Directors' Characteristics and its impact on firm's productivity and performance: The case of trade and industry listed-firms in Indonesia

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Directors' Characteristics and its impact on firm's productivity and performance: The case of trade and industry listed-firms in Indonesia

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Abstract

This study aims to investigate the directors' charateristics and its impact on firm's productivity and firm performance. Directors' characteristics contains of the level of education (high school, undergraduate, graduate and post-graduate), the type of education (business and non-business), the directors' tenure. Firm's productivity is measured using the ratio of sales and the number of employees. Firm performance is measured using the ratio of return on assets (ROA). The population is all listed-firms in the sector of trade and industry with a total of 112 firms and the sample size is 87 firms that is chosen proportionately from each sub-sectors. Due to the missing data and incomplete data, the final sample is 44 firms with a period of 2010 to 2016. A quarterly financial report is used and thus there is 28 financial reports (2010 to 2016), and the total observation is 1232. The ordinary least square (OLS) is used to analyse the data, and prior to analysis, a normality test of data is employed using Kolmogorov-Smirnov test. The specification test such as normality test, autocorrelation test, multicolinearity test is performed. The result reveals that the directors' charateristics has a significant effect on firm's productivity and firm performance. This significant result is supported by the type of directors' education that is more than 80% of directors have a master degree and a bachelor degree qualification and most of the directors have an education major in business. Moreover, most of the directors has more that five years of tenure, however, the term of office of the chief executive needs to be limited, because it will impact on saturation and innovativeness.

Keyword directors' characteristics, firms' productivity, firm performance, Indonesia.

1. Introduction

Everyone who set up a business, of course, has a purpose for the business he managed can survival in indefinite time. To be able to survival, the company must have a good performance. Company performance can be seen from different viewpoints, marketing performance, human resource performance, operational performance and financial performance. If the business type is still a closed business, then the company must get profit or profit enough. But in the type of business managed is a public or community-owned business, then the goal is to prosper the owner of the company. Measures that can be used to see the increased welfare of the owner, is Return on Asset, or return on Equity and Earning per share.

According to Fact Book in 2015, the number of companies that are public companies that have been listed on the Indonesia Stock Exchange is 508 companies and with the total market capitalization of Rp 4,006,022 billion. The types of companies listed on the BEI can be classified as many as 9 types of industries, and industry groups Trade, Service, and Investment. Similarly, the market capitalization value of the Trade, Service, and Investment industry group has a market capitalization value of Rp 625,823 Billion and

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this amount is the largest number after the Finance industry group (Source: Fact book, 2015, Indonesian Stock Exchange).

Based on the amount and value of market capitalization of companies within this industry group is the most and big, then the industry trade, service, and investment group are feasible to be the object of research. Furthermore, the success of a company can be seen from the performance, especially the performance of the company. Commonly used indicators to assess company performance are employees' productivity, return on asset and return on equity. These three ratios illustrate the rate of return on investment compared to the number of employees, the value of the company's assets, and the capital value of the owners of the company. In terms of human resources, can be seen from two aspects, namely the workers and the leaders of the company. The director main role has a very important role in managing the company, therefore the characteristics of the main director should be a concern. These characteristics among, the level of education, the type of education, the origin of the school, the general and the experience of the director.

Many experts argue that weakness in corporate governance is one of the main sources of economic vulnerability that has caused the deteriorating economies of Asian countries (including Indonesia) in 1997 and 1998 (Husnan, 2001). Ho and Wong (2001) argue that the financial crisis in Asia is not only caused by the loss of confidence from investors but more importantly due to the decline of effective corporate governance (Kurniasari, 2009). The case scandals of PT Kimia Farma, Bank Lippo, and PT Indofarma are examples of weak implementation of corporate governance within Indonesian companies. Therefore, good corporate governance becomes a part of corporate governance.

Then, based on empirical research studies conducted by Bhagat, Bolton, and Subramanian (2010), a CEO who holds a degree with higher levels of education, did not guarantee will be able to improve the company's performance for the better. A study reveals the fact, even though CEOs hold degrees, but their performance is no better than those who do not hold a bachelor's degree, even those who drop out of school.

Furthermore, the results of Ying and Mei's research (2014) show a significantly negative result between the levels of CEO education with firm performance. The research conducted by Ayaba and Itteno (2012) showed the same results there is no significant relationship between educational backgrounds with company performance. Similarly, the results of the research of Idha Kumala and Herry Laksito (2010) show no significant relationship between main director education and corporate social performance. The research conducted by Cimerova (2012) gives the result that CEO with less experience has an impact on company performance volatility.

Empirical studies that discuss the effect of board member diversity on corporate performance for developing countries are still very limited. The existing study is dominated by studies from developed countries such as the United States, Canada, Japan and other developed countries. In Indonesia research on board member diversity is done by Kusumastuti et al. (2007) and Darmadi (2011), both of which used a sample of companies listed on the Indonesia Stock Exchange in 2007.

Based on the results of research from both developed and developing countries, there are still differences in results due to environmental, cultural and other differences that affect the performance of a company in a country. Some research finds a positive relationship and some research finds a negative relationship between diversity characteristics director and financial performance. Carter et al., (2003), Ararat et al (2010) and Darmadi (2011) examining the effect of gender, nationality, age and education of directors found a positive influence of these variables on firm performance, while Tacheva and Huse (2006) and Gantenbein et al (2011) found a negative effect of the director's characteristic variable on financial performance. Kusumastuti et al (2007) who examined the characteristics of directors (gender, nationality, age and educational background) on financial performance found no significant effect.

This study aims to investigate (1) the effect of education level, education type and director's work experience on productivity in trade, services and investment industries listed on Indonesia Stock Exchange, and (2) the effect of the education level, the type of education and the work experience of the director on the performance of the company in the trade, services and investment industries listed on the Indonesia Stock Exchange.

2. Literature Review

Productivity

Every company is always trying to make employees can excel in the form of providing maximum work productivity. Employee work productivity for a company is very important as a measure of success in running a business. Because of the higher employee productivity in the company, the company's profit and productivity will increase. The International Labor Organization (ILO) cited by Hasibuan (2005) reveals that more simply the purpose of productivity is the computation of arithmetic between the amount produced and the amount of each source used during production. The source can be: 1) Land 2) Raw material and auxiliary materials 3) Factory, machinery, and tools 4) Manpower.

The concept of productivity can basically be seen from two dimensions, namely the dimensions of individuals and organizational dimensions. Assessment of productivity problems from the dimensions of the individual is none other than to see productivity especially in relation to the characteristics of individual personality traits. In this context, the essence of understanding productivity is a mental attitude that always has the view that the quality of life today must be better than yesterday, and tomorrow must be better than today (Kusnendi, 2003).

Sinabung (2005) also implies two groups of requirements for high individual productivity: 1) First group a) Level of education and expertise b) Type of technology and output c) Working conditions d) Health, physical and mental capability 2) Second group a) Mental attitudes (to duties), peers and supervisors b) Diversity of duties c) Incentive systems (wages and bonus systems) d) Job satisfaction Meanwhile in terms of organizational dimensions, the concept of productivity as a whole is another dimension of efforts to achieve quality and the quantity of a process of activity in conjunction with the subject of economics. Therefore, always oriented to how to think and act to utilize the input source to get the optimum output. Thus the concept of productivity in this view is always placed on the framework of the technical relationship between the input (input) and output (Kusnendi, 2003). From various opinions above can be concluded that the productivity of work is the ability to produce goods and services from various resources or production factors used to improve the quality and quantity of work produced within a company.

According to Simanjuntak (2001), the factors that affect the productivity of the employees of the company can be classified into two groups: 1) The quality and the physical ability of the employees, including: the level of education, training, work motivation, work ethic, mental and physical ability of the employee 2) Supporting facilities include: a) Work environment, including: production, production facilities and equipment, safety level, and work welfare. b) Employee welfare, including Management and industrial relations.

From the above opinions, it can be concluded that the main condition of the employees is increasingly important and determines the level of employee productivity that is education and training, motivation, discipline, skill, income level, environment and work climate, equipment mastery. With the hope that employees are more passionate and have a passion for working and ultimately can enhance the quality of work, increase production and work productivity.

According to Simamora (2004), the factors used in the measurement of work productivity include the quantity of work, quality of work and timeliness: 1) Quantity of work is a result achieved by employees in a certain amount with a comparison of standards exist or set by the company. 2) Quality of work is a standard result relating to the quality of a product produced by employees, in this case, is an ability of employees in completing the work technically with a comparison of standards set by the company. 3) Timeliness is the level of an activity completed at the beginning of a given time, viewed from the coordination angle with the output and maximizing the time available for other activities. Timeliness is measured from employee perceptions of an activity that is provided in time until it becomes output. Measuring work productivity according to the organizational dimension according to Alan Thomas (in Kusnendi, 2003) that mathematically the relationship is formulated by dividing the output with input.

In Sinungan (2003) in general, productivity measurement means that the comparison can be differentiated in three very different types. 1). Comparisons between present and historical execution do not indicate whether the present execution is satisfactory but only suggests whether it increases or decreases as well as its level. 2). Comparison of implementation between one unit (individual task, section, process) with others. Such measurements show relative achievement. 3) Comparison of the current implementation with the target and this is best as focusing on the goals. To compile these comparisons it is necessary to consider the list level of composition and comparison of productivity measures. There are at least two different types of comparison rates, namely total productivity and partial productivity. Total productivity is total yield divided by total input and partial productivity is a partial result divided by total input.

Measurement of work productivity has an important role to know work productivity of the employees so it can be known how far the productivity that can be achieved by employees. In addition, productivity measurement can also be used as a guide for managers to improve work productivity in accordance with what is expected of the company.

Firm Performance

The company's overall performance and competitive advantage is a benchmark for the success rate and development of small companies. Measurement of return on investment, growth, volume, profit, and labor in general company is done to know company performance. There are several criteria for assessing a company's performance delivered in various literature. These criteria include both financial and non-financial criteria. The different criteria for measuring the company's performance actually depends on the performance measurement itself. Benchmarks are unique, because of the specificity of each business entity, including business, background, legal status, capital structure, growth rate and technological level. The difference will affect the behavior of business entities. And by itself also affect the performance and benchmarks used. The company's overall performance and competitive advantage are the benchmarks of the success rate and development of small companies. Measurement of return on investment, growth, volume, profit, and labor in general company is done to know company performance (Jennings and Beaver, 1997). Researchers are encouraging sales growth, employment growth, income growth and market share growth as a measure of the most important small-company performance (Kim & Choi, 1994, Hadjimanolis 2000).

The company's financial performance is an achievement achieved by the company in a certain period that reflects the company's health level (Sutrisno, 2009). Financial performance is an analysis conducted to see how far a company has implemented by using the rules of financial implementation properly and correctly. Company performance is a description of the financial condition of a company that is analyzed with the tools of financial analysis, so it can be known about either the poor financial condition of a company that reflects the performance of work within a certain period. It is very important that resources are used optimally in the face of environmental change (Fahmi, 2011).

The company's financial performance is closely related to performance measurement and measurement. Performance measurement is the qualification and efficiency and effectiveness of the company in business operations during the accounting period. As for performance appraisal according to Srimindarti (2006) is the determination of operational, organizational and employee effectiveness based on target, predefined standards and criteria periodically.

In this research, company performance is measured by using financial ratios that is Return on asset which is a comparison between net profits after tax with total assets. Return on asset is a ratio that measures the ability of the company as a whole in generating profits with the total assets available in the company (Syamsuddin, 2009). The higher this ratio the better the state of a company. Return on assets is a ratio that shows how much net profit the company obtained when measured from the value of assets (Syafri, 2008).

The role of directors

The Chief Executive Officer (CEO) Director is the supreme leader who governs the running of a company. (Carver and Carver, 2009) In arranging this according to Price and Ritcheske (2003) that the Director or CEO has an attitude that is (1) have a strong belief to achieve the desired achievement, (2) consent on profit and realistic results, (3) have a competitive attitude but not cruel, (4) a strong desire to control the fate of others, and (5) have a strong spirit of endurance. In the 21st century, the emerging phenomenon is the challenge of becoming a world-class company and in a global competition, the CEO must see the borderless world, diversity and knowledge power (Mahapatro, 2010).

Cross-cultural, cross-border has produced a new class of human, global citizens with global attitude, tastes, and networks. By looking at several variables, the infinite world blocks great complexity, complexity in the environment, across inter-organizational relationships, in a mode of doing business and socio-cultural diversity. One of the most important tasks of a modern HR manager is to get things done through people. He must bring the employee into contact with the organization in such a way that the goals of the two groups are achieved. He should be interested in the person, the work and the accomplishment of the goals set. To be effective, he must balance his concern for people and work. In other words, he must know how to utilize human as well as temporary non-human resources.

Resource Dependence Theory

Theory of resource dependence was put forward by Aldrich and Pfeiffer in 1976. The theory was originally developed to provide an alternative perspective for economists on mergers and board interlocks and to understand the type of inter-organizational relationships that have a major role in the recent market failure. The basis of this theory is Emerson's 1962 declaration that power A over B is based on control over the required resources B, where the resource is not found elsewhere. So that corporate managers have the motivation to ensure the survival of the company and improve the autonomy companies they manage. The emphasis on power and careful review of the tactics that are available to the board of the company is a characteristic of resource dependence theory that distinguishes it from other approaches. Some tactics that can be used for example are if the company depends on a single source for raw materials, then the way to become more economist is to find and maintain an alternative source. Another tactic that can be used is to be big. Large companies have a tendency to fail more easily than small firms.

Another advantage gained from large company sizes is that companies can ask for help from the authorities when the company faces problems. A slightly riskier tactical alternative is to include representatives from suppliers into the board for support, or by applying representatives of large customer groups to the council, or by putting former government officials into councils to gain legitimacy (Davis and Cobb, 2009).

The strategy and tactics of BOD member composition selection as one of the ways to overcome dependence and become more autonomous are the ones that have received attention recently. By using the scattered BOD composition, it will increase at least five things (1) increase understanding of the market. With the spread of the market, the company must be able to understand the characteristics of its customers. The best way is to use a sales force that is also spread, (2) enhance creativity and innovation. Attitudes, cognitive functions, and beliefs are not scattered randomly in the population but tend to differ systematically according to demographic variables such as age, race, and gender. So the expected consequences of increasing cultural diversity in organizations are the emergence of different perspectives - creative task. In addition, employees who feel valued and supported by their organizations tend to be more innovative, (3) improve the quality of problem-solving, (4) improve leader effectiveness. The demographic composition at the top management level affects the competitive strategy and financial effectiveness of the firm, and (5) fostering an effective global relationship. The challenge facing top managers is to turn ethno cultural diversity into a distinctly diverse potential in the increasingly competitive global marketplace.

Director's Charateristics: Level of education, education major and tenure

Resource-based strategy views emphasize the importance of resources and capabilities in developing competitive advantage of the company. Innovation is a key that leads to competitive advantage, therefore innovation and its relationship with organizational resources and capabilities should be investigated (Barney, 1991; Autio et al., 1998; in Hadjimanolis, 2000; Thong, 1999; Daellenbach et al., 1999; Hadjimanolis & Dickson, 2000).

Characteristics of owners and managers are one of the main symbols of entrepreneurship of small and medium-sized enterprises (Amit, et al., 1993). The owner or manager identifies technological opportunities and coordinates the process of obtaining resources. Personality and attitude variables such as locus of control, tolerance for ambiguity and attitude to risk are not included. The behavior of the entrepreneur and the main variables in the characteristics of the owner/manager are age, education and work experience. (Anvlonitis et al, 1994; Hadjimanolis, 2000). Innovativeness from the manager/owner (Thong, 1999; Hadjimanolis & Dickson, 2000).

Further, according to Bass (1985) in Daellenbach et al (1999) that the personal character of the leader influences the exposed leadership behavior of internal-oriented leaders conveys a sense of determination and confidence in their vision. And transformational leaders increase follower motivation and performance, resulting in higher unit performance levels. According to Hambrick and Mason (1984) in Daellenbach et al (1999) the decision to invest in R & D generally involves top management or company owners taking into account external and internal factors. In considering external and internal factors senior managers will conduct screening mechanisms, interpreting data through cognitive base and values.

Education managers and business experience are significantly associated with this because these demographic characteristics are thought to be the primary determinants of each cognitive, basic and individual value. According to Hadjimanolis and Dickson (2000) a company that is proactively innovating is a company that has a manager / owner who has the vision and ability to recognize opportunities, commitment to innovation, internal locus of control (a feeling that the company's destiny depends on its actions rather than external factors), a high need for achievement, engagement with local and international networks and relations with the government. The locus of control is a personality attribute that reflects the degree to which a person generally senses an event that occurs under a controlling consciousness (internal control or internal locus) or under the control of something more powerful (external or external control). The behavior of entrepreneurs which are the main variables in the characteristics of the owner/manager is age, education level and business experience (Anvlonitis et al. 1994; Hadjimanolis, 2000), knowledge (Thong, 1999).

According to Ponnu (2008), BOD should consist of professionals with expertise in law, accounting, finance, and other taxes. With skilled board members, it can provide a useful perspective on risk assessment, competitive advantage, and understanding of the challenges faced in business. The diversity of backgrounds and experiences that fit the needs of enterprises is important to the board's overall composition. This is due to the company's need for certain educational backgrounds and experiences that change over time. The board should monitor the expertise and experience of board members with established membership criteria to assess at each stage of the company's lifecycle whether the board has the tools to perform its functions effectively. However, without the qualifications of expertise, one can still contribute to the company, make different decisions, have independent views, and act without fear.

According to the theory of resource dependence, all forms of human resources that the company has must be used as much as possible. This will encourage companies to improve performance and potential wealth creation (Mitchell S. S.M., 2001). The diversification of human resource structures related to gender mix is often seen as important to maximize the company's key resources (Siciliano, 1996).

In corporate governance literature and resource dependence theory, it is often disclosed that diversified and well-balanced BODs can significantly improve enterprise performance (Mitchell, 2001). BOD is an important mechanism that can enhance and create a coalition between BOD and shareholders in controlling the resources needed by firms. Each member of the board will provide a collection of unique, different experiences, attachments and views for the council. If the perceptions, views, and background of council members are relatively homogeneous, then it is likely that the decision-making strategies of the corporate governance mechanism will be single-minded, predictable and inflexible. Boards with higher member diversity will be better able to cope with the challenges and dynamics of the business environment.

Hua (2005) examines the differences in primary education, secondary education and university education levels in China on productivity. The results show that the level of education at the university education level is higher than in primary and secondary education. Ng and Felmand (2009) examine the level of education and job performance. Its results indicate that education level is not related to the counterproductive work behavior and is very weakly related to supervision.

Ying and Mei (2014) studied the CEO's education and Firm Performance. Firm performance measured by ROA and ROE, education in view of the master and non-master education. The results show that the master's level of education cannot improve the company's performance. Andriyani Muttaqin et al (2014) examined the educational background and years of service and motivation for employee performance. The research shows that educational background has no significant effect on employee's performance and employee's life has a positive and significant effect on employee performance.

Research conducted by Kusumastuti et al. (2007) that measures the effect of board diversity (gender, the outsider, director's age and director's educational background) on financial performance finds that board diversity has no significant effect on financial performance. Research conducted by Ararat et al. (2010) that measures the effect of board diversity (members of management, gender, age and director education) on firm performance finds that board diversity has a positive and significant impact on company performance.

Research conducted by Gantenbein et al. (2011), which investigates the characteristics of directors such as education, work experience and business on financial performance, found that the characteristics of directors had a negative and significant impact on the financial performance of the company. Research conducted Utami and January (2014) that investigate the influence of corporate governance characteristics on the possibility of corporate failure on manufacturing companies listed on the BEI. The results of the study found that the characteristics of corporate governance affect corporate failure.

3. Research Methodology

This study uses quantitative data taken from the company's financial statements on industry trade, service and investment listed on the Indonesia Stock Exchange from 2010 to 2016. Financial report data downloaded from the website of the Indonesia Stock Exchange is www.idx.co.id. This study uses 4 (four) main variables, namely education level (X1), education type (X2) and work experience of director (X3) which is independent variable and productivity and company performance (Y) as a Dependent variable. Company performance indicators are productivity and return on assets (ROA). The productivity indicator is the ratio of sales to the number of employees. Indicators of education level are high school level, Bachelor, Master, and Doctorate. Education type indicators are business education and non-business education. The work experience indicator is the time frame for the president director to hold the position.

The population of this research is all companies of industry sector of trade and services listed on Indonesia Stock Exchange from 2010 until 2016. Trade and services industry sector consist of sub-sector that is (1) wholesale, (2) retail, (3) restaurant, hotel, and tourism (4) advertising, printing and media, (5) healthcare, (6) computer and services, (7) investment company and (8) others. The total population is 112 consisting of (32) wholesale, (21) retail, (21) restaurant, hotel and tourism (14) advertising, printing and media, (3) healthcare, (5) computer and services, (11) investment company and (5) others. The sample size was determined using Isaac and Michael's method (Sugiyono, 2014) and after calculation using the method, the sample size was 87 firms. Of the 87 samples, 25 companies will be taken from the wholesale sub-sector, 16 from the retail sub-sector, 16 from the restaurant, hotel and tourism sub-sectors, 11 from the advertising, printing and media sub-sector, 2 companies from the healthcare sub-sector, 4 companies from the sub-sector of computer and services, 9 companies from sub-sector investment company, and 4 companies from sub-sector others.

Model data analysis is to perform the following steps is first to test the normality of data used to see whether the distribution of data results of this study is normally distributed or not. The purpose of normality test is to find out whether the independent variable regression model and the dependent variable both have a normal distribution or not. A good regression model is to have normal or near-normal data distribution. The analytical tool is a nonparametric statistical test using one sample Kolmogorov Smirnov test. For the normal distribution size in a regression model can be seen on the normal graph of P-P plot, where when the points spread around the diagonal line and its distribution follow the direction of the diagonal line, then the data can be said to be a normal distribution. Then the second step is to model the regression equation with the ordinary least square model (OLS).

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

where :

Y	= productivity/firm performance
a	= constant
b_1 b_2 b_3	= coefficient
X_1	= level of education
X_2	= education major
X_3	= tenure
e	= Error Term

The last step is to test the regression coefficient using t-test and test the model of regression equation as a whole using F-test.

4. Findings and Discussions

Descriptive Statistics

Descriptive statistics indicate that the level of education of the directors in the industry trade and service has an average of 2.4, median 2 and mode 3. Since the data used in this level of educational variables is nominal, consisting of SMA = 1, S1 = 2, S2 = 3 and S3 = 4. Then it can be seen that the education level of the directors is 3, judging from the mode. Based on data that the education level of the main director is master (S2) as much as 564 people or by 46 percent. Although there is a president director who has a doctoral education level of 2.3 percent but there is still a director's level of education is with high school graduates, as many as 119 people or nearly 10 percent. This shows that education is relatively low, that is, SMA can still be the main director.

The type of education using the nominal scale is the primary director of the business school = 1 and the non-business is 0. 74% percent of the director's education is from the business school, whether it comes from the faculty of economics, or the master's education from the business school MM or MBA. As much as 26 percent of the funds, the director's education comes from non-business schools, whether from engineering, education or agriculture. Then, when viewed from the level of education and type of education, of 74 percent of education directors who come from business schools, of which 540 people or 44 percent are master's inquiry. While the director of doctoral education all is from non-business schools, which is as many as 28 people or 2 percent.

There are 8 directors with experience above 31 years or reaching 0.6 percent. In general, the President Director holds between 1 and 10 years, ie 5 years of directors with 601 persons or 311 persons taking a maximum of 10 years. This shows that the turn of the main director in the industry sector is relatively good.

This productivity variable is the ratio of output per input. An output is the volume of sales and input is the number of employees. From the tabulation results indicate that the productivity of many employees is under the level of 5,000 million rupiah per employee, which reached 90 percent. While the highest employee productivity is on the above 40,000 million rupiahs worker but only 2 time period or 0.2 percent.

The average ROA of the Trade and Service group is 0.0234 or 2.34 percent, with a minimum value of -1.73 and the maximum value is .54. When ROA data are grouped into several groups, the results are as follows: more than 73 percent, firms get ROA below 0.05 or 5 percent. Or 89 percent of companies in the Trade and Service industry is getting 10 percent ROA. While companies that earn ROA above 10 percent there are 133 companies from a total of 1232 or about 10 percent. While companies that get ROA below zero is as much as 17 percent. ROA below zero shows the company suffering losses.

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Descriptive Statistics

		TKTPENDIDIK	JENISPENDD	PENGALAMAN	PRODUKTIVITAS	ROA
N	Valid	1232	1232	1232	1232	1232
	Missing	0	0	0	0	0
Mean		2.4067	1.7443	7.4651	1967.3693	.0234
Median		2.0000	2.0000	6.0000	535.5000	.0156
Mode		3.00	2.00	2.00	2725.00	.00
Std. Deviation		.69305	.43642	6.23103	4355.95999	.13513
Minimum		1.00	1.00	1.00	1.00	-1.73
Maximum		4.00	2.00	32.00	44153.00	.54

Normality Data Test

From the results of skewness, calculation shows below only graduate variables that have a value below -1, while other variables have a value above 1, so it can be said only variable Graduates are normally distributed. Therefore other variables need to be adjusted for data to be normal. For variables that have negative skewness value will try to be adjusted by using logarithm.

Normality test

	N	Skewness	
	Statistic	Statistic	Std. Error
Lulusan	1232	-.330	.070
Jenispendd	1232	-1.121	.070
Pengalaman	1232	1.368	.070
Produktivitas	1232	4.858	.070
Roa	1232	-5.750	.070
Valid N (Listwise)	1232		

Regression Equation Model ,Coefficient Regression test (t-test) and Regression Equation Test (F-test)

Dependent Variable: Productivity

Level of Education

Education level has a positive coefficient of 226,484 means that the variable Education Level positive effect on productivity, the higher level of education of the main director productivity will be even greater and vice versa. The value of t is 1.127 and the value of t-table with alpha 5% is 2.2441 and this shows the value of t < t table, so Ho is accepted. If seen from significant value, then sig value is 0,260 and sig alpha 0,05, then sig value > sig alpha, thus Ho is rejected which means that the education level of the main director has a positive effect but not significant to productivity.

This study contradicts the research of Hua (2005) examining the differences in the education level of primary education, secondary education and university education in China on productivity. The results show that the level of education at the university education level is higher than in primary and secondary education. While this study shows that education level has no significant effect on productivity. But this research is in line with the results of research Ng and Felmand (2009) examined the level of education and job performance. Its results indicate that the educational level is not related to the productive work behavior and is very weakly related to supervision.

In this research indicates that education level and education type of the main director have a positive and significant effect on employee productivity. This positive relationship can be seen in the table below. At a productivity level below 5,000 indicates that the higher the education level of the president director, the more the number of directors achieving that productivity. So also with the productivity level of 20,000, 30,000 and 40,000. The main directors with higher levels of education are more numerous than directors who have lower levels of education.

Education Major

Type of education has a positive coefficient of 636,119 means that if the president director has a business education background, then the level of productivity of the company will be greater and vice versa. The value of t is 2.063 and the value of t-table with alpha 5% is 2,241, it shows t value> t table, so Ho is rejected. If seen from significant value, then sig value is 0.000 and sig alpha 0,05, then sig value <sig alpha, thus Ho is rejected. This means that the type of education of the president director has a positive and significant impact on productivity.

This study contradicts with the results of research Andriyan Muttaqin et al (2014) examines the background of education and employment and motivation to employee performance. The research shows that educational background has no significant effect on employee's performance and employee's life has a positive and significant effect on employee performance. While this research yields conclusion that business education background has a positive and significant effect on productivity.

The results of this study indicate that the relationship between the levels of productivity with the type of education is positive. This is shown in the table below. The main director with an educational background from a business school provides a higher level of productivity. The higher the productivity level, from 10,000 to above 40,000, then the number of directors with a business education background reaching that number is more than the director with a non-business background.

Tenure

Experience has a negative coefficient of -103,817 means that the longer a person served as the main director the level of productivity will decrease, and vice versa. The value of t is -5.096 and the value of t-table with alpha 5% is -2.224, this shows the value of t < - table, so Ho is rejected. If seen from significant value, then sig value is 0,009 and sig alpha 0,05, then sig value <sig alpha, thus Ho is rejected. This means that the experience of the president director has a negative and significant effect on productivity.

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The results of this study are in line with the results of Andriyani Muttaqin et al (2014) examined the background of education and employment and motivation to employee performance. Employee period has a positive and significant effect on employee performance.

The results of this study indicate a negative relationship between productivity with experience, which means the higher the director's experience the productivity level decreases. It is understandable that the longer a person becomes the president director then there is boredom or boredom in working so that the motivation of work becomes smaller. However, if someone is new as a director, then the motivation of work is very high to be achievers that can increase productivity. This is shown also in the table below. The main directors with 1 - 5-year experience tend to contribute more, compared to directors with longer work experience.

Coefficient Regression Result

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1087.708	613.398		1.773	.076
	EducationLevel	226.484	200.994	.036	1.127	.260
	EducationMajor	636.119	308.391	.064	2.063	.039
	Tenure	-103.817	20.370	-.149	-5.096	.000

a. Dependent Variable: PRODUCTIVITY

Based on the value of F of 14.168 and F-table for alpha 5% with a degree of freedom v1 = 3 and v2 = 1228 is 2.6121, then F value > F table, so Ho is rejected and Ha is accepted. Similarly, when viewed from the significant value, the significant value is 0.000 and significant alpha is 0.05 thus significant value <significant alpha 5%, which means rejecting Ho and accepting Ha. Reject Ho means that the variables education level, type of education and working experience of the president director affect the productivity of the company.

ANOVA: Productivity

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	781425752.966	3	260475250.989	14.168	.000[b]
	Residual	22576045195.994	1228	18384401.625		
	Total	23357470948.960	1231			

a. Dependent Variable: PRODUCTIVITY
b. Predictors: (Constant), EducationLevel, EducationMajor, Tenure

Dependent Variable: ROA

Level of Education

Education level has a positive coefficient of 0.005, meaning that the higher level of education of the president director, the higher the ROA obtained, and vice versa. The value of t is 0.782 and the value of t-table with alpha 5% is 2.2441, this shows the value of t > t-table, so Ho is rejected. If seen from significant value, then sig value is 0,009 and sig alpha 0,05, then sig value <sig alpha, thus Ho is rejected. This means that the education level of the main director has a positive and significant impact on productivity.

The results of this study contradict the results of research conducted by Gantenbein et al. (2011) that investigates the characteristics of directors such as education, work experience and business on financial performance found that the characteristics of directors have a negative and significant impact on the company's financial performance. Yet this research supports the results of the Ying and Mei research (2014) indicating that the master educational level of CEOs cannot improve the performance of the company.

The results of this study indicate that there is a positive but not significant relationship between ROA with education level. If this is seen from the table below shows that the spreading level of education on ROA is relatively diffuse and relatively similar, especially the level of undergraduate education with master education. Another reason, ROA is the ratio between net income and total assets, so this is not directly related to employee performance.

Education Major

Type of education has a negative coefficient of -0.041 means that if the president director has a business education background, then the level of corporate ROA will shrink, and vice versa. The value of t is 4.262 and the value of t-table with alpha 5% is 2.2441, it shows the value of t > t-table, so Ho is rejected. If seen from significant value, then sig count is 0.000 and sig alpha 0,05, then sig value <sig alpha, thus Ho is rejected. This means that the type of education of the main director has a positive and significant impact on productivity.

The results showed that there is a positive and significant relationship between ROA with the type of education. This is supported by the data in the table below. From the table below shows the director with a business education background has a larger contribution than a director with a non-business background. Directors of business education backgrounds understand financial management, so as to regulate the use and source of funds

Tenure

Experience has a negative coefficient of 0.001, meaning that the longer a person served as the main director the ROA level decreases and vice versa. The value of t is 2.356 and the value of t-table with alpha 5% is 2,241, it shows t value < t-table, so Ho is rejected. If seen from significant value, then sig count is 0,009 and sig alpha 0,05, then sig value <sig alpha, thus Ho is rejected. This means that the experience of the president director has a negative and significant effect on productivity.

The results showed a positive and significant relationship between experience and ROA. This means that the longer a person is a director, the greater the company's ROA. Based on the data, there are 601 people who have experience between 1- 5 years with the highest level of education is the master's education. And there is still a director with a high school education level but has a long experience, even up to 35 years. It can be explained that although the company has become public property will control the

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company still owned by the owner, and owners with high school education level can be served as a long-standing director.

Coefficient Regression: ROA

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.071	.019		-3.717	.000
	EducationLevel	.005	.006	.025	.782	.434
	EducationMajor	.041	.010	.132	4.262	.000
	Tenure	.001	.001	.069	2.356	.019

a. Dependent Variable: ROA

Based on the calculated F value of 9,860 and F table for alpha 5% with a degree of freedom v1 = 3 and v2 = 1228 is 2,6121, then F value > F-table, so Ho is rejected and Ha is accepted. Likewise, when viewed from the significant value, significant value is 0.042 and significant alpha is 0.05 thus significant value < significant alpha 5%, which means rejecting Ho and accepting Ha. Reject Ho this means that the variables education level, type of education and working experience of the president director affect the productivity of the company.

ANOVA[a] ROA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.529	3	.176	9.860	.000[b]
	Residual	21.951	1228	.018		
	Total	22.480	1231			

a. Dependent Variable: ROA
b. Predictors: (Constant), EducationLevel, EducationMajor, Tenure

5. Conclusions

Based on the results of the analysis, this study concludes that (1) The level of education, type of education and experience of the main director significantly influences the company's productivity in the Trade and Service company, (2) Level of education, have a significant effect on Return on Assets, (3) The level of education of the main directors of Trade and Service companies has almost equal education level between master's and bachelor's education, (4) The type of education of the main director is more with educational background of business school, either from an economics graduate, as well as a master MBA and MM, (5) The experience of the chief directors of Trade and Service companies has more than five years of experience.

Although the level of education does not have a significant effect, the main director is already more highly educated than the undergraduate, since the level of education is important for a president. Preferably someone who will serve as a director as well as from a school/business school and business school should provide a curriculum relevant to the

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development of the business. It is a good idea to have someone as the president director with a maximum span of 10 years because there will be saturation.

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