

# Gender Diversity and Cash Holdings in Indonesia Non-Financial Firms

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## ABSTRACT

### Keywords:

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### Kata Kunci:

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Keberagaman Gender.

Within the company, the functions of the board of directors and the board of commissioners are distinct. Disparities in decision-making over the company's cash holdings may result from this function. This study aimed to investigate the effect of gender diversity on the board of commissioners and the board of directors on the company's cash holdings. A non-financial firm with 1305 observations that was listed on the Indonesia Stock Exchange between 2015 and 2019 serves as the study's sample. The data in this study were analyzed using multiple regression. The ratios of cash holdings to net assets and total assets are used to calculate the amount of cash held. According to this study, the company's cash holdings are negatively impacted by the diversity of the board of commissioners, and positively by the diversity of the board of directors. This research's practical implication is that business owners ought to consider about having women on their boards since they can lessen agency conflicts.

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Dewan komisaris dan dewan direksi memiliki peran yang berbeda di Perusahaan. Peran tersebut dapat menyebabkan perbedaan pengambilan keputusan pada cash holding perusahaan. Penelitian ini bertujuan untuk mengetahui pengaruh keberagaman gender pada dewan komisaris dan dewan direksi terhadap cash holding perusahaan. Sampel penelitian ini adalah perusahaan non-keuangan dengan 1305 observasi yang terdaftar di Bursa Efek Indonesia antara tahun 2015 dan 2019. Data dalam penelitian ini dianalisis menggunakan regresi berganda. Rasio kepemilikan kas terhadap aset bersih dan total aset digunakan untuk menghitung jumlah kas yang dimiliki. Menurut penelitian ini, kepemilikan kas perusahaan dipengaruhi secara negatif oleh keberagaman dewan komisaris, dan secara positif dipengaruhi oleh keberagaman dewan direksi. Implikasi praktis dari penelitian ini adalah pemilik perusahaan dapat mempertimbangkan keberadaan Wanita pada susunan dewan di perusahaan karena dengan keberadaan Wanita dapat mengurangi konflik keagenan.

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## INTRODUCTION

Agency conflict is an important problem in company management. Agency conflicts that occur can be detrimental to company owners. One shareholder dominates the share ownership of companies in Indonesia (Claessens et al., 2000). This shows that the agency conflict is an agency conflict between majority ownership and minority ownership. Agency conflicts can be detrimental to minority share ownership in the company.

One source of agency conflicts is cash holdings. A company's cash holdings are its cash and cash equivalents. Increasing company cash holdings might lead overinvestment, which is detrimental to company owners (Jensen, 1986). Alim et al. (2019) found that cash holdings improve tunneling practices. Bhuiyan and Hooks (2019) found that cash holdings increase overinvestment in firm investments.

The corporate governance mechanism is a mechanism that can reduce agency conflicts. According to Shleifer and Vishny (1997), corporate governance ensures returns on an investor's investment. In Indonesia, there is a two-tier system for corporate governance, namely the board of directors as the party that supervises the company's operation, while the board of commissioners provides oversight. Gender diversity on the company's board of directors and board of commissioners is a crucial topic for further investigation.

The presence of gender diversity on the board of directors and commissioners demonstrates that neither the company's board of directors nor the board of commissioners are dominated by a single gender. The inclusion of women on the board of commissioners and the board of directors is a topic that should be investigated since their presence can serve as a way to minimize agency conflict. This is due to women's tendency to be more conservative and risk-averse (Saona et al., 2019), more ethical (Lakhal et al., 2015), more effort to monitoring (Adams & Ferreira, 2009), less confident when making financial decisions (Saeed & Sameer, 2017).

Gender diversity can affect the cash holdings owned by the company. Based on research conducted by Atif et al. (2019), board diversity negatively affects the company's cash holdings because gender diversity can increase more active monitoring and accountability. In addition, gender diversity can limit opportunistic behavior from managers regarding cash holdings (Atif et al., 2019). Research conducted by Cambrea et al. (2020) found that the effect of gender diversity on a company's cash holdings is associated with executive and monitoring functions. Conversely, Suherman (2017) discovered that having a female CEO has a favorable impact on the company's cash holdings and Suherman et al. (2021) found that having female executives enhances a company's cash holdings because female executives are more conservative and do not like high risk compared to male executives. La Rocca et al. (2019) revealed that the presence of women in executive positions favorably affects a company's cash holdings because it anticipates potential risks in the future. Dimitropoulos and Koronios (2021) firm with two or more female board member has higher cash holdings.

The purpose of the study was to investigate how gender diversity of the board of commissioners and the board of directors affected the cash holdings. Based on agency theory, many previous studies have examined the effect of gender diversity on performance (Moreno-Gómez et al., 2018), (Triana & Asri, 2017), earnings management (Kyaw et al., 2015), (Hala, 2019), (Zalata et al., 2019). but few have analyzed cash holdings. This study makes two contributions, namely first is to examine how gender diversity affects cash holdings. This is very interesting because cash holdings are one of the causes of agency conflicts such as overinvestment (Bhuiyan & Hooks, 2019) and expropriation (Alim et al., 2019). The second contribution to this research is to analyze the influence of gender diversity on cash holdings by looking at the role of gender diversity as part of the board of commissioners and board of directors.

## Literature Review and Hypothesis Development

Cash and marketable securities are important resources for companies. Cash and marketable securities are a source of liquidity for a company. Companies have several motivations to save cash, namely launching investment projects when they face financial difficulties (Bates et al., 2009) and reducing financial costs when facing instability financial markets (Opler et al., 1999).

On the other hand, the availability of large cash in the company is a source of agency conflict. Alim *et al.* (2019) found that cash is positively related to expropriation. According to Jensen (1986) agency theory, an organization's excess cash flow may lead to overinvestment. According to research conducted by Bhuiyan and Hooks (2019), cash holdings have a positive impact on overinvestment.

The inclusion of women on the board of directors and commissioners is an essential aspect of the governance system. Women have characteristics such as tighter monitoring (Adams & Ferreira, 2009) and being risk-averse (Saona et al., 2019).

### Relationship between Gender Diversity in the Board of Commissioners and Cash Holdings

According to Regulation Number 33 of 2014 by the Indonesia Financial Services Authority, the board of commissioners is responsible for supervising the management of the organization. In order to maintain harmony between the business's owner and management, supervision is necessary. In an agency relationship, management decision-making requires oversight from a mechanism. Supervision is needed because company policies can be influenced by the attitudes of company management (Graham et al., 2013) and harm the interests of shareholders. The company's cash holdings are things that need to be monitored by the company because the company's cash holdings potential to trigger agency problems.

The gender diversity of the board of

commissioners is examined in this study. The presence of gender diversity on the board of commissioners is indicated by gender diversity. The inclusion of female commissioners will enhance agency partnerships by lowering agency conflicts and enhancing monitoring systems. The oversight of the corporation can be improved by having more women on the board of commissioners. Gender diversity increases the effectiveness of boards by improving strategic control and monitoring functions (Lucas-Pérez *et al.*, 2015). The enhanced monitoring is anticipated to lessen agency conflicts inside the organization. To minimize expropriation and overinvestment, tighter oversight can restrict the company's cash flow. This is supported by research from Atif et al. (2019) and Ajanthan & Kumara (2017) who revealed that board diversity has a negative effect on company cash holdings.

H<sub>1</sub>: Gender diversity on The Board of Commissioners negatively affects cash holdings

### Relationship between Gender Diversity in the Board of Directors and Cash Holdings

According to Indonesia Financial Services Authority Regulation Number 33 of 2014, the board of directors is responsible for managing the company's operations and establishing its policies. Graham *et al.* (2013) suggested that the company's policymaking can be influenced by the attitude of the company's management. Jensen and Meckling (1976) stated that management decision-making may not be in line with the interests of the firm's owners. There is a dispute in Indonesia between the majority and minority shareholders.

The investigation of gender diversity on the board of directors on the company's cash holdings is the focus of this study. The male gender has different characteristics than the female gender. The attributes of female directors help lessen agency conflicts in agency relationships. The female gender also has risk-averse characteristics compared to the male gender (Saona et al., 2019). Gender women also have higher moral ethics (Lakhal et al., 2015). This shows that the presence of women in making

decisions becomes more careful than men (Huang & Kisgen, 2013) and has risk-averse characteristics. The traits associated with risk aversion also suggest that women prefer to retain more liquidity in order to shield themselves from the fallout from their decisions (Cambrea et al., 2020) and overcome all the possibilities that prevent the company from seizing its growth opportunities (La Rocca et al., 2019). This causes the company to have bigger cash holdings. La Rocca et al. (2019) in their research found that gender diversity has a positive effect on company cash holdings. This is supported by research conducted by Suherman et al. (2021) who found that female executives have a positive effect on company cash holdings.

H<sub>2</sub>: Gender diversity on The Board of Directors positively affects cash holdings

**RESEARCH METHODS**

This research is hypothesized quantitative research. The non-financial companies listed on the Indonesia Stock Exchange comprise the study’s population. Purposive sampling was conducted using the criterion of companies listed on the Indonesia Stock Exchange between 2015 and 2019, financial statements issued in rupiah currency, and having adequate data to support this analysis. The data in this study is the company’s annual report obtained from www.idx.co.id and the company’s website.

Cash holdings are the dependent variable in this research. Cash holdings are corporate decisions to provide liquidity. Based on Atif et al. (2019), cash holdings are measured using the:

$$\begin{aligned}
 CH1 &= \frac{\text{Cash and Marketable Securities}}{\text{Total Assets}} \\
 CH2 &= \frac{\text{Cash and Marketable Securities}}{\text{Net Assets}} \\
 \text{Net Assets} &= \text{Total Assets} - \text{Cash and Marketable Securities}
 \end{aligned}$$

Gender diversity on the board of commissioners and directors serves as the study’s independent variable. Gender diversity on the board of commissioners describes the gender diversity on the company’s board of commissioners. According to Ain et al. (2020), gender diversity on the board of commissioners is assess using:

$$\begin{aligned}
 \text{COM\_BLAU} &= 1 - \sum_{i=1}^2 P_i^2, \text{ where } P_i \text{ is the percentage of each category and } n = 2 \\
 &\quad \text{[female (male)] on the Board of Commissioners} \\
 \text{COM\_SHAN} &= - \sum_{i=1}^n P_i \ln P_i, \text{ where } P_i \text{ is the percentage of each category and } n = 2 \\
 &\quad \text{[Women (male)] on the Board of Commissioners} \\
 \text{COM\_FPROP} &= \frac{\text{Number of Commissioner Board Female Members}}{\text{Number of Commissioner Board Members}} \\
 \text{COM\_DUM} &= \text{Dummy is equal to 1 if the Board of Commissioners has a minimum of} \\
 &\quad \text{1 female member}
 \end{aligned}$$

Gender diversity on the board of directors describes gender diversity on the company’s board of directors. Based on Atif et al. (2019), gender diversity on the board of directors is measured using The Blau Index, and based on La Rocca et al. (2019), gender diversity on the board of directors is measured using female proportion and dummy variable as follow:

$$\begin{aligned} \text{DIR\_BLAU} &= 1 - \sum_{i=1}^2 P_i^2, \text{ where } P_i \text{ is the percentage of each category and } n = 2 \text{ [female} \\ &\text{(male)] on the Board of Directors} \\ \text{DIR\_SHAN} &= - \sum_{i=1}^n P_i \ln P_i, \text{ where } P_i \text{ is the percentage of each category and } n = 2 \\ &\text{[female (male)] on the Board of Directors} \\ \text{DIR\_FPROP} &= \frac{\text{Number of Director Board Female Members}}{\text{Number of Director Board Members}} \\ \text{DIR\_DUM} &= \text{Dummy is equal to 1 if the Board of Directors has a minimum of 1 female} \\ &\text{member} \end{aligned}$$

In this study, the control variables are leverage, firm size, profitability, and board of commissioners' size. Leverage (LEV) is the percentage of debt used to finance the company's assets. Leverage based on research conducted by Atif *et al.* (2019) is measured using the:

$$\text{LEV} = \frac{\text{Total Debt}}{\text{Total Asset}}$$

Company size (FSIZE) shows the size of the company as seen through the company's total assets. Company size based on research conducted by Atif *et al.* (2019) is measured using the:

$$\text{FSIZE} = \text{Natural Logarithm of Total Asset}$$

Profitability (ROA) indicates the company's ability to produce profits based on a total assets owned. Profitability based on research conducted by Atif *et al.* (2019) is measured using the:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Asset}}$$

The size of the board of commissioners (BS\_C) indicates the number of commissioners in a company. The size of the board of commissioners based on research conducted by Atif *et al.* (2019) is measured using the:

$$\text{BS\_C} = \text{Number of Board of Commissioners Members}$$

Multiple linear regression is used in this study's data analysis. The statistical equations in this study are as follows:

**Model 1**

$$\text{CH (CH1, CH2)}_{it} = \alpha + \beta_1 \text{COM\_BLAU\_C}_{it} + \beta_2 \text{DIR\_BLAU\_D}_{it} + \beta_3 \text{LEV}_{it} + \beta_4 \text{FSIZE}_{it} + \beta_5 \text{ROA}_{it} + \beta_6 \text{BS\_C}_{it} + \varepsilon_{it}$$

**Model 2**

$$\text{CH (CH1, CH2)}_{it} = \alpha + \beta_1 \text{COM\_SHAN\_C}_{it} + \beta_2 \text{DIR\_SHAN\_D}_{it} + \beta_3 \text{LEV}_{it} + \beta_4 \text{FSIZE}_{it} + \beta_5 \text{ROA}_{it} + \beta_6 \text{BS\_C}_{it} + \varepsilon_{it}$$

**Model 3**

$$CH (CH1, CH2)_{it} = \alpha + \beta_1 COM\_FPROP_{it} + \beta_2 DIR\_FPROP_{it} + \beta_3 LEV_{it} + \beta_4 FSIZE_{it} + \beta_5 ROA_{it} + \beta_6 BS\_C_{it} + \varepsilon_{it}$$

**Model 4**

$$CH (CH1, CH2)_{it} = \alpha + \beta_1 COM\_DUM_{it} + \beta_2 DIR\_DUM_{it} + \beta_3 LEV_{it} + \beta_4 FSIZE_{it} + \beta_5 ROA_{it} + \beta_6 BS\_C_{it} + \varepsilon_{it}$$

Where CH1 and CH2 are cash holdings, COM\_BLAU, COM\_SHAN, COM\_FPROP, COM\_DUM is gender diversity on the board of commissioners, DIR\_BLAU, DIR\_SHAN, DIR\_FPROP, DIR\_DUM is gender diversity on the board of directors, LEV is firm leverage, FSIZE is firm size, ROA is firm profitability, BS\_C is size of the board of commissioners.

**RESULTS AND DISCUSSION**

This study's sample included 265 companies and 1,305 observations. In Table 1, descriptive statistics from the study are shown:

**Table 1. Descriptive Statistics**

Variables	N	Mean	Std. Deviation	Maximum	Minimum
CH1	1305	0.0889	0.0830	0.3774	0.0004
CH2	1305	0.1081	0.1167	0.6061	0.0004
COM_BLAU	1305	0.1493	0.1980	0.5000	0.0000
DIR_BLAU	1305	0.1775	0.2873	0.5000	0.0000
COM_SHAN	1305	0.2196	0.2873	0.6931	0.0000
DIR_SHAN	1305	0.2622	0.2927	0.6931	0.0000
COM_FPROP	1305	0.1292	0.1946	1.0000	0.0000
DIR_FPROP	1305	0.1472	0.1918	1.0000	0.0000
LEV	1305	0.4468	0.2021	0.9987	0.0076
FSIZE	1305	28.7023	1.6622	33.4945	22.7577
FSIZE (dalam Milyar Rupiah)	1305	10,827.3273	26,447.8611	351,958.0000	7.6482
ROA	1305	0.0359	0.0933	0.9210	-0.6003
BS_C	1305	4.3034	1.9515	22.0000	2.0000
<b>Dummy Variables</b>					
COM_DUM	Number of observations that have at least one woman on the board of commissioners				503
	Number of observations that do not have female members on the board of commissioners				802
DIR_DUM	Number of observations that have at least one woman on the board of directors				603
	Number of observations that do not have female members on the board of directors				702

Based on Table 1, the descriptive statistics of this study indicate the average CH1 is 0.0889. This shows that the average cash and securities owned by the company are 8.89% of the company's total assets. The average CH2 is 0.1081 and shows that 10.81% of the company's net assets are cash and marketable securities. The average BLAU\_C is 0.1493, SHAN\_C is 0.2196, BLAU\_D is 0.1775, and SHAN\_D is 0.2622. This shows the low diversity of Indonesian corporations' boards of commissioners and directors. The mean PFC value is 0.1292. This indicates that 12.92% of the board of commissioners are female on average. The average PFD is 0.1472 and shows that female members of

the board of directors are on average 14.72% of the total members of the board of directors. There have been 503 observations where the board of commissioners has at least one female member. The number of observations with at least one member of the board of directors is 603. The average LEV is 0.4468, which shows that 44.68% of the company's assets are funded using debt. The average FSIZE shown through the company's total assets is 10.827,3273 billion. The average ROA is 0.0359 and shows that the average company earns 3.59% of the total assets owned by the company. The average number of the company's board of commissioners is 4.3034.

**Table 2. Regression Analysis (CH1 variable dependent)**

Variable	Coefficient	Std. Error	t-Statistic	Sig.
<b>Gender diversity measured by Blau Index</b>				
C	0.0773	0.0418	1.8491	0.0647
COM_BLAU	-0.0318	0.0109	-2.9094	0.0037***
DIR_BLAU	0.0372	0.0108	3.4477	0.0006***
BS_C	0.0056	0.0013	4.3917	0.0000***
LEV	-0.0868	0.0113	-7.6988	0.0000***
SIZE	0.0006	0.0016	0.4064	0.6845
ROA	0.1605	0.0245	6.5473	0.0000***
Adj R-squared	0.1289			
F-Statistic	33.1530			
Sig (F-Statistic)	0.0000			
<b>Gender diversity measured by Shannon Index</b>				
C	0.0786	0.0418	1.8827	0.0600
COM_SHAN	-0.0223	0.0075	-2.9523	0.0032***
DIR_SHAN	0.0257	0.0074	3.4575	0.0006***
BS_C	0.0057	0.0013	4.4480	0.0000***
LEV	-0.0869	0.0113	-7.7120	0.0000***
SIZE	0.0006	0.0016	0.3719	0.7100
ROA	0.1602	0.0245	6.5360	0.0000***
Adj R-squared	0.1291			
F-Statistic	33.2148			

Variable	Coefficient	Std. Error	t-Statistic	Sig.
Sig (F-Statistic)	0.0000			
<b>Gender diversity measured by Female Proportion</b>				
C	0.0830	0.0422	1.9677	0.0493
COM_FPROP	-0.0388	0.0111	-3.4810	0.0005***
DIR_FPROP	0.0266	0.0114	2.3271	0.0201**
BS_C	0.0054	0.0013	4.2008	0.0000***
LEV	-0.0880	0.0113	-7.7648	0.0000***
SIZE	0.0006	0.0016	0.3800	0.7040
ROA	0.1595	0.0245	6.5067	0.0000***
Adj R-squared	0.1278			
F-Statistic	32.8484			
Sig (F-Statistic)	0.0000			
<b>Gender diversity measured by Dummy Variable</b>				
C	0.0834	0.0417	2.0006	0.0456
COM_DUM	-0.0142	0.0044	-3.1827	0.0015***
DIR_DUM	0.0130	0.0044	2.9922	0.0028***
BS_C	0.0060	0.0013	4.6037	0.0000***
LEV	-0.0878	0.0113	-7.7870	0.0000***
SIZE	0.0004	0.0016	0.2827	0.7774
ROA	0.1594	0.0245	6.5010	0.0000***
Adj R-squared	0.1284			
F-Statistic	33.0180			
Sig (F-Statistic)	0.0000			

\*\*\* significant in 1%, \*\* significant in 5%, \*significant in 10%

According to Table 2, diversity on the board of commissioners has a negative impact on cash holdings as measured by the Blau index. (COM\_BLAU = -0.0318, sig = 0.0037), Shannon index (COM\_SHAN = -0.0223, sig = 0.0032), female proportion (COM\_FPROP = - 0.0388, sig = 0.0005), dummy variable (COM\_DUM = -0.0142, sig = 0.0015). Using the four variables to measure the diversity of the board of commissioners, this study yields consistent findings. According to this research, the study’s first hypothesis that the diversity of the board of commissioners has a negative effect on cash holdings is supported. The findings of this investigation are consistent with the

work carried out by Atif *et al.* (2019). According to this study, Gender diversity is one of the control mechanisms. This is demonstrated by more effective supervision when there is a larger gender diversity on the board of commissioners. This increased supervision can reduce agency conflicts within the company and ultimately have an impact on reducing the company's cash holdings. The results of this research support agency theory which suggests that the board of commissioners is a monitoring mechanism that can reduce agency conflicts.

The results of Table 3 also show that cash holdings as determined by the Blau Index are



positively impacted by the diversity of the board of directors. (DIR\_BLAU = 0.0372, sig = 0.0006), Shannon index (DIR\_SHAN = 0.0257, sig = 0.0006), female proportion (DIR\_FPROP = 0.0266, sig = 0.0201), dummy variable (DIR\_DUM = 0.0130, sig = 0.0028). When four different types of metrics are used to measure the diversity of the board of directors, consistent results are obtained. According to this research the study's second hypothesis that board diversity influences cash holdings is supported. The results of this study are consistent with the findings of Cambrea *et al.* (2020). According to this study, having a more gender diverse board of directors fosters greater prudence on the part of the board, which leads to larger cash holdings as a sort of safeguard against the consequences of decisions made and possible obstacles to investment opportunities. The study's findings do not support agency theory which

suggests that the existence of a control mechanism will lessen agency theory, as evidenced by lower cash holdings. Gender diversity is a control mechanism because of the characteristics of women who do not like risk and are more careful. The results of this research show that gender diversity in the board of directors has a positive effect on cash holdings and shows precautionary motives about the consequences of the company's cash flow needs in the future due to the decisions that have been taken.

### Robustness Test

This study conducted a robustness test using alternative measurements referring to Atif *et al.* (2019) for cash holdings. The robustness test employs the ratio of cash and marketable securities to net assets (CH2) to measure cash holdings. Table 3 shows the robustness test in this study:

**Table 3. Regression Analysis (CH2 variable dependent)**

Variable	Coefficient	Std. Error	t-Statistic	Sig.
<b>Gender diversity measured by Blau Index</b>				
Constant	0.1251	0.0589	2.1223	0.0340**
COM_BLAU	-0.0476	0.0154	-3.0833	0.0021***
DIR_BLAU	0.0516	0.0152	3.3923	0.0007***
BS_C	0.0086	0.0018	4.7141	0.0000***
LEV	-0.1202	0.0159	-7.5651	0.0000***
SIZE	-0.0004	0.0022	-0.1586	0.8740
ROA	0.2180	0.0345	6.3115	0.0000***
Adj R-squared	0.1248			
F-Statistic	32.0012			
Sig (F-Statistic)	0.0000			
<b>Gender diversity measured by Shannon Index</b>				
Constant	0.1268	0.0588	2.1550	0.0313**
COM_SHAN	-0.0333	0.0106	-3.1358	0.0018***
DIR_SHAN	0.0356	0.0105	3.3953	0.0007***
BS_C	0.0087	0.0018	4.7731	0.0000***
LEV	-0.1203	0.0159	-7.5787	0.0000***

Variable	Coefficient	Std. Error	t-Statistic	Sig.
SIZE	-0.0004	0.0022	-0.1915	0.8482
ROA	0.2177	0.0345	6.3011	0.0000***
Adj R-squared	0.1251			
F-Statistic	32.0680			
Sig (F-Statistic)	0.0000			
<b>Gender diversity measured by Female Proportion</b>				
Constant	0.1317	0.0594	2.2174	0.0268**
COM_FPROP	-0.0556	0.0157	-3.5444	0.0004***
DIR_FPROP	0.0393	0.0161	2.4448	0.0146**
BS_C	0.0082	0.0018	4.5228	0.0000***
LEV	-0.1216	0.0160	-7.6169	0.0000***
SIZE	-0.0004	0.0022	-0.1758	0.8605
ROA	0.2165	0.0345	6.2664	0.0000***
Adj R-squared	0.1240			
F-Statistic	31.7675			
Sig (F-Statistic)	0.0000			
<b>Gender diversity measured by Dummy Variable</b>				
C	0.1332	0.0587	2.2672	0.0235**
COM_DUM	-0.0212	0.0063	-3.3895	0.0007***
DIR_DUM	0.0181	0.0061	2.9544	0.0032***
BS_C	0.0090	0.0018	4.9383	0.0000***
LEV	-0.1215	0.0159	-7.6554	0.0000***
SIZE	-0.0006	0.0022	-0.2749	0.7834
ROA	0.2165	0.0345	6.2662	0.0000***
Adj R-squared	0.1247			
F-Statistic	31.9583			
Sig (F-Statistic)	0.0000			

\*\*\* significant in 1%, \*\* significant in 5%, \*significant in 10%

The results of the robustness test, which are shown in Table 3 indicate that cash holdings as measured by the Blau index negatively impacted by the diversity of the board of commissioners. (COM\_BLAU = -0.0476, sig = 0.0021), Shannon index (COM\_SHAN = -0.0333, sig = 0.0018), female proportion (COM\_FPROP = -0.0556, sig = 0.0004), dummy variable (COM\_DUM = -0.0212, sig = 0.0007). The robustness test results in Table 3 indicate that board diversity has a positive impact

on cash holdings as measured by the Blau index. (DIR\_BLAU = 0.0516, sig = 0.0007), Shannon index (DIR\_SHAN = 0.0356, sig = 0.0007), female proportion (DIR\_FPROP = 0.0393, sig = 0.0146), dummy variable (DIR\_DUM = 0.0181, sig = 0.0032). The robustness test's outcomes align with the study's primary findings.

### CONCLUSION

Gender diversity research is a fascinating

issue. This study investigates into how the company's cash holdings are affected by the diversity of the board of directors and commissioners. Women on the board of commissioners and the board of directors can minimize agency conflict based on agency theory. The primary finding of the study indicates that gender diversity on the board of commissioners has a detrimental effect on the company's cash holdings. Women's representation on the board of commissioner's results in improve monitoring, which can cause in lowers company cash holdings. The study's second finding indicates that the company's cash holdings are positively impacted by the diversity of the board of directors. The presence of women on the board of directors encourages them to consider the consequences of their choices more carefully, which has an effect on the growth in cash holdings. The results of this research show different results on the gender diversity variable for the board of directors and the board of

commissioners and these results show that the impact on cash holdings depends on the role of the board, namely as executive or supervisory.

The practical contribution of this research is that companies can consider the gender proportion of women on the board of commissioners and board of directors. This is because increasing the proportion of women in board members can reduce agency conflicts. The academic contribution to gender diversity as corporate governance measure and the theoretical contribution to board diversity in corporate cash holdings are both made by this study. The limitation of this research is that it does not consider ownership structure on the influence of gender diversity on cash holdings. Subsequent investigations may take into account how the ownership structure of the company affects the relationship between the representation of women on the board and cash holdings of the company.

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