

Board diversity and earning management in companies listed in Indonesian stock exchange

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Abstract- This research aims to explore the relation between company's board diversity and earning management in Indonesian Listed Companies. As independent variable, board diversity measured by index of variation of the diversity of gender, nationality, age, and educational background. While as dependent variable, earning management measured by discretionary accruals. This research also used company's size and type of industry as controlling variable. Data collected from Indonesian Stocks Exchange (IDX) for the past 6 years using purposive sampling method producing 298 observations, then analyzed using multiple linear regressions. The result of the research shows that board diversity have negative effect on earning management, means the higher board diversity, the lower earning management. Other finding suggested that both industrial type and company's size does not affect earning management. Therefore it is hope that this result can be used as a consideration to maximize the company good corporate governance practice

Key words- Board diversity, earning management, Good Corporate Governance, index of variation

I. INTRODUCTION

In the last few years, cases related on deliberate errors in reporting financial condition attract public attention to the issues on how companies should be managed. Corporate scandals such as Maxwell Corporation in the UK in 1991, Enron in the United States in 2001, Worldcom in the United States in 2002, Parmalat in Italy in 2003, AIG in the United States in 2005, and Lehman Brothers in 2008, followed by the increase of shareholders' activeness have encouraged better corporate governance practices.

The implementation of good governance can reduce the manager's intension to make earning management. Earning management occurs when managers use the accounting policies and manipulate transactions to change financial statements with intention of either to mislead the users of financial statements related to important numbers in the report or to gain personal benefit by manipulating the reported accounting numbers [1]. Earning management is also defined as a deliberate misreporting of a company's financial statements which occurred through a deliberate mistreatment with the aim of deceiving the users of financial statements [2]

The manager has the intention to do profit manipulation due to several reasons, such as: (1) to maximize the value of the firm, (2) to increase compensation and job security, (3) to avoid the negative effect of profit change [1]. The implementation of good corporate governance by managers can reduce the intenton to make Earnings Management.

Corporate governance describes the framework of how companies are directed and monitored, for example: through setting company goals and monitoring of performance in relation to the established objectives. Good corporate governance aims to encourage boards and management to achieve these objectives, which are, actually, the interests of the company and its shareholders [3].

This framework combines structural and behavioral components. The structural component involves the separation of roles between the commissioner and the director and the number of independent commissioners on the board. While the behavioral component, which is used when assessing the effectiveness of corporate decision making, includes the attendance of commissioners on the board's meetings and the disclosure of

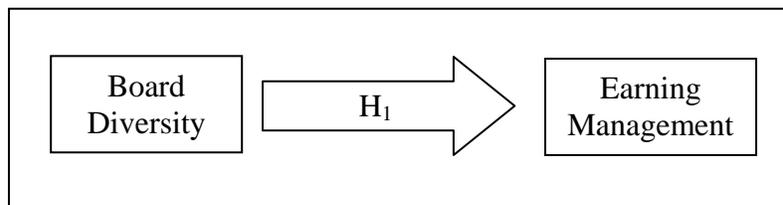
company's remuneration. However, unlike traditional elements, board diversity and corporate codes of ethics are seen as indicators of independence and accountability of decision making.

Some researches that focus on diversity and its effects on earning management reveals a wide range of findings. Rose [4] who conducted research in Denmark, examined the relationship between gender diversity and Tobin's Q score found no significant relationship between gender diversity and the value of Tobin's Q. Rauf [1] who examined the relationship between corporate characteristics and council on earning management found that firm size has a positive relationship to earning management, operational cash flow negatively affect earnings management, and board and race size have no effect on earnings management. Buniamin [5] who investigated the relationship between board diversity as measured by the presence of women in councils on earning management in Malaysia, found that board diversity positively affects the accrual discretion in Malaysia. The research of Lakhali [6], who investigated the relationship of women in councils in France to earning management shows that women have a positive influence on the accrual discretionary. Bala [2] who conducted a study in Nigeria, found an inverse relationship between board characteristics and earnings management, while board composition and women are positively associated with the accrual discretion.

The results of those researches which are still various make the research concerning board diversity is still interesting to conduct. This research tries to see the effect of board diversity on the earning management in the company. In this research, the 'board' is defined as a combination of the board of directors and the board of commissioners. To measure board diversity we are using board diversity index, four criteria are used: gender, nationality, age, and educational background. Board diversity is assumed to be high if there is a high index on board diversity index or a high variation of gender, nationality, age and educational background of board members.

The presence of board diversity in good corporate governance mechanism represent the principle of accountability and independence of decision-making. This principle of accountability should then be able to reduce the manager's intention to make earning management.

Based on the previous discussion, the earning management has the potential to become an agency problem as managers manipulate profits to mislead shareholders and to achieve their personal interests. Therefore the board has an important role in reducing the level of earning management. Some researches even show that good supervision by the board is able to maintain the credibility of the financial reporting process. In this research is then proposes research hypothesis, as follows H1: Board Diversity negatively affects earnings management as shown at Figure 1.



2. Research methodology

This research uses the quantitative and qualitative data in the form of secondary data which obtained by accessing the website www.idx.co.id and using the Indonesian Capital Market Directory (ICMD). Using the purposive sampling method founded 298 observations for the past 6 years. Based on the proposed research hypothesis, it is identified three variables used in this research, they are: Board Diversity as independent variable, earning management as dependent variable, as well as types and size of the companies as control variables.

The tests on the effect of board diversity on earning management are conducted by using multiple regression analysis. Multiple regression analysis is used to show the influence of independent variables to the dependent variable. Before conducting regression analysis, classical assumption test consisted of normality test, multicollinearity test, autocorrelation test, and heterokedastitas test are done. The result of the tests then used as the basis for making conclusions

2.1 Description and measurement of research variables

2.1.1 Board diversity

What is meant by the board is the number of members of the board of commissioners and the board of directors. Board diversity is measured based on four criteria: gender diversity within the board, the presence of non-Indonesian members in the board, the age variations of board members, and their educational background

Board diversity is assessed from the summation of those four criteria. The result is a score with a value range between 4 for the highest value and 0 for the lowest one. The criteria for each indicator are described as follows: (1) Gender diversity and the presence of non-Indonesian board members in the board are assessed by dummy, where if there is gender diversity or any non-Indonesian member in the board will be scored 1, otherwise it will be scored 0. (2) The age variation of board members is assessed using the standard deviation of the board member's age. The result is then divided into two groups, the group with a larger standard deviation value then scored 1, whereas the one with a small standard deviation will be scored 0. (3) Educational background is measured by, firstly, classifying educational background into accounting and finance, marketing management and strategic management, law, engineering, socio-economic and others. Then the company is divided into two groups, they are diverse and non-diverse. A company is said to be diverse when less than 40 percent of council members have the same educational background [7]. The diverse group will be scored 1, while the non-diverse will be scored 0.

2.1.2 Earning management

Analysis of earning management often focuses on management's use of discretionary accruals. Existing models range from simple models in which discretionary accruals are measured as total accruals to more sophisticated models that attempt to separate total accruals into discretionary and nondiscretionary components [8]. In this research, earning management was calculated using Jones modified model use by Dechow [8]. The formula is

$$NDA_{\tau} = \alpha_1(1/A_{\tau-1}) + \alpha_2(\Delta REV_{\tau} - \Delta REC_{\tau}) + \alpha_3(PPE_{\tau}), \quad (1)$$

The estimates of α_1 , α_2 , α_3 and nondiscretionary accruals during the estimation period are those obtains from the original Jones model

$$TA_{\tau} = a_1(1/A_{\tau-1}) + a_2(\Delta REV_{\tau}) + a_3(PPE_{\tau}) + v_{\tau}, \quad (2)$$

2.1.3 Types of industry

There are differences in terms of rules that govern specifically how financial companies institutions are run, There are certain measures that financial institutions must meet which are not enforced for non-financial companies. These rules will increase the incentive of financial company to meet the requirement. Therefore the financial company tends to make earning management. To control the industrial effect of this research, dummy is used; the non-financial company will be scored 2, while the financial one will be scored 1.

2.1.4 Company size

Firm size is assumed to have a direct effect on financial performance, as large firms will get benefit from economies of scale, market power, and access to resources over small firms [9]. Large companies are considered to have lower intension to do earning management comparing to small ones. In this research the size of the company is measured using the logarithm of the total assets of the company, so the greater the total logarithm value of company assets the greater the size of the company.

3. Finding and discussion

After analyzing data using SPSS 21 for windows program, the result shown in Table 1 below

Table 1. Multiple Linier Regression Result.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.038	.051		.740	.460
Diversity	-.016	.007	-.141	-2.190	.029
1 Company's size	.002	.008	.015	.249	.804
Industrial types	.008	.012	.042	.708	.480
LAGy	.229	.058	.228	3.955	.000

Table 1 reveals that board diversity has significant effect to earning management. It can be concluded from the number of level of significance 0.029 under the level of α of 5%, while the direction of board diversity effect on earning management is negative as shown from the negative β . From the above result, it can be said that the research hypothesis is accepted. This means board diversity negatively affects earning management. The presence of board diversity in good corporate governance mechanism represent the principle of accountability and independence of decision-making. This principle of accountability able to reduce the manager's intention to make earning management

This research finding is in accordance with Zwet's [11] finding that stated board diversity affects earning management. Lakhal [6] also stated that women presence inside the company's board can reduce earning management. Board diversity in company's board as hypothesized in this research is able to reduce earning management. It can be predicted that the role of diverse board as monitoring mechanism is able to control management's accounting policy so that it can reduce earning management.

Table 1 also shows that the controlling variables which are company's size and industrial type do not significantly affecting the earning management. It is concluded from the sig number, respectively 0.804 and 0.480, which are higher than the significant level of 5%

Other findings are that the company's size and industrial type do not affect earning management. Both large and small companies have the same incentive to do earning management. The same finding can be applied to financial and non-financial companies. Both of them have the same incentive to do earning management. These results are in accordance with Kim's [12] finding, stated that both large and small companies manage their earnings. While industrial type doesn't significantly affect earning management. Nurdiana [13] also stated that size of company does not affect earning management. Alexander [14] claimed that industry type and size do not influenced earning management. Furthermore he stated that earning management does not depending on the size of company.

4. Conclusion

This research aims to find out the relation between high board diversity with the earning management. High board diversity measured by the variation of gender, nationality, age, and educational background of company's board member, while earning management measured by discretionary accruals.

The result of the analysis which use 298 observations from the past 6 years show that there is a significant negative effect of board diversity on earning management. This means the higher board diversity, the lower earning management practice is. Based on this finding, the board diversity can be used as a good corporate governance mechanism since it can reduce the earning management.

Other finding is that company size and industrial type do not affect the earning management. Big or small companies have the same incentive to do earning management. The same for industrial type, either financial or

non-financial company have the same incentive to do earning management. Earning management does not depend on size or industrial type of company.

It is hoped that the results of this research can contribute to company decision makers in relation with the strategy of choosing board member as a new approach to maximize the company's good corporate governance practice. Furthermore it can be used as consideration for the regulator regarding regulation on the good corporate governance practice.

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