend of the company, year 2010-2014

	Year periode				
Description	2010	2011	2012	2013	2014
Sales revenue (IDR Million)	20.927	22.723	56.316	58.579	44.422
Trend (%)	100.000	108.820	269.110	279.920	212.270
Operating cost (HPP+Cost Pms+Genera Adm) IDR million	21.800	21.970	48.428	50.563	40.284
Trend (%)	100.000	100.780	222.150	231.940	184.790
Operating ratio	1.040	0.970	0.860	0.860	0.910
Trend (%)	100.000	93.270	82.690	82.690	87.500

Table 5: Operation profit trends towards sales revenue, year 2010-2014

	Year period				
Description	2010	2011	2012	2013	2014
Sales revenue (IDR million)	20.927	22.723	56.316	58.579	44.422
Trend (%)	100.00	108.82	269.11	279.92	212.27
Operation profit (IDR million)	-873	803	7.888	8.017	4.138
Trend (%)	100.00	191.98	1.003.55	1.018.33	574.00
Operation profit for each IDR 1.00 of the sales	-0.04	0.04	0.14	0.14	0.09
Trend (%)	100.00	200.00	450.00	450.00	325.00

Processed data

million in 2012 and IDR 16.667 million in 2013. However, in 2014 there is a decreasing gross profit of the company compared to year 2014 to 12.442 million.

Analysis towards operating ratio: Operating ratio is the ratio of the total operational cost of the company including the cost of goods sold, marketing cost and administration and general cost towards operational revenue (sales revenue). The high operating ratio will lead to inadequate income from operation to cover interest rate, the devident expected by the business owner. Trend of the operating ratio of the company within the past 5 years is presented in Table 4.

On the basis of the calculation data above, we can see that the trend in the operating ratio is relatively lower than the trend in the change of the sales revenue. Operating ratio trend drecreases while sales revenue trend increases.

Analysis towards operation profit: Ratio or percentage of the operation profit from the sales revenue indicates the remaining of the IDR 1.00 of sales revenue after being reduced with the cost of goods sold and other operating cost.

Trend analysis towards the operation profit related to sales revenue of the company within the past 5 years (2010-2014) can be seen from Table 5.

From the data processing above, we can see that the profitability trend of the company is not quite satisfactory. Although, the sales revenue of the company increases within the past 5 years, seen from the operation profit aspect towards each rupiah the margin is relatively pretty small.

Growth rate analysis: Sustainable growth rate is the maximum annual increasing percentage in the sales achieved based on the target operation, obligation and devident pay out ratio. This analysis refers to the formula developed by C. Higgins according to Ross *et al.* (2001) as follows:

$$SGR = \frac{p(1\text{-}d)\,(1+L)}{T\text{-}[p(1\text{-}d)\,(1+L)]}$$

Where:

SGR = Sustainable Growth Rate
p = Profit margin towards the sales
d = Devident pay-out ratio
L = Total obligation ratio towards total assets
T = Total asset ratio towards the sale

To conduct SGR analysis, there are some elements to be considered in the analysis as presented in Table 6 and Fig. 2. From Table 6 and Fig. 2, we can see that the sustainable growth rate of PT Bumi Sarana Utama Makassar tends to be fluctuative with relatively low average.

Table 6: Calculation of Sustainable Growth Rate (SGR) year 2010-2014

	(Rp 000)				
Explaination	2010	2011	2012	2013	2014
Assets	37.010.079	47.937.482	63.289.595	72.867.769	63.306.376
Sales	20.926.682	22.772.638	56.316.060	58.579.461	44.421.950
A/S (T)	1.77	2.11	1.12	1.24	1.43
Operation profit	-873.104	802.986	7.887.559	8.016.581	4.138.213
Net profit	-6.692.970	3.733.705	2.607.304	6.089.874	2.043.089
Profit margin (p) = (4)/(2)	-0.04	0.04	0.14	0.14	0.09
Devident	0	1.816.350	1.433.265	0	0
d = (7)/(5)	0	0.49	0.55	0	0
Debt	14.844.443	23.854.490	38.032.564	41.520.864	29.916.382
L = (9)/(1)	0.40	0.50	0.60	0.57	0.47
p (1-d) (1 + L)	-0.056	0.0306	0.1008	0.2198	0.1323
T -(p (1-d)(1+L)	1.826	2.0794	1.0192	1.0202	1.2977
SGR (%): (11)/(12)	-3.07	1.47	9.89	21.54	10.19

PT. BSU (processed data)

Table 7: Correlation analysis of each variable

	Correlations		
Analysis	SGR	Profit margin	TATO
Pearson correlation			
SGR	1.000	0.883	0.730
Profit margin	0.883	1.000	0.819
TATO	0.730	0.819	1.000
Sig. (1-tailed)			
SGR	-	0.023	0.081
Profit margin	0.023	-	0.045
TATO	0.081	0.045	-
N			
SGR	5	5	5
Profit margin	5	5	5
TATO	5	5	5

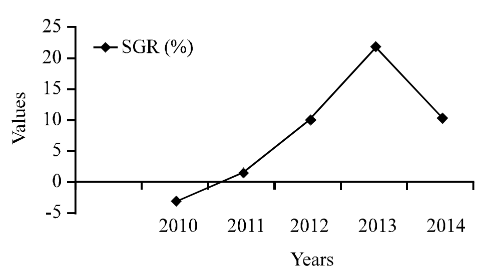

Fig. 2: Sustainable growth rate graph period 2010-2014

Regression and correlation analysis: To sharpen the result of profitability analysis of the company and to know the affecting factors, the researcher conducts regression and correlation analysis. To understand the direction of correlation and the influence of the interrrelation of one another that is between SGR (Y), profit margin (X_1) and total assets turnover (X_2), the researcher uses Pearson correlation analysis.

The result of the processed data above indicates (Table 7 and 8) strong correlation/tight correlation between SGR and the Profit Margin with correlation coefficient value of 0.883 while between SGR and Total Assets Turnover (TATO) there is a strong correlation/tight correlation of 0.780 (78.0%). From the output of the computerized result (attachment) we get regression equation as follows:

Table 8: Determination coefficient

	Model summary[b]			
Model	R	R^2	Adjusted R^2	Std. error of the estimate
1	0.883[a]	0.780	0.561	6.25929

[a]Predictors: constant, TATO, profit margin; [b]dependent variable: SGR

Table 9: Regression coefficient (coefficients[a])

Model	Unstandardized coefficients (B)	SE	Standardized coefficients (β)	t-values	Sig.
Constant	-0.743	18.683	-	-0.040	0.972
Profit margin	107.731	71.779	0.867	1.501	0.022
TATO	1.126	32.806	0.020	0.034	0.036

Dependent variable: SGR

Table 10: Correlation between SGR and ROI

	Correlations	
Models	SGR	ROI
SGR		
Pearson correlation	1	0.550
Sig. (2-tailed)		0.336
N	5	5
ROI		
Pearson correlation	-0.550	1
Sig. (2-tailed)	0.336	
N	5	5

$$SGR = -0.743 + 107.731\ PM + 1.126\ TATO$$

On the basis of the regression result we can tell that there is positive effect of the profit margin and total assets turnover towards SGR although not significant. Each increaseos one percent will also increase SGR value of 107.731 unit while each increase of one assets turnover will increase the value of 1.126 SGR (Table 9). Then, the result of the correlation analysis between SGR and ROI based on DuPont formula is presented as follows.

The above calculation result indicates that there is a strong correlation between Return on Investment (ROI) with Sustainable Growth Rate (SGR) of 0.550 with direct correlation. Graphically, it can be presented as follows (Table 10 and Fig. 3).

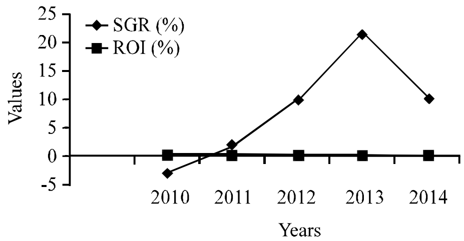

Fig. 3: Correlation graph between SGR and ROI period 2010- 2014

On the basis of the previous graph, we can see that although, SGR changes significantly during the period of 2010-2014, ROI of the company does not change significantly and relatively tend to level.

CONCLUSION

- The factors causing decreasing level of profitability of the company during the course of 5 past years is due to the increasing cost of goods sold and the increasing cost of others in the company within the period of 2010-1014
- The level of profitability presented in the ROI variable represented by profit margin variable and Total Assets Turnover (TATO) significantly influence sustainable growth rate, SGR. Tingkat profitabilitas which is reflected in variabel ROI represented by variable profit margin dan Total Assets Turnover (TATO) kuatterhadap affect the sustainable growth rate Sustainable Growth Rate (SGR)
- The model predictor used has a quite accurate prediction (R^2) of 0.780 (78%)

SUGGESTION

- In order to maintain good profitability, the company management should keep the volume of sales and operating cost proportion in balance
- In the future, the company will need to compress administration and general cost by conducting work efficiency through reducing unnecessary activity (wastefulness) and more effective supervision through budgeting control mechanism
- The company should do its best to increase sales volume by increasing marketing cost strategy. Therefore, the company will need to have such analysis data before deciding its marketing strategy

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