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Gender diversity and firm performances suffering from financial distress: evidence from Indonesia

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Abstract

Purpose – This paper aims to demonstrate gender diversity in the structure of corporate governance and test the effect of diversity on the firm performance suffering from financial distress.

Design/methodology/approach – The paper is quantitative using a sample of 467 public firms in Indonesia. Data were analyzed into statistics descriptive and the hypothesis was tested using the test of logistic regression.

Findings – The preliminary results of the paper demonstrate the number of firms employing women and men in the structure of corporate governance of 13% on the commissioner board, 7% on the director board and 5% on the audit committee. Based on the test of effect, this paper further found that firms employing women and men (gender diversity) in the structure of the board of commissioners, tend to suffer from financial distress lower than firms only employing men (non-gender diversity).

Research limitations/implications – This paper is not an effort to make the proportion of voices of women equal to men, however the representation of women at least exists in the structure of corporate governance as part of workforce diversity and inclusivity. In addition, this paper is considered not to use panel data with the purpose of avoiding repetitive data because of the use of a nominal scale in the logistic regression model.

Practical implications – The finding of the paper is addressed to deliver insights into the current conversation on the issue of women's day with the theme of Each for Equal and to firms in positioning women in the structure of boardrooms.

Originality/value – This paper extends the limited scholarly work on the nexus between gender diversity and financial performance. The framework of social identity theory and the tenet of corporate governance are elaborated to disclose the finding that firm shareholders tend to benefit from gender diversity in the structure of the commissioner board.

Keywords Corporate governance, Distress, Diversity, Financial performance, Gender

Paper type Research paper

1. Introduction

Gender is terminologically different with sex, woman and man. If it is defined in a particular non-biological aspect, the meaning is broader. This research, for example, is on the business aspect. It will also be extended by connecting with behavior, role, and appearance in encountering problems and making decisions on firm performance. Ruisah (2018) stated that gender is a cultural concept used to distinguish roles, behaviors, mentalities, and emotional characteristics between men and women in society.

Gender equality is an issue voiced annually by women. March 18th is World Women's Day. In 2020, the theme of raised in women's day was Each for Equal which specifically wants gender equality not only involving women's issues in society, but also in business issues. Women's involvement is considered so important for business development. This issue certainly encourages a research in the context of gender to be conducted. What's more, securities and exchange commission in the USA have approved regulations for firms to disclose information regarding gender diversity (Dhir, 2015). In the business area, women business leaders are more likely to pay attention to social value than men (Hechvarria *et al.*, 2017) so gender diversity is more investigated in the business sector. This research is not designed as conducted by prior studies (Allison *et al.*, 2023; Kuzey *et al.*, 2022; Naeem *et al.*, 2022), and some of the findings are mixed (Abdullah, 2014; Abdullah and Ismail, 2013; Carter *et al.*, 2010; Endraswati, 2018; Fathonah, 2018; González *et al.*, 2020; Marquez-Cardenas *et al.*, 2022; Mohammad *et al.*, 2018; Ramadhani and Adhariani, 2017; Thanh Tu *et al.*, 2015).

Since International Finance Corporation released its report in 2019 (IFC, 2019) stating that the representation of women in business leadership positions is able to perform well in the company, gender diversity in the business sector should be highlighted. In its report, companies involving a proportion of female directors produced an average performance of ROA and ROE was higher than firms involving female directors. In addition, Charles *et al.* (2018) further found a positive effect of women's involvement in leading the increase into the market value. In regard to corporate sustainable performance with gender diversity, the negative effect has also been found by Naeem *et al.* (2022).

Gender diversity in the business area has driven the improvement of the firm performance in terms of ROA, ROE and stock value. In prior studies (Alabede, 2016; Dedunu and Anuradha, 2020), a positive impact on the relationship between gender diversity and firm performance has been found. It means that the inclusivity of women occupying structural positions is considered empirically to make firms more profitable, but how is the firm performance suffering financial distress? The increase may still occur in companies employing both gender diversity and non-gender diversity. Differences may be in the level of the increase, low or high, but how are they suffering financial distress? Is it same if compared to non-distressed performances? This condition leads the scheme of research should be designed to find additional contributions to the issue of gender diversity. In a prior study, Zhou (2019) related financial distress to the inclusivity of women directors demonstrating that financial distress is lower when women on the director board are occupied. The study only focuses on the structure of the director board. Being different from the prior study, this research extends the current finding in the literature of gender diversity in the structure of corporate governance on the financial performance tendency by analyzing firms in the condition of distress employing women in the structure of corporate governance including commissioner and director board, and audit committee. These three positions are important in driving the progress of the firm. The commissioner board can serve as a business principal having responsibilities for supervising corporate governance fully, particularly the policy implemented by operational executives. For independent commissioners, their positions are not affiliated with control stocks so that the status of their independence can protect minority shareholders in the structure of corporate governance. Furthermore, director board is a business executive leading the management to implement vision, mission and strategy in the companies as well as to report the outcome of performance to shareholders. Related to audit committee, its role is to assist the commissioner in doing the supervision and auditing and evaluating the firm performance.

Zhou (2019) focused on examining the board of directors, whereas independent commissioners can be considered as supervisory boards in improving the corporate governance system as previous scholars found positive effects of an independent board of commissioners on financial distress (Widhiadnyana and Dwi Ratnadi, 2019). The increase in the number the commissioners tends to improve operational supervision systems leading to better performance and avoiding financial distress (Kristanti *et al.*, 2016). The initial purpose of this research is to reveal gender diversity in the company's current business structure in Indonesia. Further purposes are to test the effects of gender diversity when companies are in a state of financial distress and analyze the effects arising from those conditions. As research contributions, the scheme of this research has been designed to differ from prior studies in that this research identifies gender diversity in the structure of the board of commissioners, directors and audit committees in the context of financial tendency suffering the financial distress. Second, theoretical arguments draw insights from the elaboration of social identity theory and literature on financial distress perspective on gender diversity so that this research contributes to the theory in terms of financial accounting. The third contribution is addressed practically to companies that no gender diversity in the business ownership of commissioner boards leads to higher financial distress. The last contribution is that the finding of this research demonstrating current descriptions regarding gender diversity in companies in Indonesia can be a feedback in providing answers related to gender issues and the business on world women's day.

The following section in this paper describes literature review and method. Afterward, results and discussion are presented in section 4. We end this paper in a conclusion containing implications and future studies in section 5.

2. Literature review

2.1 Theory framework

The study of gender diversity associated with business performance has been widely utilized from different points of view. Allison *et al.* (2023) stated that several studies theoretically underpin resource theory for explaining gender and performance differences. Charles *et al.* (2018) with the theory of resource dependence stated that companies provide open systems depending on external organizations and environmental contingencies where they must rely on outside organizations for obtaining human resources. Women are considered human resources providing a more varied perspective so that this theory can be affiliated with understanding gender diversities in the business sector. However, their research hasn't been able to provide a significant nexus between gender diversity and financial performance. On the other hand, in the elaboration on stakeholder theory, inconclusive results are found by prior researchers (Mohammad *et al.*, 2018; Reguera-Alvarado *et al.*, 2017; Willows and Van Der Linde, 2016). Stakeholders in the company require the presence of women in performing. The theory is that the presence of women brings unique perspectives in making decisions. On the other hand, social psychology theory becomes an alternative foundation in elaborating on gender diversity, although there is actually no significant relationship found between gender diversity and corporate performance (Ramadhani and Adhariani, 2017). Understanding mixed perspectives, the foundation of theory used by previous scholars is not specifically able to elaborate on the relationship between gender diversity and the performance of companies, particularly financial distress. Women's inclusivity is a concept of emphasis in building on this research and corporate governance in the companies is the initial context in elaborating the theory of developing the hypothesis. The company is a universal unit in which there is an organizational structure and business governance. If this is associated with the concept of gender, the company's organizational structure will have functions that can involve both men and women. They are forms of gender diversity having the same function in the business position.

Gender diversity in a business is present because of its value, experience and personality. Abebe and Dadanlar (2019) used social identity theory for elaborating on the involvement of women in the director board. This theory basically implies that individual knowledge that we belong to a social group with values from group membership (Billig *et al.*, 1991; Glassner and Tajfel, 1985; Tajfel, 1974). An identity indicates the ways in which a person understands a role in the social group. What is social? It is what you have together with others and what sets you apart from others (Berger and Luckmann, 1966). Social identity theory in this research underlines insights from the literature on empathy-based perspectives in terms of gender diversity and corporate governance. In this theory, Abebe and Dadanlar (2019) found that the presence of women reduces the occurrence of such lawsuits. When talking about identity, it refers to groups (Ibrahim, 2003). A group is shaped by similarities or matches between members of that group (Tajfel and Turner, 2004). It is a social system consisting of a number of people interacting with each other and involving in one activity together because they have a common goal and attitude.

2.2 Gender diversity and financial distress

Corporate governance is a legal and factual system directing and monitoring companies (Belcher, 2000; Cadbury, 2000; Werder, 2011). Basically, the structure of corporate governance is affected by various factors, especially used corporate theory, culture and the applicable legal system. In addition, the corporate governance system also depends on the cultural background of society and the economic and political history of a country as well as the quality of corporate governance distinguishes companies between the best and the worst (Daily *et al.*, 2003). Khanchel (2007) stated that the quality of corporate governance is important because investors, such as institutional investors, use corporate governance as one of the assessments for firms to carry out the operational activity in capital market and management. Therefore, good governance leads to good management and performance for stakeholders.

Corporate governance is a set of relationships between the firm’s management, boards, shareholders and other parties owning interests in the company. Good governance can provide a stimulus for them to achieve goals where they should facilitate effective supervision so as to encourage companies to use resources efficiently. In the corporate governance structure, the implementation of Good Corporate Governance (GCG) is so expected by all companies. The implementation of GCG commitments contained in the firm’s mission is used as guideline for the board of commissioners in carrying out supervision and providing advice to directors in business management, while directors can carry out the company’s operational activities properly. In this research, social identity theory can elaborate the structure of corporate governance in the financial distress and gender. This research draws insights from social identity theory that social identity means similarities and differences, personal and social and about what is shared with some people and what distinguishes one from others. All people have a series of gender categories acting as the basis for the creation of social identity as well as in relation to others (Moghadam, 1992). Social identity is also a concept of one’s self as a member of the group (Billig *et al.*, 1991). In social identity theory, directors, commissioners and audit committees are a number of people interacting with the business management in which they have the same objective in building the company. Krishnan and Park (2005) found a positive nexus between organizational performance and women’s involvement in top management structures. The proportion of women involvements drives better ROA performance. The representation of women in the top management of organizational structures on the board of directors leads to an increase in conservative financial reporting and a decrease in tax aggressiveness (Khlif and Achek, 2017). The increase in the value of firms is greater when the board has three or more women directors (Gyapong *et al.*, 2016).

The board of directors can have various beliefs when faced with an event. The direction of the board of commissioners in the management of the company is an additional assurance to the board of directors. Morris *et al.* (2005) stated that gender diversity can affect decision-making. The role of the audit committee is involved in assisting commissioners during supervision and inspection, and in evaluating the firm performance. If it refers to gender, biological and psychological factors influence each other's individual personalities (Tualeka, 2017). The board of commissioners, directors and audit committees uses their personality in making the decision. Men and women have different skills (Friedman, 1989). In the context of psychology, such as leadership attitudes, men tend to be bold and have great responsibilities, and their decision-making behaviors are more about taking risks, while women tend to pay more attention to detail and to be more sensitive to non-verbal signs. Women's leadership in the company is found to have higher performance (Qian, 2016). The combination of behavior and performance style is complementary so that when it is owned by the board of commissioners, performance tends to improve. Women are able to encourage good communication in decision making due to the inclusivity of perspective more diverse resulting in good ideas (Hillman, 2005).

Companies with women directors show very different behaviors related to investment decision making affecting financial performance significantly where men are more confident but women are more conservative and cautious (Zhou, 2019). From the perspective of investors, the existence of women directors leads the positive reactions because investors assume that the presence of women can increase the ability of the company in implementing better strategies when facing economic, social, and environmental problems (Loukil *et al.*, 2019). Therefore, the increasing representation of women can enhance the reputation and improve financial and social performances. In addition, women are more internally focused and more worried than men (Tamres *et al.*, 2002). The level of the emotional condition tends to be more felt by women (Nolen-Hoeksema, 2012). Companies employing women in business structures appear to be less financially distressed. Stoet *et al.* (2013) in an experimental study showed that women are more organized when they are under pressure. They justified that women in stressful and complex situations are able to be silent and to think about what is happening in front of them while men show slower and less organized when switching tasks.

Furthermore, if human integration in the organization is carried out, attitude and manner lead to an easy strategy to set. Gender diversity in organizational governance structures can be considered as a unique tendency in integrating human resources. Men and women tend to be formed by different social roles resulting in unique values of work and strategic behavior in decision-making (Davis *et al.*, 2010). In other words, the market orientation forming the performance is affected by gender diversity because women sometimes focus on profitability. Women have particular skills and knowledge because they also have different experiences and social backgrounds than men (Singh and Vinnicombe, 2004; Terjesen *et al.*, 2009), so this encourages additional choices in making decisions. The increasing representation of women can boost corporate reputation and improve financial and social performance and a more balanced gender composition is very likely to be more innovative (Østergaard *et al.*, 2011). The hypothesis in this research is built on the basis that companies involving diversity in governance structures in the board of commissioners, directors and audit committees are less likely to experience financial distress than companies not filled by women at all, nevertheless negative effects tend to be found in the nexus between corporate governance structures including gender diversity and the tendency of financial performance. Overall, this research hypothesizes that gender diversity in the structure of corporate governance affects negatively financial distress and it is subsequently outlined as follows.

H1a. Gender diversity on board of commissioners has negative effect on financial distress

H1b. Gender diversity on board of directors has negative effect on financial distress

H1c. Gender diversity on board of audit committees has negative effect on financial distress

3. Method

3.1 Research type, sample and data

Type of this research is quantitative using the effect testing on the nexus between variables. The sample was all public business sectors in Indonesia in 2018 including 682 firms. Final sample was 467 because there were 73 firms presenting non-Rupiah currency and 142 firms with nonavailable data. This research used data including annual financial statements in 2018. The period of 2018 was selected because the growth in the performance of companies on the IDX was reported positively as implied by Caesario (2019) that the research should be more representative when the growth shows the positive level.

3.2 Research variable definition and measurements

The diversity in this research was the number of women and men in the company structure. This research established commissioners, directors and audit committees because they were a major line in building and driving the business. For the tendency of financial performance, this research analyzes financial distress. Therefore, variables used gender diversity as an independent variable and financial distress as a dependent variable.

In the dependent variable, financial distress was symbolized in DISTRESS measures using Z-score analysis. Financial distress in this research refers to the tendency of companies considered to suffer financial pressures. Some latest studies have reached to utilize Z-score analysis to assess a company's performance condition (Desiyanti *et al.*, 2019; Olengga and Fauzi, 2020; Pekerti and Yovita, 2019). Primasari (2018) has tested that Z-score obtains more accurate values than other analysis tools. The Z-Score Altman models (Altman, 1968, 2013) in this research was formulated as follows.

Companies with the sector of manufacturing business

$$Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5 \ldots\ldots\ldots\ldots\ldots \text{Model} \qquad (1)$$

Companies with the sector of nonmanufacturing business

$$Z = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4 \ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{Model} \qquad (2)$$

Where,

X1 = Working capital/total assets

X2 = Retained earnings/total assets

X3 = Earnings before interest and tax (EBIT)/total assets

X4 = Market value of equity/book value of total liabilities

X5 = Revenues/total assets

If model 1 yielded a score of Z. If $Z < 2.99$, a company would be indicated to suffer from financial distress, otherwise if the value of Z showed more than 2.99, a company would be classified into financial distress. The measurement of financial tendency used Logit

DISTRESS with a value of one for distress and zero for non-distress. With respect to model 2, a company could be indicated to have non-distress, when the value of the Z-score showed more than 2.6.

This research used gender diversity composed of three diversities in the structure of corporate governances including commissioners (GENDER_COM), directors (GENDER_DIR) and audit committees (GENDER_AUDIT). The diversities were measured using a nominal scale, taking 1 for company placing women and men, and 0 for only placing whole men. In addition, this research involved control variables as previous studies in general related to gender diversity. The cross-section data used in this research involved all industries in 2018 so that industrial types were included as control variables. The business sectors were grouped into three sectors, namely primary, secondary and tertiary. The category size has been used to classify the business sector given 1 for the primary sector, and 2 for the secondary sector. For the tertiary characteristic, there were two subsectors consisting of financial and non-financial services, so this research divided two sub-sectors with financial services given 3 and non-financial services given 4. The control variable is measured using a dummy scale (k-1).

3.3 Hypothesis testing

Hypotheses in this research were tested using logistic regression testing in STATA. The equation is written as follows.

$$\text{Logit } \mathit{DISTRESS} = \alpha + \beta_1 \mathit{GENDER}\_\text{COM} + \beta_2 \mathit{GENDER}\_\text{DIR} + \beta_3 \mathit{GENDER}\_\text{AUDIT} + \beta_4 \text{TYPE\_IND} + \varepsilon$$

Where,

Logit *DISTRESS* = Financial performance tendency, given 1 for distress and 0 for non-distress

*GENDER*_COM = Gender diversity in the structure of the board of commissioners

*GENDER*_DIR = Gender diversity in the structure of the board of directors

*GENDER*_AUDIT = Gender diversity in the structure of the board of audit committees

TYPE_IND = Industry type

α = Constant and ε = error standard

The level of significance set in this research was at the level of $\alpha = 1\%$. $\alpha = 5\%$ and $\alpha = 10\%$. The interpretation of this research model in using logistic effect tests. Gender diversity has a significant effect in conditions of financial distress if the nexus between variables is at the level under 10% and vice versa where the gender diversity within the company. The emerging effect is likely to have two effects, namely positive and negative. The significant effect essentially signifies that there are differences in companies placing the gender diversity (women and men) compared to companies placing all men. When the effect is positive, companies with gender diversity in the structure of the organization tend to suffer financial distress compared to companies with no women at all (all held by men in the structure of the corporate governance).

4. Results and discussion

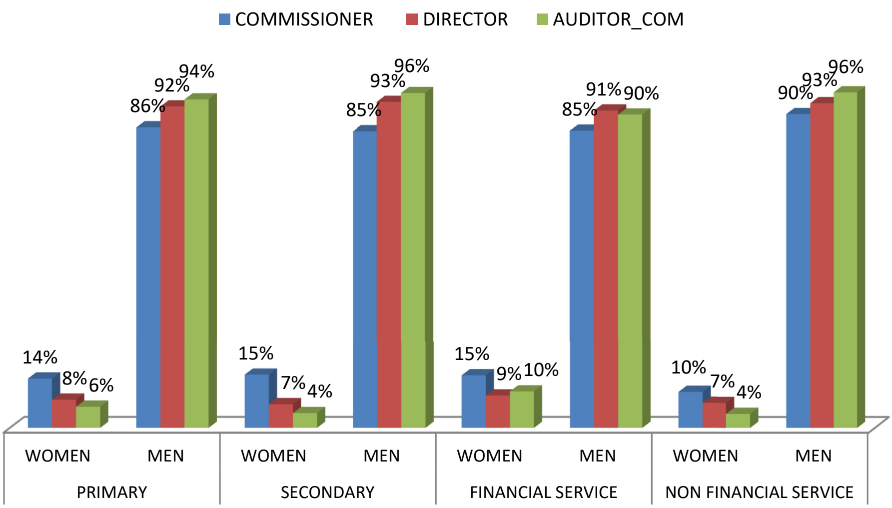
4.1 Descriptions of gender diversity in Indonesia and results of hypothesis test

Gender diversity is identified from the presence of women and men in occupying the structure of corporate governance. Multinational corporations are generally divided into several sectors. In Indonesia, businesses are grouped into three sectors, namely primary, secondary and tertiary. Based on the sector, this research classifies companies based on the primary sector consisting of mining, agriculture and fishery industries, while the secondary sector is manufacturing related to processing, and tertiary refers to financial and non-financial services. The following results are described in a bar chart with blue showing the position of the board of commissioners, red showing gender diversity in the board of directors and green is the audit committee.

In Figure 1, the primary sector consists of the mining, agriculture and fishery industries. We found 36 firms during the observation period. The number of companies involving women and men to occupy board position was 5 firms in the commissioner (14%), 3 firms in the director (8%) and 2 firms in the audit committee (6%), while the rest was filled entirely by men. The following sector is the secondary sector. It relates to the manufacturing industry with 119 firms in the observation period. Total companies involving women and men to occupy board positions were 18 firms in the commissioner (15%), eight firms in the director (7%) and five firms in the audit committee (4%), while the rest was filled by men.

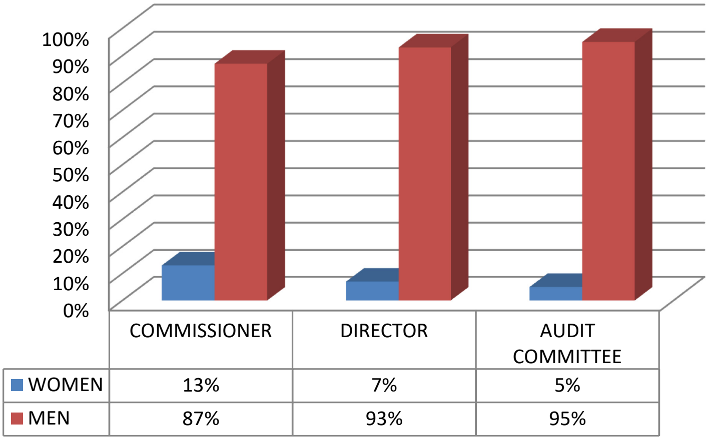
Furthermore, the tertiary sector consists of the financial sector (87 firms) and other services (225 firms). When comparing the two tertiary sectors, the percentage of companies with higher gender diversity was found in financial institution than in other service sectors. The number of companies involving women and men in the financial sectors was 13 firms in the commissioner (15%), eight firms in the director (9%) and nine firms in the audit committee (10%), while other service sectors had the commissioner with 23 firms (10%), the director with 16 firms (7%) and the audit committee with nine firms (4%). Overall, the finding of this research describes that the percentage of companies involving gender diversity is very low [1].

The next analysis is the identification of the entire sector shown in Figure 2. The results found that there were 59 firms (13%) whose organizational structure on the board of commissioner was held by women and men, and the remaining 408 firms were held by men (87%). In the structure of the board of director, there were 35 firms with gender diversity (7%) and 434 firms with non-diversity (93%), while in the audit committee, there were only 25 firms with gender diversity (5%). These results show that gender diversity in Indonesia is very low, but does it have effects on financial distress? The effect is further tested. This research



Source(s): Authors own work

Figure 1.
Gender diversity based on various sectors



Source(s): Authors own work

Figure 2.
Board gender diversity in all sectors

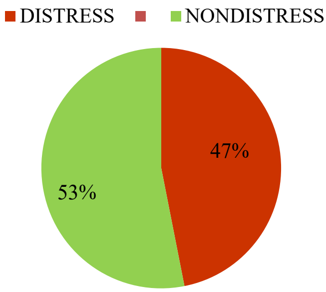
already needs to identify the financial performances of companies divided into two tendencies, distress and non-distress. Distress is a condition of the firm suffering less healthy with $Z < 2.99$ for the manufacturing industry and $Z < 2.6$ for the non-manufacturing industry. In Table 1, firms experiencing financial distress are 219, while there are 248 firms gaining non-distress. Taking a closer look at Figure 3 gives information about percentage, where the number of companies showing financial distress and non-financial distress is 47 and 53% respectively. This result reveals that firms with financial distress have lower percentage than those with non-distress.

Having found total companies with distress and non-distress, the effect test is conducted. It aims to find is there a difference of companies with gender diversity in the condition of distress and non-distress? The result of testing is presented in Table 2 as follows.

Financial tendency	Number
DISTRESS	219
NON-DISTRESS	248
Total	467

Source(s): Authors own work

Table 1.
Distress and non-distress



Source(s): Authors own work

Figure 3.
Proportion of distress and non-distress

Table 2. Effect test of significance

$\text{Logit}\mathit{DISTRESS} = \alpha + \beta_1\mathit{GENDER}\_\text{COM} + \beta_2\mathit{GENDER}\_\text{DIR} + \beta_3\mathit{GENDER}\_\text{AUDIT} + \beta_4\text{TYPE\_IND} + \varepsilon$				
Variabel	Coef	Odd	*t* statistic	Sig
*GENDER*_COM	−1.638	0.194	−4.42	0.000***
*GENDER*_DIR	−0.114	0.891	−0.31	0.758
*GENDER*_AUDIT	−0.377	0.685	−0.82	0.414
TYPE_IND	−0.239	0.786	−2.53	0.011
Constant	0.815	2.259	2.60	0.009***
Number of obs = 467				
LogLikehood Block initial = −222.798				
LogLikehood Block end = −305.891				

Note(s): LR χ^2 = 33.81***
Pseudo R2 = 0.052
*0.10, ** 0.05, *** 0.01
Source(s): Authors own work

The result of the effect test provides negative effects on their respective significance levels. The negative effect shows that companies involving gender diversity in serving the organizational structure tend to suffer less financial distress than those not involving gender diversity. However, whether the negative effects were significant at the levels of 1%, 5%, or 10% established in this research? This research has found the results. The independent variable of the commissioner board (GENDER_COM) is at the significance level of α = 1%, and the director board (GENDER_DIR) and the audit committee (GENDER_AUDIT) is at the α = 10% level respectively. Thus, the results of this research reveal that only gender diversity in commissionerships provides a significant effect on the independent variable (DISTRESS). The emerging effect is negative indicating that companies involving diversity on the board of commissioners tend to suffer less financial distress than non-diversity. This research further conducted a sensitivity analysis to find robust and consistent significances by eliminating control variables and outlining equation models in each sector (Type I, II, III and IV). The result has provided the same effect as shown in Table 3.

In Table 3, all types of industry provide significant effects on the independent variable of commissioner (GENDER_COM). The primary industry and the tertiary sector with non-financial services (Type I and IV) obtained significance at the 0.05 level, while the secondary industry (Type II) obtained significance at the 0.10 level and the tertiary with financial services (Type III) was at the 0.01 level. As a result, H1a is accepted stating that gender diversity in the commissioner board has a negative effect on financial distress. Conversely, H1b and H1c are rejected.

4.2 Gender diversity within the business sectors in Indonesia

Gender diversity can be shown in corporate sectors in Indonesia. As found in this research, it is described in the structure of corporate governance consisting of commissioners, directors and audit committees. They are the boards of the organization involved in moving the business line into financial and operational ownership. All three can be held by some people with the composition of gender whether men as a whole or not (some women). In all business sectors, companies having gender diversity in the structure are found to still be under 15%. On the board of commissioners, the number of companies reached 13% indicating that there are 59 companies whose executive positions are filled by men and women, while the remaining 408 companies are filled by all men. Although the results are in the range of 10%, LogitDISTRESS = $\alpha + \beta_1$GENDER_COM+ β_2GENDER_DIR+ β_3GENDER_AUDIT + ε

Industry type	I		II		III		IV	
	Coef	Odds	Coef	Odds	Coef	Odds	Coef	Odds
GENDER_ COM	−2.693 −2.16**	0.067	−1.135 −1.88*	0.321	−3.070 −2.75***	0.046	−1.315 −2.20**	0.268
GENDER_ DIR	−1.990 −1.52	0.136	0.177 0.24	1.194	0.815 0.84	2.261	−0.409 −0.72	0.662
GENDER_ AUDIT	0.492 −0.14	1.050	−0.978 −0.84	0.275	−0.583 −0.53	0.558	0.341 0.48	1.407
Constant	1.297 2.79***	3.660	−0.045 −0.22	0.955	0.618 2.41**	1.856	−0.225 1.53	0.798
Log likelihood	−22.914	−18.959	−81.778	−79.047	−58.771	−49.982	−152.560	−148.86
LR χ^2	7.91**		5.45		12.15***		7.39*	
Pseudo R2	0.172		0.03		0.10		0.10	
Number of Obs		36	119		87		225	

Note(s):
Industry Type I = Primary Sector
Industry Type II = Secondary Sector
Industry Type III = Tertiary Sector (Financial Services)
Industry Type IV = Tertiary Sector (Non-Financial Services)
***0.01, ***0.05, *0.10
Source(s): Authors own work

Table 3.
Sensitivity analysis

this percentage is fairly higher than the percentage of the board of directors of 7% and the audit committee by 5%. A commissioner is a position of ownership in the structure of corporate governance because this position can be filled by the owner of capital in building the company. The gender diversity of these capital owners was found to obtain a higher level than in the composition of the director board and audit committee.

The responsibility of the capital ownership board is to select and oversee executives (directors) and to take audit committees to carry out the supervision over corporate governance. On the board of directors and audit committees, the number of companies in all sectors is under 10% employing women. The directors are the executive of company taking the responsibility for carrying out the company's business activities operationally. In other words, directors are the leaders of the company driving the business and making the report of the performance to capital owners, while audit committees have the task to examine, supervise and evaluate the business performance with the mandate of the board of commissioners. These results statistically reveal that companies with women's involvement in working with men in the structure of the board of directors and audit committees are still below 10% of 467 companies.

4.3 Effects of gender diversity on financial performance tendency

Prior studies have consistently provided a positive effect on improving the firm's performance (Charles *et al.*, 2018; Dedunu and Anuradha, 2020; Fathonah, 2018; IFC, 2019; Khlif and Achek, 2017). Companies employing women in the structure of the board of directors can perform much better than those not employing women (Lückerath-Rovers, 2013). In this research, the model of previous studies was extended by identifying the financial tendency of the company. The tendency emphasized is distress and non-distress.

The effects of diversity were tested on two types of the tendency. Based on the previous description shown in Figure 3, performance has been found in 47% of firms suffering distress and 53% of firms obtaining non-distress. Is there an effect of financial performance employing women? The effect found in Table 3 shows the negative direction both gender diversity in the structure of the board of commissioners, directors and audit committees, but the level of significance accepted only on the board of commissioners which is significant at the 0.01 level. Therefore, the independent variable of GENDER_COM is found to have a significant negative effect on the company's financial distress.

Gender diversity in the board of commissioners has a significant negative effect on financial tendency in the condition of distress. This effect indicates that there are differences between companies with gender diversity and without gender diversity in the board structure of commissioners. They with the composition of women and men, in the position of commissioner tend to experience less financial distress, while they, with all men without women, have higher financial distress. The percentage of companies involving gender diversity is 7% on the board of directors and 5% on the audit committees of 467 companies. These values are very low below 10% allowing the effect to be insignificant on the financial distress. Related to the result of the director board, the finding of this research doesn't align with Zhou (2019) implying that financial distress is significant when there is an inclusivity of women on the board of directors.

The further reason is the difference in the function of the position of commissioner board serving as one of the owners of capital or shareholder. What's more, the increase of independent boards is likely to improve operational oversight systems leading to better corporate governances and can avoid financial distress as stated by the previous studies (Kristanti *et al.*, 2016; Widhiadnyana and Dwi Ratnadi, 2019). Besides, the board of commissioners in the company has the right to determine the composition of the board of directors and audit committees by looking at the competence in carrying out the business. The inclusivity of attitudes given to women's perspective combined with men's perspective encourages performance to be more stable and tends avoidable from financial distress.

If this result is elaborated in the framework of the theory, social identity theory may underline the significant effect of the commissioner board on financial distress. Identity as a woman on the board of commissioners can form the pattern in making the decision. They interact more with men in one activity together to achieve a common goal. The type of interaction includes assurances, for instance, the assurance of the board of directors when faced with an occurrence, they tend to obey the direction of the board of commissioners in managing the operational activity of the firm. Corporate governance is a system designed to direct the company to run well and become a guideline for the board of commissioners in providing advice to the management. In sample firms, the chief commissioner tends to be the principal, and along with the directors, they are responsible for the progress of the business. For independent commissioners, although their position is not affiliated with controlling shareholders, their independent status is more about protecting stakeholders. In conditions of financial distress, independent commissioners increasingly serve as advisors to policies taken by the board of directors. Women are considered able to function in providing advice and their involvement only plays a role in improving the inclusivity of ideas in making the decision, regardless of the proportion in each organizational structure. In other words, with women, an ownership is quite possible for the company to gain a broader perspective in achieving the goal. As a result, men and women on the board of commissioners can determine the values of work and strategic behavior to make managerial decisions. Thus, the result of this research discloses that only the commissioner's board employing women is found to have a significant effect in making better decisions during the company under the condition of financial distress.

5. Conclusion

The result of this research discloses that the number of companies in the overall business sector employing women and men in the structure of the board of commissioners at 13%, the board of director at 7% and the audit committee at 5%. This research further examines the effect of significance. The result of the test, a significant effect is only obtained in the gender variable of the board of commissioners, with negative direction. In this case, the commissioner as capital owner is a boardroom that feels the most financial distress. When companies place gender diversity (women and men) in the composition of the commissioner board, they tend to obtain lower financial distress.

The nexus between gender diversity and firm performance has been highlighted by several latest studies (Endraswati, 2018; Fathonah, 2018; González *et al.*, 2020; Marquez-Cardenas *et al.*, 2022; Mohammad *et al.*, 2018), however gender diversity in the structure of corporate governance on the financial performance tendency needs to be concluded and this research finally makes inferences that firms employing women and men (gender diversity) in the structure of corporate governance as the board of commissioners suffer from less financial distress. As stated by the literature (Kristanti *et al.*, 2016; Widhiadnyana and Dwi Ratnadi, 2019), an independent board in corporate governance tends to improve operational oversight. In addition, Hechvarria *et al.* (2017) reveal that women business leaders are more likely to pay attention on social value. Thus, the finding of this study aligns with Abebe and Dadanlar (2019) implying that the presence of women reduces the occurrence of business.

This study has managerial implications for corporate management as the decision-making. Gender diversity can help firms obtain a broader perspective because of greater inclusivity of ideas and diverse decisions so that companies can eventually find the solution when financial conditions experience down. This research doesn't assume that the representation of women's ownership shouldn't be as same as men, but at least there is the involvement of women in providing insight into business decision-making. This research should be complemented by the study of women's involvement from year to year in the business area because the position is limited by time. It could be that the sample companies in this research change ownership because there is a taking over the position. In addition, the research model emphasizes more on gender measurement (nominal), while shifting organizational structures requires five years allowing the nominal scale to be repeated each year resulting in the use of cross-section data in this research and conducts the test for all types of industry. For further research, the model of this research needs to add control variables and take into account other factors beyond gender that may contribute to financial distress.

Note

1. Less 20% = very low, 21–40% = low, 41–60% = sufficient, 61–80% = high and 81–99% = very high

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