Family Ownership, Women in Top Management, and Risk-taking: Evidence from Indonesia

Abstract

Family firms were widely recognized to have substantial contribution to economy especially in emerging economies. However, some previous studies reveal that family firms tend to be conservative and unwilling to take more risks. We extended the literature by investigating whether there was a difference in risk-taking behavior between family and non-family firms in the context of Indonesia. Moreover, the presence of women in the top management also considered negatively correlated with risk-taking strategy. Therefore, this study empirically examined the effects of family ownership and women in top management on risk-taking strategy of firms. Using data of 336 publicly traded firms in Indonesia over 2012-2016, this study confirmed the negative effect of family ownership and women in top management on corporate risk-taking. Family ownership and involvement as the CEO of the firms negatively associated with the level of risk taking. Moreover, our results reveal that the presence of women was matter more to decrease corporate risk-taking when they served in the board of directors rather than in the board of commissioners.

Keywords: Family Ownership; Risk-taking; Women in Top Management

JEL Classification: G32, M14


Abstrak


Kata kunci: Kepemilikan Keluarga; Pengambilan Risiko; Perempuan dalam Manajemen Puncak

This is an open access article under the CC–BY-SA license
The family business is a business where a family has relatively strong power in a firm and giving the strategic direction through ownership or management (Pieper, Klein, & Jaskiewicz, 2008). In Asia, more than two-thirds of firms are owned by individual or family. In Western Europe, 44 percent of firms are in control by families (Faccio & Lang, 2002). Such kind of ownership concentration could have a different impact on firm value (Jiang & Peng, 2010). Bhaumik & Gregoriou (2010) provide a comprehensive review of agency problem with regards to family firms. It is argued that type 1 agency problem (shareholders and managers) should be minimized in the family firms. However, on the other hand, agency problem type 2 (majority-minority shareholders) is potentially higher in family firms. There have also been a number of studies investigating the outcomes of family firms, with particular emphasis on the effect of family management, family control, and the characteristics of the family (Habbershon, Williams, & MacMillan, 2003; Dyer, 2006; Villalonga & Amit, 2006).

In this present paper, first, we extend the literature by questioning whether there is a difference in risk-taking behavior between family and non-family firms in the context of Indonesia. Some previous studies have empirically examined this particular issue in a different context. In the context of Japan, Nguyen (2011) finds that control and ownership by the family are positively related to the behavior in decision making. Anderson & Reeb (2003) find that family is not associated with high-risk decisions. Family tends to choose the safest way to inherit the business to the next generation. Likewise, La Porta et al. (1999) and Morck & Yeung (2004) show that family-controlled firms have a tendency to decline risky decisions. Gómez-Mejía et al. (2007) mention that families do not like the loss due to their socio-emotion to the business. Burkart, Panunzi, & Shleifer (2003) show that if the family holds a large proportion of shares, their interest would be in accordance with the firm’s interest. Thus, the family would take more risk to lift the firm value. Setiawan et al. (2016), using Indonesian firms, reveal that family-owned firms pay a lower dividend. However, they argue that it is not because the families want to take more risk by investing retained earnings on risky investment, rather, they may take benefits by controlling the resources in the expense of minority (agency problem type 2). Prabowo (2013), by studying commercial banks in Indonesia, reveals those family-controlled banks, both direct and indirect controls, have a lower performance than that of non-family banks. On a different angle, Untoro et al. (2017) show that past performance is important in the family firms particularly in the appointment of the following CEO. Bad performance could imply that non-family members may have more chance to be selected as the new CEO.

Discussing family-controlled firms should also consider the family involvement in the management which is usually identified by looking at profiles of board directors and board of commissioners - in the dual board system (Filatotchev, Lien, & Piesse, 2005; Villalonga & Amit, 2006; Lin, 2011). In the context of Indonesia, most of the family firms have involvement in the board of commissioners. A substantial number of family-controlled firms also appoint a family member as the CEO (president director). Jiang & Peng (2011) reveal that there is a positive impact on firm performance in Indonesia when the CEO (or called president director) is a family member.

In this present paper, we also consider that risk-taking strategy is also influenced by the profiles of the board of directors and the board of commissioners. Our main interest here is on the presence of women on the board both in the board of directors and board of commissioners as it is generally argued that women are more risk averse in taking decisions than men. Byrnes, Miller, & Schafer (1999) exhibit a meta-analysis of 150 studies on risk-taking behavior and conclude that men are more involved in risky and more gambling investment than women. Similarly, Barber & Odean (2001) find
that men have a higher confidence level than women which is then reflected in the more transactions in the investment. In the context of corporation, Huang & Kisgen (2013) document that men are more confident in financial decisions than women. In the context of Indonesia, Sawitri, Untoro, & Trinugroho (2016) find that the proportion of women in top management of banks is negatively associated with lower performance. Arguably, it is due to the less risk-taking strategy.

However, some papers provide different results. Midavaine, Dolfsma, & Aalbers (2016) find that the existence of women in the board making firms having more investment in research and development which means women is also challenged to take risky decisions. Similarly, Deaves, Luders, & Luo (2009) do not find that women are less confident than men.

It has been generally known that family business is a typical business in Asia including Indonesia. Miller & Le Breton-Miller (2006) distinguish family control of firms into four types; degree and mode of family ownership, the leadership of family in the firm, the involvement of multiple family members, and participation of later generations or succession plan.

There have been some empirical studies on the impact of family control and firm outcomes such as accounting performance and market value. For instance, the seminal paper of Anderson & Reeb (2003) shows that family firms have higher performance than non-family firms. Likewise, Lee (2006) concludes that the revenue of family-controlled firms is growing over time. Moreover, those firms are more profitable than non-family firms. In addition, this study also reveals that founding family involvement is significant in improving firm performance. Maury (2006) differentiates between active and passive family control. This study finds that active family control has a positive effect on firm performance, while there is no significant effect on passive family control. Andres (2008), by using German data, also finds that family firms are more profitable than widely-held firms. More recent, Chu (2011), in the context of Taiwan, find that there is a positive effect of family ownership on firm performance more so when the family members involved in the management. However, some studies find differently, for instance, Tsao et al. (2009), in which there is no evidence on the different performance between family and non-family firms.

The other interesting issue is regarding the difference in business strategy between family and non-family firms, particularly concerning the risk-taking strategy. Some empirical studies have investigated the difference in risk-taking behavior between family and non-family firms. For example, Croci, Doukas, & Gonenc (2011) demonstrate that family firms tend to invest less in the high-risk and R&D projects. Similarly, Chen & Hsu (2009) reveal that family firms tend to be reluctant in investing in long-term R&D which is considered to be risky. Some studies, however, provide different evidence. Zahra (2005) explains that family ownership and involvement is positively associated with entrepreneurial risk-taking. Naldi et al. (2007) argue that family firms take the risk especially in entrepreneurial activities; however, the level is lower than non-family firms. Our focus here is to extend the literature by empirically studying the effect of family ownership and involvement on a risk-taking strategy of firms in the context of Indonesia.

The issue of women presence in top management, both as top executive and board of director members has been extensively studies along with the increase in the proportion of women on corporate board (Nielsen & Huse, 2010). Some studies conclude that women presence is beneficial for firms in improving firm performance, e.g., Smith, Smith, & Verner (2007) and García-Meca, García-Sánchez, & Martínez-Ferrero (2015). In a meta-analysis study, Post & Byron (2015) conclude that female board presence is positively associated with firm performance, more so in the countries with greater investor protections. It could be considered that the posi-
tive effect come from the fact that female directors are more likely to hold advance degree (Hillman, Cannella-Jr, & Harris, 2002). In addition to the advance degree that women directors may have, Post & Byron (2015) argue that female directors may have strength in market analysis and flexible decision making process. Nevertheless, some studies find differently in which female representation in the board is negatively associated with firm performance (Darmadi, 2011; Sawitri, Untoro, & Trinugroho, 2016).

A number of papers specifically discuss on the effect of women presence on corporate risk-taking based on the generally considered argument that women are perceived to be more risk-averse than men (Sawitri, Untoro, & Trinugroho, 2016). It is also based on some behavioral studies such as Charness & Gneezy (2012) who conduct an experimental study consistently demonstrate that women tend to be financially risk-averse than men. However, at the corporate level, the findings are inconclusive. For instance, Strøm, D’Espallier, & Mersland (2014) find that in the microfinance institutions, women presence is negatively associated with default risk. However, Sila, Gonzalez, & Hagendorff (2016) find that there is no evidence that female board representation has an impact on firm risk.

In here, we extend the literature on the determinants of corporate risk-taking behaviors. We focus on the impact of family ownership and the presence of women in the top management of the level of risk-taking of public firms in Indonesia. Indonesia adopts a two-tier system making the separation of the board of commissioners and the board of directors. The board of directors has a role in managing the daily operations of the firm; on the other hand, the board of commissioners plays a role in monitoring the board of directors in managing the firms. We expect that the greater the percentage of family ownership will lead to less risky corporate decisions, as well as the greater percentage of women in the board of directors and the board of commissioners tend to take non-risky decisions.

**METHODS**

Data is gathered from the annual reports of 336 public firms in Indonesia taken from the website of the Indonesia Stock Exchange (www.idx.com). We also go through the website of each firm to check the consistency of the reported annual reports. Financial firms are not included due to their specific characteristics. This study takes the data over the 2012-2016 periods.

The main explanatory variables are family ownership and the presence of women in top management. Family ownership is reflected by two different proxies. First, a dummy variable is employed to distinguish a family firm (FAM_FIRM), taking the value of 1 if there is individual stock ownership of more than 10 percent and 0 otherwise. Second, if the president director is a member of the family then it is stated 1 and 0 otherwise (FAM_CEO). The presence of women in top management is measured by two proxies, the ratio of women in the board of directors (WOM_DIR) and the ratio of women in the board of commissioners (WOM_COMM). Risk-taking is seen from the volatility of return, standard deviations of return on assets (SDROA), as in the previous studies. SDROA is calculated in a three-period rolling window.

We also include some control variables to explain the level of risk-taking which are leverage, size, age and. Leverage is defined as the ratio of total debt to total assets (LEVERAGE). To measure the company size, we use the total natural logarithm of the company’s total asset (SIZE). The age of the company is the number of years since the company was established (AGE).

**RESULTS**

Table 1 shows the proportion of firms included in sample for each industry. The classification refers to the Jakarta Stock Industrial Classification (Jasica) Index following the study of Prabowo et al. (2014). Table 2 exhibits the descriptive statis-
tics of each variable. The average of SDROA is 35.5 percent while, the mean of SDROE is 2.4 percent. 32.9 percent are family firms, and 20.5 percent are led by family members. It means that not all of the family firms assign family members to be the CEO. Furthermore, the proportion of female director (13.8 percent) is slightly higher than that of female commissioner (11.10 percent).

Table 1. Proportion of Firms Based on Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Firms (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>5.06</td>
</tr>
<tr>
<td>Mining</td>
<td>10.12</td>
</tr>
<tr>
<td>Basic industry and chemicals</td>
<td>16.07</td>
</tr>
<tr>
<td>Miscellaneous industry</td>
<td>8.93</td>
</tr>
<tr>
<td>Consumer goods industry</td>
<td>8.93</td>
</tr>
<tr>
<td>Property, real estate and construction</td>
<td>12.80</td>
</tr>
<tr>
<td>Infrastructure, utilities, and transportation</td>
<td>11.31</td>
</tr>
<tr>
<td>Trade, service, and investment</td>
<td>26.79</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Max</th>
<th>Min</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDROA</td>
<td>0.355</td>
<td>0.024</td>
<td>229.203</td>
<td>0</td>
<td>8.013</td>
</tr>
<tr>
<td>FAM_FIRM</td>
<td>0.329</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.470</td>
</tr>
<tr>
<td>FAM_CEO</td>
<td>0.205</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.404</td>
</tr>
<tr>
<td>WOM_COMM</td>
<td>0.111</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0.177</td>
</tr>
<tr>
<td>WOM_DIR</td>
<td>0.138</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0.233</td>
</tr>
<tr>
<td>AGE</td>
<td>3.438</td>
<td>3.465</td>
<td>7.608</td>
<td>1.098</td>
<td>0.786</td>
</tr>
<tr>
<td>LEV</td>
<td>0.554</td>
<td>0.483</td>
<td>32.923</td>
<td>0</td>
<td>0.992</td>
</tr>
<tr>
<td>SALES</td>
<td>7.157</td>
<td>0.483</td>
<td>12.214</td>
<td>-2.302</td>
<td>2.005</td>
</tr>
</tbody>
</table>

Table 3. The Result of OLS Regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.192</td>
<td>(7.129)***</td>
<td>0.000</td>
</tr>
<tr>
<td>FAM_FIRM</td>
<td>-0.025</td>
<td>(2.921)***</td>
<td>0.004</td>
</tr>
<tr>
<td>FAM_CEO</td>
<td>-0.041</td>
<td>(4.669)***</td>
<td>0.000</td>
</tr>
<tr>
<td>WOM_COMM</td>
<td>0.011</td>
<td>(0.417)</td>
<td>0.682</td>
</tr>
<tr>
<td>WOM_DIR</td>
<td>0.038</td>
<td>(2.522)***</td>
<td>0.012</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.006</td>
<td>(-1.712)*</td>
<td>0.089</td>
</tr>
<tr>
<td>SALES</td>
<td>-0.014</td>
<td>(-5.822)***</td>
<td>0.000</td>
</tr>
<tr>
<td>LEV</td>
<td>0.034</td>
<td>(7.419)***</td>
<td>0.000</td>
</tr>
<tr>
<td>Adj. R Square</td>
<td>0.084</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Statistic</td>
<td>17.67***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: t-statistics is in parentheses. *, **, and *** denote significance at 10 percent, 5 percent, and 1 percent levels respectively.

Table 3 presents the regression results using OLS regression. The first proxy of family control which is family ownership (FAM_FIRM) has a negative effect on SDROA which means that family ownership is negatively associated with the risk-taking strategy. Moreover, our result shows that family involves in the management or if the president director is a member of the family, the corporate risk-taking would be lower as shown by the negative and significant coefficient of SDROA. Turn to the role of women in the top management on corporate risk-taking; we find that the existence of female member in the board of commissioners does not affect risk-taking neither on SDROA which means that female commissioner (WOM_COMM) does not affect risk-taking. On the other hand, the presence of female directors has a negative and significant effect on SDROA which means that the more the proportion of women in the board of directors, the lower the risk-taking decisions are made in the corporation.

**DISCUSSION**

Our main finding in this empirical study is that family ownership and involvement are negatively correlated with the degree of corporate risk-taking. It confirms some previous studies such as Anderson & Reeb (2003) and Morck & Yeung (2004). It is also in line with the finding of Naldi et al. (2007) which mention that family firms have less risk-taking compared to non-family firms even though they conduct entrepreneurial activities. Family firms are at some extent perceived as conservative (Sharma, Chrisman, & Chua, 1997). The negative effect, perhaps, comes from the fact that family tends to choose the safest way to inherit the business to the next generation. Moreover, the finding suggests that family participation in the top management has more effect on the direction and strategy of the firms rather than appointing outside CEO. Family CEO would behave in line with the interest of family as a whole to consider the sustainability of the business to the next generation (Naldi et al., 2007).
The second issue here is related to the presence of women in top management which is found to have negative on firm risk-taking particularly when women serve on the board of directors rather than on the board of commissioners. It may be considered that the role of women in board of commissioners has a small impact on the organization. To some extent, these results confirm the most finding in the previous studies that the presence of women in the top management is negatively associated with the degree of corporate risk-taking. This also indicates that any addition of female directors would expectedly decrease the overall firm risk-taking. Board of directors, in the context of Indonesia which is similar to top management team in the single board system, is responsible for managing the daily operations of the firms which require high involvement of the members. Perhaps, this confirms the postulation of Barber & Odean (2011) and Charness & Gneezy (2012) that women are basically more cautious and more risk-averse than men.

We conduct some robustness checks for this study. First, we tested the empirical model using random effect and fixed effect techniques rather than OLS regression. Second, we separate the two proxies of family control in different regression models as some may argue that there is a collinearity problem between these two measures. The results of our variables of interest, however, remain consistent.

### CONCLUSION AND SUGGESTIONS

**Conclusion**

Using data of 336 firms over the period of 2012-2016, we empirically test the impacts of family ownership and women presence in the top management on corporate risk-taking. Our study contributes to in the debate on the role of women in top management especially with regard to risk-taking strategy. Our results reveal that the presence of women is mattered more to decrease corporate risk-taking strategy when they serve in the board of directors rather than in the board of commissioners. Likewise, we also find that family ownership and family involvement as the CEO of the firms negatively associated with corporate risk-taking strategy.

**Suggestions**

However, we acknowledge that there are three limitations in this research. First, this study is only limited to five years. Second, our measure for risk-taking only relies on the standard deviation of returns. Future studies may also consider including some other risk-taking measures such as investment in research and development. Third, we do not control for the educational background, expertise and tenure of members of the board of directors and board of commissioners as some may argue that the behavior of women when they serve in the board could be influenced by their experience and background.

### REFERENCES


Family Ownership, Women in Top Management, and Risk Taking: Evidence from Indonesia

Novi Widyawati, Irwan Trinugroho, & Wisnu Untoro


