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The Influence of Financial Performance, Intellectual Capital and Managerial Ownership toward Firm Value in Consumer Goods Manufacturing Sector

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Abstract

The objective of this research is to find out the influence of financial performance, intellectual capital and the existence of managerial ownership toward firm value. The samples are consumer goods manufacturing companies which are listed in Indonesia Stock Exchange in 2014-2016. The sample collection is using purposive sampling and 42 companies firm-years are obtained as the samples. This research has been done by using multiple regression analysis. The result of the research shows financial performance has positive influence to the firm value but not significance, the intellectual capital is significance and influences the firm value positively, the existence of managerial ownership is not significance in influencing the firm value.

Keywords: Financial performance, intellectual capital, managerial ownership

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1. INTRODUCTION

Financial performance is the result of company activities and also become the measurement of the company success. Pertiwi and Pratama (2012) had been conducted the measurement of financial performance by using some method, such as Return on Asset (ROA). Return on Asset (ROA) is the most popular ratio for evaluating the company performance. ROA shows the efficiency of the company when using its assets, the more efficient the company is, the more profit generated by the company.

Recently, financial performance can be manipulated, so the investors value the company not only from financial performance but also from both financial and non-financial performance of the company. To avoid that, many companies realized the importance of good corporate governance (GCG). Bad corporate governance makes the investors think twice to invest (L'Huillier, 2014). To achieve the better firm value, the company tries to maximize the value. However in the process of maximize the firm value, the managers sometime have conflict of interest that the decision they have taken are reflecting more on their individual goal which is not the best one for the company. Bad corporate governance creates the conflict between company (agent) and stakeholders (principal). The difference of interest between the company (agent) and shareholders create the agency problems, where the management of the company acts by their own interest and sacrifice the stakeholders' interests. In order to reduce the agency problem, the managerial ownership can be used as one of the tools for management control to minimize the manipulation of financial statement (Bendickson et al., 2016). The owners provide opportunity for the managers to own the company's share. It means, the managers are now become the owners as well.

Beside financial performance and good corporate governance, intellectual capital also affects the firm value (Nielsen, 2010). The performance of company not only valued by the financial performance but also by the non-financial performance of company. Intellectual capital can be called as the board-based term of intangible assets (Nielsen, 2010). Usually intellectual capital is divided into three categories such as customer capital, human capital and structural capital. These three categories of intellectual capital increase the firm value. The method for rating the intellectual capital indirectly is using Value Added Intellectual Coefficient (VAIC^{TM}). VAIC^{TM} consists of customer capital known as Value Added Capital Employed (VACA), human capital as Value Added Human Capital (VAHU), and structural capital as Structural Capital Value Added (STVA) (Pulic, 1998).

2. LITERATURE REVIEW

Agency theory is the theory where the management is the agent and the owner is the principal. Agency problem means the difference of interest between the principal and the agent that arise some conflicts. (Jensen and Meckling, 1976). Informational asymmetry happens when the principal cannot directly monitor what the agent do or do not have enough information. Goal conflict is the conflict that happens when the agent and principal have different interests and try to fulfill their own interest. The agent wants to have higher income with lower efforts and the principal wants higher return from the investment (Jensen and Meckling, 1976 in Priyadi, 2017). If the goal conflict cannot be managed well, then it will decrease the company performance, and at the end, reducing the firm value.

Financial performance is one factor that shows the efficiency and effectiveness of the company. The

company can be called effective if the company be able to achieve the goals. Efficient can be a ratio between input and output (Capkun, 2009).

There are times that the performance the company can go down or go up. The way to know the company performance is used by ratios. The measurement of performance using the ratios every some period is useful for the company to improve the performance and to help the management to take the right decision and also can create the value of firm (Disegni, 2015). Return on assets, as one of the financial ratios, can measure the efficiency of the company. Return on assets (ROA) is used to measure the performance of the company in using the assets to generate the profit.

Managerial ownership is the management that has share of the company that actively in taking decision. Managerial ownership is also the percentage of shares that owned by the company. The managerial ownership is used in order to minimize the agency conflict. This is because managerial ownership is the monitoring tools towards manager performance. The more the managerial ownership in company has, the more the management will increase the performance because the management has responsibility for fulfilling the shareholder's interest who are none other than themselves by reducing the risk of corporate finance through decreasing the level of debt. (Ruan et al., 2011). Ramadonal and Lukviarman (2011) research shows that the managerial ownership can minimize the agency problem towards the firm value.

Intellectual capital can be called as the board-based term of intangible assets. Intellectual capital is all non-intangible or non-physical assets or resources that include the process, innovation, knowledge in the company. Intellectual capital is also used to create the stakeholder value. Intellectual capital divided by three categories such as customer capital (VACA), human capital (VAHU) and structural capital (STVA) (Molodchik et al., 2012).

The first element of value added intellectual capital is value added customer capital (VACA), VACA is the important resource for the company to gain the income. The customer capital identifies how the company can fulfill the customers' needs. Customer capital is the knowledge that the company has to create the relationships with customers (Molodchik et al., 2012).

The second element of value added intellectual capital is value added human capital (VAHU). VAHU is the knowledge, skills that the employees had in order to obtain or achieve something in operational or non-operational activities. The good of human capital in the company is rated based on how the company can develop the potency of employees (Molodchik et al., 2012).

The last element of value added intellectual capital is value added structural capital (STVA). STVA is the infrastructure that the company has to fulfill the market needs. Structural capital becomes a support tool of human capital to develop the human skills. Structural capital will always be used along with the operational activities. (Molodchik et al., 2012).

The company has goals to maximize the firm value. The higher firm value means the more successful company in the market. The firm value in the market becomes the measurement for investor to take decision for investing or not. The higher firm value, the higher chance investor to invest (Eberhart, 2012).

The decision to invest in the company depends on the value that the company have. The alternatives to measure the firm value are Tobin's Q. Tobin's Q shows the estimation of return of investment. If

the value of firm is higher, the company have strong brand image. It also means the profit is getting higher than the expenses (Tobin, 1967 in Indrajaya, 2015).

The usage of intellectual capital will be possible to increase the firm value and achieving the advantages of competition. When the non-financial performance of the company such as employee's skill is increasing, it will affect the performance of the company. That is why the firm value will be possible to increase. Measurement intellectual capital toward firm value using Tobin's Q shows the fundamental aspect and also how the market values the firm in various aspects that can be seen by investor. Tobin's Q can show the market value of firm that reflected to future of the firm such as profit. The hypothesis is:
H1: Intellectual capital influences the firm value.

Investors value the firm with the ratio as a tool for investing because the ratio shows the low of high value the firm has. The ratio is used to measure the financial performance is ROA. ROA shows the profitability of the company. If the ROA of the company is high, the efficiency of the company when using its asset to generate the profit is also high. Therefore it will motivate the investor to invest in the firm. The hypothesis is:
H2: Financial performance influences the firm value.

In previous research by Ramadonal and Lukviarman (2011) the managerial ownership can be able to decrease the agency problem between agent and principal. Increasing the owner shares of manager will be motivated the manager to increase the performance and the possibility do the action according to shareholders' needs. The hypothesis is:
H3: The existence of managerial ownership influences the firm value.

Based on the explanation above, the model that will be used in this research is shown in figure 1.

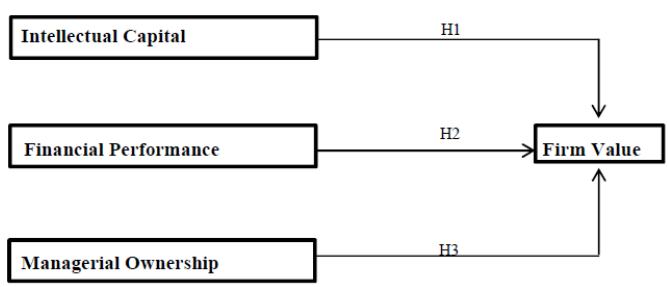

Figure 1. Research Model

3. RESEARCH METHODOLOGY

This quantitative research will use secondary data from Indonesia Stock Exchange in consumer goods manufacturing sector from 2014-2016. Using purposive sampling, from 33 companies, there are only 14 companies chosen by the criteria set by the researcher. With 14 companies, there is 42 sample companies-firm years.

The independent variables in this research are intellectual capital, financial performance and good corporate governance. The intellectual capital is the total of human capital (VAHU), customer capital (VACA), structural capital (STVA) that has relationship with the firm value. The intellectual capital model developed by Pulic (1998) is VAIC™

The first step to calculate VAIC™ is to find the value added (VA). VA is the variance of input and output (Pulic, 1998).

$$\mathbf{VA = OUT - IN}$$

VA: Value Added. The value added is derived from reduction of OUT with IN.
OUT: The total of sales and other income (included finance income).
IN: The expenses (except employee expense such as wages, salary, and welfare) and costs (included finance and cost of goods sold) (Pulic, 1998).

Value Added Capital Employed or VACA is the important resource for the company to gain the income. VACA is the comparison between value added and capital employee (Pulic, 1998).

$$\mathbf{VACA} = \frac{\boldsymbol{Value\ Added}}{\boldsymbol{Capital\ Employed}}$$

VA: Value Added is the total of sales and income (included other and finance income) minus by the total expenses (exclude employee expenses such as salary, wages, welfare) and cost (included cost of goods sold and finance cost))
CA: Capital Employed is the fund that available (Total Equity of the company) (Pulic, 1998).

Value Added Human Capital or VAHU is the knowledge, skills that the employees had in order to obtain or achieve something in operational or non-operational activities. VAHU is the comparison between value added and human capital (Pulic, 1998).

$$\mathbf{VAHU} = \frac{\boldsymbol{Value\ Added}}{\boldsymbol{Human\ Capital}}$$

VA: Value Added is the total of sales and income (included other and finance income) minus by the total expenses (exclude employee expenses such as salary, wages, welfare) and cost (included cost of goods sold and finance cost)
HC: Human Capital is taken from the total of salary, wages and welfare of employees (Pulic, 1998).

Structural Capital Value Added or STVA becomes a support tool of human capital to develop the human skills. Structural capital will always be used along with the operational activities. STVA is the comparison between structural capital and value added (Pulic, 1998).

$$\mathbf{STVA} = \frac{\boldsymbol{Structural\ Capital}}{\boldsymbol{Value\ Added}}$$

VA: Value Added is the total of sales and income (included other and finance income) minus by the total expenses (exclude employee expenses such as salary, wages, welfare) and cost (included cost of goods sold and finance cost))
ST: Structural Capital is taken from value added – human capital (Pulic, 1998).
VAIC is how much the value that created from every resource. The higher value of VAIC, the higher value added of the company (Pulic, 1998).

$$\textbf{VAIC™} = \textbf{VACA} + \textbf{VAHU} + \textbf{STVA}$$

VAIC: value added intellectual capital
VACA: value added capital employed
VAHU: value added human capital
STVA: structural capital value added

The second independent variable is financial performance. In this research the measurement to measure the financial performance is ROA. Return on assets is used to measure the performance of total assets in generating the profit (Pleshko et al., 2014).

$$\textbf{ROA} = \frac{\textit{Net Profit after Tax}}{\textit{Total Assets}}$$

Net profit after tax is net profit that is gained by the company from net operating income or from non-operating income in a period and be reduced by income tax.
Total assets are the total amount of economic value that gives the benefit in the future. The value of asset is the result of liability and equity. The percentage of ROA is already reflected from company's liability and equity. But, for example, comparing to return on equity, if the percentage of ROE is high, it does not mean the financial of the company is healthy, because in ROE, the liability of the company is not included. It may be the liability of the company is higher than its equity (Pleshko et al., 2014).

The third independent variable is managerial ownership as mechanism of good corporate governance. The managerial ownership is used to measure the corporate governance of the company towards firm value. The managerial ownership is measured by using dummy variable, where the managerial ownership will be given one if the management of the company have shares and zero if the management of the company does not have shares (Asward and Lina, 2015).

The dependent variable in this research is firm value. The measurement of firm value is Tobin's Q (Tobin, 1967 in Indrajaya, 2015).

$$\textbf{Q} = \frac{\textit{Equity Market Value}}{\textit{Total Asset}}$$

Equity market value is taken from the total of outstanding shares multiplied by current share price in that year.
Total assets are the total amount of economic value that gives the benefit in the future. This information can be taken from financial statement of the company (Tobin, 1967 in Indrajaya, 2015).

The multiple regression analysis can be measured partially implied by coefficient of partial regression. The form of multiple linear regression equation as follows:

Firm Value = β0 + β1 Intellectual Capital + β2 Financial Performance + β3 Managerial Ownership + e

4. RESULTS & DISCUSSIONS

Descriptive Statistical Analysis

Table 1. Descriptive Statistic

Variables	Sample	Minimum	Maximum	Mean	Std. Deviation
Intellectual Capital	42	2,19	10,82	4,22	2,01
Financial Performance	42	0,02	0,36	0,10	0,06
Managerial Ownership	42	0	1	0,55	0,50
Firm Value	42	0,00	20,1	4,78	5,99

Source: Secondary data were processed

Based on the table, VAIC^{TM} of consumer goods manufacturing companies have minimum value is 2,19 and the maximum value is 10,82, the mean of VAIC^{TM} is 4,22 which means the average of consumer goods manufacturing companies' VAIC^{TM} is 4,22, while standard deviation is 2,01 which means the data that spreads out of mean about 68% of values in the range of 2,21 – 6,23, 95% of values in the range of 0,20 - 8,23 and anything below -1,81 and above 10,25 is very rare (Garson, 2012, p. 9).

Based on the table, ROA of consumer goods manufacturing companies have minimum value is 0,02 and the maximum value is 0,36, the mean is 0,10 which means the average of consumer goods manufacturing companies' ROA is 0,10, while standard deviation is 0,056 which means the data that spreads out of mean about 68% of values in the range of 0,05 – 0,16, 95% of values in the range of -0,01 - 0,21 and anything below -0,06 and above 0,27 is very rare (Garson, 2012, p. 9).

Based on the table, MO of consumer goods manufacturing companies have minimum value is 0 and the maximum value is 1, the mean of MO is 0,55 which means the average of consumer goods manufacturing companies' MO is 0,55, while standard deviation is 0,5 which means the data that spreads out of mean about 68% of values in the range of 0,05 – 1,05, 95% of values in the range of -0,05 - 1,56 and anything below -0,96 and above 2,06 is very rare (Garson, 2012, p. 9).

Based on the table, Tobin's Q of consumer goods manufacturing companies have minimum value is 0,00 and the maximum value is 20,10, the mean of Tobins' Q is 4,78 which means the average of consumer goods manufacturing companies' Tobins' Q is 4,78, while standard deviation is 5,99 which means the data that spreads out of mean about 68% of values in the range of -1,21 – 10,78, 95% of values in the range of -7,20 - 16,77 and anything below -13,20 and above 22,76 is very rare (Garson, 2012, p. 9).

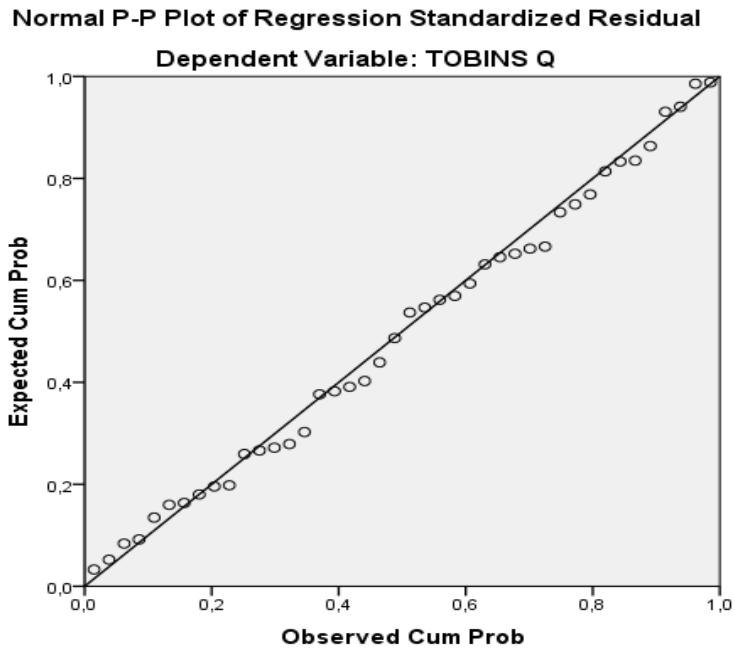

Figure 2. Normal P-P Plot of Regression Standardized Residual
Source: Secondary data were processed

Based the normal probability plot that the data pattern spreads around the diagonal line and follow the line, so can be concluded that the data is normally distributed. Beside normal probability plot, Kolmogorov-Smirnov test is also used (Garson, 2012, p. 35). From Kolmogorov-Smirnov Test, it can be seen that the significant value of the variable is 0,200. Since it is higher than 0,05, then the data in this research is normally distributed (Garson, 2012, p. 35).

Table 2. Multicollinearity Test

Model	Variables	Tolerance	VIF
1	Intellectual Capital	0,44	2,28
	Financial Performance	0,47	2,12
	Managerial Ownership	0,79	1,27

Source: Secondary data were processed

From the data above, the tolerance value of variables are 0.47, 0.44, 0.79 and the values are not less than 0,10 and VIF values are 2.12, 2.28, 1.27 and there are no VIF values is more than 10. So can be concluded the variables are not multicollinearity or do not have strong relationship between independent variables (Garson, 2012, p. 44-45).

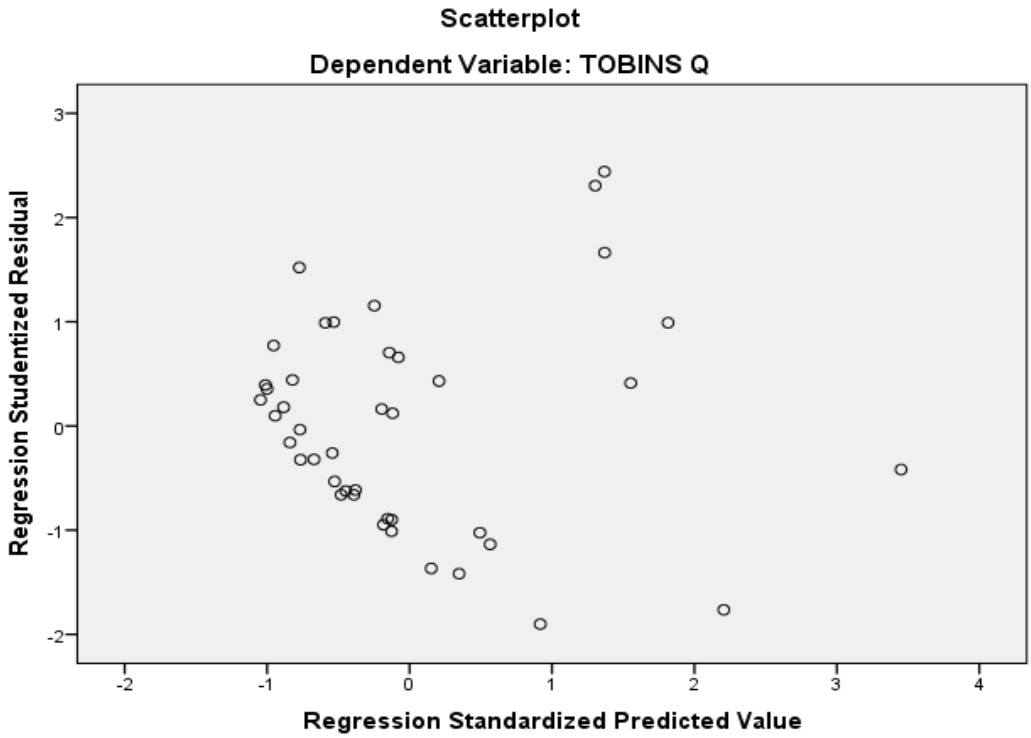

Figure 3. Scatterplot
Source: Secondary data were processed

Based on the scatterplot graphic, the dots spread randomly under and upper Y axis so can be concluded that the residual data is not heteroscedasticity (Santoso S, 2017, p. 367).

Table 3. Autocorrelation Test

Model	Durbin-Watson
1	2.363

Source: Secondary data were processed

From the table above, the value of Durbin-Watson is 2,363 which is within du (1,60608) and 4-du(2,39392), so can be concluded that there is free autocorrelation in the model (Garson, 2012, p. 47).

Determination of coefficient is used to measure how well observed outcomes are replicated by the model. The determination of coefficient shows the proportion of the variance in the dependent variable can be predicted by the independent variables.

Table 4. Model Summary[b]

Model	R	R Square	Adjusted R Square
1	,769a	0,592	0,56

Source: Secondary data were processed

Based on the table, the adjusted R square is 0,560, this value means the variable independent influence the variable dependent is about 56%, while 44% is influenced by another factors that are not be researched (Garson, 2012, p. 42).

Table 5. ANOVA

Model	Sum of Squares	F	Sig.	
1	Regression	290,712	18,387	,000
	Residual	15,811		
	Total			

Source: Secondary data were processed

Based on the table 5, the F value is 18,387 and the significance value is 0,000. The probability of significance is less than 0,05 which means the model regression is fit (Garson, 2012, p. 42-43).

Table 6. Coefficients

Model		B	T	Sig.
1	(Constant)	-5,131	-2,843	0,007
	Intellectual Capital	2,21	4,732	0,000
	Financial Performance	4,961	0,305	0,762
	Managerial Ownership	0,135	0,097	0,923

Source: Secondary data were processed

Y (Firm Value) = -5,131 + 2,210 Intellectual Capital + 4,961 Financial Performance + 0,135 Managerial Ownership

Table 7. Summary of Hypothesis Result

Dependent Variable: Firm Value		
	Variables	**Result**
H1	Intellectual Capital	Supported
H2	Financial Performance	Not Supported
H3	Managerial Ownership	Not Supported

Source: Secondary data were processed

Based on the test, H1 is supported because the significance value of intellectual capital is 0,000 with the positive coefficient regression is 2,210. H2 is not supported because the significance of financial performance is 0,762 with positive coefficient regression is 4,961. H3 is not supported because the significance of managerial ownership is 0,923 with the positive coefficient regression is 0,135.

The influence of intellectual capital (VAIC^{TM}) towards firm value

Based on the test, H1 is supported. From the table, the significance value of VAIC^{TM} is 0,000 with the positive coefficient regression is 2,210. The result of positive coefficient regression means that if the intellectual capital is higher, so the firm value is also higher. When the non-financial performance of the company such as employee's skill is increasing, it will positively affect the performance of the company. That is why the firm value will be possible to increase. The significance value of VAIC^{TM} is less than 0,05 which means the intellectual capital influences significantly

toward firm value. This research support the research that conducted by Indrajaya (2015) and also consistent that the intellectual capital positively significance towards firm value.

The influence of financial performance (ROA) towards firm value
Based on the test, H2 is not supported. Tabel 7 shows that the significance of ROA is 0,762 but the coefficient regression is 4,961. The result of positive coefficient regression means that if the financial performance is higher, so the firm value is also higher but the significance value of ROA is more than 0,05 which means financial performance does not influence significantly toward firm value.

This research support the research that conducted by Suhendra (2015). This is caused by many companies try to manipulate their financial statement in order to have high firm value for attracting the investor. When the financial statement can be manipulated, it is difficult to measure the firm value.

The influence of corporate governance (MO) towards firm value
Based on the test, H3 is not supported. From the table, the significance of MO is 0,923 with the positive coefficient regression is 0,135. The significance of MO is higher than 0,05 which means the existence of managerial ownership does not influences significantly toward firm value. This is caused 2014). The stakeholders do not believe to the management of the company yet because the stakeholders think that the commissioners do not have enough knowledge about their company.

5. CONCLUSION

Based on the result of multiple regression analysis, the conclusions of this research can be taken. First, the result of the analysis shows the intellectual capital influence the firm value positively which means if the intellectual capital of the company is higher, the firm value is also higher. Second, the result of ROA shows that the higher of ROA, the firm value also increase but not really increase significance to the firm value. The last, the result of managerial ownership shows that the managerial ownership does not influence significance to the firm value. This is caused by the managerial ownership structure in Indonesia is still small and dominated by family (Kamardin, 2014). The stakeholders do not believe to the management of the company yet because the stakeholders think that the commissioners do not have enough knowledge about their company

In this research, researcher only take consumer goods manufacturing sector from 2014 until 2016 on Indonesia Stock Exchange with three variables consists of intellectual capital, financial performance, managerial ownership and for measuring the financial performance only uses one measurement which is ROA. For the next research, the researchers can add more samples, sectors and more variables to reflect the overall of market. The researcher can also extend the time period of the data and using more measurements.

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