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THE INFLUENCE OF FINANCIAL PERFORMANCE ON MARKET PERFORMANCE OF INDONESIAN FINANCE INDUSTRY

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The purpose of this study is to examine whether profit per employee and revenue per employee as financial performance measures act as proxies to market performance measured by market capitalization per employee of Indonesian listed finance industry (banks and non-bank financial institutions). Using purposive sampling in year 2012, 56 companies were selected. Multiple and simple regression analyses were conducted to test the hypotheses. The result of multiple regression suggests that the increase in profit per employee can lead to a better market capitalization per employee. However, revenue per employee could not provide a significant influence to market capitalization per employee. Further examination was conducted with simple regression analysis using profit per employee as independent variable and the finding indicates that approximately 62.4% of variance in market capitalization per employee can be explained by profit per employee and the remaining 37.6% proportion of variance in market capitalization per employee can be explained by other factors. The results provide guidelines to help investors, managers, as well as academicians to comprehend the importance of profit per employee as a driver to market performance and to sustain it in Indonesian finance industry.

Keywords: *Finance industry, financial performance, market capitalization per employee, market performance, profit per employee, revenue per employee*

INTRODUCTION

Measuring financial performance is important for business owners to make a better decision. Financial ratios are used as a tool to measure financial performance and if calculated accurately and timely, could provide important information to business owners (Alvarado, 2011). Financial performance analysis is usually conducted to determine the performance and efficiency of management to ensure that the business is run in realistic way to provide enough returns to its stockholders to maintain at least its market value (Bhunia, Mukhuti, & Roy, 2011).

Furthermore, Bryan (2007) claimed that financial performance increasingly derives from returns on talent, and in a competitive environment where talented employees create intangible assets, return on talent is powerful to offer the larger part of new wealth. The excellent performance of a number of biggest and the most successful companies over the past decade shows the value of intangible assets. Therefore, Harnish (2006) argued that revenue per employee

should drive business leaders' decision in this decade and according to Bryan (2007), profit per employee is a good proxy for the return on intangibles.

Many finance industry companies asserted that their employees are of vital competitive advantage (Groysberg, 2011). Therefore, the focus of this study is on finance industry which is always in need of talent that is heavily relied on skilled labor as indicated by Kneer (2013, September). More specifically, based on a thorough review, no prior study has, theoretically or empirically, examined how financial performance measured by profit per employee and revenue per employee influence market capitalization per employee particularly in Indonesian finance industry. Market capitalization per employee is considered as market performance in regard to the statement of Bryan (2007) that growth in profits and market capitalization is closely correlated in which increases in profit would drive market capitalization.

Per employee metrics were applied in measuring business performance for the reason that they can assess quality as stated by Morgan Stanley (2011) and furthermore, they can give a performance score to each employee. However, the research of Groysberg (2011) found that the excellent performance of employees in one company does not guarantee the same level of performance in the other. Hence, the purpose of this study is to examine whether profit per employee and revenue per employee act as proxies to market capitalization per employee of Indonesian finance industry and to provide a framework by which business leaders could assess their current management capabilities.

Literature Review and Theoretical Framework

Financial Performance. Financial performance indicators based on balance sheets, cash flow reports, and income statements will remain the primary metric for assessing a company and its management. However, to improve the capability for wealth creation, corporate executives must adopt an extreme idea of changing financial performance metrics to focus on thinking intensive people rather than on capital alone. By looking at performance in this new way, business executives will change the internal measurements of performance and hence encourage managers to make better business decision (Bryan, 2007).

Profit per Employee. The profits the firm is generating per employee working in a company is measured by profit per employee. Bryan (2007) considered profit per employee as a new metric of corporate performance in this new age. Company's real wealth creation could be generated by profit per employee, therefore profit per employee becomes a measure for how efficiently a company manages the complexity. It is an excellent indicator for return on intangibles. The computation is as follows:

$$\text{Profit per Employee} = \frac{\text{Net Profit}}{\text{Number of Employees}}$$

Evidence from European in 2001-2002 revealed that companies who made more money per employee extremely did better than their labor heavy peers, however, since the credit crisis the situation has contracted (Markit, 2013, October). Using simple analysis of US Companies, Markit (2013, October) found that by outsourcing most of their work they actually reveal as close to the top of list by profitability per employee.

Revenue per Employee. Financial performance of a service-oriented firm according to Reeve, Warren, and Duchac (2012) can be assessed using revenue per employee. It measured the efficiency of a firm in generating revenues. The higher the revenue per employee indicates the more efficient the firm in generating revenue from its employees. It is important to compare revenue per employee within an industry and over time.

When making a comparison between two companies, the company with the higher value for revenue per employee would be considered more efficient or productive. Revenue per employee can be used to track the impact of staffing resources on productivity. As staff are added, the resulting increase or decrease in revenue per employee could help in measuring the changes in output (ACA International, 2010). This concept supports D' Amico (2004) who asserted that revenue per employee is a commonly used measure of management efficiency. It provides an interesting view of how well a company is run. It shows how a company is doing against its competitor and the best run companies have high revenue per employee.

Revenue per employeee measured at the ratio of revenue to the number of employees required at that level of revenue. The computation is as follows:

$$\text{Revenue per Employee} = \frac{\text{Revenue}}{\text{Number of Employees}}$$

Market Capitalization Per Employee. Market performance in this study is measured by market capitalization per employee. Market capitalization declares the value of a company in the market for how much the company can be sold in the market. It is an important tool to measure the ability of the market to mobilize the capital and to measure the firm size. It indicates the value of a firm by multiplying the number of outstanding stocks with current stock price. Market capitalization is compared with the book value by analysts to asses company's future prospects, whilst institutional investors analyze it as an investment criterion (Yasmin & Yusuf, 2008). It can be used to get a picture of the company's value in the market place.

The value of a company's market capitalization is calculated with an easy formula: Stock price x number of shares outstanding (Skriloff, 2011). The computation of market capitalization per employee is as follows:

$$\text{Market Capitalization per Employee} = \frac{\text{Stock price x number of shares outstanding}}{\text{Number of Employees}}$$

According to Nash (2006), the smartest companies are those where people are employed, productive, and forward thinking. The stock buying choices of investors create market value of a company and in effect, judging the value of employees.

Financial Performance and Market Performance. Even though financial measure based on accounting data and market based measure are broadly recognized as corporate performance indicators, there have been some criticisms of financial information

based on accounting data during the recent global financial crisis and more specifically on the financial statements of financial institutions. The basis for this criticism was that the market prices were incorrect and that the assets were value more than the market believed (Boyle, 2009). Moreover, Gentry and Shen (2010) asserted that there is an ongoing debate about their relationships. Specifically, regarding how closely the accounting measures and market measures are related, whether there is positive or negative relationships or no relationship at all. Despite the incongruent findings in the literature, the following hypothesis is suggested:

*H*1: Companies with greater profit per employee will have a stronger positive market capitalization per employee.

The study conducted by Bryan (2007) of the top 30 largest companies in the world from 1995 to 2005 indicated that growth in profits and market capitalization should be closely correlated and that an increase in profits should lead to a similar increase in market capitalization. Maximising profit per employee increases total profit, which drives market capitalization. This leads to the next hypothesis:

*H*2: Companies with greater revenue per employee will have a stronger positive market capitalization per employee.

RESEARCH METHODOLOGY

The data for this study was gathered from 2012 annual reports of the listed finance industry (banks and non-bank financial institutions) and IDX statistics which are available on the Indonesia Stock Exchange (IDX) website. The classification of the industry according to IDX is as follows: (1) bank; (2) financial institution; (3) securities company; (4) insurance; (5) investment fund/mutual fund; and (6) others. However, in 2012 there is no company listed under investment/mutual fund classification. From the total of 76 companies listed, 18 companies were excluded from the analysis due to missing data, negative profit, and the absence of annual reports. Using purposive sampling technique, the final sample of 56 companies (76% of the population) is considered sufficient for the purpose of the statistical analyses. Cross sectional design was applied as the information about financial performance and market performance that is going on at only one point in time, 2012. Table 1 summarizes the sample selection details.

Table 1: Summary of Sample Selection

Year	2012
Financial Sector (Bank and Non-Bank Financial Institutions)	74
Less	
Missing data	(6)
Negative profit	(4)
No annual report	(8)
Final Sample	**56**

Multiple regression analysis was performed to test the influence of independent variables to dependent variables. The regression model is presented below:

$$\text{LogMark} = \beta_0 + \beta_1 \text{LogNetP} + \beta_2 \text{LogReve} + \varepsilon$$

where:

LogMark=	Logarithm of market capitalization per employee
LogNetP=	Logarithm of net profit per employee
LogReve=	Logarithm of revenue per employee
β_0 =	Intercept coefficient
β_1, β_2 =	Coefficient for each of the independent variables
ε =	Error term

Linearity assumption was verified and normal probability plots gave evidence to the normality of data used. Multicollinearity between the independent variables was checked and the VIF values indicated that multicollinearity is not a problem for this analysis as the VIF values of less than three are below the recommended cutoff of 10 (Mendenhall & Sincich, 1996). The plots of profit per employee, revenue per employee, and market capitalization per employee have no pattern, which implies that no heteroscedasticity are found in these variables.

RESULTS AND DISCUSSIONS

The regression model of the study is shown in Table 2. The result shows that the calculated value of *F*-statistic is 45.855 and the significant *F* is at *p*-value of .000. This finding suggests that the overall model is significant. Adjusted R^2 of the model indicates that 62% of the variance in market performance measured by market capitalization per employee can be explained by the two financial performance measures (profit per employee and revenue per employee). Turning to the significance of each independent variable, the two hypothesized financial performance measures toward the market performance measure as dependent variable were examined.

*H*1 Companies with greater profit per employee will have a stronger positive market capitalization per employee. The current study found that the coefficient of profit per employee is positive and statistically significant with market capitalization per employee (β = .545, p < .05). Thus, when profit per employee increase, market capitalization is likely to increase. Hence, *H*1 is supported. This finding supports Bryan (2007) that an increase in profit should lead to an increase in market capitalization. Hence, profit per employee drives market capitalization per employee.

*H*2: Companies with greater revenue per employee will have a stronger positive market capitalization per employee. The empirical result shows that the coefficient of revenue per employee is not statistically significant with market capitalization per employee (β = .211, p > .05). This study has been unable to demonstrate that revenue per employee drives market capitalization per employee. This finding confirms the question of Gentry and Shen (2010) who asserted that there is an ongoing debate about the relationships of accounting measures and market measures, whether or not exist a positive or negative relationship. The finding is rather disappointing that revenue per employee has no significant influence on market capitalization per employee.

Thus, as part of robustness check, to further determine the

significance of profit per empoyee in explaining market capitalization per employee, Table 3 shows the simple regression result using profit per employee only as the independent variable.

Table 2. Result of OLS Multiple Regression Analysis (*H*1, *H*2)

Variables (with hypothesized relationships in parentheses)	Unstandardized Coefficients	Standardized Beta	t	Sig.*
(Constant)	1.347		3.746	.000
Hypotheses:				
*H*1: Profit per employee (+)	.545	.665	4.938	.000
*H*2: Revenue per employee (+)	.211	.159	1.182	.243
R^2= .634				
Adj. R^2 =.620				
F-value = 45.855				
Prob. *(F)*= .000				
No. of companies/observations = 56				

Predictors: (Constant), LogNetP, LogReve.
Dependent Variable: LogMark
** Significant at the 0.05 level*

The result in Table 3 suggests that in Indonesian finance industry scenario, the profit per employee can be expected as a driver of market performance. R^2 of the model indicates that approximately 62.4% of variance in market capitalization per employee can be explained by predictor variable profit per employee and the remaining 37.6% proportion of variance in market capitalization per employee can be explained by other factors.

Table 3. Result of OLS Simple Regression Analysis (*H*1)

Variable (with hypothesized relationships in parentheses)	Unstandardized Coefficients	Standardized Beta	t	Sig.*
(Constant)	1.734		11.547	.000
Hypothesis:				
*H*1: Profit per employee (+)	.648	.790	9.469	.000
R^2= .624				
Adj. R^2 =.617				
F-value = 89.656				
Prob. *(F)*= .000				
No. of companies/observations = 56				

Predictors: (Constant), LogNetP
Dependent Variable: LogMark
** Significant at the 0.05 level*

Although revenue per employee can be used to track the impact of staffing resources on productivity, the result suggests that Indonesian finance industry managers must understand that increasing revenue per employee does not significantly influence investors' investing decision. However, profit per employee was found to influence investors' investing decision through market capitalization per employee. This implies that investors consider that there is no possibility of rising incomes coupled with increasing profits due to inefficient expenditure. Therefore, managers must continue giving attention to the cost savings in running the business to increase profits and thus increase investors positive reaction in investing in this industry.

CONCLUSIONS

Using annual financial and market performance data from the publicly listed finance companies in 2012, this study suggests that the increase in profit per employee can lead to better market capitalization per employee. However, the model shows that revenue per employee could not provide a significant influence to market capitalization per employee. A possible explanation for this might be that investors assume that there is no possibility of rising income a long with increasing profits in consequence of inefficient cost.

The results provide guidelines to help investors, managers, and academicians to comprehend the importance of profit per employee as a driver to market performance and to sustain it in Indonesian finance industry. Other researchers are encouraged to build greater insights on how financial performance influences market performance. This study also provides a basic reference and guide to analyze the company performance and as a useful eye-opener for scholars and policy makers. The findings obtained are important to be used by the finance industry to give a better understanding of performance and its drivers and lead to managerial practices to improve company performance of this significant industry.

The empirical results, however, must be interpreted with caution because the study drawn on data from a single industry and single nation that the nature of the business operation as well as the cultural and legal environment of every nation is different. Lastly, the regression analyses were conducted for only one financial year.

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