Jurnal Akuntansi dan Bisnis
Vol. 22 No. 2, Agustus 2022: 303-319
www.jab.fe.uns.ac.id

THE INFLUENCE OF FIRM AGE ON PROFITABILITY PERFORMANCE OF INDONESIAN MANUFACTURING COMPANIES WITH THE AGE LEVEL OF DIRECTORS AS MODERATING VARIABLE

YOHANES KRISTANTO WIBOWO (yohaneskw1994@gmail.com)
SETYANINGTYAS HONGGOWATI[2]

Master of Management, Faculty of Economics and Business, Universitas Sebelas Maret, Indonesia

ABSTRACT

This research this study empirically investigates the effect of the age level of Board of Directors (BD) as moderating variable toward the influence of firm age on the corporate financial performance of manufacturing companies in Indonesia. Secondary data which were collected from the annual reports of 125 manufacturing companies listed on the Indonesia Stock Exchange (IDX), from year 2014 to 2017, are used as panel data for research sample of this study and regression analysis is applied on the proposed research models. The results of this study outline that the firm age of the listed Indonesian manufacturing companies has significant direct positive influence on the corporate financial performance as measured by accounting-based ratios of profitability, which include ROA, ROE, and NPM. However, the strength of influence of firm age on ROE depends on the effect of the age level of BD members as moderating variable. The higher the age level of BD members is proved to weaken the influence of firm age on ROE, while the lower the age level of BD members is proved to strengthen the influence of firm age on ROE. In addition, the age level of BD members also has significant negative influence on the corporate financial performance as measured by ROA and ROE. Thus, the age level of BD members can be regarded as Quasi Moderator of firm age on ROE. Ultimately, this study contributes to the limited body of corporate governance studies on the demographic factor of age of the corporate leaders, by outlining the indirect influence of the age level of the BD members toward the influence of firm age on the corporate financial performance in the context of economically developing country of Indonesia.

Keywords: *Age, Board of Directors, Corporate Financial Performance, Firm Age, Panel Data*

Penelitian ini mengkaji secara empiris pengaruh tingkat usia Direksi (BD) sebagai variabel moderasi terhadap pengaruh usia perusahaan terhadap kinerja keuangan perusahaan perusahaan manufaktur di Indonesia. Data sekunder yang dikumpulkan dari laporan tahunan 125 perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia (BEI), dari tahun 2014 hingga 2017, digunakan sebagai data panel untuk sampel penelitian penelitian ini dan analisis regresi diterapkan pada model penelitian yang diusulkan. . Hasil penelitian ini menjelaskan bahwa umur perusahaan dari perusahaan manufaktur Indonesia yang terdaftar memiliki pengaruh positif langsung yang signifikan terhadap kinerja keuangan perusahaan yang diukur dengan rasio profitabilitas berbasis akuntansi, yang meliputi ROA, ROE, dan NPM. Namun kekuatan pengaruh umur perusahaan terhadap ROE bergantung pada pengaruh tingkat umur anggota BD sebagai variabel moderasi. Semakin tinggi tingkat umur anggota BD terbukti memperlemah pengaruh umur perusahaan terhadap ROE, sedangkan semakin rendah tingkat umur anggota BD terbukti memperkuat pengaruh umur perusahaan terhadap ROE. Selain itu, tingkat usia anggota BD juga berpengaruh negatif signifikan terhadap kinerja keuangan perusahaan yang diukur dengan ROA dan ROE. Dengan demikian, tingkat usia anggota BD dapat dianggap sebagai Quasi Moderator usia perusahaan pada ROE. Pada akhirnya, penelitian ini memberikan kontribusi terhadap studi tata kelola perusahaan yang terbatas pada faktor demografis usia pemimpin perusahaan, dengan menguraikan pengaruh tidak langsung dari tingkat usia anggota BD terhadap pengaruh usia perusahaan terhadap kinerja keuangan perusahaan di konteks ekonomi negara berkembang Indonesia.

Kata kunci: Umur, Direksi, Kinerja Keuangan Perusahaan, Umur Perusahaan.

INTRODUCTION

Listed limited liability companies (Perseroan Terbatas or PT) in Indonesia are regulated by national law to use two-tier

system in their Top Management Team (TMT) structure according to legal policy regarding the corporate governance, named UU number 40 year 2007 (Darmadi, 2013), to be managed by Board of Directors (BD) and board of commissioners (BC) as corporate leaders. Basically, legal policies and regulations that target the corporate governance structure are practically applied to enhance the managerial effectiveness of internal corporate governance control of the company (Azaria et al., 2021). BD members are the executives of the company who hold a responsibility to lead, organize, and supervise the decision-making processes and corporate business activities of the company, while fulfilling the corporate goals and strategies (Assenga et al., 2018; Zulfikar et al., 2020), and protecting the interests of shareholders (Azaria et al., 2021). Meanwhile, board of commissioners (BC) hold a responsibility as the corporate supervisors who evaluate whether the company operations and work performance of BD or corporate leaders are in align to the corporate goals, strategies, and the shareholder's expectations (Zulfikar et al., 2020). A fundamental theory in the scope of corporate governance, which is agency theory, highlight that an effective corporate management of TMT members is the core mechanism to minimize agency problems of the company while maximizing corporate financial performance (Assenga et al., 2018). According to Hambrick and Mason (1984) certain values, perceptions, and cognitive bases of corporate leaders might be reflected by organizational outcomes of their company, whether the company meet their goals and strategy or not. The agency theory also underlines the influence of diversity of the BD members which determine the independence and effectiveness of strategic decision-making ability of TMT (Assenga et al., 2018).

On the other hand, resource dependence theory outlines that company cannot independently sustaining themselves due to limited resources they have (Azaria et al., 2021). In this case, the corporate BD members not only act as the resources managers of the organizations they lead but also business mediators to obtain any capitals needed for the sustainance of the companies (Kılıç & Kuzey, 2016). In order to survive the market, companies need to depend on the availability of external resources which not only limited to financial, human, informational, material, and technological capitals from their environment to functionally operate and develop (Assenga et al., 2018). As part of human capital, BD members are assigned in the vital positions of the company to provide access of other critical resources that can support the economic development of their organizations (Kılıç & Kuzey, 2016). Therefore, corporate financial performance of the companies depends on how effective and strategic the decisions made by corporate leaders in determining the profitability performance of their organizations. BD members of various generations might hold different values and perceptions on how to manage the resources of their company and fulfill the corporate goals, strategies, and the shareholder's expectations. In this case, the demographics of BD members can indirectly influence their leadership functioning in the organization (Kagzi & Guha, 2018). Thus, both of those theories outline that demographic diversity of BD members is an indirect factor that determine the leadership styles, perspectives, and decision-making ability of corporate leaders, which ultimately contribute to the corporate governance sustainability of the company (Kılıç & Kuzey, 2016).

There are two types of diversity of human capital as highlighted by McGuire and Taylor (2017), which consist of the demographic diversity, that include gender, age, ethnicity, race, and the cognitive diversity which include knowledge, educational background, personal value, and perceptions. Moreover, the psychological aspects of corporate leaders such as the cognitive bases, personal value, and perceptions can theoretically explain the influential factors of decision-making ability of TMT members but are not

convenient and amenable to directly measured in the study of corporate governance (Hambrick & Mason, 1984). However, the background characteristics of demographic diversity, such as age, gender, race, and ethnicity are some of the observable factors of the decision makers to be researched in relation to the organizational outcomes (Hambrick & Mason, 1984). For example, the age of BD members is the observable demographic diversity attribute of corporate leaders that still receive less attention in the body of researches on corporate governance and corporate financial performance (Kagzi & Guha, 2018), especially in the context of economically developing country such as Indonesia (Darmadi, 2013). In addition, country-specific corporate governance study that focus on the influence of demographic diversity of BD on corporate financial performance are majorly conducted on sample companies in developed countries, such as Australia (Ali & Konrad, 2017), Italy (Gordini & Rancati, 2017), and cannot be generalized to other countries with different legal corporate governance policy, TMT structure, and corporate culture (Assenga et al., 2018). Previous researches also highlight the need of more panel data studies on the topic of TMT diversity (Delgado-Márquez et al., 2017), especially on developing economy.

To improve understanding about the indirect influence of the age level of BD members as contributing factor that may result in certain financial performance outcomes of the companies, this study empirically investigates the effect of the age level of Board of Directors (BD) as moderating variable toward the influence of firm age on the corporate financial performance of manufacturing companies in Indonesia. Secondary data that are collected from the annual reports of 125 manufacturing companies listed on the *Indonesia Stock Exchange (IDX)*, from the period of year 2014 to 2017 (within 4 years), used as panel data for research samples in this study and regression analysis is applied on the proposed research models. This research is aimed to contribute toward the limited body of corporate governance studies on the demographic factor of age of the corporate leaders, by outlining the influences of the age level of BD members as moderating variable which might result in certain corporate profitability performance of listed manufacturing companies in the context of economically developing country. Furthermore, this study used the accounting-based ratios which include return on assets (ROA), return on equity (ROE), and net profit margin (NPM) as dependent variables to measure the corporate financial performance of the sample companies. Moreover, this study included control variables that consist of size of BD (BSIZE), size of the company (FSIZE), total assets turnover (TATO), and Debt-to-Total-Equity Ratio (DER) of the company. In addition, EViews 10 software is used to calculate and process the panel data analysis from the selected samples to gather the relevant information regarding descriptive analysis and causality analysis of this research study. The rest of this study consists of literature review and hypotheses development, methodology, discussion on analysis results, and conclusion.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Firm Age (FAGE)

An apparent characteristic of the organization that shows whether a company economically survived the market conditions within a certain period of time is firm age. Firm age indicates the living cycle of organizations which determine their current conditions of corporate financial performance, as a result of managerial decisions conducted by BD members of TMT since the establishment period of the company. The longer the company operated since they were founded, the more they have well established resources and stable financial conditions which might include well experienced and skillful human capital, especially their corporate leaders or TMT members. According to Kartiningsih, D., & Daryanto, W. M. (2020), the long-established organizations tend to have

more experience in carrying out business activities in their industrial sector and their products are better known by broader public community of stakeholders compared to the newcomers, which can boost their sales. To sustain and develop the existence of business for long time period is challenging because the surviving companies should maintain the quality of their products and new competitors can enter the market, so the older companies have to be innovative with their products and technology to be able to compete and secure their market.

Based on the resource dependence theory, a company can obtain the competitive advantage and has a good financial performance by owning, mastering, and utilizing their strategic assets which include the tangible and intangible assets. The older and well-established companies who tend to have more integrated business channels, distributors, and suppliers might also be able to control their costs, generate more profit for their shareholders, and has more resources to hire expert members of BD compared to younger aged companies. Additionally, based on the agency theory, any strategic decisions made by the company depend on the concerns of TMT members and their approval into account (Kagzi & Guha, 2018), so the functioning of BD representatives as vital human resource might lead to certain outcomes of financial performance of the company. In this study, the higher the score of firm age (FAGE) is associated with older and more well-established companies, while the lower the score of FAGE is associated with younger aged and less established companies. Thus, this study argues that firm age might determine the corporate profitability of the organizations with the older firm age is associated with higher value of ROA, ROE, and NPM. Moreover, firm age (FAGE) is calculated by the natural logarithm of the number of years which the company have been established or founded until the year of corresponding study sample (Ali & Konrad, 2017; Delgado-Márquez et al., 2017; Gordini & Rancati, 2017; Chong et al., 2018).

H1A: There is a direct significant positive influence of firm age on the corporate financial performance as measured by ROA without moderating variable.

H1B: There is a direct significant positive influence of firm age on the corporate financial performance as measured by ROE without moderating variable.

H1C: There is a direct significant positive influence of firm age on the corporate financial performance as measured by NPM without moderating variable.

Age Diversity of BD Members (BDAGE) as Moderating Variable

Age is the least researched innate demographic attribute of diversity in the study of corporate governance (Kagzi & Guha, 2018), and usually used as control variable (Tanikawa et al., 2017). The influence of the age level of BD members might indirectly contribute to certain profitability conditions of the company as a result of the assets management performance of their BD members. Effective resource management performance of BD members has always been associated with higher profit that their company could generate. Meanwhile, ineffective managerial performance of BD members might result in the negative or no influence on corporate financial performance of the company. Some previous research findings on corporate governance indicated a significant positive influence of younger corporate leaders on corporate growth (Hambrick & Mason, 1984), and corporate financial performance (Naseem et al., 2020). It is argued that the age of BD members is a contributing demographic factor of their cognitive development and psychological development (Naseem et al., 2020), due to the improvement of experiences or change of perceptions and personal values (Hambrick & Mason, 1984; Tanikawa et al., 2017). In fact, cognitive abilities of corporate leaders are strongly influenced by age due to the unstoppable nature of constant physical development and changes overtime, especially toward their behaviors, values, and perspectives (Tanikawa et al., 2017).

Moreover, age diversity within TMT provides heterogeneous decision-making experiences for BD members (Kagzi & Guha, 2018), which include resource for broad range of skill, information, and knowledge among TMT members of different backgrounds (Tanikawa et al., 2017). The heterogeneous demographic factors of various generations of TMT members might also facilitate higher creativity and innovation to better understand the market and conduct novel problem-solving in decision-making process (Solakoglu & Demir, 2016), which is vital for the improvement of financial profitability of the company. Resource dependence theory also suggest that age diversity of TMT members with mixed population of young and old BD members can provide more intellectual perks of human capital, such as valuable experiences and skills to boost their resources management and decision-making abilities (Kagzi & Guha, 2018). The younger BD members with more developed educational backgrounds and technological abilities might be able to assist the older BD members, while the younger BD members might be supported by the older BD members who have previous strategic experiences in the industry (Kagzi & Guha, 2018). For example, the corporate governance study on TMT diversity of companies in Pakistan highlighted a significant positive influence of the age of BD members on corporate financial performance (Naseem et al., 2020).

However, the support of senior corporate leaders is still a fundamental factor for the success of organizational change and development, especially any initiatives to improve inclusiveness and heterogenous diversity of TMT members of the company (Ali & Konrad, 2017). Older corporate leaders might be more conservative and less enthusiastic to initiate changes (Kagzi & Guha, 2018). In addition, Hambrick and Mason (1984) argued that there are three underlying factors regarding the conservative stance of older generations of corporate leaders. First, they tend to have less mental and physical stamina, or less flexible to grasp new ideas and less able to adapt new behaviors. Second, they tend to take longer time in integrating information and having confidence in making decisions, while being more comfortable to maintain the organizational status quo. Lastly, they tend to avoid risks taking actions that can threaten their career security, financial security, and social security. These factors explain why older generation of corporate leaders tend to be more avoidant to engage in high-risk financial strategy, while the younger ones are more profit-oriented, less afraid of strategic change (Kagzi & Guha, 2018), or choosing more high-risk investments (Naseem et al., 2020). Moreover, agency theory also outlines that age diversity can lower the managerial performance of BD members which possibly caused by disparity from different perspectives among corporate leaders of different generations, specifically in terms of communication styles, culture, and values (Tanikawa et al., 2017). This problem might slow down the decision-making process of BD and compromise their managerial effectiveness, which result in the negative relationship between age diversity of BD members and corporate financial performance (Tanikawa et al., 2017). The previous research conducted by Tanikawa et al. (2017) on the age diversity of TMT members in South Korea indicated a significant negative relationship between age diversity variables and corporate financial performance variables.

Furthermore, regarding the issue of age diversity within economically developing economy in Indonesia, the culture of seniority in the workplace environment is also persistent with the underlying problem of conflict of interests among TMT members. For example, the younger TMT members might be hired due to familial relationships with existing older TMT members or the owners of the company. In this case, higher age level of BD members that is tend to be dominated by the old generation of corporate leaders might be harmful toward corporate financial performance of the company. Furthermore, BD dominated by older aged BD members will increase the average age

level of BD, while BD dominated by younger aged BD members will lower the average age level of BD in this study. Therefore, this research argues that the higher the age level of BD members might have adverse effect toward the influence of firm age on corporate financial performance. The age level of BD in this study is calculated by the formula of the natural logarithm of average age value of corporate BD members of the sample companies (Tanikawa et al., 2017). Thus, the hypotheses on the effect of the age level of BD as moderating variable are proposed below:

H2A: There is a significant positive influence of firm age on the corporate financial performance as measured by ROA that is weakened by the increase of the age level of BD as moderating variable.

H2B: There is a significant positive influence of firm age on the corporate financial performance as measured by ROE that is weakened by the increase of the age level of BD as moderating variable.

H2C: There is a significant positive influence of firm age on the corporate financial performance as measured by NPM that is weakened by the increase of the age level of BD as moderating variable.

Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM)

Ratios of corporate financial performance are used to indicate financial conditions of the company as the results of resources management and decision-making abilities of the Board of Directors (BD). There are several types of corporate financial performance measurements, especially the ones which are used to measure corporate profitability; which include market-based measurement such as Tobin's Q, and accounting-based measurements which include return on assets (ROA), return on equity (ROE), and net profit margin (NPM). Measurements of corporate financial performance are usually showed in the annual report of the listed companies as external information for the stakeholders. For instance, ROA is calculated from the formula of the net income or EBIT (earnings before interests and tax) divided by the total assets of the company. Meanwhile, ROE is calculated from the formula of the net income or EBIT divided by the net worth of shareholders' equity of the company (Solakoglu & Demir, 2016; Assenga et al., 2018; Jadiyappa et al., 2019). ROA as profitability ratio of the company can be used to indicate the effectiveness of managerial ability of BD members and efficiency of the company to generate income and return for shareholders from the total capital invested on the company (Jadiyappa et al., 2019), which include liability and shareholder's equity whether for financing corporate operations or investing purposes. Meanwhile, ROE as profitability ratio of the company can be used to indicate the effectiveness of managerial ability of BD members and efficiency of the company to generate income and return for shareholders from the account attributed to shareholders (Jadiyappa et al., 2019). Both total assets of the company and shareholders' equity are the company's main resources for financing operations or investing purposes to improve corporate profitability.

In addition, NPM is used to calculate the profitability ratio of the company with the formula of net income divided by revenue of the company (Ali & Konrad, 2017). NPM can predict how much profit is generated from the sales of the company. Thus, ROA, ROE, and NPM are used as dependent variables in this study because they provide historical perspective of the corporate financial performance from the listed companies through the years of operations and the indication of how successful the BD in supporting the improvement of financial profitability of the selected sample companies. The higher score of ROA, ROE and NPM of the company indicate the better financial conditions and resources that the company have and also more profit that have been generated from the efficient use of those resources. The previous researches that used these accounting-based

measurements include studies by Kılıç and Kuzey (2016), Solakoglu and Demir (2016), Ali and Konrad (2017), Gordini and Rancati (2017), Assenga et al. (2018), and Jadiyappa et al. (2019).

Control Variables

Control variables are used to optimally explain the occurring influence on dependent variable further and to control any influences from external factors that are not assessed within research model as the main independent variable.

Size of Board of Directors (BSIZE)

According to the stance of resource dependence theory, larger board with more members can provide more connections from external environment for the company, while smaller board with less BD members might improve the effectiveness of decision-making process of the TMT (Assenga et al., 2018). Bigger size of BD might also facilitate TMT of the company with more members of diverse competencies and demographic characteristics, while smaller size of BD might perform more efficient in centralized supervision and controlling management (Kılıç & Kuzey, 2016). Size of Board of Directors (BD) is calculated by the natural logarithm of the total number of BD members within TMT (Kılıç & Kuzey, 2016; Gordini & Rancati, 2017; Azaria et al., 2021).

Firm Size (FSIZE)

The size of the company depends on the amount of total assets as economic resources controlled by the company to sustain their business activities. Company with larger size tend to have better economic conditions than the smaller ones and flexibility in using larger invested resources to facilitate the decision-making ability of BD members in improving the financial performance of the company (Azaria et al., 2021). Larger size of the

Table 1.
Description of Research Variables

Variable Type	Description	Indicator	Measurement and Sources
Dependent Variable			
Corporate Financial Performance	Return on Assets Ratio	ROA	Net income divided by the total assets of the company (Assenga et al., 2018; Jadiyappa et al., 2019)
	Return on Equity Ratio	ROE	Net income divided by the net worth of shareholders' equity of the company (Assenga et al., 2018; Jadiyappa et al., 2019)
	Net Profit Margin	NPM	Net profit divided by total revenue (sales) of the company (Ali & Konrad, 2017)
Independent Variable			
Age of Company (Firm Age)		FAGE	Natural logarithm of the number of years which the company have been established or founded (Ali & Konrad, 2017; Delgado-Márquez et al., 2017; Gordini & Rancati, 2017; Chong et al., 2018)
Moderating Variable			
Age Level of Board of Directors		BDAGE	Natural logarithm of the average age value of corporate BD members (Tanikawa et al., 2017)
FAGE x BDAGE		FAGE x BDAGE	The predictor of contingency variable which indicates the indirect effect of BDAGE that can strengthen or weaken the influence of independent variable on dependent variables
Control Variable			
Size of Board of Directors (Number of Directors)		BSIZE	Natural logarithm of the total number of BD members within TMT (Kılıç & Kuzey, 2016; Gordini & Rancati, 2017; Azaria et al., 2021)
Size of Company (Firm Size)		FSIZE	Natural logarithm of total assets (LNASSETS) (Kılıç & Kuzey, 2016; Gordini & Rancati, 2017; Assenga et al., 2018; Azaria et al., 2021)
Total Assets Turnover Ratio		TATO	Net sales divided by total assets of the company
Debt-to-Total-Assets Ratio (Leverage)		DAR	The ratio of total long-term and short-term debt divided by total assets of the company (Kılıç & Kuzey, 2016; Gordini & Rancati, 2017; Chong et al., 2018)

company is associated with positive effect on profitability because they require better performance of their BD members to conduct more effective supervision and managerial activities (Azaria et al., 2021). Furthermore, Kılıç & Kuzey (2016) added that companies with larger size have more resources to develop product differentiation and lower production costs as compared to the economic scale of smaller companies which might improve their financial performance. Meanwhile, smaller companies tend to focus on financial and market survival due to more limited resources they have to sustain (Chams et al., 2021).

According to Azaria et al. (2021), legitimacy of the company also depends on the size of the company because the public tend to trust the products marketed by larger company than the smaller ones which contribute to the corporate profitability of the company. Moreover, the larger size company with relatively better financial resources can hire more experienced and skillful corporate leaders, which include their BD members, to improve the corporate financial performance of the company. In some cases, company with larger size might not contribute to profitability because of ineffective resources management on their unemployed assets to be used in generating profits. Company with larger assets and capitals which are not used to the maximum might also generate less profit. Thus, the size of the firm is calculated by the natural logarithm of total assets of the sample company (LNASSETS) (Kılıç & Kuzey, 2016; Assenga et al., 2018; Azaria et al., 2021).

Total Assets Turnover (TATO)

Accounting-based measurement of total assets turnover (TATO) indicates how effective the company in using the overall asset structure or invested capitals to generate profit from sales. The higher ratio of TATO means that the company also have higher rate of generated profit through effectively utilizing their assets to support their sales activity (Nurlaela et al., 2019). Moreover, TATO ratio in this study represents the activity ratio of the company's operations managed by BD members, with the measurement formula of net sales divided by total assets of the company (Jadiyappa et al., 2019; Nurlaela et al., 2019).

Debt-to-Total-Assets Ratio (DAR)

The accounting-based measurement of leverage, debt-to-total-assets ratio (DAR), is used to indicate capital structure and financial risk of the company (Kılıç & Kuzey, 2016). The higher the score shown by the leverage ratio might indicate the higher costs of unpaid debts that the company have as compared to the total capital invested on the company. In this case, higher DAR score highlights the higher risk of bankruptcy and is expected to negatively influence corporate financial performance when the interest rate increases, which might undermine the profitability performance of the company. Moreover, financing investment-related activities also depends on the leverage or capital structure of the company, whether BD members decide to use either shareholder's equity, debt, liability or the mix of both accounts (Nurlaela et al., 2019). Capital structure is permanent financing sources of the company which consist of long-term debt, preferred stock, and share capital. The ratio of total long-term and short-term debt divided by total assets of the company is used in this study to measure leverage level of the sample companies (Kılıç & Kuzey, 2016; Gordini & Rancati, 2017; Chong et al., 2018).

RESEARCH METHODS

This research empirically investigates the effect of the age level of Board of Directors (BD) as moderating variable toward the influence of firm age on the corporate financial performance of manufacturing companies in Indonesia. ROA, ROE, and NPM that become the dependent variables of this study are the accounting-based ratios to measure the corporate financial performance of profitability from the sample companies. Moreover, this study used panel data samples within 4 years period, from year 2014 to 2017, which is

collected from the annual reports of 125 manufacturing companies listed on the Indonesia Stock Exchange (IDX). Purposive sampling method is used to collect the secondary data required in this study from the annual reports of the sample companies, which are available to be downloaded from the official Indonesia Stock Exchange website (www.idx.co.id) or the official website of the sample companies. Furthermore, the criteria of samples selected in this study include companies that did not delist during the period of year 2014 to 2017 or lately listed on IDX in the middle of year 2014 to 2017. The total number of collected data from the selected samples which are observable is at 500. In addition, listed manufacturing companies are selected as research samples of this study because manufacturing sector is the secondary sector of the economy, which has been the primary source of purchases and sales among corporate sectors (linkage affect), as well as source of knowledge flows between corporate sectors (spillover effect) ("Policies to Support the Development of Indonesia's Manufacturing Sector during 2020–2024: A Joint ADB–BAPPENAS Report", 2021).

This research focus on the quantitative approach to assess the influence of the age level of Board of Directors (BD) on the variables of corporate financial performance. Table 1 below describes all variables that are included in this study. The data samples are collected with Microsoft Excel software and EViews 10 software is later used to conduct the regression analysis on the collected panel data to generate information regarding descriptive analysis, correlations analysis, and causality analysis. Common effect method of regression analysis is conducted on sample data to analyze the proposed research models through EViews 10 software. This regression process is repeated separately for the dependent variables of ROA, ROE, and NPM to promote comprehensive results. Furthermore, common statistical tools such as descriptive statistics, Pearson's correlation coefficient test, simultaneous significance test (F-statistic), and coefficient determination test (R-squared) are generated to interpret the analyzed data. Simultaneous significance test (F-statistic) indicates the significance of relationships occurred between variables proposed in the research models, while the coefficient determination test (R-squared) indicates how significant the overall influence of variables proposed in the research models. To overcome the outlier effect of the research data in the estimation model and to approximate a normal distribution, all variables were considered significant at the 95% percentile or probability value (p-value) below the score of 0.05 (Chams et al., 2021).

This study also used the following generated theoretical equations as regression analysis model of the relationship between variables proposed in this study:

Research Model 1A: Firm Age on ROA without Moderating Variable

$$ROA_{it} = \alpha + \beta 1FAGE_{it} + \beta 2BDAGE + \beta 3BSIZE_{it} + \beta 4FSIZE_{it} + \beta 5TATO_{it} + \beta 6DAR_{it} + \varepsilon_{it}.$$

Research Model 1B: Firm Age on ROE without Moderating Variable

$$ROE_{it} = \alpha + \beta 1FAGE_{it} + \beta 2BDAGE + \beta 3BSIZE_{it} + \beta 4FSIZE_{it} + \beta 5TATO_{it} + \beta 6DAR_{it} + \varepsilon_{it}.$$

Research Model 1C: Firm Age on NPM without Moderating Variable

$$NPM_{it} = \alpha + \beta 1FAGE_{it} + \beta 2BDAGE + \beta 3BSIZE_{it} + \beta 4FSIZE_{it} + \beta 5TATO_{it} + \beta 6DAR_{it} + \varepsilon_{it}.$$

Research Model 2A: Firm Age on ROA with The Age Level of Directors as Moderating Variable

$$ROA_{it} = \alpha + \beta 1FAGE_{it} + \beta 2BDAGE_{it} + \beta 3FAGE \times BDAGE_{it} + \beta 4BSIZE_{it} + \beta 5FSIZE_{it} + \beta 6TATO_{it} + \beta DAR7_{it} + \varepsilon_{it}.$$

Research Model 2B: Firm Age on ROE with The Age Level of Directors as Moderating Variable

$$ROE_{it} = \alpha + \beta 1FAGE_{it} + \beta 2BDAGE_{it} + \beta 3FAGE \times BDAGE_{it} + \beta 4BSIZE_{it} + \beta 5FSIZE_{it} + \beta 6TATO_{it} + \beta DAR7_{it} + \varepsilon_{it}.$$

Research Model 2C: Firm Age on NPM with The Age Level of Directors as Moderating Variable

$NPM_{it} = \alpha + \beta 1FAGE_{it} + \beta 2BDAGE_{it} + \beta 3FAGE \times BDAGE_{it} + \beta 4BSIZE_{it} + \beta 5FSIZE_{it} + \beta 6TATO_{it} + \beta DAR7_{it} + \varepsilon_{it}$.

Where: *i*: the company. *t*: represents the time series of panel data from year 2014 to 2017.

α: represents the intercept coefficient or constant; β: represents the regression coefficient or influence and direction of the variable.; ε: represents the unobservable factor or composite error term.

ANALYSIS AND DISCUSSION

Descriptive Statistics

Table 2 below presents the descriptive statistics summary of all variables mentioned in the research design. It is known that from the 500 data observed in this study, the average value of ROA of the sample companies is at 0.048 (4,8%), while the average ROE value of the samples is at 0.065 (6,5%). These results mean that the average amount of corporate net income as compared to the corporate total equity, from ROE, is higher than as compared to the total assets of the sample companies, from ROA. Furthermore, the maximum value of ROA is also lower than the maximum value of ROE, which is at 1.02 compared to 2.33. However, the minimum value of ROE is lower than the value of ROA, which is at -9.64 compared to -0.54 consecutively. In addition, the average value of the company's age (FAGE) is about 39 years old, with the average minimum value of company's age is at 32.5 years old and the average maximum value of those companies is at 99 years old. Moreover, the average value of the age level of BD (BDAGE) is at 52.87 years old, with the minimum value of age diversity of BD members at 37.75 years old and the maximum value is at 71.33 years old. These results mean that the average youngest age of BD members from the sample companies is at 37,75 years old, while the average oldest age of BD members from the sample companies is at 71,33 years old. Regarding the size of BD of the sample companies (BSIZE), the average value is at 5 members with the maximum value of BSIZE is at 14 members and the minimum value of BSIZE is at 2 members. Meanwhile, the average size of the sample companies (FSIZE), as measured by LNASSETS, is at 14.59 with the average maximum value is at 19.51 and the average minimum value at 8.94. Furthermore, the average value of total assets turnover (TATO) of the sample companies is at 1.03 annually, with the average maximum TATO value is at 13.28 and the average minimum TATO value is at 0.02. Lastly, the average value of debt-to-total-assets ratio (DER) of the sample companies is at 1.74 annually, with the average maximum value of DAR is at 174.02 and the average minimum value of DAR is at -22.35.

Correlation Results

Table 3 below presents the results of Pearson's correlation coefficient test on all variables mentioned in the research design. Referring to the data within Table 3 below, there is no detected multicollinearity issues among the variables included in this study because there is no result of correlation coefficient that is above the value of 0.80 among different variables within the same proposed research model in this research

Table 2.
Descriptive Statistics

	ROA	ROE	NPM	FAGE	BDAGE	FAGE x BDAGE	BSIZE	FSIZE	TATO	DAR
Mean	0.0472	0.0907	0.0502	3.6188	3.9630	14.344	1.5508	14.583	0.9638	0.9724
Median	0.0318	0.0686	0.0339	3.6636	3.9544	14.473	1.6094	14.450	0.8886	0.4711
Maximum	0.3720	1.5311	0.5085	4.5951	4.2437	18.215	2.6391	18.456	3.0573	417.65
Minimum	-0.2080	-1.1434	-0.3572	2.5649	3.7495	10.184	0.6931	10.599	0.0153	-111.57
Std. Dev.	0.0796	0.2150	0.0935	0.3433	0.0957	1.4190	0.4275	1.4296	0.4990	19.643
Skewness	1.1599	2.2942	0.7093	-0.1710	0.5358	-0.3414	-0.0508	0.2533	1.0267	18.645
Kurtosis	6.5296	23.082	7.4084	3.9800	3.5756	3.7354	2.6693	3.0139	4.9383	409.22
Observations	500	500	500	500	500	500	500	500	500	500

(Shrestha, 2020).

Regression Analysis Results

Table 4 below shows the results of panel data regression from all variables proposed in the research model 1A. According to the regression results of Table 4, the p-value (Prob.) that are below the score of 0.05 and positive coefficient value indicate that there are direct positive significant influences from the variable of firm age (FAGE), size of BD (BSIZE), and assets turnover ratio (TATO) on the corporate profitability performance as measured by ROA. These results mean that the higher score of firm age (FAGE), age level of BD members (BDAGE), number of BD (BSIZE), and assets turnover (TATO) are directly associated with the increase of return on assets ratio (ROA); while the lower score of FAGE, BSIZE, and TATO are directly associated with the decrease of ROA. Moreover, the significant direct positive influence of firm age (FAGE) on ROA which is found from the regression results of Table 4 supports the proposed hypothesis H1A.

Furthermore, Table 5 below shows the results of panel data regression from all variables proposed in the research model 1B. According to the regression results of Table 5, firm age (FAGE) has direct significant positive influence on return on equity ratio (ROE) with p-value (Prob.) score below 0.05 and a positive coefficient value, which supports the proposed hypothesis H1B. The control variables of firm size (FSIZE) and assets turnover ratio (TATO) also indicate direct significant positive influences toward ROE. These results mean that the higher score of FAGE, FSIZE, and TATO are directly associated with the increase of corporate profitability performance as measured with

Table 3.
Pearson's Correlation Coefficient

	ROA	ROE	NPM	FAGE	BDAGE	FAGE x BDAGE	BSIZE	FSIZE	TATO	DER
ROA	1									
ROE	0.7291	1								
NPM	0.8050	0.5469	1							
FAGE	0.3124	0.2836	0.2332	1						
BDAGE	-0.0926	-0.1441	0.0017	0.0777	1					
FAGE x BDAGE	0.2735	0.2318	0.2229	0.7697	0.3181	1				
BSIZE	0.2346	0.1679	0.2022	0.2351	-0.0233	0.2162	1			
FSIZE	0.1638	0.1795	0.2191	0.2091	0.0393	0.2081	0.5660	1		
TATO	0.2782	0.2463	-0.0110	0.0961	-0.1075	0.0625	0.0786	-0.0717	1	
DER	-0.0868	0.0381	0.0186	-0.0238	0.0485	-0.0113	-0.0313	-0.0414	-0.0842	1

Tabel 4.
Model 1A: Firm Age on ROA without Moderating Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.005909	0.139185	-0.042456	0.9662
FAGE	0.059286	0.009782	6.060765	0.0000*
BDAGE	-0.072056	0.034045	-2.116469	0.0348*
BSIZE	0.021749	0.009329	2.331303	0.0201*
FSIZE	0.003647	0.002780	1.311858	0.1902
TATO	0.038508	0.006620	5.816630	0.0000*
DAR	9.94E-05	0.000164	0.604507	0.5458
R-squared	0.193085	Mean dependent var		0.047167
Adjusted R-squared	0.183264	S.D. dependent var		0.079610
Prob(F-statistic)	0.000000			

ROE; while the lower score of FAGE, FSIZE, and TATO are directly associated with the decrease of ROE. On the other hand, the p-value (Prob.) scores below 0.05 and negative coefficient values of BDAGE from Table 4 and Table 5 below outline the significant direct negative influences of the age level of BD on ROA and ROE. This means that the higher age level of BD members (BDAGE), that is dominated by older corporate leaders, is directly associated with the decrease of ROA and ROE; while the lower age level of BD members (BDAGE), that is dominated by younger corporate leaders, is directly associated with the increase of ROA and ROE.

Furthermore, table 6 below shows the results of panel data regression from all variables proposed in the research model 1C. According to the regression results from Table 6 below both firm age (FAGE), firm size (FSIZE), and debt-to-total-assets ratio (DAR) have direct significant positive influences on net profit margin (NPM), with p-value scores below 0.05 and positive coefficient values. These results mean that the higher score of FAGE, FSIZE, and leverage (DAR) are directly associated with the increase of NPM; while the lower score of FAGE, FSIZE, DAR are directly associated with the decrease of NPM. Accordingly, hypothesis H1C is supported by direct significant positive influence of firm age (FAGE) on the corporate financial performance as measured by NPM. Ultimately, the older the age of the company is directly linked with the higher corporate profitability of the listed manufacturing firms as measured by ROA, ROE, and NPM; while the younger the age of the company is directly linked with the lower corporate profitability performance as measured by ROA, ROE, and NPM. Thus, hypotheses H1A, H1B, and H1C are all confirmed by the significant influence of

Tabel 5.
Model 1B: Firm Age on ROE without Moderating Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.417581	0.381104	1.095713	0.2737
FAGE	0.151439	0.026784	5.654096	0.0000*
BDAGE	-0.326009	0.093220	-3.497207	0.0005*
BSIZE	0.004026	0.025544	0.157622	0.8748
FSIZE	0.021959	0.007611	2.885134	0.0041*
TATO	0.093926	0.018127	5.181592	0.0000*
DAR	0.000111	0.000450	0.246432	0.8055
Adjusted R-squared	0.160467	Prob(F-statistic)		0,00000

Symbol * indicates that p-value < 0.05 or significance level at 95%.

Tabel 6.
Model 1C: Firm Age on NPM without Moderating Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.214976	0.171981	-1.249998	0.2119
FAGE	0.052706	0.012087	4.360579	0.0000*
BDAGE	-0.019711	0.042067	-0.468547	0.6396
BSIZE	0.018419	0.011527	1.597813	0.1107
FSIZE	0.008718	0.003435	2.538203	0.0114*
TATO	-0.003902	0.008180	-0.477059	0.6335
DAR	0.000612	0.000203	3.013803	0.0027*
Adjusted R-squared	0.095948	Prob(F-statistic)		0,00000

Symbol * indicates that p-value < 0.05 or significance level at 95%.

firm age (FAGE) that is direct and positive toward corporate profitability performance of listed manufacturing firms in Indonesia as measured by ROA, ROE, and NPM.

In addition, the results of simultaneous significance test (F-statistic) of both Table 4, Table 5, and Table 6 showed the score of 0, that are below 0.05, which mean that the research model 1A, 1B, and 1C analyzed in this study are all proved to be significant. However, the result of coefficient determination test (R-squared) presented on Table 4 indicates that all of variables from research model 1A can only explain 19,3% of the factors influencing the corporate financial performance as measured by ROA, while the other 80,7% are explained by other factors outside the research model 1A of this study. Moreover, the R-squared test result presented on Table 5 indicates that all of the variables from research model 1B can only explain 17% of the factors influencing the corporate financial performance as measured by ROE, while the other 83% are explained by other factors outside the research model 1B of this study. Lastly the R-squared test result presented on Table 6 indicates that all of the variables from research model 1C can only explain 10,6% of the factors influencing the corporate financial performance as measured by NPM, while the other 89,4% are explained by other factors outside the research model 1C of this study.

Simultaneously, the regression results from Table 7 and Table 9 below show no significant influence of firm age (FAGE) on both ROA and NPM after the moderating variable of the age level of BD members (FAGE x BDAGE) is included in the research model 2A, 2B, and 2C. The results of p-value (Prob.) above the score of 0.05 from the variable of FAGE as showed on Table 7 and Table 9 below mean that with the presence of the age level of BD members (BDAGE) as moderating variable, firm age (FAGE) does not influence the corporate profitability performance as measured by ROA and NPM. Furthermore, the predictor of contingency variable (FAGE x BDAGE) which indicates an indirect effect of the age level of BD members (BDAGE) has no effect on the influence of independent variable, firm age (FAGE), toward dependent variables of ROA and NPM as indicated by p-value (Prob.) score above 0.05. These regression results do not support the proposed hypotheses H2A and H2C because both FAGE, BDAGE, and FAGE x BDAGE have no significant influence toward corporate profitability performance as measured by ROA and NPM.

On the other hand, the regression results of Table 8 show that both variables of firm age (FAGE) and the age level of BD members (BDAGE) have significant positive influence toward corporate profitability performance as measured by ROE, but the variable of FAGE x BDAGE indicates a significant negative influence toward ROE. This means that the older the firm age (FAGE) might increase the corporate profitability performance as measured by ROE, while the younger the age of the company might decrease the profitability of the listed manufacturing company as

Tabel 7.
Model 2A: Firm Age on ROA with The Age Level of Directors as Moderating Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.280077	1.599956	-0.175053	0.8611
FAGE	0.135153	0.441165	0.306356	0.7595
BDAGE	-0.002259	0.407193	-0.005548	0.9956
FAGE x BDAGE	-0.019296	0.112179	-0.172013	0.8635
BSIZE	0.021637	0.009361	2.311365	0.0212*
FSIZE	0.003654	0.002783	1.313003	0.1898
TATO	0.038369	0.006676	5.747544	0.0000*
DAR	9.86E-05	0.000165	0.598861	0.5495
R-squared	0.193133	Mean dependent var		0.047167
Adjusted R-squared	0.181653	S.D. dependent var		0.079610
Prob(F-statistic)	0.000000			

measured by ROE. However, this strong relationship between independent and dependent variables will become weaker with the increase of the age level of BD members (BDAGE), while the lower age level of BD members (BDAGE) that is dominated by younger corporate leaders might strengthen the influence of firm age (FAGE) on the corporate profitability performance as measured by ROE. In this case, FAGE x BDAGE can be regarded as quasi moderator (Helm & Mark, 2010) or variable that moderate the influence of independent variable, firm age (FAGE), on dependent variable of corporate financial performance as measured by ROE; while at the same time, the age level of BD members (BDAGE) also has direct significant influence toward ROE as proved by the regression results of Table 5. Thus, hypothesis H2B is confirmed by the adverse effect from the higher age level of BD members (BDAGE) on the significant relationship between firm age (FAGE) and profitability of listed manufacturing companies as measured by ROE.

Additionally, similar to the regression results of Table 4, the influences of the size of BD (BSIZE) and total assets turnover (TATO) as control variables are significantly positive and direct on ROA according to the regression results of Table 7. Furthermore, similar to the regression results of Table 5, the regression results of Table 8 also indicated direct positive influences of firm size (FSIZE) and assets turnover ratio (TATO) which are significant toward ROE. Moreover, similar to the regression results on Table 6, the direct positive influences of firm size (FSIZE) and leverage (DAR) as control variables on NPM are also significant according to the regression results of Table 9. In addition, the R-squared test result on Table 7 indicates that all variables from research model 2A can explain 19,3% of the factors influencing the corporate financial performance as measured by ROA, while the other 80,7% are explained by other factors outside the research model 2A of this study. Meanwhile, the R-squared test result presented on Table 8 indicates that all of the independent and control variables from research model 2B can only

Tabel 8.
Model 2B: Firm Age on ROE with The Age Level of Directors as Moderating Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.904036	4.356009	-2.273649	0.0234*
FAGE	3.007625	1.201106	2.504045	0.0126*
BDAGE	2.301636	1.108616	2.076134	0.0384*
FAGE x BDAGE	-0.726447	0.305416	-2.378548	0.0178*
BSIZE	-0.000197	0.025486	-0.007726	0.9938
FSIZE	0.022230	0.007576	2.934136	0.0035*
TATO	0.088703	0.018175	4.880471	0.0000*
DAR	8.11E-05	0.000448	0.180924	0.8565
Adjusted R-squared	0.168324	Prob(F-statistic)		0.000000

Tabel 9.
Model 2C: Firm Age on NPM with The Age Level of Directors as Moderating Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.067900	1.974309	1.047404	0.2954
FAGE	-0.579009	0.544387	-1.063598	0.2880
BDAGE	-0.600878	0.502467	-1.195856	0.2323
FAGE x BDAGE	0.160671	0.138426	1.160700	0.2463
BSIZE	0.019353	0.011551	1.675354	0.0945
FSIZE	0.008658	0.003434	2.521373	0.0120*
TATO	-0.002747	0.008238	-0.333485	0.7389
DAR	0.000619	0.000203	3.046170	0.0024*
Adjusted R-squared	0.096584	F-statistic		8.621136

explain 17,9% of the factors influencing the corporate financial performance as measured by ROE, while the other 82,1% are explained by other factors outside the research model 2B of this study. Lastly, the R-squared test result on Table 9 indicates that all variables from research model 2C can explain 10,9% of the factors influencing the corporate financial performance as measured by ROA, while the other 89,1% are explained by other factors outside the research model 2C of this study.

CONCLUSION

Demographic diversity of BD members is argued to be a vital factor that determine the effectiveness of corporate governance sustainability and legitimacy of the company which contribute to the conditions of corporate financial performance (Assenga et al., 2018). Indeed, this study found that the age level of BD members significantly determines the influence of firm age on the corporate financial performance of the listed Indonesian manufacturing companies as measured by return on equity (ROE). The regression results indicate that firm age has a significant direct positive influence on corporate profitability as measured with ROA, ROE, and NPM. However, the strength of influence from firm age on corporate profitability performance as measured by ROE depends on the age level of BD members of the manufacturing firms in Indonesia. The lower age level of BD members, that is dominated by younger aged BD members, is associated with the stronger positive influence of firm age on ROE. Meanwhile, the higher age level of BD members, that is dominated by older aged BD members, is associated with the weaker positive influence of firm age on ROE. In addition, the age level of BD members is significantly proved to have direct negative influence on corporate profitability performance as measured by ROA and ROE. Therefore, the lower age level of BD members is directly associated with higher corporate profitability as measured by ROA and ROE, while the higher age level of BD members is directly associated with lower score of ROA and ROE. Ultimately, the age level of BD members can act as both the independent variable of ROA and ROE, and also become the Quasi Moderator of firm age on ROE. Thus, the results of this study supports the hypotheses H1A, H1B, H1C, and H2B proposed in this study.

Ultimately, this study contributes to the limited body of corporate governance studies on the demographic factor of age of the corporate leaders, by outlining the indirect influence of the age level of BD members toward the direct influence of firm age on the corporate financial performance in the context of economically developing country of Indonesia. Furthermore, this study used secondary data that are collected from the annual reports of 125 manufacturing companies listed on the Indonesia Stock Exchange (IDX), from year 2014 to 2017, as research sample. Furthermore, regression analysis is applied on the collected panel data to investigate the relationships between variables within the proposed research model of this study. In terms of practical implications, this research contributes to the further understanding on the influences of the age level of BD members as moderating variable on the influence of firm age as independent variable toward the profitability performance of manufacturing companies as measured by ROE. These research findings can be used as informational resource for the corporate policy making in Indonesia and as academic reference for the researchers of any related fields of study. This study also suggests that listed manufacturing firms in Indonesia need to be more inclusive and better develop their composition of BD with more younger representatives of BD members to improve their profitability.

LIMITATIONS AND SUGGESTIONS

In terms of limitations, this study excluded other diversity attributes of TMT members such as tenure of corporate leaders, corporate ownership, educational backgrounds, family relations, political beliefs, nationality, race, religion, and so on for the research variables. The use of specific market-based variables and different geography of samples or time

settings of the data might also contribute to answer the research limitations of this study. The possible related future researches of this study can also explore other demographic diversity or cognitive diversity of TMT members which might have indirect influences on corporate financial performance (Kagzi & Guha, 2018). Potential related future researches might also use sample companies from different industry other than manufacturing companies, such as financial institutions, educational institutions, or different size of sample companies such as small medium enterprises (SMEs). The uses of primary data and variety of samples from other countries or cross-country comparison can also contribute to the potential future studies. Another possible related future studies can also include other corporate financial performance measurements such as ROI, ROS, and Tobin's Q or additional variations of intervening variables.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to my thesis supervisor Dr. Setianingtyas Honggowati M.M., Ak. and accounting lecturers from Faculty of Economics and Business at Sebelas Maret University Surakarta for providing their invaluable guidance and suggestions in writing journal paper. I appreciate their crucial roles for sharing their knowledge on how to write scientific paper and method to process sample data with statistic software, EViews.

REFERENCES

Asian Development Bank. (2021). Policies to Support the Development of Indonesia's Manufacturing Sector during 2020–2024: A Joint ADB–BAPPENAS Report.

Ali, M., & Konrad, A. (2017). Antecedents and consequences of diversity and equality management systems: The importance of gender diversity in the TMT and lower to middle management. *European Management Journal*, 35(4), 440-453.

Assenga, M., Aly, D., & Hussainey, K. (2018). The impact of board characteristics on the financial performance of Tanzanian firms. *Corporate Governance: The International Journal Of Business In Society*, 18(6), 1089-1106.

Azaria, D., Murhadi, W. R., & Silvia Sutedjo, B. (2021). Board diversity and financial performance in Indonesia. *Journal of Entrepreneurship & Business,* 2(2), 86–95.

Chams, N., García-Blandón, J., & Hassan, K. (2021). Role Reversal! Financial Performance as an Antecedent of ESG: The Moderating Effect of Total Quality Management. *Sustainability*, 13(13), 7026.

Chong, L., Ong, H., & Tan, S. (2018). Corporate risk-taking and performance in Malaysia: the effect of board composition, political connections and sustainability practices. *Corporate Governance: The International Journal Of Business In Society,* 18(4), 635-654.

Darmadi, S. (2013). Do women in top management affect firm performance? Evidence from Indonesia. *Corporate Governance: The International Journal of Business in Society*, 13(3), 288-304.

Delgado-Márquez, L., de Castro, J., & Justo, R. (2017). The boundary conditions of gender diversity in top teams. *Management Research: Journal Of The Iberoamerican Academy Of Management*, 15(4), 425-442.

Gordini, N., & Rancati, E. (2017). Gender diversity in the Italian boardroom and firm financial performance. *Management Research Review*, 40(1), 75-94.

Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9 (2), 193–206.

Helm, R., & Mark, A. (2010). Analysis and evaluation of moderator effects in regression models: State of art, alternatives and empirical example. *Review of Managerial Science*, 6(4), 307–332.

Jadiyappa, N., Jyothi, P., Sireesha, B., & Hickman, L. (2019). CEO gender, firm performance and agency costs: evidence from India. *Journal Of Economic Studies*, 46(2), 482-495.

Kagzi, M., & Guha, M. (2018). Board demographic diversity: a review of literature. *Journal Of Strategy And Management*, 11(1), 33-51.

Kagzi, M., & Guha, M. (2018). Does board

demographic diversity influence firm performance? Evidence from Indian-knowledge intensive firms. Benchmarking: *An International Journal*, 25(3), 1028-1058.

Kılıç, M., & Kuzey, C. (2016). The effect of board gender diversity on firm performance: evidence from Turkey. *Gender In Management: An International Journal*, 31(7), 434-455.

Kartiningsih, D., & Daryanto, W. M. (2020). The effect of firm characteristics to profitability of food and beverage companies listed in Indonesia stock exchange. *International Journal of Business, Economics and Law*, 22(1), 69-76. ISSN 2289-1552

McGuire, J., & Taylor, E. (2017). Board of director and committee diversity and firm Financial Performance. *Academy of Management Proceedings*, 2017(1), 14207.

Naseem, M., Lin, J., Rehman, R., Ahmad, M., & Ali, R. (2020). Does capital structure mediate the link between CEO characteristics and firm performance?. *Management Decision*, 58(1), 164-181.

Nurlaela, S., Mursito, B., Kustiyah, E., Istiqomah, I., & Hartono, S. (2019). Asset Turnover, Capital Structure and Financial Performance Consumption Industry Company in Indonesia Stock Exchange. *International Journal Of Economics and Financial Issues*, 9(3), 297-301.

Shrestha, N. (2020). Detecting Multicollinearity in Regression Analysis. *American Journal Of Applied Mathematics and Statistics,* 8 (2), 39-42.

Solakoglu, M., & Demir, N. (2016). The role of firm characteristics on the relationship between gender diversity and firm performance. *Management Decision*, 54(6), 1407-1419.

Tanikawa, T., Kim, S., & Jung, Y. (2017). Top management team diversity and firm performance: Exploring a function of age. *Team Performance Management: An International Journal*, 23(3/4), 156 –170.

Zulfikar, R., Lukviarman, N., Suhardjanto, D., Ismail, T., Dwi Astuti, K., & Meutia, M. (2020). Corporate Governance Compliance in Banking Industry: The Role of the Board. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 1-18.