Executives’ Gender and Firm Value

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The purpose of this paper is to examine the effect of executives’ gender on the firm value of Indonesian manufacturing firms. Executives' gender is measured by the existence of women as CEOs and CFOs, and corporate value is measured by Tobin’s Q. This study hypothesizes that both female CEO’s and CFO’s have a positive association with firm value. The sample of this research is manufacturing firms listed on the Indonesian Stock Exchange in the period of 2016-2017. Data was collected from companies’ annual reports and their websites; while financial data was obtained from the Thomson Reuters Eikon database. The results of the descriptive data showed the percentage of female CFO’s in the studied sample was 19%, and the results from a panel regression indicate a positive effect on firm value. Meanwhile, women as CEOs only made up 4% of the total observed sample and the results showed that it does not affect firm value. Previous studies have produced mixed results regarding female CEO’s and female CFO’s on firm value. This study showed an increase in the value of the company's financial management when led by women. Some previous findings indicate that women are more responsive to moral and ethical norms. Women’s ability to listen, motivate, persuade, and inspire others makes them more suitable than their male counterparts for leading financial functions. This result brings a practical implications for companies to consider women as CFOs. In addition, this research can add to the academic literature related to executives’ gender and firm value.

\textbf{Key words:} Female CEO, female CFO, firm value.
Introduction

The purpose of a business organization is to increase the value of the company's stakeholders. Value can be determined through the company's market performance as measured by the company's stock price (Bennouri et al., 2018; Darmadi, 2013). Sujoko (2007) defines company value as an investor's perception of a company that can be linked to stock prices in the market. The value of a company is reflected by the stock price. If the stock price is increasingly rising, so too is the value of the company, and vice versa.

Some studies have found that the value of a company, as proxied by stock prices, can be influenced by the existence of female CEO’s and CFO’s (Chadwick and Alexandra 2018; Peni 2014; Shitthipongpanic and Polsiri, 2013; Faccio et al., 2016; Borghesi et al., 2016; Bennouri et al., 2018; Brinkhuis and Scholtensab, 2018; and Lakhal et al., 2015, David and Jake, 2017, David and Jake, 2017, David, 2017, Dincer and Kilinç, 2018, Dunst et al., 2018). Chadwick and Alexandra (2018) examined the influence of female directors on family company performance, as measured by Tobin’s Q, and the results of the study showed that when compared to men, female directors cause better company performance. Peni (2014) found that women CFO’s can influence stock prices because investors appreciate women CFO’s, as they believe that women think more conservatively. Female directors may have superior leadership skills, because women are found to have better communication and listening skills (Dallas, 2002; Eagly and Carli, 2003; Schubert, 2006).

However, several other studies have found contrasting results. Shitthipong et al. (2013) and Faccio et al. (2016) found that female CEO’s do not influence stock prices. Research by Borghesi et al. (2016); Bennouri et al. (2018); Brinkhuis and Scholtensab (2018) and Lakhal et al. (2015), found that stock prices are not significantly influenced by female CFO’s. So, with these inconsistent results, the researcher is interested in undertaking further research on the influence of female CEO’s and CFO’s on firm value.

"Women in Business" 2017 released by Grant Thornton states that the percentage of Indonesian women who have become leaders in a company has jumped dramatically (Toarik, 2017). From the results of a global survey of 5,500 companies in 36 countries, about 46% of women in Indonesia occupy top ranks in companies in 2017. This makes Indonesia a leader in the Asia Pacific region and second in the world after Russia. The positions most commonly held by Indonesian women are CFO at 20% and CEO at 6%. The survey results indicate that women and men have different perspectives on risks and opportunities. In general, women will see a risk from varying aspects of the business and be more careful than men. In addition, women also tend to do more detailed and they conduct more detailed reviews or research before making big decisions for their company (Debora, 2017). The increase in the
percentage of female leaders in companies in Indonesia, shows that Indonesian women have the same opportunities within companies (Debora, 2017).

Based on the research background, the problem formulated in this study is: are female CEO’s and CFO’s influencing the value of companies in the manufacturing sector and listed on the Indonesian Stock Exchange. The results of the research found that the existence of female CEO’s do not affect the value of the company, while women as CFO’s have a positive effect on firm value. The results of descriptive data show the percentage of female CFO’s in the study is 19%. While female CEO’s only amount to 4% of the sample, it is still seen that they do not affect the value of the company. The results of this study are expected to be useful for: (1) investors or potential investors in choosing investment portfolios, (2) regulators in making policies related to female CEO’s and CFO’s.

**Literature Review**

**Stakeholder Theory**

Freeman argues that stakeholder theory is a theory that describes which parties the company is responsible for. Companies must maintain relationships with stakeholders so that they can accommodate the desires and needs of stakeholders, especially for those stakeholders who have power over the availability of resources that are used for the company's operational activities. Stakeholder theory also directs business organizations to maintain good relations with all stakeholders (Reverte, 2009; Lourenço and Branco, 2013). The Stanford Research Institute (SRI) defines stakeholders as groups that are able to provide support for the existence of an organization (Lépineux, 2005).

The purpose of a business organization once established, is to increase the value of stakeholders. This value can be proxied through the company's market performance as measured by the company's stock price (Bennouri et al., 2018; Darmadi, 2013). There are several factors to increase company value (Chen et al., 2014; Rose, 2016; Fatemi et al., 2018; Bennouri et al., 2018). Wang et al. (2018) states that one of a directors' main responsibilities is to improve company performance, which includes the accounting and market performance of public companies. A company's performance depends heavily on the director's knowledge, values and personality, which ultimately influence their decision making (Hambrick and Mason, 1984). A company's performance also depends on a director's ability to mobilize stakeholders (Wang et al., 2018).

**Upper Echelons Theory**

Upper echelon theory (Hambrick and Mason, 1984) emphasizes how the cognitive framework of members in the top management team (TMT), is an important determinant of
the outcome of decisions. The cognitive framework is a personalized interpretation of the situation (such as the information seeking and information evaluation process) which ultimately comes from the experience, values, and personality of individuals (Chadwick and Alexandra, 2018). Individual cognitive bases and these values reflect individual characteristics and peculiarities in decision-making situations (Finkelstein et al., 2009, Hambrick and Mason, 1984).

Underlying this theoretical approach is the assumption that the characteristics of leaders, such as gender in this study, will shape their experiences and values in ways that affect the information that is processed and how they process it in their environment. Subsequently, the upper echelon theory can suggest that female leaders can bring a unique cognitive framework to male-dominated TMT’s (Chadwick and Alexandra, 2018), because women tend to face different experiences in their personal and professional lives, as compared to their male counterparts (Post and Byron, 2015).

**Firm Value**

Company value is an investor's perception of a company that is often associated with stock prices in the market (Makhdalena, 2016). Company value can be seen through the market or book value of the company. In order to achieve company value, investors generally hand over their management to professionals. Professionals are positioned as managers or commissioners (Nurlela, 2008). Various policies were taken by management in an effort to increase company value through increasing the prosperity of owners and shareholders that is reflected in stock prices (Brigham and Houston, 2006); the policy of disclosure of corporate anti-corruption is discussed in this study. From an economic perspective, companies will disclose information if the information can increase the value of the company (Verrecchia, 1983).

Tobin Q Theory (Tobin’s Q Theory), is a ratio that measures the market value of a company. The essence of this theory is assessing how monetary policy influences the economy through its influence on the valuation of equity. Tobin defines Q as the company's market value divided by capital replacement costs (Weston and Copeland, 1997). In this study the value of the company will be influenced by three groups in the statement of financial position, namely total assets, total liabilities, and the company's market capitalization value, which obtained by multiplying the number of shares outstanding at the market price of the company's stock.

Many researchers have examined firm value as influenced by many factors (Pung and Hoang, 2013; Shitthipongpanich et al., 2013; Peni, 2014; Makhdalena, 2016; Faccio et al., 2016; Brinkhuis and Scholtensab, 2018), but this study looks at the influence of executives' gender on firm value.
Executives' Gender

The Organization for Economic and Development (OECD, 2004) defines governance as a set of relationships between the management of the company, the board (board), shareholders and other parties who have an interest in the company. There are five principles in carrying out corporate governance according to the Forum for Corporate Governance in Indonesia (FCGI, 2001), namely transparency, accountability, responsibility, independency and fairness.

To support these five principles, a good corporate governance mechanism is needed. The governance mechanism in this study is the gender of company executives. Based on the definition of the Women's Studies Encyclopaedia, gender is a cultural concept that is used to distinguish roles, behaviours, mentalities, and emotional characteristics, between men and women (Mulia, 2004). The proxy of executive gender in this study is the presence of women as Chief Executive Officers (CEO) and Chief Financial Officers (CFO). Section 302 of SOX regarding Corporate Responsibility for Financial Statements, states that public company CEO’s and CFO’s, are certifiers of the company's financial statements (Habib and Hossain, 2013).

According to Miller et al., (1982), CEO’s are the main decision makers of company policy. However, a CEO cannot lead the company alone, so they are assisted by the board of directors, which includes the CFO. The role of the CFO in a company is closely related to the provision of funding, spending, budgeting, and financial reporting (Nabielrafi, 2015).

Women and men have different perceptions of leadership roles (Wood and Eagly, 2009). In particular, according to Eagly et al. (2003), men are more likely to be characterized by agentic attributes, while women have more communal characteristics (such as being supportive, empathetic and gentle). Practically, these communal characteristics seem to direct female directors to better address the interests of stakeholders (Adams et al., 2011). In addition to increasing the effectiveness of corporate governance, it has also been shown that the presence of female directors improves company performance (Nalikka, 2009).

Several studies have examined the role of female CEO’s and CFO’s on corporate value (Agyemang-Mintah dan Schadewitz, 2019; Shithipongpanich et al., 2013; Faccio et al., 2016; Brinkhuisa and Scholtensab, 2018). Agyemang-Mintah and Schadewitz (2019) conducted research that shows that board diversity (measured by the percentage of women and by the Blau and Shannon index) has a positive impact on firm value. Peni (2014) found that female CFO’s can influence stock prices, because investors appreciate female CFO’s as they are considered to be more conservative.
Hypotheses Development

Female CEO and Firm Value

Campbell and Antonio (2008) and Agyemang-Mintah and Schadewitz (2019) both conducted research that found that board diversity (measured by the percentage of women) has a positive impact on firm value. Peni (2014), found that female CEO’s tend to outperform companies that have only male executives. Previous literature on gender-based differences and corporate governance, shows that female executives may have superior leadership skills, because women are found to have better communication and listening skills (Dallas 2002; Eagly and Carli 2003; Schubert 2006).

Hypothesis 1: Female CEO’s have a positive effect on firm value.

Female CFO and Firm Value

CFO’s have recently gained popularity in both practice-oriented and in academic literature (Hiebl, 2013). The question that is still frequently discussed is whether the CFO takes responsibility for traditional financial management tasks, such as financial accounting and management accounting, or whether it has progressed to a more strategic role and is involved in leading the company's strategic programs (Hiebl, 2013).

Francis et al. (2014) found that female CFO’s were associated with less tax aggressiveness as compared to their male counterparts. Furthermore, the results of research conducted by Huang (2014), show that female CFO’s will be more conservative and require more audits. There are other decisive factors that are required in the role of CFO, such as increasing shareholder value orientation (Zorn, 2004).

Hypothesis 2: Female CFO’s have a positive effect on firm value.

Research Design

This study uses quantitative and descriptive research. Female CEO’s and female CFO’s are independent variables, with firm value as the dependent variable. Female CEO’s are the chairperson of a board of directors and responsible for managing the company; the indicator is 1 if there is a female CEO and 0 if there is a male CEO. A female CFO is a member of the board of directors who is responsible for finance; the indicator is 1 if there is a female CFO and is 0 if the CFO is male. Firm value is an investor's perception of a company that is often associated with stock prices in markets with indicators using Tobin’s Q.
The sample of this research is manufacturing firms listed on the Indonesian Stock Exchange in 2016-2017. Data was collected from company's annual reports and websites; while financial data was taken from the Thomson Reuters Eikon database. The method of data analysis in this study is panel data by using STATA.

The research model of this research is:

\[ Q = a + \beta_1 FCEO + \beta_2 FCFO + \beta_3 size + \beta_4 ROA + \beta_5 LEV + \beta_6 age + e \]

The detailed operationalization of variable is follows:

**Table 1: Research Operationalization Variable**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Concept</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable:</strong> Firm Value (Q)</td>
<td>Firm value is an investor's perception of a company that is associated with stock prices in the market</td>
<td>Tobin’s Q (share market price x number of outstanding share + book value of debt)/ book value of total assets</td>
<td>Ratio</td>
</tr>
<tr>
<td><strong>Independent Variable:</strong> FCFO</td>
<td>female CFO is a member of the board of directors who is responsible for finance</td>
<td>1 if female CFO and 0 if male CFO.</td>
<td>dummy</td>
</tr>
<tr>
<td>FCEO</td>
<td>The CEO is the chairperson of the board of directors who is responsible for managing the company</td>
<td>1 if female CEO and 0 if the CEO.</td>
<td>dummy</td>
</tr>
<tr>
<td><strong>Control Variable:</strong> Size</td>
<td>The size of the company</td>
<td>(Loan) Total asset</td>
<td>Ratio</td>
</tr>
<tr>
<td>Profitability</td>
<td>The ability of company management to produce by managing company resources.</td>
<td>Return on Equity (ROA)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Leverage</td>
<td>Amount of assets financed by debt</td>
<td>The ratio of debt to assets</td>
<td>Ratio</td>
</tr>
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</table>
AGE
How long the company has been public
(Loan) The age of the company since IPO

<table>
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<th>Std.Dev</th>
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<td>9.600958</td>
<td>1</td>
<td>38</td>
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</table>

Source: Analysis of Researcher (2019)

Research Results and Discussion
Descriptive Analysis of Research Variables

Descriptive analysis is used by describing data that has been collected as it is, without intending to make conclusions that apply to generalizations (Sugiyono, 2013). The results of the descriptive analysis of each research variable are presented in Table 2 as follows.

Table 2: Descriptive statistics

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ACD is Anti-Corruption Disclosure. FCEO is the existence of women as CEO’s of a company. FCFO is the existence of women as CFO’s of a company. SIZE is the size of the company. ROA is the profitability of the company. LEV is leverage. AGE is the age of the company since IPO.

Source: STATA 14 results reprocessed (2019)
Analysis of the influence of female CEO’s and female CFO’s on firm value

In Table 3 are the empirical results of the research model for hypothesis testing in this study.

**Table 3: Empirical Results**

| Dependent = Tobin’s Q | Hypothesis | Hasil | Coef. | Std. Err. | P>|t| |
|-----------------------|------------|-------|-------|-----------|------|
| FCEO                  | H1         | x     | 0.08241 | 0.127978  | 0.260 |
| FCFO                  | H2         | √     | 0.21512** | 0.118073  | 0.036 |
| SIZE                  |            |       | -0.80560*** | 0.098093  | 0.000 |
| ROA                   |            |       | -0.00096 | 0.003694  | 0.397 |
| LEV                   |            |       | 0.035205 | 0.030077  | 0.122 |
| AGE                   |            |       | -0.01236 | 0.134584  | 0.463 |

Prob > F = 0.0000
R-sq = 51.54%

*, ** and *** indication of significance at 10%, 5% and 1% (two-tailed) levels respectively.

TOBIN'S Q is a company’s value. FCEO is the presence of women as CEOs of a company. FCFO is the existence of women as CFOs of a company. SIZE is the size of a company. ROA is the profitability of the company. LEV is leverage. AGE is the age of the company since IPO.

Source: STATA 14 results reprocessed (2019)

The results of hypothesis testing in Table 3 show that the H1 hypothesis is rejected. The results of this study indicate that female CEO’s (FCEO) have no effect on firm value (Q). According to Borghesi *et al.* (2016), corporate diversity (increased creativity, broader perspectives, superior information processing, better monitoring, and mitigated determination) may not originate from the presence of women or minorities on the board, but rather from differences between the composition of board members. Faccio *et al.* (2016) said that corporate investment is less responsive to value-added growth in companies run by female CEO’s. These results indicate that women do not seem to allocate capital as efficiently as male CEO’s.

It is possible that female CEO’s did not have influence on the value of the company as they are still minority in the company. Research conducted by Brinkhuis and Scholtens (2018) shows that there are no abnormal stock market returns that are statistically significant after the announcement of the appointment of top executives. Investors do not seem to differentiate in company valuations after the appointment of female CEO’s or male CEO’s. There were no statistically significant differences in stock price reactions after the announcement of the appointment of female CEO’s as compared to male CEO’s.
Table 3 shows that H2 is accepted, as it is seen that female CFO’s (FCFO) have a positive effect on firm value (Q). The results of this study are also in line with the research conducted by Peni (2014) and Huang et al. (2014).

Conclusions and Suggestions

Conclusion

Based on the formulation of the problem, research hypothesis and analysis of the research results, it can be concluded that the variables of female CEO’s, female CFO’s, ROA, leverage, age, and size, all simultaneously affect the firm value of manufacturing sector companies that are listed on the Indonesia Stock Exchange. The findings also prove that: (1) female CEO’s do not significantly influence the value of the company in manufacturing sector companies that are listed on the Indonesia Stock Exchange; (2) female CFO’s have a positive effect on the value of the company in manufacturing sector companies that are listed on the Indonesia Stock Exchange in 2016-2017.

Suggestions

Based on the conclusions of the research results, the researcher suggests the following: (1) future researchers that use company value as the dependent variable can add other variables that were not included in this research model, such as: audit committees, independent commissioners, ownership structure (managerial ownership), foreign ownership, and institutional ownership; (2) it is recommended to make regulations relating to gender in order to increase company value; (3) this research should be added to the existing academic literature on the influence of executives' gender on company value.
REFERENCES


