

Corporate governance and earnings management: Does gender matter?

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ABSTRACT

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This study aims to analyse the extent to which corporate governance is able to influence earnings management when moderated by the presence of woman in board of directors. Independent variables used in this study were board independence, board meeting, board size, managerial ownership, ownership concentration, institutional ownership, audit quality, and firm size. This study used the financial data from the companies that are registered in Indonesia Stock Exchange from 2015-2019. The total 1,749 data were tested using multiple linear regression analysis. The results show that board independence has significantly positive effect, while firm size have negatively significant effect on earnings management when the relationship is moderated by board gender diversity. The other variables do not show significant results. This study contributes to the provision of inputs to the literature development related to governance idea proposing that the woman factor in governance can be important for the company control. In addition, this study has the implication for companies to analyse good corporate governance and consider the role of woman in the company management.

Introduction

Efficient and effective corporate wealth management to support a company in running its operational activities with the purpose of having the edge over the competition is a vital point in doing business. This drives a company to constantly perform well. Therefore, one of the measuring tools in determining the effectiveness and efficiency of a company's operational activities and assessing the company performance is income statement where the profit that increases from year to year shows that the company is able to manage its resources to achieve the targeted profit (Kasmawati, 2018).

Companies, especially those registered in Indonesia Stock Exchange, are required to publish their annual financial statements periodically in accordance with the applicable national accounting standard. This is done as such so that each company applies the same standard and conditions in making financial reports thus avoids the practices of manipulating profits by the company. Financial reports can be defined as a report published by a company that discloses the performance and financial conditions of a company.

Earnings management was first studied by Healy (1985). Earnings management refers to a company practice of increasing or decreasing the reported profit on purpose to match what is expected. The advent of earnings management was propagated by managers as an instance of maximizing the CEO incentive compensation (Harakeh et al., 2019). Principally, earnings management does not violate General Accepted Accounting Principle (GAAP) but exploits a loophole in the existing accounting standard so that earnings report can be depressed while following the standard. In general, earnings management is committed by the managers by manipulating the transactions which aims to alter the financial statements to what is expected. This can lead to an inaccurate assessment on the financial reporting by the public and mislead the decision-making process conducted by the interested parties (Habbash et al., 2012).

Earnings management is still widely practiced by the companies in Indonesia. One infamous case of earnings management involves PT Garuda Indonesia that was found manipulating its earnings in financial year of 2018. Government and non-government financial institutions impose sanctions for this case. The company auditors responsible for auditing the company financial statements are also sanctioned by the Ministry of Finance.

The earnings management process is a practice carried out internally by the company for certain interests. Corporate governance plays an important role as an internal control of earnings management risk (Christiani & Nugrahanti, 2014). A number of studies conclude that corporate governance has a significant effect on earnings management. The elements of corporate governance such as board gender diversity (Wicaksana et al., 2017; Nurbach et al., 2019), board independence (Habbash et al., 2012; Idris et al., 2018), board meeting (Chouaibi et al., 2018; Kankanamage, 2015), board size (Aygün et al., 2014; Haider et al., 2016), managerial ownership (Alzoubi, 2016; Dimitropoulos, 2011), audit quality (Soliman & Ragab, 2014; Lopes, 2018), ownership

concentration (Ramadan, 2015), and institutional ownership (Alzoubi, 2016; Wimelda & Chandra, 2018) have been considerably studied by the previous researchers, and the results show that the characteristics of corporate governance may influence the corporate earnings management.

There have been numerous corporate governance studies on earnings management in Indonesia. However, the studies show that current corporate governance is still insignificant in influencing earnings management practices in companies owing to the fact that companies tend to solely fulfill the characteristics of corporate governance issued by authorized government agencies without profoundly taking into account the effectiveness and purpose of the governance itself. These characteristics include number of board independencies, number of audit committees, board size, number of board meetings, etc. in accordance with the regulations (Karina, 2020).

Board gender diversity which refers to the presence of woman directors in the structure of corporate board is one element of the corporate governance that has garnered particular attention from researchers. The presence of women on the board has a good impact on improving board behaviors and effectiveness because women on the company board are considered to be more active in managerial activities (Enofe et al., 2017). In general, women provide more motivations and display higher moral values, as well as propensity to be more conservative, so it is considered to minimize the possibility of earnings management (Alqatan, 2019). The studies by Damak (2018) and Saona et al. (2019) showed that female CFOs could decrease the possibility of earnings management practices due to their conservativeness. Male CFOs are more involved in earnings management, while female CFOs tend to avoid risks in drawing up financial reports and operating decisions (Azeez et al., 2019). This makes gender differences an important factor that can influence the course of good corporate governance in avoiding earnings management.

The objective of this study is to analyze the effect of various characteristics of corporate governance on earnings management when moderated by the involvement of female board. The research question would be “Do board independence, board meeting, board size, managerial ownership, ownership concentration, institutional ownership, audit quality, and firm size significantly influence earnings management when moderated by female board size in a company?”

This study is expected to contribute some insights to companies in implementing good corporate governance by taking into account the involvement of women in company management. In addition, it can also contribute to investors and other interested parties regarding what factors can influence the company in carrying out earnings management practices. This is also expected to give literature contribution that woman involvement in management plays an important role and should be recognized in the future studies on corporate governance and earnings management.

Literature Review

Managerial interests in a company performance can cause problems for the interested parties, such as potential investors, shareholders, commissioners, and so on. The problems arise because the company managers manipulate the company's reported earnings by exploiting the loophole in the existing accounting policies so that the earnings reported are in line with the personal interests. The purpose of earnings management is to manipulate the accrued earnings driven by the motivations related to contract constraints or can be referred to as political theory as well as the pressure on financial markets. The board of directors manipulates the company's income with the aim of increasing the value of the company and avoiding negative conducts such as violating debt covenants (Talbi et al., 2015).

In the previous studies, corporate governance influences earnings management. The effect of corporate governance on earnings management of manufacturing companies in Nigeria is investigated by Frank and Binaebi (2020) by taking the company samples from the period 2009-2019. The independent variables studied include board composition, audit committee size, and ownership concentration. The results show that board composition has a significantly negative effect on earnings management. Another study by Fairus and Sihombing (2020) finds that the institutional ownership, managerial ownership, independent board of commissioners, audit committee, and audit quality variables have significant effects on earnings management.

Effect of Board Gender Diversity on the Relationship between Corporate Governance Characteristics and Earnings Management

Role congruity theory suggests that perceived incongruity between the roles and attributes are typically associated with women and effective managers resulting in less favourable attitudes towards women managers (Eagly & Karau, 2002). This theory explains why only few women on top-level management consider a perceived incongruity between the attributes of woman's gender roles and a strong leader. This leads to the interest and trust issue on why woman should not be a part of top-level management. Women tend to have communal characteristics, such as kindness, compassion, nurturing, while men tend to have agentic characteristics, such as independence, ambition, and confidence. Agentic characteristics are associated with effective managers, therefore men are perceived to be more congruent with the management positions than women (Funk, 2019). However, women in a company are

known for their motivation, achievement, and confidence in dealing with various problems and improvising positive corporate performance strategies (Enofe et al., 2017). Female directors tend to be more risk-averse and more careful in taking corporate actions and decisions in order to minimize mistakes or irregularities that might occur in the organization (Zalata et al., 2019).

Board gender diversity has a negative effect on earnings management which means that the greater involvement of women in governance may discourage earnings management in a company (Wicaksana et al., 2017; Nurbach et al., 2019; Enofe et al., 2017; Trisanti, 2021). The presence of women in a board of directors could diminish the possibility of earnings management practice in a company with higher degrees of family ownership (Ismail & Abdullah, 2013). Because the involvement of women in the elements of corporate governance is thought to diminish the opportunity for earnings management to occur, it is necessary to conduct an in-depth study on how the involvement of women on the board can affect the relationship between corporate governance and earnings management. Corporate governance characteristics need to be examined further on how they affect earnings management practice in an organization. Corporate governance functions to control and assure the quality of management to gain trust and recognition from the investors. Some of the characteristics are independent board, board meetings activity, board size, ownership structures, audit quality, etc.

Board Independence

Board independence is very important to maximize the implementation of effective corporate governance. Independent board can effectively monitor the performance of the company neutrally without the influence of certain interests (Idris et al., 2018). The involvement of independent parties in decision making is very important in the event of a conflict within the company (Idris et al., 2018). The effect of board independence on earnings management is significant and negative which means that by adding the amount of board independence, this can improve the company performance and is also very helpful in monitoring the company from taking earnings management actions (Habbash et al., 2012; Idris et al., 2018).

H₁: Board gender diversity will significantly affect the relationship between board independence and earnings management.

Board Meetings

Board meetings are often held when a company is in turmoil with the aim of devising a strategy to improve the company financial performance. The more often the company holds board meetings, the more likely it is to minimize various problems, especially earnings management. Directors who frequently monitor the management tend to actively participate in board meeting activities (Abubakar et al., 2017). The previous studies have shown that board meetings have a significantly negative effect on earnings management which means that with the frequent meetings in a company, the possibility of earnings management actions to occur is minimal (Chouaibi et al., 2018; Kankanamage, 2015). Frequent board meetings can lead to the effectiveness in governance management and minimize the problems that arise with more active coordination (Abubakar et al., 2017).

H₂: Board gender diversity will significantly affect the relationship between board meetings and earnings management.

Board Size

A large board of directors has a good impact on governance because a board with more varied experiences can increase the effectiveness of monitoring earnings management (Sellami & Slimi, 2016). A larger board size may result in more inputs and more diverse views on the problems that exist within the company. This can unravel the possibility of internal interests in committing earnings management practices. Board size has a negative impact on earnings management which means that the larger the board size in a company, the less likely earnings management actions will occur (Haider et al., 2016; Aygun et al., 2014; Olaoye & Adewumi, 2018).

H₃: Board gender diversity will significantly affect the relationship between board size and earnings management.

Managerial Ownership

Managers are responsible for the use of company resources to maximize its value or performance. However, there are some managers who tend to make their own decisions with the aim of maximizing personal gain. Managers with a large proportion of share ownership can reduce the conflicts between managers and shareholders because their majority share ownership. This makes the managers tend to have greater decision-making authority, thereby enlarging the likelihood of earnings management if they have certain interests (Abdelrahimkhaider & Ravanramzan, 2019). The study by Ramadan (2015), and Wimelda and Chandra (2018) show that managerial ownership has a positive and significant effect on earnings management.

H₄: Board gender diversity will significantly affect the relationship between managerial ownership and earnings management.

Ownership Concentration

Ownership concentration refers to the share ownership by a majority shareholder that owns more than 5% of company shares (Ramadan, 2015). The more investors with share ownership of more than 5%, the narrower the opportunities for managers to manipulate earnings because the shareholders will try to protect their shares, particularly by tightening the control and supervision of the company management (Ramadan, 2015). Ownership concentration has a negative effect on earnings management. The higher the level of ownership concentration in a company, the easier it is for related parties to supervise, control, and reduce the information asymmetry which could give rise to the opportunities for managers to manage earnings (Saiful & Dyah, 2019).

H₅: Board gender diversity will significantly affect the relationship between ownership concentration and earnings management.

Institutional Ownership

Institutional ownership refers to the composition of share ownership by corporate or institutional organizations (Abdelrahimkader & Ravanramzan, 2019). The supervisory function of a company can be carried out by the investors in a corporate or institutional organization because the institutional investors tend to exercise tighter supervision and management control to achieve the interests of the shareholders (Wimelda & Chandra, 2018). The greater involvement of the institutional investors would positively influence corporate behaviors and pressure managers from committing earnings management (Alzoubi, 2016).

H₆: Board gender diversity will significantly affect the relationship between institutional ownership and earnings management.

Audit Quality

One way to enact the supervision on earnings management is by audit quality. The better the quality of the auditors, the higher the level of supervision and control over the financial statements presented by a company. Quality auditors represent the best auditors in their field, employed by the Big 4 with higher audit service fees (Bouchareb et al., 2014). A company with high level of audit quality shows little tendency to commit earnings management (Soliman & Ragab, 2014). The better the audit quality, the less the likelihood of errors in the report, hence, little possibility for earnings management will occur (Bassiouny, 2016). The previous studies show that audit quality has a negative and significant effect on earnings management (Soliman & Ragab, 2014; Lopes, 2018).

H₇: Board gender diversity will significantly affect the relationship between audit quality and earnings management.

Firm Size

Firm size refers to the scale of a company measured by its total assets (Mahawyahrti & Budiasih, 2016). The larger the company assets, the less the possibility of earnings management to occur because large companies gain more significant public attention which will drive them to prepare the corporate financial reports more carefully (Sellami & Slimi, 2016). Firm size has a negatively significant effect on earnings management (Ahmad et al., 2014; Mahawyahrti & Budiasih, 2016). Earnings management motivation in big companies is insignificant because they are viewed more critically by the shareholders and other externals.

H₈: Board gender diversity will significantly affect the relationship between firm size and earnings management.

Research Method

The research population was the companies listed at the Indonesia Stock Exchange with published financial reports. The sample selection method used was purposive sampling with sampling criteria, including; First, all public companies which are listed at the Indonesia Stock Exchange (IDX) and have complete annual financial reports from 2015-2019 for the calculation of research variables. Second, annual financial statements which are determined at the end of the year, on December 31 to be precise, and have been audited consistently. Third, excluding the samples from the companies operating in financial sector.

Dependent Variables

The measurement of earnings management in this study used the Modified Jones model formula (Dechow et al., 1995) as follows.

$$\frac{TCA_{it}}{A_{it-1}} = \alpha_1 \left(\frac{1}{A_{it-1}} \right) + \alpha_2 [(\Delta REV_{it} - \Delta REC_{it}) / A_{it-1}] + \alpha_3 \left(\frac{PPE_{it}}{A_{it-1}} \right) + \epsilon_{it} \quad (1)$$

Where:

TCA_{it} = Total accruals of company i in year t

A_{it-1} = Total asset at the end of year $t-1$

ΔREV_{it} = Sales in year t minus sales in year $t-1$

ΔREC_{it} = Net receivables in year t minus net receivables in year $t-1$

PPE_{it} = Gross value of fixed assets at the end of year t

ϵ_{it} = Residuals

Earnings management value used the residual value from formula (1) as the value of discretionary accruals.

Independent Variables

The independent variables in this study were as follows.

Table 1. Operational definitions of independent variables

No	Variable	Measurement	Source
1	Board Independence	Number of independent boards/total number of boards of directors	Sellami and Slimi (2016)
2	Board Meeting	Number of official regular meetings of the board of directors	Abubakar et al. (2017)
3	Board Size	Total number of members of the board of directors	Sellami and Slimi (2016)
4	Managerial Ownership	Number of shares of directors/Number of shares outstanding	Waweru and Prot (2018)
5	Ownership Concentration	Number of shares owned by investors above 5%/Number of shares outstanding	Guo and Ma (2015)
6	Institutional Ownership	Number of shares owned by the institution/Number of shares outstanding	Guo and Ma (2015)
7	Audit Quality	Audit fee/total sales	Waweru and Prot (2018)
8	Firm Size	Logarithmic value of total assets	Waweru and Prot (2018)

Moderating Variable

The moderating variable in this study was board gender diversity. This variable showed the level of woman involvement in the board of directors. The board gender diversity formula was the number of female boards divided by the total number of boards of directors (Waweru & Prot, 2018).

Data Analysis Method

This study used multiple linear regression analysis. The data testing was carried out including statistical descriptive test, F test, and t test to address the hypotheses. The regression analysis of the data used in this study was as follows.

$$DA_{it} = \alpha_0 + \alpha_1 IND_{it} + \alpha_2 MEET_{it} + \alpha_3 BSIZE_{it} + \alpha_4 MAN_{it} + \alpha_5 CON_{it} + \alpha_6 INS_{it} + \alpha_7 AQ_{it} + \alpha_8 FSIZE_{it} + \alpha_9 IND*GEN_{it} + \alpha_{10} MEET*GEN_{it} + \alpha_{11} BSIZE*GEN_{it} + \alpha_{12} MAN*GEN_{it} + \alpha_{13} CON*GEN_{it} + \alpha_{14} INS*GEN_{it} + \alpha_{15} AQ*GEN_{it} + \alpha_{16} FSIZE*GEN_{it} + \epsilon \quad (2)$$

Where:

DA = Discretionary accruals of company t in year i

IND = Board independence of company t in year i

MEET = Board meeting of company t in year i

BSIZE = Board size of company t in year i

MAN = Managerial ownership of company t in year i

CON = Ownership concentration of company t in year i

INS = Institutional ownership of company t in year i

AQ = Audit quality of company t in year i

FSIZE = Firm size of company t in year i

GEN = Board gender diversity of company t in year i

Results and Discussion

This study used 625 companies listed at the IDX in 2015-2019. 223 companies did not meet the research criteria, therefore only 402 companies were sampled. The data analysis found that there were 261 outliers in the data, so the number of the observational data which were further processed was 1,749 data. 1,749 data were analysed statistically and descriptively. Table 3 is the results of the descriptive statistical test.

Table 2. Descriptive of Samples

Description	Number
Companies listed at the IDX	625 companies
Companies that did not meet the criteria	(223) companies
Companies categorized as samples	402 companies
Research year	5 years
Total company data for the period 2015-2019	2,010 data
Total data of outlier companies	(261) data
Total data of tested company	1,749 data

Table 3. Descriptive Statistical Analysis Test Results

Variables	n	Minimum	Maximum	Average	Std. Deviation
Discretionary Accruals	1749	-8.98335	3.26864	-0.37862	0.57832
Board Gender Diversity	1749	0	1	0.12624	0.18063
Board independence	1749	0	0.75000	0.15959	0.13901
Board Meeting	1749	1	104	14.73356	12.22786
Board Size	1749	2	16	4.91424	2.08777
Managerial Ownership	1749	0	0.79861	0.02110	0.08996
Ownership Concentration	1749	0	0.99770	0.41002	0.25196
Institutional Ownership	1749	0	0.99770	0.50108	0.29508
Audit Quality	1749	0	8.36934	0.02827	0.32621
Firm Size	1749	6.78207	15.94305	12.55008	0.85784

Table 3 shows that the average of discretionary accruals value is -0,37862, which means that on average the companies in Indonesia managed their earnings by reducing the value of earnings. The data also show that on average the companies in Indonesia had female members on the board of directors as many as 12.6% of the total number of the members of the board of directors. This number illustrates how small was the presence of female members on board of directors in the companies in Indonesia. The average number of the boards of directors in Indonesia is 4-5 directors. On average, the board meetings were held 14-15 times in one year. This concludes that the companies in Indonesia are considered to have met the criteria for good governance listed in the Financial Services Authority Regulation Number 33/POJK.04/2014 (Otoritas Jasa Keuangan, 2014) which states that the number of the board of directors is at least 2 people, and the board meetings should be held at least once in every month. The descriptive analysis of the ownership structure shows that the average managerial ownership, average ownership concentration, and average institutional ownership were 0.02110, 0.41002, and 0.50108 respectively. This shows that the company ownership structure in Indonesia is mostly owned by institutions.

Table 4. Correlation Coefficient Test Results

	Earning Management	Board Gender Diversity	Board independence	Board Meeting	Board Size	Managerial Ownership	Ownership Concentration	Institutional Ownership	Audit Quality	Firm Size
Earning Management	1									
Board Gender Diversity	-0.0693	1								
Board independence	0.0376	-0.0170	1							
Board Meeting	0.0378	0.0379	-0.0361	1						
Board Size	0.0450	0.0043	0.1277	0.2871	1					
Managerial Ownership	0.0043	-0.0291	0.0010	-0.0607	0.0125	1				
Ownership Concentration	0.0010	-0.0168	-0.0327	0.0524	0.0122	0.0025	1			
Institutional Ownership	0.0020	-0.0283	-0.0554	-0.0021	0.0064	0.2828	0.4014	1		
Audit Quality	0.0014	-0.0140	0.0111	-0.0064	-0.0070	-0.0070	-0.0007	-0.0012	1	
Firm Size	0.0938	-0.0058	0.0209	0.2597	0.4651	-0.0316	0.0181	0.0184	-0.1752	1

In Table 4, it can be seen that the correlation coefficient values for all variables are below 0.8. This shows the absence of multicollinearity between variables. The next test was conducted to address the hypotheses. The results of the F-test showed the significant results with the p-value 0.001. These results conclude that the independent variables in this research fit to explain dependent variable simultaneously.

The t-test results show that board independence and firm size have significant effects on earnings management when moderated by board gender diversity. This implies that the high presence of women in the board of directors of a company may amplify the influence of independent boards and firm size on earnings management significantly. The other independent variables did not exhibit the significant relationships with earnings management directly or when moderated by board gender diversity. Thus, in this study only hypotheses 1 and 8 are proven.

Table 5. t-Test Results

	<i>Coefficients</i>	<i>t-Statistic</i>	<i>P-value</i>	<i>Conclusion</i>
Board independence	1.5114	0.1366	0.8912	-
Board Meeting	-0.2385	-0.4787	0.6321	-
Board Size	-3.5042	-1.0995	0.2716	-
Managerial Ownership	4.0581	0.0733	0.9415	-
Ownership Concentration	5.2356	0.0232	0.9814	-
Institutional Ownership	-0.0061	-0.0706	0.9437	-
Audit Quality	0.0031	0.6860	0.4927	-
Firm Size	22.4728	3.9885	6.9054	-
Moderating effects of board gender diversity:				
Board independence	100.9431	2.1039	*0.0355	H1 is supported
Board Meeting	3.7648	1.5731	0.1158	H2 is not supported
Board Size	16.4156	1.1033	0.2700	H3 is not supported
Managerial Ownership	125.4496	0.4256	0.6703	H4 is not supported
Ownership Concentration	10.5234	0.5476	0.5840	H5 is not supported
Institutional Ownership	0.6683	0.0402	0.9678	H6 is not supported
Audit Quality	0.0716	0.6572	0.5110	H7 is not supported
Firm Size	-20.5872	-3.6950	*0.0002	H8 is supported

Board independence affects earnings management significantly and positively if moderated by board gender diversity. While the result showed significant relationship, it is contrast with the literature review which states that many negative relationships were found between board independence and earnings management. Board independence is considered to have better professionalism and is not constrained by the company interests, so it is able to influence earnings management though it does not corroborate the findings of the existing literature. The research of Kjærland et al. (2020) as well as that of Jamaludin et al. (2015) also show the same results, but do not provide a clear analysis on this positive relationship. This makes this research even more interesting. The result showed that the larger number of independent boards could increase the likelihood of earnings management to occur if the female members of the board of directors' involvement in the company was equally high. This study suggests if a company has the large number of female members on the board of directors, the board independence function of the company does not work well to discourage earnings management but increases the likelihood of earnings management occurrence. There is not yet a more extensive testing on how the presence of women in the board of directors can influence the actual role of board independence in discouraging earnings management.

Firm size has a negative and significant effect on earnings management when moderated by board gender diversity. With the increasing presence of female directors in the management, firm size becomes significant in influencing managers to commit earnings management. The results show that the bigger the company, the smaller the possibility of earnings management to occur (Ahmad et al., 2014; Mahawyaharti & Budiasih, 2016). Big companies attach the importance of the market views and garner greater attention from the investors than small companies do, therefore, larger companies tend to avoid earnings management practices. The results also show that the presence of women in the board of directors significantly amplifies the effect of firm size on earnings management. A female director is considered to be cautious and more conservative in making decisions (Byrnes et al., 1999), thus the presence of women directors may discourage the practice of earnings management in a company (Wicaksana et al., 2017; Nurbach et al., 2019; Enofe et al., 2017; Trisanti, 2021).

It can be seen from the results that the presence of women in the company management is able to increase the influences of independent board and firm size on earnings management. Women on the board of directors can significantly influence the performance of independent board in controlling earnings management. The results showed that the larger the number of independent boards, the larger the possibility of earnings management if moderated by the higher level of board gender diversity. As for the firm size, the larger the company, the smaller the possibility of earnings management practices to occur if moderated by the larger number of female directors. One of the causes of the prejudice preventing women from achieving higher position is their own perception when they are placed in the leadership roles. However, the results showed how women in management can significantly reduce the earning management practices. In accordance with the results, the implication for the big-sized firms is that the companies can consider to put women on the board of directors to control the earning management practices. Women tend to have more motivation, achievement, and confidence in problem solving and are able to improvise the positive performance strategies with risk-averse attitude (Enofe et al., 2017; Zalata et al., 2018).

The other variables were proved as not significant in affecting earnings management practice even with the female board influences. The results showed that the number of women on the board of management could not significantly reduce earnings management. The number of board meetings also could not significantly assure to reduce earning management practices among the managers. This suggests that the board of directors' functions Indonesian companies are on the average in accordance with the regulation requirements but insignificantly able

to control the reporting quality. This becomes a matter which needs to be addressed by the regulators in evaluating the board of directors' standard and functions to create good corporate governance.

Ownership structures, such as managerial ownership, ownership concentration, and institutional ownership showed insignificant relationship with earnings management. Board gender diversity also could not significantly strengthen the relationship between managerial ownership, ownership concentration, as well as institutional ownership and earnings management. This result suggests that institutional investors or other significant stakeholders do not have the significant influence to control the internal data management and reporting or only few of the sophisticated investors who have fund and experiences in financial markets. Therefore, their presence is insignificant in preventing earning management practices in the firm.

The results also showed that audit quality was not significant to affect earnings management. The presence of female director on board also could not significantly increase the effect of audit quality on earning management. The result suggests that earnings management practices in a firm aim to increase the firm financial performance in the investors' point of view but ignore the role of Big 4 to prevent the practices of earning manipulation. The presence of a well-performing auditor is not for the management to prevent the probability of earnings management conducted by internal manager, but more to gain credibility and transparency in the performance of reporting in order to increase the investor trust.

Conclusion

Earnings management does not lose its relevance as a research topic. This practice is still commonly found in Indonesia. Earnings management refers to the practice of reducing or increasing the amount of reported earnings in the published financial statements to meet the company interests. This may reduce the earnings quality and not reflect the actual company conditions. Earnings management is carried out by the company's internals responsible for the financial reporting process. Good corporate governance plays a very important role in maintaining the quality of the company's business processes and reporting to the stakeholders. This study aims to analyse the extent to which corporate governance is able to influence earnings management. Some literature has examined extensively the influence of good governance on the level of earnings management in Indonesia. However, there has been no in-depth research on how the presence of women on the boards of directors is able to influence the relationship between corporate governance and earnings management. This study includes independent variables involving board independence, board meeting, board size, managerial ownership, ownership concentration, institutional ownership, audit quality, and firm size. The data were taken from the companies listed at the IDX in 2015-2019. The results show that board independence and firm size have significant effects on earnings management if the relationships are moderated by board gender diversity. However, the other variables do not exhibit significant relationships.

These results are expected to provide inputs for the literature development related to governance idea proposing that women factor in governance can be important in a company's control. In addition, this research is also expected to provide input for companies in analysing good corporate governance and considering the role of women in the company management. However, this research does not further analyse how the presence of women in a company can influence board independence role and firm size to significantly affect earning management. The results only show which factors that can be influenced by the presence of woman directors without further investigation. This becomes the limitation of the study. Further research is needed to examine more deeply the influence of woman directors in management behaviour regarding business planning and decision-making.

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References

- Abdelrahimkader, O., & Ravanramzan, S. (2019). The relationship between ownership structure and external audit towards accruals earning management among palestine listed companies. *IOSR Journal of Business and Management*, 21(7), 68–72. <https://doi.org/10.9790/487X-2107066872>
- Abubakar, I. A., Ishak, R. B., & Chandren, S. A. (2017). The effect of board attributes on real earnings management in Nigerian financial institutions. *Journal of Accounting, Business and Finance Research*, 1(1), 76–83.
- Ahmad, A., Anjum, M. T., & Azeem, M. (2014). Investigating the impact of corporate governance on earning management in the presence of firm size: Evidence from Pakistan. *Vidyabharati International*

- Interdisciplinary Research*, 3(2), 84–90.
- Alqatan, A. (2019). The association between board diversity, earnings management and firm performance in Kuwait: A research agenda. *Corporate Governance: Search for the Advanced Practices*, 254–274.
- Alzoubi, E. S. S. (2016). Audit quality and earnings management: evidence from Jordan. *Journal of Applied Accounting Research*, 17(2), 170–189. <https://doi.org/0089>
- Azeez, H. A. R. Al, Sukoharsono, E. G., Roekhudin, & Andayani, W. (2019). The impact of board characteristics on earnings management in the international oil and gas corporations. *Academy of Accounting and Financial Studies Journal*, 23(1), 1–26.
- Bassiouny, S. W. (2016). The impact of firm characteristics on earnings management: An empirical study on the listed firms in Egypt. *Journal of Business and Retail Management Research*, 20(3), 34–45.
- Bouchareb, M., Ajina, A., & Souid, S. (2014). Does the Adoption of IAS/IFRS with a Strong Governance Mechanism Can Deter Earnings Management? *International Journal of Academic Research in Economics and Management Sciences*, 3(1), 264–282.
- Byrnes, J. P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk taking: A meta-analysis. *Psychological Bulletin*, 125(3), 367–383.
- Chouaibi, J., Harres, M., & Brahim, N. B. (2018). The effect of board director's characteristics on real earnings management: Tunisian-listed firms. *Journal of the Knowledge Economy*, 9, 999–1013.
- Christiani, I., & Nugrahanti, Y. W. (2014). Pengaruh kualitas audit dan faktor lainnya terhadap manajemen laba. *Jurnal Akuntansi Dan Keuangan*, 16(1), 52–62.
- Damak, S. T. (2018). Gender diverse board and earnings management: evidence from French listed companies. *Sustainability Accounting, Management and Policy Journal*, 9(3), 289–312.
- Dechow, P. M., Richard G. Sloan, & Amy P. Sweeney. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193–225.
- Dimitropoulos, P. (2011). Corporate governance and earnings management in the European football industry. *European Sport Management Quarterly*, 11(5), 495–523.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573–598.
- Enofe, A. O., Iyafekhe, C., & Eniola, J. O. (2017). Board ethnicity, gender diversity and earnings management: Evidence from quoted firms in nigeria. *International Journal of Economics, Commerce and Management*, 5(6), 78–90.
- Fairus, M., & Sihombing, P. (2020). The effect of good corporate governance (GCG) mechanism on earnings management practices of the stubborn model (study case on mining sector companies listed on the Indonesia Stock Exchange 2014-2019). *European Journal of Business and Management Research*, 5(6), 1–6.
- Frank, B. P., & Binaebi, B. (2020). The effect of corporate governance and ownership structure on earnings management of manufacturing companies in Nigeria. *Journal of Accounting and Financial Management*, 6(2), 39–49.
- Funk, K. (2019). If the shoe fits: Gender role congruity and evaluations of public managers. *Journal of Behavioral Public Administration*, 2(1), 1–10.
- Guo, F., & Ma, S. (2015). Ownership characteristics and earnings management in China. *The Chinese Economy: Translation and Studies*, 48(5), 372–395.
- Habbash, M., Sindezingue, C., & Salama, A. (2012). The effect of audit committee characteristics on earnings management: *International Journal of Disclosure and Governance*, 10(1), 13–38.
- Haider, I., Sabir, H. M., Afzal, M. A., Sajid, M., & Khurshid, M. K. (2016). The effect of corporate ownership structure and board size on earnings management: A case of Pakistan Stock Exchange listed manufacturing firms. *Journal of Managerial Sciences*, 11(3), 483–508.
- Harakeh, M., El-Gammal, W., & Matar, G. (2019). Female directors, earnings management, and CEO incentive compensation: UK evidence. *Research in International Business and Finance*, 50, 153–170.

- Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, 7(1–3), 85–107.
- Idris, M., Siam, Y. A., & Nassar, M. (2018). Board independence, earnings management and the moderating effect of family ownership in Jordan. *Management & Marketing. Challenges for the Knowledge Society*, 33(2), 985–994.
- Ismail, K. N. I. K., & Abdullah, S. N. (2013). Does Women Representation on Boards and Audit Committees Restrict Earnings Management? The Impact of Family Ownership in Malaysian Firms. *Proceedings of the First AARESOC International Conference on Business and Management*, 12–18.
- Jamaludin, N. D., Sanusi, Z. M., & Kamaluddin, A. (2015). Board Structure and Earnings Management in Malaysian Government Linked Companies. *Procedia Economics and Finance*, 28, 235–242.
- Kankanamage, C. A. (2015). The relationship between board characteristics and earnings management: Evidence from Sri Lankan listed companies. *Kelaniya Journal of Management*, 4(2), 36–43.
- Karina, R. (2020). Pengaruh karakteristik komite audit dan auditor eksternal terhadap praktik manajemen laba di Indonesia. *Forum Ekonomi*, 22(2), 307–318.
- Kasmawati. (2018). Sumber daya manusia sebagai sumber keunggulan kompetitif. *Jurnal Idaarah*, 2(2), 229–242.
- Kjærland, F., Haugdal, A. T., Søndergaard, A., & Vågslid, A. (2020). Corporate governance and earnings management in a nordic perspective: Evidence from the Oslo stock exchange. *Journal of Risk and Financial Management*, 13(11), 1–18.
- Lopes, A. P. (2018). Audit quality and earnings management: Evidence from Portugal. *Athens Journal of Business and Economics*, 4(2), 179–192.
- Mahawyaharti, P. T., & Budiasih, I. G. A. N. (2016). Asimetri informasi, leverage, dan ukuran perusahaan pada manajemen laba. *Jurnal Ilmiah Akuntansi Dan Bisnis*, 11(2), 100–110.
- Mehmet, A., Ic, S., & Sayim, M. (2014). The effects of corporate ownership structure and board size on earnings management: Evidence from Turkey. *International Journal of Business and Management*, 9(12), 124–132.
- Nurbach, S. A., Purwohedi, U., & Handarini, D. (2019). Earnings quality: The association of board diversity, Executive compensation, debt covenant, and investment opportunity sets. *International Conference on Economics, Education, Business and Accounting*, 215–242. <https://doi.org/10.18502/kss.v3i11.4009>
- Olaoye, F. O., & Adewumi, A. A. (2018). Corporate governance and earning management of deposit money banks in Nigeria. *International Journal of Scientific & Engineering Research*, 9(7), 184–199.
- Peraturan Otoritas Jasa Keuangan Tentang Direksi dan Dewan Komisaris Emiten atau Perusahaan Publik, (2014).
- Ramadan, I. Z. (2015). Earnings quality determinants of the Jordanian manufacturing listed companies. *International Journal of Economics and Finance*, 7(5), 140–146.
- Saiful, S., & Dyah, A. (2019). Corporate Governance and Earnings Management: A Study of Indonesian Conventional and Islamic Banks. *Proceedings of the 1st Aceh Global Conference*, 662–667. <https://doi.org/10.2991/agc-18.2019.99>
- Saona, P., Muro, L., Martin, P. S., & Baier-Fuentes, H. (2019). Board of director's gender diversity and its impact on earnings management: An empirical analysis for select European firms. *Technological and Economic Development of Economy*, 25(4), 634–663.
- Sellami, Y. M., & Slimi, I. (2016). The effect of the mandatory adoption of IAS/IFRS on earnings management: Empirical evidence from South Africa. *International Journal of Accounting and Economics Studies*, 4(2), 87.
- Soliman, M. M., & Ragab, A. A. (2014). Audit committee effectiveness, audit quality and earnings management: An empirical study of the listed companies in Egypt. *Research Journal of Finance and Accounting*, 5(2), 155–166.
- Talbi, D., Omri, M. A., Guesmi, K., & Ftiti, Z. (2015). The role of board characteristics in mitigating management opportunism: The case of real earnings management. *The Journal of Applied Business Research*, 31(2), 661–674.
- Trisanti, T. (2021). Do companies with female on the board have effects on the earning management? Evidence

- Indonesia manufacturing listed firms. *European Journal of Humanities and Social Sciences*, 1(1), 19–25.
- Waweru, N. M., & Prot, N. P. (2018). Corporate governance compliance and accrual earnings management in eastern Africa: Evidence from Kenya and Tanzania. *Managerial Auditing Journal*, 33(2), 171–191.
- Wicaksana, K. A. B., Yuniasih, N. W., & Handayani, L. N. C. (2017). Board diversity and earning management in companies listed in Indonesian stock exchange. *International Journal of Scientific and Research Publications*, 7(12), 382–386.
- Wimelda, L., & Chandra, A. (2018). Accounting and finance review opportunistic behavior, external monitoring mechanisms, corporate governance, and earnings management. *Accounting and Finance Review*, 3(1), 44–52.
- Zalata, A. M., Ntim, C., Aboud, A., & Gyapong, E. (2019). Female CEOs and core earnings quality: New evidence on the ethics versus risk-aversion puzzle. *Journal of Business Ethics*, 160(2), 515–534.