Research Article

The Effect of Age, Ethnicity and Financial Expertise of Female Directors on Earnings Quality in Indonesia

Yeasy Darmayanti¹, Aza Azlina Md. Kassim², Nor Azilah Husin³, and Suryadimal Suryadimal

¹Bung Hatta University, Padang West Sumatera, Indonesia
²Xiamen University, Selangor Darul Ehsan, Malaysia
³Universiti Selangor, Shah Alam Selangor, Malaysia

ORCID
Yeasy Darmayanti: https://orcid.org/0000-0003-1985-2222

Abstract. ‘Quality earnings’ are those that are free from accounting tricks and can be used to predict future conditions of the company. Some companies engage in downward manipulation of profits to reduce taxes, while other companies artificially increase profits to look better in the eyes of analysts and investors. Placing women on the board of directors to enhance supervision may reduce these activities and improve the quality of income. This study aimed to examine the effect of age, ethnicity, and financial expertise of female directors on earnings quality on the IDX for the period 2015 - 2018. The study found that (1) higher diversity in the age of female directors did not affect earnings quality; while (2) the more ethnically diverse, the lower the earnings quality. For the moderating variable of financial expertise, the results showed that the financial expertise of female directors weakened the relationship between diversity and earnings quality.

Keywords: age diversity, ethnic diversity, financial expertise, earnings quality

1. INTRODUCTION

In accounting, earnings quality refers to the ability of earnings to predict the company’s future earnings. High-quality earnings are more indicative of the company’s fundamental earnings processes that are relevant to specific decisions [1], thus making the preparation process vulnerable to distortion of information. Almost all managerial activities have a potential effect on manipulation activities [2]. Management certainly strives to optimize the achievement of the level of income in accordance with the targets expected by the company, and even fulfill the forecasts of securities analysts.

As part of the monitoring mechanism, directors (women) play an important role in supervision to control the quality level of the financial reporting process[3]. The diversity of attributes available on the board of directors can affect the adequacy of board
monitoring and reduce earnings management actions [3, 4, 5]. Other researchers argue that companies become vulnerable to earnings malpractice activities if the composition of the board of directors is not well formed [6,7].

Research focusing on gender issues has been started since the 1960s, especially in developed countries [8].

Several studies related to the issue of gender equality show that female directors are more professional in carrying out their functions [9]; minimize cross-cultural, racial and ethnic work conflicts [10]; tends to increase oversight related to owner protection [11]; dare to take appropriate action on a problem [12]; more assertive in making decisions, especially regarding earnings quality and avoiding the risk of lawsuits [13].

However, this does not necessarily increase women's participation in top management of companies [14]. Several countries have initiated initiatives, such as Norway which by law requires the representation of women at least 40% on the board of directors. This step was followed by other EU countries such as the UK, Finland, Spain, Italy [14, 15].

Meanwhile for Southeast Asian countries, the World Economic Forum (an association engaged in gender equality) released “The Global Gender Gap Report 2018”. The report shows that for Southeast Asian countries the participation of women in top management positions is still very low, and the lowest position is occupied by Malaysia [17]. Meanwhile, globally, Indonesia is ranked 85th out of 149 countries studied related to the gender gap (Figure 1).

Focusing on research on female directors, age and ethnic diversity, and financial expertise are also required on female directors. This is aimed at optimizing the competence of female directors in decision making. Female directors who vary in terms of age (both young and senior) will provide balance in decision making, because they have
different perspectives and skills [17, 18]. While viewed from the ethnic side, diversity will offer a variety of experiences, talents, ideas, and knowledge that are useful in making risky decisions [20]; able to see opportunities in the external business environment and minimize threats that may arise [21]; and ethnic diversity has an impact on the implementation of ethics in decision making [22].

The financial expertise possessed by female directors is expected to be able to strengthen the company’s goals in improving earnings quality. The business background possessed by female directors will be able to increase the company’s competitive advantage and understanding of business challenges, as well as having competence in reducing risk [23]; and significantly able to reduce real earnings management and improve earnings quality [24].

The purpose of this research is twofold. First, it aims to provide evidence on whether the age and ethnic diversity of female directors affect earnings quality. Second, it aims to examine the relationship between the diversity of female directors and earnings quality, moderated by the financial expertise of female directors.

2. METHODOLOGY

2.1. Samples and Source of Data

To conduct the test, the researcher obtained a sample using purposive sampling method. The sample criteria are all companies listed on the IDX except financial companies in 2015 to 2018; not experiencing financial difficulties; and the availability of all necessary data in the financial statements of the sample companies.

2.2. Research Model and Description of Variables

The following is the research model used in testing the relationship between variables.

\[
EQ = \alpha + \beta_1 AD + \beta_2 ED + \beta_3 FE + \beta_4 FS + \beta_5 FG + \epsilon_{i,t} \quad (1)
\]

\[
EQ = \alpha + \beta_1 GD + \beta_2 FE + \beta_3 GD*FE + \beta_4 FS + \beta_5 FG + \epsilon_{i,t} \quad (2)
\]

Earnings quality value is obtained from the residual standard deviation (25), with formula:

\[
WCA_{i,t} = \beta_{0,i} + \beta_{1,i} CFO_{i,(t-1)} + \beta_{2,i} CFO_{i,t} + \beta_{3,i} CFO_{i,(t+1)} + \epsilon_{i,t} \quad (1)
\]

\[
WCA_{i,t} = \Delta CA_{i,t} - \Delta CI_{i,t} - \Delta CASH_{i,t} + \Delta DEBT_{i,t} \quad (2)
\]

\[
CFO_{i,t} = NI_{i,t} - (\Delta CA_{i,t} - \Delta CI_{i,t} - \Delta CASH_{i,t} + \Delta DEBT_{i,t} - DEP_{i,t}) \quad (3)
\]
The company’s working capital is symbolized by WCA; operating cash flow (CFO); current assets (CA); current liabilities (CL); cash (CASH); changes in debt in current liabilities (DEBT); net income (NI); depreciation expense (DEP). All variables on a scale with total assets. Earnings quality is declared high, if the value of discretionary accruals obtained is low.

The independent variables in this study were age diversity and ethnic diversity. Briggs, CEO of Phoenix Group, said that firms with younger, middle-aged, and older workers do better than firms that do not have a wide range of workers [26]. Age diversity is measured by the Blau index, by classifying female directors into 6 age groups, namely under 36 years, 36-45, 46-55, 56-65, 66-75 and above 76 years [27]. Meanwhile, the ethnic diversity of the company’s directors increases the independence, transparency, effectiveness, in carrying out the supervisory function [19, 26]; and improve accountability in financial reporting [29]. The measurement of ethnic diversity also uses the Blau index, by grouping the female directors into three main groups, namely Indonesian, Chinese, and others [29].

This study uses financial expertise as a moderating variable. Women directors who have a business education background will certainly have more ability to solve financial problems and be able to prepare quality financial reports [4]. This variable is measured by dividing the number of female directors with business education backgrounds by the total number of female directors [30]. Finally, firm size and firm growth become control variables. Ln total assets is used to measure the size of the company; and company growth with market to book value ratio [31].

2.3. Data Analysis Technique

This study uses unbalanced panel data, which has an impact on the unequal number of observations each year. This is due to the limitations encountered during data collection, namely the limited number of female directors in public companies on the IDX.

The testing phase begins with testing the classical assumptions (multicollinearity, heteroscedasticity, and autocorrelation), in order to obtain certainty that the data has met the requirements of statistical techniques. Then proceed with the hypothesis testing phase, using 5% significance level. In this study, researchers used SPSS version 16.0 as a test tool.
3. RESULTS AND DISCUSSIONS

3.1. Sample and Observations Result

The limited number of companies that have female directors has resulted in this study taking the form of unbalanced panel data, which means that no full observations were available during the four years of observation. Table 1 presents a summary of the 467 observations.

| Descriptions                          | n  |
|---------------------------------------|----|
| The population of public companies on the IDX 2015-2018 | 448 |
| Banking and financial institutions    | (30) |
| Companies that do not have complete data | (272) |
| Total sample                          | 146 |
| Total observations                    | 467 |

3.2. Descriptive Statistic

Table 2 reports descriptive statistics of the variables studied, namely (1) gender diversity (age diversity and ethnic diversity); as an independent variable; (2) financial expertise as a moderating variable; (3) the control variables in this study are company size and company growth; and (4) the dependent variable is earnings quality; of 467 observations.

|                  | N  | Minimum | Maximum | Mean   | Std. Deviation |
|------------------|----|---------|---------|--------|----------------|
| EarnQ (Y)        | 467| 0.00    | 4.72    | 0.0828 | 0.45843        |
| AgeDiv (X1)      | 467| 0.00    | 0.72    | 0.1245 | 0.22031        |
| EthnicDiv (X2)   | 467| 0.00    | 0.63    | 0.0583 | 0.15511        |
| FinancialExp (X3)| 467| 0.00    | 1.00    | 0.6970 | 0.40524        |
| FSize (X4)       | 467| 24.34   | 32.15   | 28.4687| 1.73656        |
| FGrowth (X5)     | 467| -14.72  | 82.44   | 3.0899 | 7.83238        |
| Valid N (listwise) | 467 |

From the table above, it is found that the average value, the lowest value, the highest value, and the standard deviation, respectively, are 0.1245; 0.72; 0.00; and 0.22031. Meanwhile, ethnic diversity shows a value of 0.0583; 0.63; 0.00; and 0.15511 respectively. For the moderating variable, financial expertise, it shows a value of 0.697; 1.00; 0.00;
and 0.40524. Furthermore, for the dependent variable (earnings quality) the average, maximum, minimum, and standard deviation values are obtained; ie 0.0828; 4.74; 0.00; and 0.45843.

**Hypothesis Result**

Before testing the hypothesis, the researcher tested the classical assumptions first. Table 3 shows a summary of the results of hypothesis testing obtained.

![Table 3: Results of the tested hypotheses](image)

Table 3 shows the hypothesis testing. Hypothesis testing was carried out in two stages, namely testing the effect of age diversity, ethnic diversity, financial expertise, on earnings quality; and testing the effect of gender diversity (age diversity and ethnic diversity together) on earnings quality, moderated by financial expertise.

For the first stage of testing, an R-square value of 9% was found, it can be concluded that the independent variables involved only affect the dependent variable by 9%; while 91% is influenced by other factors. While, in the second stage of testing, the result shows the R-square value is 11.4%, meaning that after the relationship is influenced by the moderating variable, then r² increases to 11.4%.

Then seen from the F-test value in the first stage of testing of 9.149, a significance of 0.000, and this value increased to 11.871 in the second stage of testing, with a
significance value of 0.000. This can be interpreted that simultaneously the independent variable affects the dependent variable at alpha 5%.

3.3. Age Diversity and Earnings Quality

The first test conducted found that earnings quality was not affected by age diversity. This is evidenced by the results of data processing obtained p value of 0.265 (greater than 5% alpha); 0.117 for the value of the regression coefficient; and 1.115 for the t value.

Previous researchers have proven that the company’s performance (one of which is evidenced by the increase in earnings quality) is influenced by the diversity of the age of the board of directors [32]; [33]. However, this condition does not seem to always apply in developing countries such as Indonesia, some studies still show inconsistent results. This results in not being able to prove that the age diversity can affect its business decisions, including proving an increase in the quality of the company’s earnings.

3.4. Ethnic Diversity and Earnings Quality

The second hypothesis is successful in proving that ethnic diversity has an opposite effect on earnings quality, meaning that the more ethnically diverse the directors are, the lower the company’s earnings quality will be. This is ensured with a slope coefficient of +0.765; the result of t-value 5.066; and p value 0.000 (≤ 5% alpha). This finding is consistent with previous research which found that the higher the ethnic diversity, the lower the quality of the company’s earnings [33, 34, 26].

In addition to gender, ethnicity is also an identity that a person has and shapes his character in solving a problem. In an organization that is managed by a group of people who have diverse backgrounds, it will certainly benefit the company because they have a different set of innate skills and knowledge from team members. Multidimensional and holistic perspectives will be built in a diverse environment, and are useful in making wise decisions in an organization.

Although diversity is something to be expected, in reality people often feel confused, threatened or even disturbed by people who have views, backgrounds, cultures, ethnicities that are very different from theirs. This can be seen from the findings of this study, for the case in Indonesia, ethnic diversity makes directors more smooth for group interests and lowers earnings quality.
3.5. Gender Diversity, Financial Expertise, and Earnings Quality

The test results for hypothesis 3 are carried out by looking at the p-value and the comparison of the R2 value of the single regression and regression with the moderating variable. For the first stage, it was found that the regression results showed a negative regression coefficient of 1.806, a t-value of 4.626, and a p-value of 0.000 (alpha less than 1%). Meanwhile, in the second stage, the comparison of the R2 values found that there was an increase in the R2 value after the moderating variable (from 9% to 11.4%). This means that it can be concluded that the more diverse gender and financial expertise of female directors, the lower the quality of the company’s earnings. So it can be concluded that hypothesis 3 is supported.

The financial expertise possessed is not always used by executives to improve the quality of company profits. Many cases of fraud arise because directors have adequate educational backgrounds but commit fraudulent acts. The two most common reasons executives commit frauds are greed and necessity. Greed and need can play a role on a personal level as well as a corporate level. From the explanation above, it can be concluded that educated executives, including those in finance and accounting, can result in low earnings quality.

4. CONCLUSION AND RECOMMENDATION

This study aims to see whether the diversity in the female board of directors (in terms of age and ethnicity), and the financial expertise of female directors can improve earnings quality. This study uses companies listed on the IDX from 2015-2018. The results of the study found that diverse ages have no effect on earnings quality, while ethnic diversity will trigger low earnings quality. For the moderating variable of financial expertise, it was found that financial expertise weakened the relationship between gender diversity and earnings quality.

The results showed that the independent variable had a weak relationship with the dependent variable, which was indicated by a low R-square value. Further research is needed as the development of this research. Further research will further develop the attributes of gender diversity, such as nationality, language, and so on.
References

[1] Dechow P, Ge W, Schrand C. Understanding earnings quality: A review of the proxies, their determinants and their consequences. Journal of Accounting and Economics. 2010;50(2–3):344–401. http://dx.doi.org/10.1016/j.jacceco.2010.09.001

[2] Darmayanti Y, Kassim AA. Female directors network, external financing, and earnings quality female directors network, external financing, and earnings quality. International Journal of Academic Research in Accounting Finance and Management Sciences. 2021;10(3):562–81.

[3] Waweru NM, Riro GK. Corporate governance, firm characteristics and earnings management in an emerging economy. Journal of Applied Management Accounting Research. 2013;11(1):43–64.

[4] Gounopoulos D, Pham H. Financial expert CEOs and earnings management around initial public offerings. Journal of Applied Management Accounting Research. 2018;53(2):102–17. https://doi.org/10.1016/j.intacc.2018.04.002

[5] Kirsch A. The gender composition of corporate boards: A review and research agenda. Leadership Quarterly. 2018;29(2):346–64. http://dx.doi.org/10.1016/j.leaqua.2017.06.001

[6] Koevoets S. Board characteristics and earnings quality: Evidence from the USA. Thesis. 2017;(Sept):1–44.

[7] Siam YISA, Laili NHB, Khairi KFB. Audit committee characteristics, external audit and earnings management among Jordanian listed companies: Proposing conceptual framework. The Journal of Developing Areas. 2014;6(Sept):1–14.

[8] Zalata AM, Ntim C, Aboud A, Gyapong E. Female CEOs and core earnings quality: New evidence on the ethics versus risk-aversion puzzle. Journal of Business Ethics. 2019;160(2):515–34. http://dx.doi.org/10.1007/s10551-018-3918-y

[9] Ward AM, Forker J. Financial management effectiveness and board gender diversity in member-governed, community financial institutions. Journal of Business Ethics. 2017;141(2):351–66.

[10] Tavanti M, Werhane PH. On complacency, corporate cliffs and power distance: Global leadership ethics from gender and cultural studies perspectives. Leadership and the Humanities. 2013;1(1):22–30.

[11] Chen G, Crossland C, Huang S. Female board representation and corporate acquisition intensity. Strategic Management Journal. 2016;37(2):303-301.

[12] Cruz C, Justo R, De Castro JO. Does family employment enhance MSEs performance? Integrating socioemotional wealth and family
embeddedness perspectives. Journal of Business Venturing. 2012;27(1):62–76. http://dx.doi.org/10.1016/j.jbusvent.2010.07.002

[13] Srinidhi B, Gul FA, Tsui J. Female directors and earnings quality. Contemporary Accounting Research. 2011;28(5):1610–44.

[14] Adams RB. Women on boards: The superheroes of tomorrow? Leadership Quarterly. 2016;27(3):371–86. http://dx.doi.org/10.1016/j.leaqua.2015.11.001

[15] Nekhili M, Gatfaoui H. Are demographic attributes and firm characteristics drivers of gender diversity? Investigating women’s positions on French boards of directors. Journal Business Ethics. 2013;118(2):227–49.

[16] Chapple L, Humphrey JE. Does board gender diversity have a financial impact? Evidence using stock portfolio performance. Journal Business Ethics. 2014;122(4):709–723.

[17] World Economic Forum. The global gender gap report 2018. 2018. The World Economic Forum. Available from: http://www3.weforum.org/docs/WEF_GGGR_2018.pdf

[18] Mishra RK, Shital J. Diversity and the effective corporate board. 2013. Academic Press. United States.

[19] Luan CJ, Chen YY, Huang HY, Wang KS. CEO succession decision in family businesses – A corporate governance perspective. Asia Pacific Management Review.

[20] 2018;23(2):130–6. http://dx.doi.org/10.1016/j.apmr.v.2017.03.003

[21] Bernile G, Bhagwat V, SY. Board diversity, firm risk, and corporate policies. Journal of Financial Economics. 2018;127:588–612.

[22] Carter DA, D’Souza F, Simkins BJ, Simpson WG. The gender and ethnic diversity of US boards and board committees and firm financial performance. Corporate Governance: An International Review. 2010;18(5):396–414.

[23] Gallego AC, Francoeur C, Labelle R, Laffarga J, Barbadillo E. Appointing women to boards: Is there a cultural bias? Journal Business Ethics. 2015;129: 429-444.

[24] Hussin N, Othman R. Code of corporate governance and firm performance. British Journal of Economics, Finance, and Management Science. 2012;6(2):1–22.

[25] Jiang F, Zhu B, Huang J. CEO’s financial experience and earnings management. Journal of Multinational Financial Management. 2013;23(3):134–45. http://dx.doi.org/10.1016/j.mulfin.2013.03.005

[26] Dechow PM, IDD. The quality of accruals and earnings: The role of accrual estimation errors. The Accounting Review. 2002;77:35–59.
[27] Handley L. Covid pandemic shows why businesses need to prioritize age diversity too, CEO says. CNBC. 2021 Jan 14. Available from: https://www.cnbc.com/2021/01/14/businesses-need-to-prioritize-age-diversity-as-well-as-gender-and-ethnicity-ceo.html

[28] Mahadeo JD, Soobaroyen T, Hanuman VO. Board composition and financial performance: Uncovering the effects of diversity in an emerging economy. Journal Business Ethics. 2012;105(3):375–88.

[29] Carter DA, D'Souza F, Simkins BJ, Simpson WG. The gender and ethnic diversity of US boards and board committees and firm financial performance. Corporate Governance: An International Review. 2010;18:396–414.

[30] Tee CM, Rassiah P. Ethnic board diversity, earnings quality and institutional investors: Evidence from Malaysian corporate boards. Accounting and Finance. 2019.

[31] Gull AA, Nekhili M, Nagati H, Chtioui T. Beyond gender diversity: How specific attributes of female directors affect earnings management. British Accounting Review. 2018;50(3):255–74. http://dx.doi.org/10.1016/j.bar.2017.09.001

[32] Moslemany RE, Nathan D. Ownership structure and earnings management: Evidence from Egypt. International Journal of Business & Economic Development. 2019;7(1):18–32.

[33] Astuti EP. Pengaruh diversitas dewan direksi terhadap nilai perusahaan pada perusahaan manufaktur yang terdaftar di bursa efek Indonesia periode 2008-2011. KREATIF : Jurnal Ilmiah Prodi Manajemen Universitas Pamulang. 2017;4(2):159–79.

[34] Chen MYC, Wang YS, Sun V. Intellectual capital and organizational commitment: Evidence from cultural creative industries in Taiwan. Personnel Review. 2012;41(3):321–39.

[35] Cimerovaa H, Dodd O, Frijnsa B. The impact of cultural diversity in corporate boards on firm performances. Auckland, New Zealand: Department of Finance, Auckland University of Technology, Auckland, New Zealand; 2014.