

# THE EFFECT OF TOTAL QUALITY MANAGEMENT AND EMPLOYEE ENGAGEMENT ON FINANCIAL PERFORMANCE OF THE BANKING SECTOR IN INDONESIA

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## ABSTRACT

This study aims to examine the effect of Total Quality Management and Employee Engagement on the Financial Performance of the banking sector in Indonesia. The analytical method used in this study is the annual report of 25 companies included in the banking category listed on the Indonesia Stock Exchange. The results of the data analysis show that Total Quality Management has a negative influence on Financial Performance, while Employee Engagement has a positive influence on Financial Performance. The results of this study confirm that Total Quality Management has a negative influence on financial statements and Employee Engagement has a positive influence on financial statements.

**Keywords:** Total quality management, Employee engagement, financial performance

## INTRODUCTION

### Background

The banking sector has a very important role, one of which is to provide various banking services such as savings, time deposits and demand deposits (Herman, 2012: 3). Seeing the importance of the role and function of bank, in increasing the number of customers in large numbers, each bank needs to implement a good management strategy, such as controlling and improving quality. Quality control is a process where actual performance is assessed or measured and compared with objectives and differences or deviations are followed up using statistical methods. Quality improvement is the process of achieving a higher level of performance or quality than before. Although quality cannot always be guaranteed, it can be measured. The improvement in quality from period to period can increase profitability and customer satisfaction. This requires a directed quality management system that will overall improve performance. The best quality will be obtained by making continuous efforts to improve human capabilities, processes, and the environment. One of the quality management tools commonly used is Total Quality Management (TQM).

The rationale for the need for TQM is very simple, namely that the best way to compete and excel in global competition is to produce the best quality. The success of TQM implementation will have an impact on cost reduction due to product damage or

failure and the ability to avoid wasteful costs that are not valuable to customers. With the reduced cost, it will be expected to have an impact on the performance of the bank itself.

The success of a company in achieving performance is expected to be inseparable from the existence of human capital that plays a role in running a business to meet the needs of the company in achieving its goals. Having resources that are potentially in accordance with the needs of the company can increase revenue, create new innovations and organizational effectiveness (Ashton & Morton, in Sundaray, 2011).

Employee engagement can be a way of achieving expected performance. Employee engagement is a condition of employees who are directly involved psychologically with their work. When employees are bound (engaged) with a company, employees have an awareness of the business. Awareness of the company's business is what makes employees will give their best ability to the company. Research shows that employees who are engaged will become more productive and will have an impact to company performance (Gallup, 2010).

Company performance is an illustration of the financial condition of a company that is analyzed by financial analysis tools, so that the good or bad financial condition of a company can be observed that reflects work performance in a certain period. Assessment of financial performance is one of the

ways that can be done by management in order to fulfill obligations towards funders and also to achieve the goals set by the company. Another important goal of a company is to improve the welfare of owners or shareholders, or maximize shareholder wealth through increasing company value (Brigham and Houston, 2001). The increasing company value can be achieved if the company is able to operate by achieving targeted profits.

Empirical studies that examine the effect of TQM on company performance have been carried out in previous studies. Some research results conclude that TQM is one of the best practice approaches to improve company performance (Terziovski and Samson, 1999; Huang and Yao, 2002; Lakhal et al., 2006; Prajogo and Hong, 2008). This research is also motivated by the lack of research on employee engagement conducted in an academic environment (Robinson et al., In Saks, 2006). Employee engagement is also still lacking in the scientific studies of human resources in Indonesia. Based on the background described above, the authors are interested in conducting research with the title: *The Effect of Total Quality Management and Employee Management on Financial Performance of the Banking Sector in Indonesia*.

#### Formulation of the problem

1. Does Total Quality Management affect the company's performance?
2. Does the Employee Engagement affect the company's performance?

#### Research purposes

1. To test the effect of Total Quality Management on company performance
2. To test the effect of Employee Engagement on company performance

#### HYPOTHESIS DEVELOPMENT

##### *Total Quality Management on Financial Performance*

The main goal of TQM is to make continuous improvements to get results that are getting good performance. In this case, with the existence of TQM, it is expected to be able to improvise financial performance.

H<sub>1</sub>: Total Quality Management has a positive effect on financial performance

##### *Employee Engagement on Financial Performance*

Employees who are engaged show positive behavior during work so that whatever they do leads to efforts to achieve the goals and success of the company.

H<sub>2</sub>: Employee Engagement has a positive effect on financial performance

#### RESEARCH METHODS

##### Sampling Technique

The sampling technique used in this study was the purposive sampling method. The samples in this study have the following criteria: (1) Sample companies are listed on the Indonesia Stock Exchange in 2014-2015 in banking groups; (2) The sample company issues a complete annual report in 2014-2015 and has a positive financial ratio; (3) Sample companies disclose costs related to quality improvement (TQM) and disclose surveys of employee engagement in annual reports during 2014-2015.

##### Variables and Operational Definitions of Variables

The variables used in this study are as follows: (1) Independent variables, including: Total Quality Management (TQM) and Employee Engagement; (2) Dependent variable, namely Financial Performance.

##### Operational Definitions

The operational definitions of this study are as follows: (1) **Total Quality Management** in this study uses quality costs that can be seen from the financial aspects based on quality cost report, consisting of prevention costs, appraisal costs, internal failure costs, external failure costs (Hansen and Mowen, 2006); (2) **Employee Engagement** is a social process when an employee decides to be deeply involved and interested in his work as indicated by his efforts to support the company's success. In this study, employee engagement uses the percentage number of results of the Employee Engagement Survey (EES); (3) **Financial performance** is a display of the company's financial condition for a certain period of time. In this study, financial performance uses the profitability ratio of Return on Assets (ROA).

##### Variable Measurement

**Total Quality Management** (TQM) is measured using the quality cost ratio. The quality cost ratio is

measured using a ratio scale, reflected by the comparison of the actual output value with the profit obtained. If implemented in TQM, the ratio of quality costs is calculated from the realization of quality costs divided by profit before tax obtained. The greater the quality cost ratio realized for the profits obtained, the higher the TQM value. The following is a formula for calculating TQM (Kanji and Asher, 1996):

$$\text{TQM} = \frac{\sum \text{Quality Cost}}{\text{EBIT}} \times 100\%$$

**Employee Engagement** is measured using three dimensions focused on vigor, dedication and absorption. In this study, the number of employee engagement was obtained through the results of surveys conducted by third parties or survey institutions such as Gallup Inc., Aon Hewitt, and others, which were disclosed in the annual reports of each company. Employee engagement measurements conducted by each institution adapted a questionnaire developed by the Utrecht Work Engagement Scale (UWES) (2003) which focused on three dimensions of engagement namely vigor (high energy), dedication (feeling to be involved), and absorption (concentration and drowning).

**Financial performance** in this study uses the ratio of profitability ratios, namely the rate of return on assets (ROA). This ratio is used to determine the effectiveness and efficiency of a company in managing all its wealth in generating profits. According to Brigham and Houston (2011: 109), Return on Assets (ROA) is obtained by comparing net income to total assets. Here is a formula for calculating ROA:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Asset}} \times 100\%$$

**Data Analysis Techniques**

To examine the effect of Total Quality Management and Employee Engagement on Financial Performance, the stages of data analysis are used, namely classical assumption and hypothesis testing. The multiple regression model aims to predict the size of the dependent variable by using data from independent variables that are already known to be large (Santoso, 2004: 163). The forms of multiple linear equations are as follows:

$$\text{KK} = \alpha + \beta_1 \text{TQM} + \beta_2 \text{EE} + e$$

Information:

- KK = Financial Performance
- $\alpha$  = constant
- $\beta$  = Regression Coefficient
- TQM = Total Quality Management
- EE = Employee Engagement
- e = Error

To carry out the purpose of this study, a statistical test was conducted which was tested by F test (model feasibility) and t test (hypothesis test).

**DISCUSSION**

**Research Results**

**Descriptive Analysis**

Descriptive variables for data during the period 2014-2015, the total number observed were 50 from 25 samples of banking companies listed on the IDX. Based on the results of data processing with the help of SPSS (Statistical Product and Service Solution) version 20.0, the calculation results are presented in table 5.

Tabel 5

Descriptive Statistics

	Mean	Std. Deviation	N
(Y) KK	1,8146	1,15247	50
(X1) TQM	4,5614	2,22530	50
(X2) EE	68,5586	13,37550	50

Source: processed secondary data, 2014-2015

From the descriptive statistical analysis presented in table 5, it shows that the number of samples used in this study amounted to 50 companies. From descriptive statistical analysis it is known that the average value of Total Quality Management (TQM) is 4.5614 with a standard deviation value of 2.22530, these results indicate that the standard deviation value is smaller than the average TQM which indicates that the TQM variable indicates the results well.

From descriptive statistical analysis, it is known that the average value of Employee Engagement (EE) is 68.5586 with a standard deviation value of 13.37550, these results indicate that the standard deviation value is smaller than the EE average which indicates that the EE variable indicates good results.

From descriptive statistical analysis it is known that the average value of Financial Performance (KK)

is 1.8146 with a standard deviation value of 1.15247, these results indicate that the standard deviation value is smaller than the KK average which indicates that the KK variable indicates good results.

**Classic Assumption Test**

Based on the results of data processing with the help of SPSS (Statistical Product and Service Solution) version 20.0 the following results are obtained:

In the residual normality test with graphs it can be misleading if not carefully, therefore to complete the graph test also performed other statistical tests that can be used to test residual normality are unstandardized statistical tests of non parametric residual Kolmogrov-Smirnov (KS) presented in table 6:

The data is said to have a normal distribution if the significance value of the K-S statistical test is greater than the specified significance value ( $\alpha = 0.05$ ). From the non parametric K-S test in table 6 above, it shows that the variables TQM, EE, and KK each have a significance value of 0.805, 0.654, and 0.359, the significance value is greater than 0.05. Thus it can be concluded that all variables in this study have normal distribution.

Tabel 6

One-Sample Kolmogorov-Smirnov Test

		(X1) TQM	(X2) EE	(Y) KK
N		50	50	50
Normal Parameters <sup>a,b</sup>	Mean	4,5614	68,5586	1,8146
	Std. Deviation	2,22530	13,37550	1,15247
	Absolute	,091	,104	,131
Most Extreme Differences	Positive	,091	,072	,131
	Negative	-,062	-,104	-,088
Kolmogorov-Smirnov Z		,641	,734	,925
Asymp. Sig. (2-tailed)		,805	,654	,359

a. Test distribution is Normal.

b. Calculated from data.

Source: SPSS 20.0, Processed Secondary Data 2014-2015

**The Multicollinearity Test** aims to test whether the regression model found a correlation between the independent variables. A good regression model should not have a correlation between the dependent variables. Based on the results of data processing with the help of SPSS (Statistical Product and Service Solution) version 20.0 the following results are obtained:

Tabel 7

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,620	,703		,882	,382	
	(X1) TQM	-,273	,051	-,528	-,5372	,000	,885
	(X2) EE	,036	,068	,413	4,206	,000	,885

a. Dependent Variable: (Y) KK

Source: SPSS 20.0, Secondary Data Processed 2014-2015

Tabel 8

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	(X1) TQM	(X2) EE
1	1	2,827	1,000	,00	,02	,00
1	2	,160	4,203	,01	,69	,05
	3	,013	14,577	,99	,29	,94

a. Dependent Variable: (Y) KK

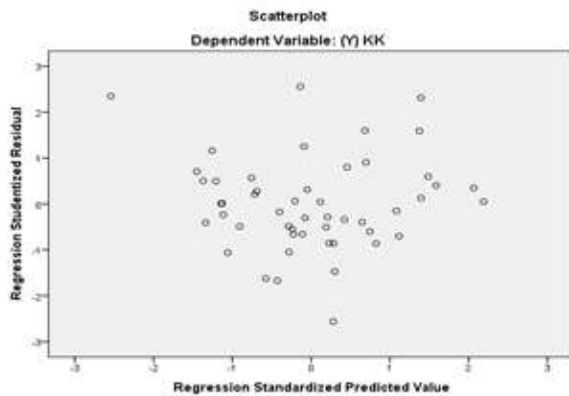
Source: SPSS 20.0, Secondary Data Processed 2014-2015

By looking at the tolerance number in table 7, the TQM variable has a TOL value of 0.885 ( $> 0.10$ ) and the EE variable has a TOL value of 0.885 ( $> 0.10$ ). By looking at the VIF numbers in table 7, the TQM variable has a VIF number of 1.130 ( $< 10$ ) and the EE variable is 1.130 ( $< 10$ ). Then by looking at the Condition Index number in table 8, the TQM variable has CI number 4,203 ( $< 30$ ) and EE variable 14,577 ( $< 10$ ). From the results of the above tests, it can be concluded that the independent variables TQM and EE there are no symptoms of multicollinearity.

**Heteroscedasticity Test** is done to test whether in the regression model variance inequality occurs from residuals to observations of other observations. Testing is done by looking at the plot graph between the predicted value of the dependent variable, namely ZPRED and the residual SRESID. Detect the presence or absence of a certain pattern on the scatterplot chart between SRESID and ZPRED where the Y axis is Y that has been predicted, and the X axis is residual (Y predictions - Y actually). Below is the result of heteroscedasticity testing.

By looking at figure 2 below, it can be seen that there is no clear pattern, and the points spread above and below 0 on the Y axis, it can be concluded that there is no heteroscedasticity in this regression model.





Gambar 2

Source: SPSS 20.0, Secondary Data Processed 2014-2015

The Autocorrelation Test is used to see whether there is a linear relationship between errors in a series of observations sorted by time (time series data). The autocorrelation test was carried out using the Durbin-Watson (DW) value. The Durbin-Watson value will be compared with the d-table value. Based on the results of data processing with the help of SPSS (Statistical Product and Service Solution) version 20.0 the following results are obtained:

Tabel 9  
Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,773 <sup>a</sup>	,598	,581	,74603	1,695

a. Predictors: (Constant), (X2) EE, (X1) TQM  
b. Dependent Variable: (Y) KK

Source: SPSS 20.0, Secondary Data Processed 2014-2015

By using a significance level of 5%, a sample of 50, and an independent variable of 2, the DL and DU values obtained were 1.4625 and 1.6283, respectively. From the results of the above tests, the Durbin-Watson value shows 1.695. The DW value is between DU and 4-DL (2.5375), which means that in this model there are no symptoms of autocorrelation.

Discussion  
F Testing

Tabel 10  
ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38,923	2	19,462	34,967	,000 <sup>b</sup>
	Residual	26,158	47	,557		
	Total	65,082	49			

a. Dependent Variable: (Y) KK  
b. Predictors: (Constant), (X2) EE, (X1) TQM

Source: SPSS 20.0, Secondary Data Processed 2014-2015

Tabel 11  
Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,773 <sup>a</sup>	,598	,581	,74603	1,695

a. Predictors: (Constant), (X2) EE, (X1) TQM  
b. Dependent Variable: (Y) KK

Source: SPSS 20.0, Secondary Data Processed 2014-2015

The feasibility test of the model with the F statistical test using the SPSS 20.0 tool, obtained the significance number on the KK test as the dependent variable of 0,000. Because the significance level is smaller than 0.05, the independent variable in this study is Total Quality Management and Employee Engagement simultaneously or together have a significant effect on the dependent variable, namely financial performance as measured by the ROA profitability ratio.

The test results of the determination coefficient (R square) with the SPSS 20.0 tool show the R square value of 0.598 or about 59.8%. This figure shows that the proportion of the effect of the Total Quality Management and Employee Engagement on financial performance as measured by the ROA profitability ratio is 59.8%, the stronger the variable Total Quality Management and Employee Engagement capabilities can explain financial performance. While the remaining 40.2% is explained by other variable factors that are not included in this research model.

**Effect of Total Quality Management on Financial Performance**

Tabel 12  
Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1	(Constant)	.620	.703	.882	.382		
	(X1) TQM	-.273	.051	-.528	.000	.885	1.130
	(X2) EE	.036	.008	.413	4.206	.000	.885 1.130

a. Dependent Variable: (Y) RK

Source: SPSS 20.0, Secondary Data Processed 2014-2015

Based on the results of the t test in this study, obtained a regression coefficient for the TQM variable of -0.528 with a significance number of 0.000 where this number is smaller than the level of significance ( $\alpha$ ) = 5% or 0.05. Thus hypothesis 1 in this study was rejected. This means that this shows that *Total Quality Management* (TQM) has a negative influence on financial performance. The higher the value of *Total Quality Management*, the lower the value of ROA.

This does not support the theory and the opinion of Tjiptono and Diana (2001: 4) which states that TQM is an approach in increasing organizational productivity (quantitative performance), improving quality (reducing errors and damage), increasing effectiveness in all activities, increasing efficiency (decreasing resources through increasing productivity), and doing everything right in the right way. This result also does not support the conclusions of Huang and Yao (2002) who stated that TQM is one of the best practice approaches to improve company performance. This result also does not support the research conducted by Prayhoego and Devie (2013) which states that if the implementation of *Total Quality Management* is getting better it will result in better performance of the company.

Theoretically, the company's expenditure is large, the performance will decrease. The biggest possibility of this situation occurs because the greater the quality cost ratio means the greater the total expenditure incurred by the company which results in smaller profits. If you want to get a big profit, the company will try to spend unnecessary expenses and increase sales. Thus it can be concluded that *Total Quality Management* is large, the company has a small profit level.

**Effect of Employee Engagement on Financial Performance**

Based on the results of the t test in this study, obtained a regression coefficient for EE variable of 0.413 with a significance number of 0.000 where this number is smaller than the level of significance ( $\alpha$ ) = 5% or 0.05. Thus hypothesis 2 in this study is accepted. This means that this shows that Employee Engagement has a positive influence on financial performance. The higher the value of the Employee Engagement, the higher the value of ROA.

These results support the theory of Kahn and Albrecht (2010) which states that employees who are engaged (engaged) show positive behavior during work so that whatever they do leads to efforts to achieve company goals and success. The results of this study also support the opinion of Gallup (2010) that employees who are engaged (engaged employees) are more productive employees and employees who provide the best ability will have an impact on the company's performance. This result also supports the theory suggested by Harter et al. (in Sundaray, 2011) that employee engagement predicts employee performance, organizational success, and financial performance. The results of this study support the research conducted by Markos and Sridevi (2010), literature studies show that employee engagement has an effect on organizational performance, companies with engaged employees have higher employee retention so that it will increase productivity, profitability, growth and customer satisfaction. The results of this study also support the research conducted by Sundaray (2011), the literature study shows that employee engagement has an influence on organizational productivity, besides that the results also emphasize that employee engagement has a relationship with profitability, employee retention, security, and customer satisfaction.

**Closing Conclusion**

First, *Total Quality Management* has a negative influence on financial performance. These results indicate that the higher the *Total Quality Management* number, the lower the financial performance figure. This can be caused because the greater the quality cost ratio means the greater the total expenditure incurred by the company which results in smaller profits. Second, *Employee Engagement* has a positive

influence on financial performance. These results indicate that the higher the value of the *Employee Engagement*, the higher the value of financial performance.

### Limitations and Suggestions

Some limitations and weaknesses that influence the results of the research and need to be revised material in the next study are: First, this study only uses two independent variables with their influence on the dependent variable; Second, the object of this research is limited to companies that enter the banking group and the period of research that is carried out is short, which is only two years and only uses 25 companies belonging to the banking category. The suggestions that can be given through the results of this study in order to get better results, namely: First, further research is expected to add variables used such as disclosure of Corporate Social Responsibility, Good Corporate Governance, financial report quality, competitive advantage, organizational culture, performance employees, and so on as independent variables in their influence on financial performance, and using other profitability ratios such as ROE, Tobin's Q, and others as a measure of financial performance; Secondly, the following research is expected to use other types of companies with more samples and longer years of observation.

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