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The Determinant of Financial Distress on Indonesian Family Firm

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Abstract

This paper aims to find the influence of the corporate governance and financial ratios on the probability of financially distressed family firms in Indonesia that are listed in Indonesia Stock Exchange in the period of 2008 – 2013. There is a performance difference between family firms and non-family firms in Indonesia, but there is no risk difference between both of them. The logistic regression showed that the adoption of corporate governance can boost company's financial performance and allow them to avoid financial distress. This study also showed that conservative capital structure is not adopted by the Indonesian family firm.

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1. Introduction

Family firm is a company that is managed and controlled by a family (Anderson & Reeb, 2003). The survival of this company is very important because it can affect the welfare of the people in a country. Family firms have a chance to survive because they have family-oriented goals, higher levels of social capital, survivability capital, efficiency and lower overall agency cost (Wilson, Wright, and Scholes, 2013). They state that there is little empirical evidence on the determinants of whether family firms survive as a viable entity. The main aspect is about the survived throughout the generations as a family company that relates to longevity in the family company (Yu, Lumpkin, Sorenson and Brigham, 2012). Family firms often act on the basis of emotions, involving all members of the family and to protect

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themselves, while companies must operate with the objective of maximizing shareholder wealth (Salloum, Schmitt, and Bouri, 2012).

The topic that often discussed in the literature is whether a family firm has a better performance than non-family companies, so that they do not experience financial distress. Financial distress is a condition in which the company is unable to meet its financial obligations (Beaver, 1966). Whereas Elloumi and Gueyie (2001) used a negative earnings per share as an indicator of financial distress.

Literature corporate governance states that the board of directors plays a fundamental role in the internal governance and firm performance (Forbes & Milliken, 1999), while Bammens, Voordeckers, and Gills (2013) state that the family firm's board of directors has a central role in the survivability than non-family firm. Poor governance and the agency problem often caused financial distress (Saloum, et al., 2012). Agency theory is important in this study because of its application on the ownership and control functions. The separation of ownership and control in a business leads to a potential conflict of interests between directors and shareholders and the company with its auditors. This research will explore how family firms are more likely to survive.

Companies that avoid financial distress is a company that is able to show good financial performance that can be seen from its financial ratios. Previous research on bankruptcy prediction based on financial ratios as predictors has been done (Beaver, 1966; Altman, 1968; Louma and Laitinen, 1991; Wheelock and Wilson, 2000; Shumway, 2001; Turetsky and McEwen, 2001).

This study describes how corporate governance variables and the financial ratios affect financial distress of the Indonesian family firm. This study is expected to fill the knowledge about the determinants of financial distress that make the family firm survive.

2. Literature Review

Agency theory concerned with two problems that occur in an agency relationship; these are principal and agent conflicting / conflict and problem risk sharing because they both have a different attitude to risk (Eisenhardt, 1989). Agency theory argues that the management actions are taken to serve the best interests of shareholders, especially when ownership is very spread out (Donaldson & Davis, 1991).

2.1 Corporate Governance

Gender diversity may reduce conflict and make the company survive and more risk averse (Adams & Funk, 2010). Study of Kristanti (2015) shows that gender diversity has a negative effect to the cost of bankruptcy. While studies conducted by Carter, Simkins, D'Souza and Simpson (2007) and Smith, Smith and Verner (2006) show that gender diversity may lead to the increase of corporate performance. Gender diversity identified as the percentage of women directors on the board of directors is expected has a negative effect on the financial distress of the company.

Directors who have house location close to the company may be able to better monitor the company and could develop a profitable relationship and networking so that it can survive (Berrone, Cruz, Gomez and Larraza, 2012). The proxy of this variable is the ratio of directors that have house address in the same city of the address of the company. The location of the director's house is expected to negatively affect on the financial distress of the company.

Independent board's ratio indicates the percentage of board from outside to all boards of the company. Independent board can provide expertise and contribute to the company's sustainability by providing advice and supervise the board of directors (Adam and Ferriera, 2004). The independent board would expect to have a negative effect on the financial distress of the company.

The highest-level executives in companies with the responsibility to provide leadership and strategic direction of the company is the CEO. Quality is measured by formal CEO education. The quality of management decision depends on the capabilities and vision of the company (Rotemberg and Saloner, 2000). Berkeley (1991) argues that firms managed by a CEO with a broad functional and educational background had better chances of improving their performance than those that were headed by CEOs who had a specialist's knowledge. The CEO quality is measured by formal education using four categories, coded (0) for Diploma, (1) for Bachelor, (2) for Master, (3) for Doctor and (4) for Professional. In this study the quality of the CEO is expected has a negative effect on the financial distress of the company.

Private family firms typically have little willingness to seek outside funding as this would threaten the control of the company. Therefore the support of partners in providing trade credit becomes very important (Atanasova & Wilson, 2003). In this study the auditor qualification criteria including the big four or not that used dummy variable, coded (1) if included in the big four qualifications and (0) if not. Qualification of auditor is expected to have a negative impact to the likelihood of companies experiencing financial distress.

2.2 Financial Information

Financial risks generally inherent in the company's ability to seek additional spending when companies experience financial distress. Leverage measured by total debt to total asset increases. The greater the leverage, the greater the risk of the company, the greater the probability of the company to experience financial distress. Study of Ahmad (2013) in Indonesia and Elloumi and Gueyee (2001) in Canada found evidence that the financial distress will be increased if the leverage increases. Consequently, the positive effect on financial distress is expected in this study.

Operating risk indicates the company's ability to utilize the asset. The company's ability to generate sales from existing assets is associated with the continuation of the company (Parker, Peters, and Turetsky, 2011). In this study the probability of bankruptcy is expected to decrease when the ratio of assets to total sales decrease.

Chancharat (2008) states that the possibility of bankruptcy is expected rise along with the increasing size of the company, where the asset is measured by the log of total assets. (Parker et al, 2011) found the positive influence between firm size and the possibility of the bankruptcy of the company. The positive effect on the bankruptcy is expected in this study.

Previous research had shown that liquidity and profitability ratios have an important role in the company to resilience in bankruptcy (Chen and Lee, 1993). Liquidity, as measured by the ratio of current assets to current liabilities, is related to the company's ability to withstand cash flow. Abdullah (2006) in Malaysia, Turetsky and McEwen (2001) in the US and Elloumi and Gueyee (2001) in Canada found the evidence that if the current ratio increase, the financial distress will decrease. Therefore, in this study, current ratio is expected to have negative effect to the financial distress.

Profitability is reflected by Return On Sales (EBIT / Sales) and represents the company's ability to recover from financial distress condition. Some of the studies using Return On Sales as a factor affecting to bankruptcy prediction are Flag, Giroux and Wiggins (1991), Parker, et al., (2011) and Donnato and Nieddu (2014). The profitability ratio is expected has a negative effect on the financial distress of the Indonesian family firm.

To control the quality of the prospects of a company that may not be reflected in the accounting variables, it is necessary to measure the perception of the market. An efficient market will generally contain non-financial information such as quality management or product strategy for its impact on the accounting of data. Market perception (PBV) is measured by the book value of shares on the stock market value. Piotroski (2000) found that most of the stocks trading at very low PBV are a financially troubled company. In this study PBV is expected has a negative effect to the financial distress of the company.

3. Sample and Methodology

A family firm is a company which individual or families have a share more than 25%. As presented by Drake (2009), the family company is a family business which has at least 25% voting rights while the rest is owned by smaller shareholders. Seven (7) sample of family companies during the 2010-2014 period is obtained, which were selected through purposive random sampling with the criteria is the sample must have complete data related to the research variables. Furthermore Independent test is used to find out the differences of performance and risks between family firm and non-family firm. The seven non-family firm are selected based on similar industrial sector with the family firm and chosen since the number of its workforce approximately equal to the family firm.

This study used logistic regression because an independent variable is a combination of continuous and categorical variables. Moreover, dependent variable remains the company's financial distress, which has a negative Earning Per Share (Elloumi and Gueyie, 2001). Dependent variable consists of dummy variable, coded (1) if the firm experienced financial distress (has negative EPS) and (0) if not, while independent variables comprises gender diversity, location

of the director's house, board independence, CEO quality, quality of auditor, leverage, operational risk, size, liquidity, profitability, and market risk.

4. Result and Discussion

Independent tests showed there is a difference financial performance between family firm and non-family firm. The non-family firm has a better average performance compared with the family firm. The average Return On Investment (ROI) of the family firm is -1,9969, meanwhile non-family firm is 5,6683. However, risk-taking between family firm and non-family firm is similar, risk is measured by leverage. This case shows that even though they have the same level of risk-taking, but the non-family firm run the business better than a family firm, that produces better performance.

The value $-2\log L$ is 32.141 which is not significant at alpha 5% and this shows that the model does fit to the data. Nagelkerke's R^2 value of 0.598 indicates that the variability of the dependent variable can be explained by the independent variable amounted to 59.8%. Furthermore, Value Hosmer and Lemeshow's Goodness of fit test was 0.986 greater than 0.05, then the hypothesis can not be rejected. Therefore model can predict the value of its observations. The estimated accuracy of the model goes to 78.6%.

The model can be expressed in a logistic regression equation as follows:

$$\begin{aligned} \ln \frac{p}{1-p} = & 22,355 - 52,248 \text{ GENDIV} - 11,915 \text{ LOCDIR} - 20,757 \text{ INDPD} - 11,372 \text{ QUALCEO} \\ & - 5,552 \text{ AUDITOR} - 5,106 \text{ LEV} - 2,495 \text{ OPRISK} - 0,317 \text{ SIZE} + 1,35 \text{ CR} \\ & - 0,061 \text{ PROFTRISK} + 0,05 \text{ PBV} \end{aligned}$$

The result of logistic regression (table 1) showed that *gendiv*, independent board, and leverage have significantly influenced (at alpha 5%) to the probability of experiencing financial distress to the Indonesian family firm. If other variables held constant, the leverage would increase that probability at 5.106. Gender diversity will decrease the company's risk to experience financial distress at 52.248, while the independent commissioner board will decrease that risk at 20.757. Meanwhile, current ratio, *locdir* and CEO Quality remain significant at alpha 10%. Other variables such as, operational risk, size, profitability risk, PBV, and auditor do not have a significant effect on the financial distress of the Indonesian family-firm.

On average only 11.41% of women on the board of directors of the Indonesian family firm. This study indicates that greater gender diversity, the lower of the financial distress. The women have a lower preference for risk when compared with men (Powell and Ansic, 1997). They do not dare to take a greater risk so they will be more conservative in running the company's operations and consequently the possibility of companies experiencing financial distress also becomes smaller. This study supports the study of Kristanti (2015), which indicates a negative influence between gender diversity to the cost of bankruptcy. The increasing of the number of women on the board of directors showed an increasing the role of women in management decision making of the company, so that the company will be more conservative relatively in their operation. It causes the cost of the bankruptcy of the company can be decreased, and therefore the possibility of companies experiencing financial distress is also getting smaller. Carter, et al. (2007) and Smith, et al. (2006) showed a positive effect between gender diversity and firm performance, consequently the possibility of companies experiencing financial distress is also getting smaller.

The independent board affect negatively to the financial distress. On average only 12.43% of independent board of the family firm in Indonesia. Increasing of the independent board would improve supervision of the company's operations. Therefore the company's operations will run well and the possibility of companies experiencing financial distress can be prevented. It showed that there is a good control function of the board in the family firm in Indonesia. This study different from the study of Siahaan (2013) in Indonesia that found evidence that independence board has a negative effect on the value of the firm. The decrease of this value will be increase the possibility of financial distress.

There is a significant negative effect between leverage and financial distress. The average leverage is high (on average 0,68) but their financial performance is still good enough (showed by an average operating margin is 0,31 and

only 40,5% firm that experience in financial distress condition). This indicates that the company has the ability to pay all its fixed obligations, therefore the financial distress potency of the company decreased. The result also showed that Indonesian family firm do not adopt a conservative capital structure. The results of this study support study Pranowo, Achسانی, Manurung and Nuryantono (2010) that found a negative effect between leverage and bankruptcy in Indonesia. Kristanti (2015) also found a negative relation between leverage and cost of financial distress in family firm Indonesia. This study does not support the study of Opler and Titman (1994) in The US, Abdullah (2006) in Malaysia and Chancharat (2008) in Australia, which indicates a positive relation between leverage and the possibility of the company into bankruptcy.

Table 1 . Statistical result

No.	Variables	Coefficients
1	Gender Diversity	-52,248**
2	Location of director	-11,915*
3	Independent Board	-20,757**
4	CEOQual	-11,372*
5	Auditor	-5,552
6	Leverage	-5,106**
7	Operating Risk	-2,495
8	Size	-0,317
9	Current Ratio	1,350*
10	Profitability Risk	-0,061
11	Price Book Value	0,050
12	Constanta	22,355

Note: *** is 1 % at level of significant, **5 % at level of significant, *10 % at level of significant

There is a significant negative effect between locdir and financial distress. The average locdir value was 0.78 showed that most directors have the same location with the location of the company. This condition makes a good communication between them. In addition, management has a good ability to respond rapidly to market changes makes the company able to generate sufficient income to cover all of the company's expenses, so that companies can avoid financial distress. This study support study of Wilson, et al. (2012) that found a negative effect between the locdir to the company failed that measured by insolvent condition.

Current ratio and financial distress has positively significant relation. If the current ratio increased, the financially distressed of the Indonesian family firm also rises. The average liquidity family firm was 4.37, showed high liquidity. If the company is liquid, the profitability will reduce. If the company is not profitable then it is likely the company suffered losses so there would be a chance that the company enters into financial distress condition. This study support study by Pranowo, et al. (2010) in Indonesia that found evidence a positive effect between current ratio and financial distress.

Most CEOs have a high formal education degree. This is shown by the average number of 1.69 means that on average the CEO of Indonesian family firm has bachelor level. The CEO Quality has a significant negative effect to the financial distress of family firms in Indonesia. If the CEO Quality increase, the financial distress will be decreased. The qualified CEO will make the right decisions with better handling for the complexity of organizational problems. Good decision will create a good performance so that companies do not have to experience financial distress. These results are consistent with studies of Berkeley, et al. (1991) that found a strong indication that support a positive relationship between performance companies and educational backgrounds CEO. This study does not support study of Gottesman et al. (2010) that found no relationship between the quality of CEO educational background and firm performance, using the Tobin's Q as a measure of the financial performance of a firm.

Operational risk is measured by the sales to total asset that show the asset's ability to generate sales that showed loventy company. The high of this ratio showed a good performance related to the company's operations. The results of the study showed that the operational risk did not affect significantly the probability of family firms experiencing financial distress. It is very reasonable because sales is not reflected profit to be gained by the firm. In this study profitability risk measured by dividing the EBIT by total assets that also have no significant effect to the financial

distress of the family firm in Indonesia. The average of operating risk is 1.03 and profitability risk average is 0.31. It indicates good financial performance. This is reinforced by the fact that only a few the family firm in Indonesia who suffered distress (on average 0.4).

This study showed that the size does not affect financial distress. It indicates that either large or small family firm professionally managed. Professional management will produce a good performance, therefore companies can avoid the financial distress. This study does not support study of Le Clere (2005), Fich and Slezak (2008) and Tinoco and Wilson (2013) that showed a negative effect between size and financial distress and Chancarat (2008) that showed a positive relation.

There is no relation between PBV and financial distress. The average value PBV is 4.3, indicates a high market risk of family firms in Indonesia that showed a good signal on the company's prospects. It showed that the Indonesian family firm is managed in a professional manner, therefore they have a good performance and did not experience financial distress. This result reinforces study conducted by Farida (2015), which indicates there is no significant influence between PBV with the cost of financial distress in the family firm in Indonesia.

Average quality auditor of 0.143 indicates that most companies do not use the auditor which included four big classification. Decisions about who auditor chosen do not affect to financial distress because most of this family firm in Indonesia demonstrated a high profit so that only a few companies experiencing financial distress. Family firm performance in Indonesia is determined by how management runs the company's operations professionally. This study does not support study of Wilson, et al. (2013) that found a positive relation between quality auditor to the company failure.

5. Conclusions

There is evidence that gender diversity, independent boards, leverage and current ratio, location of director and quality of CEO has influenced to the financial distress of the Indonesian family firm. However, there are no significant effect among operational risk, size, profitability risk, market risk and quality of auditor to the financial distress.

Independent tests showed that the performance of non-family firm is better than the family firm. Family firm in Indonesia does not adopt a conservative capital structure, but demonstrate the efficient use of funds. The presence of women on the board of directors who have a tendency to risk averse also produces good financial performances so that companies can avoid financial distress. This condition is supported by a good control over the company's operations by the presence of the independent board, the qualified CEO and the CEO that have a similar location of the company address.

This study proves that good corporate governance will enhance the company's performance, and it will decrease financial distress of the Indonesian family firm. This study supports the view that a great opportunity to survive for the Indonesian family firm is they had an agency cost efficiency and lower overall costs. Consequently, the company can increase better adoption of corporate governance to produce better financial performance so that they can avoid financial distress. Specifically on increasing of independent commissioner, a women's role on the boards, directors who live in the same city where the company is located, and qualified CEO. Their existence will influence the decrease of agency costs due to better separate ownership and control

The next studies may use a combination of financial variables, corporate governance and the variables that indicate the macro economic conditions. The study can also be done for small business which may have different behaviors financial distress.

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