

## THE EFFECT FAMILY OWNERSHIP ON FIRM RISK: THE ROLE OF PROFESSIONAL CEO

Wery Andriani\*<sup>1</sup>, Ancella Anitawati Hermawan<sup>2</sup>

<sup>1</sup>Department of Accounting, Faculty of Economics and Business, Universitas Indonesia, Indonesia\*

<sup>2</sup>Department of Accounting, Faculty of Economics and Business, Universitas Indonesia, Indonesia

\* *E-mail: wery.andriani@ui.ac.id*

---

### Abstrak

Penelitian ini bertujuan untuk menguji apakah kepemilikan keluarga memiliki dampak terhadap resiko perusahaan. Hal ini dikarenakan adanya keunikan tersendiri pada perusahaan keluarga dalam menjalankan bisnisnya juga memperhatikan aspek non keuangan. Selain itu, penelitian ini juga melihat pengaruh moderasi dari CEO Profesional terhadap hubungan kepemilikan keluarga dengan resiko perusahaan. Sampel yang digunakan adalah seluruh perusahaan keluarga dalam industri manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2015-2019. Adapun total observasi adalah sebanyak 245 perusahaan yang akan diuji dengan regresi Data Panel. Hasilnya ditemukan bahwa kepemilikan keluarga memiliki pengaruh negatif terhadap resiko perusahaan. Selain itu CEO profesional mampu bertindak lebih realistis dan independen, sehingga dapat memperlemah hubungan kepemilikan keluarga dan resiko perusahaan. Secara praktik, hasil penelitian ini diharapkan dapat membantu berbagai pihak pemangku kepentingan dalam memahami bagaimana kepemilikan keluarga dapat mempengaruhi resiko perusahaan.

**Kata Kunci:** Kepemilikan Keluarga, CEO Profesional, Risiko Perusahaan

**JEL Code:** M12, M14, M40

---

### Abstract

This study aims to examine whether family ownership impacts firm risk. This argument is due to the uniqueness of the family company in running its business, which prioritizes not only financial aspects but also non-financial aspects. In addition, this study also aims to examine the moderating effect of the professional CEO on the relationship between family ownership and firm risk. The samples used in this study are family firms in the manufacturing industry, listed on the Indonesia Stock Exchange from 2015 to 2019. The total 245 observations will be tested with Panel Data regression. The results found that family ownership has a negative effect on firm risk. The result indicates that the company tries to maintain the family's wealth. In addition, professional CEOs are able to act more realistically and independently, thus weakening the relationship between family ownership and firm risk. In practice, the results of this study are expected to help various stakeholders understand how family ownership can affect firm risk.

**Keywords:** Family Ownership, Professional CEO, Firm Risk.

**JEL Code:** M12, M14, M40

## INTRODUCTION

In developing countries, family firms play an important role in the economy. According to [Claessens & Yurtoglu \(2013\)](#) and [La Porta et al. \(1999\)](#), most companies in developing countries are controlled by families, including for the East Asia and Southeast Asia regions, including Indonesia. When operating the business, it cannot be separated from the risk that will be faced. In general, [Sassen et al. \(2016\)](#) define firm risk because of uncertainty in the future so that it can lead to a potential loss of company value. [Lee et al. \(2018\)](#) and [Rajverma et al. \(2019\)](#) explains that one of the factors that can affect a firm risk is the ownership structure.

Recently, some research has focused on whether family firms are risk-taking or risk averse. Some researchers argue that families have long-term goal alignment with the company, thus encouraging innovation and entrepreneurial risk ([Huybrechts et al., 2013](#); [Zahra, 2005](#)). In other words, family firms would dare to take risks if the benefits obtained can increase socioemotional wealth. [Gómez-Mejía et al. \(2007\)](#) stated that family firms do not always avoid risk. Sometimes they dare to take risks, especially when it comes to socio-emotional wealth families.

On the other hand, some researchers also have a strong argument that family firms prefer to avoid risk. This is in line with the assumption of agency theory when the level of ownership is concentrated in one company, it will result in investment delays because the financial burden is only borne by one person. [La Porta, Lopez-de-Silanes, & Shleifer \(1999\)](#) argue that family-controlled companies tend to be careful in making decisions and choose to avoid risk. The same thing was also documented by [Morck, Randall; Yeun \(2003\)](#) in his research states that sometimes the family as the controller will not carry out certain innovations to protect investments that have been made previously. Thus, new projects whose returns are uncertain will not be selected.

Research related to the relationship between family ownership has been widely carried out, especially in the United States, Latin America, and Europe. However, for the Southeast Asia Region, there is some literature discussing about that. As stated by [La Porta et al. \(1998\)](#), the uniqueness of companies in the Southeast Asian region is their ownership structure which is controlled by blockholders or families. Furthermore, [Claessens et al. \(2000\)](#) explained that family-controlled companies in Indonesia and Malaysia generally tend to be of medium size. Therefore, research related to family ownership in Indonesia becomes a special attraction to discuss due to its unique characteristics as emphasized by [La Porta et al. \(1998\)](#). In this study we focus on manufacturing industry. Because based on a survey from Pricewaterhouse Coopers (2018) which stated that around 22% of family businesses in Indonesia are in the manufacturing sector and this is the highest when compared to other sectors.

Besides ownership structure, the characteristics of the CEO can also affect the firm risk. Usually, a family company is led by management who comes from the family. Either they serve as commissioners or as directors. However, it is possible to entrust the management of the family business to the CEO or professional management. Thus, the family is only the owner but does not directly participate in managing the business.

Researchers argue that professional CEOs can weaken the relationship between family ownership and firm risk. Professional CEOs can play two roles in family companies related to firm risk. When family companies tend to take risks, CEOs who are not family members can resist this behavior. Under the stewardship theory which asserts that the management who is trusted to run the company will be responsible for the position ([Neubaum et al., 2017](#)). Thus, management will not approve decisions related to projects that are too risky because they can endanger the company.

In addition, if the family company is always risk averse, the professional CEO will encourage the company to be more willing to take risks. [Kang & Kim \(2016\)](#) conducted a study on the exchange from family CEOs to professional CEOs in companies in Korea. The results show that to increase the value of the company after a decline, family companies tend to replace their family CEOs with professional CEOs. The declining firm value occurred due to the expropriation of minority

shareholders. [Lin and Hu \(2007\)](#) explain that when the company families have weak controls, then they will recruit management has high skills to improve firm performance.

This study discusses the relationship between family ownership and firm risk as well as the moderating influence of the CEO professional in family firms ([Lee et al., 2018](#); [Llanos-Contreras et al., 2020](#); [Poletti-Hughes & Williams, 2019](#)). To develop the argument, used socioemotional wealth theory which was initiated by [Gómez-Mejía et al. \(2007\)](#) related to family ownership. Thus, it will be seen how the application of this theory to family firms in Indonesia will be seen. In addition, the other focus is to see how the moderating role of professional CEOs in family companies is especially related to firm risk, based on the stewardship theory perspective.

We found that family ownership has a negative relationship with firm risk. This indicates that family-owned companies tend to avoid risk. The goal is to keep the family's investment and wealth so that it can be passed on to the next generation. In addition, professional CEOs can weaken the relationship between family ownership and firm risk. These results are consistent with the view of stewardship theory, which states that the CEO appointed to manage the business will act more rationally and independently to meet the interests of all shareholders.

The sequence of this research is as follows: section 2 is a literature review, followed by research methods in section 3. Section 4 will explain the results of the study. Also, section 5 is the conclusion and conclusion.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### *The Effect Family Ownership on Firm Risk*

With the various complexities faced in running a business, family companies tend to consider many things in making decisions. This is inseparable from how the decisions are taken will affect various aspects. Such as the reputation of the company, the identity, and the sustainability of the business or family wealth in the future.

Concerning firm risk, research related to family ownership has been widely studied from several theoretical perspectives such as stewardship theory, socioemotional wealth theory, and agency theory. In the perspective of stewardship theory, [Zahra \(2005\)](#) argues that an alignment between family and company interests will ultimately encourage new business growth, use technology, and encourage entrepreneurial risk-taking. From this perspective, it can be said that there is risk-taking in family firms.

[Poletti-Hughes & Williams \(2019\)](#) in their research found that family firms will choose to take performance hazards (performance-related risks). This indicates that the family company is a risk-taker. In line with this opinion, [Lee et al. \(2018\)](#) in his research found a linear relationship between family ownership and risk-taking. This means that the higher the family ownership, there will be an alignment between company goals and family goals. So, management will try to create better company growth by investing with greater profit potential.

Meanwhile, in the perspective of socioemotional wealth theory, [Berrone et al. \(2012\)](#) confirm that family-owned companies prioritize avoiding losses that can lead to a decline in wealth family. They even want to take certain actions to maintain the wealth of the family. In line with this research, [Widyawati et al. \(2018\)](#) said that family-owned companies tend to avoid risk. The goal is to maintain the family dynasty so that it can be passed down to the next generation. Thus, in this perspective, family ownership has a negative relationship with firm risk.

[Dong et al. \(2014\)](#) suggest that concentrated share ownership increases risk-taking opportunities. However, the argument that when a company is controlled by concentrated shareholders such as by an institution will be run well by management cannot be forgotten. This action was driven by monitoring strict by shareholders. Therefore, management is limited to operate the business. [Su & Lee \(2013\)](#) asserted that when there is a concentrated shareholding which is usually held by the family, there will be a limit given to risk-taking.

[Morck, Randall; Yeung \(2003\)](#) states that to protect family investments that have been made, sometimes a company owned by a family will not carry out certain innovations. This is because they will try to maximize their previous investment. [Widyawati et al. \(2018\)](#) also researched in Indonesia, related to family ownership and risk-taking. The results show that there is a negative relationship between family ownership and firm risk. This objective is to maintain the stability of the business that will be passed on to the next generation.

In addition, [Frisenna & Rizzotti \(2020\)](#) in their research states that the tendency of family companies to choose to be risk-averse can have an impact on company growth. Especially those related to the company's source of funding. Family companies, which generally come from family wealth, will prefer to be careful in investing. If there is a failure, then the family as the owner of the funds will be affected. Thus, this argument states that family ownership tends to be risk-averse.

Given the view to be more careful in running a business, family companies often tend to be more conservative than companies in general ([Morck, Randall; Yeung, 2003](#)). Therefore, the decisions taken mainly related to risk will be carefully considered. If the decision can have an impact on a family's wealth, they prefer to avoid risk. With the perspective as presented above, the hypothesis proposed in this study is as follows:

**H1: Family ownership has a negative influence on firm risk.**

#### *Moderating of Professional CEOs in Family Ownership and Firm Risk Relationship*

As previously explained, family ownership influences firm risk. Based on shareholder theory, family firms act the same as companies in general that pursue value creation, to add value to the company. Sometimes they take risks according to their preferences risk ([Gómez-Mejía et al., 2007](#)). However, it is possible to maintain business stability and family wealth, companies tend to avoid risk. However, these strategic decisions return to top management as one of the executors in the company.

When discussing family companies, it cannot be separated from the assumption that the leader of the company is part of the family. Both served as commissioners or directors. Many studies have been carried out on the involvement of family members. [Tang et al. \(2016\)](#) conducted a study on CEOs in China with a final sample of 2,820 companies. They found that the CEO status as founder has a positive influence on risk-taking. These results indicate that the CEO involvement founder's in running the company is very strong because it can influence the company's strategic policies. In this case, it can also be seen that the CEO founder will try to maximize the value of the company, by taking advantage of opportunities that contain high risks. With this bold action, of course, the family ignores the minority shareholders for the decisions taken.

In addition to status as a family member, CEO characteristics can also affect the company's risk. [Martino et al. \(2020\)](#) used 3 proxies of CEO characteristics to see their effect on the risk-taking actions of family firms in Italy. These characteristics include being a family member, a CEO's professional education, and having a career in other companies. The results show that the company's risk will increase when the CEO also serves in another company.

One of the methods used to suppress the problem of expropriation is to appoint a CEO who is not from a family or a professional CEO. As explained by [Kang & Kim \(2016\)](#) in their research on Korean family companies (Korean Chaebol), they found that when there was a decline in firm value, companies that were initially led by family CEOs decided to replace them with professional CEOs. The aim is to restore the firm's performance while still considering the rights of minority shareholders. The expropriation action that has been carried out by the management has an impact on the decline in the value of the company. In line with this opinion, Fang et al. (2021) argues that management from professional circles will encourage family companies that have below average performance to improve their performance. This is because management who are not from the family have wider experience, so they are more willing to take risks.

[Lin & Hu \(2007\)](#) in their research found that when family companies have small cash flow rights, they tend to use CEOs who come from professional circles. The goal is to increase the firm value. However, if families have high cash flow rights, they tend to use CEOs who come from families. In addition, Khanin et al. (2020) also stated that one of the advantages of recruiting professional CEOs is that they have expertise in human resources which is often neglected by management who come from families, so they can maximize existing resources. So, it can have an impact on firm performance and firm risk because it can be separated. To achieve maximum goals, several sacrifices are needed, including having the courage to take risks. Therefore, the presence of the CEO affects the firm risk.

Likewise in the concept of firm risk. From the perspective of stewardship theory, a professional CEO or agent appointed as a substitute for the principal will certainly act to reduce conflicts of interest in family companies. So, it can be said that professional CEOs will be more realistic and independent of the company's strategic decisions. Decisions related to high-risk projects will certainly not be easily approved. And vice versa, if family companies tend to avoid risk, the CEO will encourage companies to be more willing to take risks. Of course, it aims to increase the value of the company.

One of the contributions of research is the moderation of the use of professional CEOs in family firms. It is hoped that this professional CEO can influence the relationship between family ownership and firm risk. This is based on the argument that professional CEOs will be fair to all shareholders. So that there is no expropriation of minority shareholders. Thus, the second hypothesis of this study is as follows:

***H2: Professional CEO weakens the relationship between family ownership and firm risk.***

## RESEARCH METHOD

### *Data and Variables*

The purpose of this study was to examine the relationship between family ownership and firm risk and the moderating role of professional CEOs. The research sample consisted of all family companies in the manufacturing sector, listed on the Indonesia Stock Exchange in 2015-2019. The manufacturing sector was chosen based on a survey from Pricewaterhouse Coopers (2018) which stated that around 22% of family businesses in Indonesia are in the manufacturing sector, and this is the highest when compared to other sectors. In addition, 2015 was chosen as the initial year of observation because in 2015, the OJK issued PJOK Number 60/POJK.04/2015 concerning information disclosure of certain shareholders which is a substitute for the Decree of the Chairman of the Capital Market Supervisory Agency Number: KEP-82/PM/1996 dated January 17, 1996. In the regulation there are sanctions given to issuers, if the issuer does not disclose information related to shareholders. Therefore, in 2015 many issuers have disclosed their ownership structure even to the final controlling level.

To adjust to the research objectives, the purposive sampling method was chosen with the following criteria:

1. Family firm listed on the Indonesia Stock Exchange (IDX) in the manufacturing sector.
2. Family firm has an IPO at least in 2014.
3. Have complete data needed for research.
4. A family firm that has stock price movements

In 2019, there were 165 manufacturing companies listed on the Indonesia Stock Exchange. Based on the sampling selection, 45 firms are not family firms, 41 firms are IPO after 2015, and 24 firms have incomplete financial data and negative equity. In addition, there are 6 companies whose annual reports cannot be found. Finally, the total 49 firms were selected as the research sample and will be observed for 5 years.

The data used in this study is secondary data derived from the company's annual report published on the IDX website ([www.idx.com](http://www.idx.com)), the company's website and other websites that can provide additional information related to family ownership and the status of the company's CEO. Data on family ownership is collected by hand collect from the annual report and is supported by information from various sources related to family ownership in the company. Other financial data was collected from Thomson Reuters and Datastreams.

To examine the relationship between family ownership and firm risk as well as the moderating role of the professional CEO, appropriate measurements are needed. To measure a firm risk, a proxy for total risk or market-based risk is used. [Lee et al. \(2018\)](#) used total risk as a proxy for firm risk. By calculating the standard deviation of stock returns for one year. [Low \(2009\)](#) states that one of the advantages of using stock returns is that it can control the effect of leverage on firm risk.

To measure family ownership, various proxies have been used in the literature. [Abinzano et al. \(2020\)](#) used the percentage of direct family share ownership in the company, while [Xu et al. \(2019\)](#) add direct and indirect ownership by families in the company. In addition to the percentage of ownership, some use family involvement as either top management or commissioner, or board ([García-Sánchez et al., 2020](#)) and a dummy variable using a certain limit to the percentage of family ownership ([Briano-Turrent & Poletti-Hughes, 2017](#)). [Briano-Turrent & Poletti-Hughes \(2017\)](#) use a dummy variable where the value is 1 if the largest shareholder has at least 20% shares, and 0 otherwise. In this study, family ownership is measured by the percentage of share ownership directly and indirectly. So that it can be known the family's control rights over the company.

Furthermore, the moderating variable of the professional CEO was measured by a dummy variable. Referring to [Lin & Hu \(2007\)](#), this variable uses a dummy variable to distinguish between family CEOs and professional CEOs. Where 1 if the CEO is not a family member and 0 otherwise. The existence of a non-family CEO is expected to provide different views, thus encouraging a company owned by a family to be better.

This study also uses several control variables such as size, leverage, growth, firm age and, ROA. SIZE is reflected by the natural logarithm of the total assets. [Chakraborty et al. \(2019\)](#) stated that company size is one of the factors that can affect risk. LEVERAGE is the ratio between the total debt to the total equity. The aim is to control the effect of the company's capital structure on risk ([Sassen et al., 2016](#)). The greater the leverage ratio, it means that there is a large source of funding from third parties through debt. Undoubtedly, when company has a high level of debt, the interest that the company has to pay is also high. Another risk that will arise from high debt is the company's inability to pay debts when they fall due.

GROWTH is measured by sales growth based on the percentage change in sales from one year to the next ([Martínez-Alonso et al., 2019](#)). [Mathew et al. \(2018\)](#) emphasized that when there is a company growth opportunity that is large enough, it will encourage the company to get opportunities from new projects that can have an impact on firm risk. So, it is necessary to control for this variable.

FIRMAGE is a determinant of the company's survival. [Revilla et al. \(2016\)](#) in their research states that when companies are young, it will allow them to experience failure because they must take risks from debt. This is because the company's newly established capital structure is supported by a high level of debt. So, the probability of failure will also be high. Furthermore, related to profitability (ROA), [Abinzano et al. \(2020\)](#) suggest that when companies can generate high profits, they are less likely to experience the risk of failure.

In this study, there is some data outlier related to control variables, especially LEVERAGE and GROWTH. [Poletti-Hughes & Briano-Turrent \(2019\)](#) winsorize financial data to address data outlier at percentile 1% and 99%. For this study, winsorize data was also performed at the level percentile 1% and 99%.

#### *Empirical Model*

To test the hypothesis, we use 2 models based on hypothesis development. Model 1 aims to see the relationship between family ownership and firm risk. Meanwhile, Model 2 is used to examine the moderating role of professional CEO on the relationship between family ownership and firm risk. Both models use panel data regression analysis.

*Model 1*

$$\text{FIRMRISK}_{it} = \beta_0 + \beta_1\text{FAMOWN}_{it} + \beta_2\text{SIZE}_{it} + \beta_3\text{LEVERAGE}_{it} + \beta_4\text{GROWTH}_{it} + \beta_5\text{FIRMAGE}_{it} + \beta_6\text{ROA}_{it} + \varepsilon \dots\dots\dots (1)$$

*Model 2*

$$\text{FIRMRISK}_{it} = \beta_0 + \beta_1\text{FAMOWN}_{it} + \beta_2\text{CEO\_P}_{it} + \beta_3\text{FAMOWN}_{it} * \text{CEO\_P}_{it} + \beta_4\text{SIZE}_{it} + \beta_5\text{LEVERAGE}_{it} + \beta_6\text{GROWTH}_{it} + \beta_7\text{FIRMAGE}_{it} + \beta_8\text{ROA}_{it} + \varepsilon \dots\dots\dots (2)$$

Where:  $\text{FIRMRISK}_{it}$  is the risk of the company measured by the standard deviation of weekly stock return company  $i$  in year  $t$ .  $\text{FAMOWN}_{it}$  is the percentage of direct and indirect ownership by the family in firm  $i$  in year  $t$ .  $\text{CEO\_P}_{it}$  is a dummy variable, 1 if the CEO is a non-family member and 0 otherwise.  $\text{SIZE}_{it}$  was measured by the natural logarithm of the total assets of the firm  $i$  in year  $t$ .  $\text{LEVERAGE}_{it}$  is debt to equity ratio firm  $i$  in year  $t$ .  $\text{GROWTH}_{it}$  reflects the company growth that is proxied by the growth in sales of the firm  $i$  in year  $t$ .  $\text{FIRMAGE}_{it}$  measured by natural logarithm of the age of firm  $i$  since it was founded in year  $t$ .  $\text{ROA}_{it}$  is profitability was measured by return on assets firm  $i$  in year  $t$ .

This study employs the fixed effect model to estimate the result after performing Chow Test, Lagrange Multiplier (LM) Test, and Hausman Test. The result suggested that H1 and H2 use fixed effect model.

## RESULT AND DISCUSSION

The descriptive statistics in Table 1 show that the firm risk (FIRMRISK) has an average value of 0.0520 with the highest value of 0.1558. These results indicate that the company experienced a volatile stock price change. Meanwhile, the average family ownership (FAMOWN) is 47,20% with the maximum 91,69%. This figure shows that the percentage of family ownership is quite large so that it can influence decision-making in the company. As for professional CEOs (CEO\_P), around 37.96% of firm are led by CEOs who come from professional circles. This indicates that family firm will not always be led by families.

Tabel 1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
FIRMRISK	245	.0520	.0248	.0066	.1658
FAMOWN	245	.4720	.2493	0	.9169
CEO_P	245	.3796	.4863	0	1
SIZE	245	14.9292	1.7979	12	20
LEVERAGE	245	.6819	.6633	0	3.8665
GROWTH	245	.0549	.1609	-.3765	.8050
FIRMAGE	245	4	.3730	1.9459	4.3694
ROA	245	.0400	.0661	-.1817	.2288

Note:

**FIRM RISK** = total risk measured by calculating standard deviation of weekly stock return for each fiscal year; **FAMOWN** = Family Ownership was measured by the percentage of family ownership directly and indirectly; **CEO\_P** = Dummy variable, 1 if the CEO is not a family member or professional CEO and 0 otherwise; **SIZE** = Firm size was measured by the natural logarithm of total asset firm  $i$  year  $t$ ; **LEVERAGE** = measured by the ratio of total debt and total equity; **GROWTH** = firm growth was reflected by sales growth; **FIRMAGE** = natural logarithm of the firm age calculated since it was founded; **ROA** = profitability was measured by *return on asset*.

Source: Data Processed, 2021

Table 2. Shows the results of testing hypotheses 1 and 2. Table 2 (column 1) shows that H1 of this study is accepted. It can be concluded that family ownership has a negative effect on firm risk. These results are consistent with the socioemotional wealth perspective which assumes that family firms are more conservative than non-family firms all the time (Berrone et al., 2012; Zahra, 2018). They tend to avoid the main risk when it comes to losses that can reduce a family's wealth.

In line with this result, Morck, Randall; Yeung (2003) states that to protect family investments that have been made, sometimes firms owned by families will not carry out certain innovations. This case occurs because they will try to maximize their previous investment. Widyawati et al. (2018) also conducted research in Indonesia about family ownership and firm risk. The results show that there is a negative relationship between family ownership and firm risk. This is to maintain the stability of the business that will be passed on to the next generation.

Frisenna & Rizzotti (2020) in their research stated that the tendency of family companies to choose to be risk-averse can have an impact on company growth. Especially when it comes to the source of funding. Family companies, which generally come from family wealth, will prefer to be careful in investing. If a failure occurs, the family as the owner of the funds will be affected.

Table 2. Main Result

Variables	Expected Sign	(1)		(2)	
		Coef.	Prob.	Coef.	Prob
FAMOWN	-	-.0196	.004***	-.0406	.006**
CEO_P	+/-			-.0307	.196
FAMOWN*CEO_P	+			.0614	.038**
SIZE	-	-.0024	.001***	.0052	.663
LEVERAGE	+	.0079	.001***	.0052	.226
GROWTH	+	.0071	.376	-.0021	.793
FIRMAGE	-	.0086	.000***	.0262	.522
ROA	-	-.0106	.721	.1497	.000***
CONSTANT		.0616	.000***	-.1086	.495
Num. Obs.	245			245	
R-squared	0.1111			0.1138	
Prob > F	0.000			0.0001	

Note

\*\*\* Sig at  $\alpha$  1%  
 \*\* Sig at  $\alpha$  5%  
 \* Sig at  $\alpha$  10%

(One-tailed test)

**Note:**

**FIRM RISK** = total risk measured by calculating standard deviation of weekly stock return for each fiscal year; **FAMOWN** = Family Ownership was measured by the percentage of family ownership directly and indirectly; **CEO\_P** = Dummy variable, 1 if the CEO is not a family member or professional CEO and 0 otherwise; **FAM\*CEOP** = the interaction between family

ownership and Professional CEO; **SIZE** = Firm size was measured by the natural logarithm of total asset firm  $i$  year  $t$ ; **LEVERAGE** = measured by the ratio of total debt and total equity; **GROWTH** = firm growth was reflected by sales growth; **FIRMAGE** = natural logarithm of the firm age calculated since it was founded; **ROA** = profitability was measured by *return on asset*.

---

*Source: Data Processed, 2021*

One of the activities that can reflect risk-averse family firms is by not engaging in internationalization activities (international trade). [Yang et al. \(2020\)](#) found that to maintain family-owned control, family firms in China chose not to engage in internationalization activities. This is because internationalization requires more external funding, so this action can reduce the control that families have.

The results of the study differ from the research conducted by [Llanos-Contreras et al. \(2020\)](#) which examined family and non-family companies in Chile. The results show that risk-taking in family companies is higher than in non-family companies. In essence, families will be willing to take risks when they have a greater opportunity to pass down their business to the next generation ([Debicki et al., 2016](#)). [Lee et al. \(2018\)](#) in a study on family companies in Korea also found that when the family owns 50% or more shares, there is a tendency to be more willing to take risks. The decision assumes that there is harmony between the goals of the family and the goals of the company ([Zahra, 2018](#)).

However, there are certain limits to the acceptance of this risk. [Abinzano et al. \(2020\)](#) found that family-owned firms tend to avoid risks that would lead to bankruptcy. In other words, this will be able to affect the socio-emotional wealth of the family. So, they will be more careful about decisions related to this bankruptcy. [Gómez-Mejía et al. \(2007\)](#) emphasized that the aspect is non-financial very much considered by the family, especially when it comes to identity, reputation, and the continuity of the family dynasty to the business that has been established. It can be concluded that family companies tend to avoid risk when it comes to losses that can cause loss or decrease in the wealth family.

Table 2 (Column 2) shows the H2 of this study was accepted. The professional CEO can weaken the relationship between family ownership and firm risk. This result is in line with the stewardship theory, which states that the management team or CEO recruited from professional circles will provide the best for the company ([Tang et al., 2016](#)). Professional CEOs will try to show good performance to all parties, both shareholders and stakeholders.

These results are consistent with [Kang & Kim \(2016\)](#) in their research on Korean family companies (Korean Chaebol). They found that when there was a decline in company value, companies that were initially led by family CEOs decided to replace them with professional CEOs. The aim is to restore the company's performance while still considering the rights of minority shareholders. [Huybrechts et al. \(2013\)](#) in his research on CEOs and financial directors in Belgium, found a positive relationship between non-family CEOs and the level of risk-taking companies when the CEO has a longer tenure.

In addition, these results also indicate that when family companies tend to avoid risk to protect family wealth, professional CEOs will act more realistic. They will weigh a project independently so that they can look for project opportunities that can increase company profits. as stated by [Lin & Hu \(2007\)](#), one of the goals of companies recruiting CEOs from professional circles is to improve company performance. Likewise in the context of family companies, when families only have low control in the company, they tend to choose professional CEOs to protect their rights, so as not to be subject to expropriation by the majority shareholder.

In addition, one of the benefits of professional CEOs is that they tend to be received better and the presence of higher external legitimacy (Chung & Luo, 2013), will be able to create a better company reputation. Of course, this reputation is also related to family wealth, so hiring a professional CEO is one way to maintain family wealth ([Xu et al., 2019](#)).

For the control variable, SIZE as measured by the natural logarithm of total assets has a negative relationship in Model 1. These results indicate that the larger the company, the better the

ability to manage risk compared to small companies. This is due to the ability to diversify risk (Ellouze & Mnasri, 2020). LEVERAGE which is the ratio of total debt to total equity has a positive effect on firm risk. This result in line with Abinzano et al. (2020) that found positive effect between leverage and firm risk. The greater the leverage ratio, it means that there is a large source of funding from third parties through debt. The results also show that the variable GROWTH has no effect on firm risk. Furthermore, FIRMAGE as measured by the natural logarithm of the company's age shows that the results has a positive effect on firm risk. It indicates that the mature company face more risk than the beginner firm. Profitability, as measured by ROA, shows a negative relationship with firm risk (in Model 2). Abinzano et al. (2020) suggest that when companies can generate high profits, they are less likely to experience the risk of failure.

#### Additional Testing

The additional test purpose is to see differences in the measurement of family ownership variables. This test is done by analyzing family ownership by dividing family ownership into two categories. The first category with family ownership is between 20% to 50% (FAM20TO50), and the second measurement, with family ownership above 50% (FAMOVER50), or better known as controlling shareholder. The aim is to see the test results due to differences in control owned by the family.

For this test, use a dummy variable. FAM20TO50 is 1 if family ownership is around 20% to 50% and 0 otherwise. Meanwhile, FAMOVER50 is 1 if the family owns shares above 50%. Additional test results can be seen in Table 3.

Table 3. Additional Test

Variable	Expected Sign	(1)		(2)	
		Coef.	Prob.	Coef.	Prob
FAM20TO50	-	-.0106	.011**	-.0140	.382
FAMOVER50	-	-.0132	.003***	-.0367	.000***
CEO_P	+/-			-.0507	.074*
FAM20TO50*CEO_P	+			.0333	.157
FAMOVER50*CEO_P	+			.0627	.012**
SIZE	-	-.0020	.003***	.0069	.484
LEVERAGE	+	.0079	.001***	.0057	.234
GROWTH	+	.0081	.289	-.0018	.851
FIRMAGE	-	.0079	.000***	.0248	.411
ROA	-	-.0136	.679	.1471	.001***
CONSTANT		.0589	.000***	-.1228	.357
Num. Obs.		245		245	
R-squared		0.1189		0.1497	
Prob > F		0.000		0.0006	

Note:

- \*\*\* Sig at  $\alpha$  1%
- \*\* Sig at  $\alpha$  5%
- \* Sig at  $\alpha$  10%

(One-tailed test)

Note:

**FIRMIRISK** = total risk measured by calculating standard deviation of weekly stock return for each fiscal year; **FAM20TO50** = Dummy variable, 1 if family has share between 20% and 50%; **FAMOVER50** = dummy variable, 1 if family has at least 50% share directly and indirectly; **CEO\_P** = Dummy variable, 1 if the CEO is not a family member and 0 otherwise; **FAM20TO50\*CEOP** =

the interaction between FAM20TO50 and Professional CEO; **FAMOVER50\*CEOP** = The interaction between family ownership over 50% and Professional CEO; **SIZE** = Firm size was measured by natural logarithm of total asset firm  $i$  year  $t$ ; **LEVERAGE** = measured by the ratio of total debt and total equity; **GROWTH** = firm growth was reflected by sales growth; **FIRMAGE** = natural logarithm of the firm age calculated since it was founded; **ROA** = profitability was measured by *return on asset*.

---

*Source: Data Processed, 2021*

From Table 3, family ownership at the level of 20% to 50% and ownership above 50% has negative effect on firm risk. This result is consistent with the main test in this study. We can say that both-family ownership tends to avoid risk. Interestingly, with the separation of ownership, when the controlling shareholder is held by the family, there is a moderating role of the professional CEO. In this case, the professional CEO can weaken the relationship between family ownership and firm risk in a company controlled by the family. It can be said that this result is in accordance with the stewardship theory where the CEO appointed by the shareholders will act rationally and independently to fulfill the interests of all shareholders.

## CONCLUSION

This study aims to examine whether family ownership has a relationship with firm risk. The focus of this research is to see how the moderating role of the professional CEO on the relationship between family ownership and firm risk. There are 49 firms listed on the Indonesia Stock Exchange in 2019 and will be observed for 5 years. We found a negative relationship between family ownership and firm risk. This result is consistent with socioemotional wealth theory which argues that companies owned by families will act more conservatively to protect family wealth. So, to make a risky investment with an uncertain rate of return will not be chosen. In the end the business can be passed on to the next generation.

In addition, the results of the study also show that professional CEOs can weaken the relationship. This is consistent with the stewardship theory which assumes that the CEO appointed to run the company's operations will give his best to fulfill the wishes of shareholders. When family companies tend to avoid risk, professional CEOs will encourage companies to invest more in the hope of getting high returns in the future. As a result, the value of the company can increase.

The research has several implications. From an academic perspective, the results show that, as with traditional variables, the measurement of firm risk with total risk should also include some related to investor behavior. This is especially relevant for companies with significant family ownership, where the decisions chosen are primarily related to risk as well as company performance. In addition, practically, this research is useful for investors who want to invest by looking at how family companies manage the risk and whether the status of a professional CEO appointed to run a business can affect the firm risk.

We acknowledge that this study has several limitations, so we provide suggestions for future research. First, not all firms disclose their family ownership information in annual reports, it is difficult for researchers to obtain data on family ownership. Second, researchers only use one risk measurement, total risk. Therefore, in the future, researchers suggest using several other risk measurements. Third, the measurement of professional CEOs only uses dummy variables, so other aspects or characteristics of professional CEOs such as experience and education have not been observed further. So that in the future this will be a special attraction for research, especially in family companies.

## REFERENCES

- Abinzano, I., Corredor, P., & Martinez, B. (2020). Does family ownership always reduce default risk? *Accounting and Finance*.
- Abrokwah, S., Hanig, J., & Schaffer, M. (2018). Executive compensation and firm risk: an examination across industries. *Review of Accounting and Finance*, 17(3), 359–382.
- Alessandri, T. M., Mammen, J., & Eddleston, K. (2018). Managerial incentives, myopic loss aversion, and firm risk: A comparison of family and non-family firms. *Journal of Business Research*, 91(March 2017), 19–27.
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional Wealth in Family Firms: Theoretical Dimensions, Assessment Approaches, and Agenda for Future Research. *Family Business Review*, 25(3), 258–279.
- Blackwell III, J. L. (2005). Estimation and testing of fixed-effect panel-data systems. *Stata Journal*.
- Briano-Turrent, G. D. C., & Poletti-Hughes, J. (2017). Corporate governance compliance of family and non-family listed firms in emerging markets: Evidence from Latin America. *Journal of Family Business Strategy*, 8(4), 237–247.
- Byun, S. K., & Oh, J. M. (2018). Local corporate social responsibility, media coverage, and shareholder value. *Journal of Banking and Finance*.
- Caldwell, C., Bischoff, S. J., & Karri, R. (2002). The four umpires: A paradigm for ethical leadership. *Journal of Business Ethics*.
- Chakraborty, A., Gao, L., & Sheikh, S. (2019). Corporate governance and risk in cross-listed and Canadian only companies. *Management Decision*, 57(10), 2740–2757.
- Chun, S., & Lee, M. (2017). CORPORATE OWNERSHIP STRUCTURE AND RISK-TAKING : EVIDENCE FROM JAPAN. 6(4), 39–52.
- Claessens, S., Djankov, S., & Lang, L. H. P. (2000). East Asian corporations. Heroes or villains? In *World Bank Discussion Papers* (Vol. 58, Issue 409).
- Claessens, Stijn, Djankov, S., & Lang, L. H. P. (2000). The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics*.
- D'Aquila, J. M., & Houmes, R. (2014). COSO's Updated Internal Control and Enterprise Risk Management Frameworks. *CPA Journal*.
- Debicki, B. J., Kellermanns, F. W., Chrisman, J. J., Pearson, A. W., & Spencer, B. A. (2016). Development of a socioemotional wealth importance (SEWi) scale for family firm research. *Journal of Family Business Strategy*.
- Dong, Y., Meng, C., Firth, M., & Hou, W. (2014). Ownership structure and risk-taking: Comparative evidence from private and state-controlled banks in China. *International Review of Financial Analysis*, 36, 120–130.

- Ellouze, D., & Mnasri, K. (2020). Risk-taking behaviour of family firms: Evidence from Tunisia. *International Journal of Entrepreneurship and Small Business*, 39(1–2), 192–221.
- Fontrodona, J., & Sison, A. J. G. (2006). The nature of the firm, agency theory and shareholder theory: A critique from philosophical anthropology. *Journal of Business Ethics*, 66(1), 33–42.
- Frisenna, C., & Rizzotti, D. (2020). Investment decisions in listed family firms: Risk aversion and emotional attachment. In *Contributions to Management Science*.
- Gande, A., & Kalpathy, S. (2017). CEO compensation and risk-taking at financial firms: Evidence from U.S. federal loan assistance. *Journal of Corporate Finance*.
- García-Sánchez, I. M., Martínez-Ferrero, J., & García-Meca, E. (2020). Does family involvement monitor external CEOs' investment decisions? *Review of Managerial Science*, 14(1), 159–192.
- Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52(1), 106–137.
- Gomez-Mejia, L. R., Neacsu, I., & Martin, G. (2019). CEO Risk-Taking and Socioemotional Wealth: The Behavioral Agency Model, Family Control, and CEO Option Wealth. *Journal of Management*, 45(4), 1713–1738.
- Guenther, D. A., Matsunaga, S. R., & Williams, B. M. (2017). Is tax avoidance related to firm risk? *Accounting Review*, 92(1), 115–136.
- Hamori, M., & Kakarika, M. (2009). External labor market strategy and career success: Ceo careers in Europe and the United States. *Human Resource Management*.
- Huybrechts, J., Voordeckers, W., & Lybaert, N. (2013). Entrepreneurial Risk Taking of Private Family Firms: The Influence of a Non-family CEO and the Moderating Effect of CEO Tenure. *Family Business Review*.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*.
- Kang, H. C., & Kim, J. (2016). Why do family firms switch between family CEOs and non-family profesional ceo? Evidence from Korean Chaebols. *Review of Accounting and Finance*, 15(1), 45–64.
- Keay, A. (2017). Stewardship theory: is board accountability necessary? *International Journal of Law and Management*.
- Kelleci, R., Lambrechts, F., Voordeckers, W., & Huybrechts, J. (2019). CEO Personality: A Different Perspective on the Non-family Versus Family CEO Debate. *Family Business Review*.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, 54(2), 471–517.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*.

- Lee, E. J., Chae, J., & Lee, Y. K. (2018). Family ownership and risk taking. *Finance Research Letters*, 25(September), 69–75.
- Leotta, A., Rizza, C., & Ruggeri, D. (2020). An overview of family business. profiles, definitions and the main challenges of the business life cycle. In *Contributions to Management Science*.
- Liang, H., & Renneboog, L. (2017). Corporate donations and shareholder value. *Oxford Review of Economic Policy*.
- Lin, S. H., & Hu, S. Y. (2007). A family member or profesional management? the choice of a CEO and its impact on performance. *Corporate Governance: An International Review*, 15(6), 1348–1362.
- Llanos-Contreras, O., Arias, J., & Maquieira, C. (2020). Risk taking behavior in Chilean listed family firms: a socioemotional wealth approach. *International Entrepreneurship and Management Journal*.
- Low, A. (2009). Managerial risk-taking behavior and equity-based compensation. *Journal of Financial Economics*.
- Madison, K., Holt, D. T., Kellermanns, F. W., & Ranft, A. L. (2016). Viewing Family Firm Behavior and Governance Through the Lens of Agency and Stewardship Theories. *Family Business Review*, 29(1), 65–93.
- Martin, G., & Gomez-Mejia, L. (2016). The relationship between socioemotional and financial wealth: Re-visiting family firm decision making. *Management Research*, 14(3), 215–233.
- Martínez-Alonso, R., Martínez-Romero, M. J., & Rojo-Ramírez, A. A. (2019). The impact of technological innovation efficiency on firm growth: The moderating role of family involvement in management. *European Journal of Innovation Management*, 23(1), 134–155.
- Martino, P., Rigolini, A., & D’Onza, G. (2020). The relationships between CEO characteristics and strategic risk-taking in family firms. *Journal of Risk Research*, 23(1), 95–116.
- Mathew, S., Ibrahim, S., & Archbold, S. (2018). Corporate governance and firm risk. *Corporate Governance (Bingley)*, 18(1), 52–67.
- Mensching, H., Calabrò, A., Eggers, F., & Kraus, S. (2016). Internationalisation of family and non-family firms: A conjoint experiment among CEOs. *European Journal of International Management*.
- Morck, Randall; Yeung, B. (2003). Agency Problems in Large Family Firms. *Entrepreneurship: Theory and Practice*, 27(4), 367–382.
- Neubaum, D. O., Thomas, C. H., Dibrell, C., & Craig, J. B. (2017). Stewardship Climate Scale: An Assessment of Reliability and Validity. *Family Business Review*, 30(1), 37–60.
- Pathan, S. (2009). Strong boards, CEO power and bank risk-taking. *Journal of Banking and Finance*.

- Pieper, T. M., Klein, S. B., & Jaskiewicz, P. (2008). The impact of goal alignment on board existence and top management team composition: Evidence from family-influenced businesses. *Journal of Small Business Management*.
- Poletti-Hughes, J., & Briano-Turrent, G. C. (2019). Gender diversity on the board of directors and corporate risk: A behavioural agency theory perspective. *International Review of Financial Analysis*, 62(January), 80–90.
- Poletti-Hughes, J., & Williams, J. (2019). The effect of family control on value and risk-taking in Mexico: A socioemotional wealth approach. *International Review of Financial Analysis*, 63, 369–381.
- Rajverma, A. K., Misra, A. K., Mohapatra, S., & Chandra, A. (2019). Impact of ownership structure and dividend on firm performance and firm risk. *Managerial Finance*, 45(8), 1041–1061.
- Revilla, A. J., Pérez-Luño, A., & Nieto, M. J. (2016). Does Family Involvement in Management Reduce the Risk of Business Failure? The Moderating Role of Entrepreneurial Orientation. *Family Business Review*, 29(4), 365–379.
- Sassen, R., Hinze, A. K., & Hardeck, I. (2016). Impact of ESG factors on firm risk in Europe. *Journal of Business Economics*, 86(8), 867–904.
- Sataloff, R. T., Johns, M. M., & Kost, K. M. (2010). What is the Purpose of the Firm?: Shareholder and Stakeholder Theories.
- Sensoy, A. (2017). Firm size, ownership structure, and systematic liquidity risk: The case of an emerging market. *Journal of Financial Stability*.
- Sheikh, S. (2019). CEO power and corporate risk: The impact of market competition and corporate governance. *Corporate Governance: An International Review*, 27(5), 358–377.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*.
- Sila, V., Gonzalez, A., & Hagedorff, J. (2016). Women on board: Does boardroom gender diversity affect firm risk? *Journal of Corporate Finance*.
- Singapurwoko, A. (2015). The Impact of Ownership Structure on Family Firm Performance: Evidence from The Indonesia Stock Exchange. 1–5.
- Su, W., & Lee, C. Y. (2013). Effects of corporate governance on risk taking in Taiwanese family firms during institutional reform. *Asia Pacific Journal of Management*.
- Sun, X., Lee, S. H., & Phan, P. H. (2019). Family firm R&D investments in the 2007–2009 Great Recession. *Journal of Family Business Strategy*, 10(4), 1–9.
- Tang, Y., Li, J., & Liu, Y. (2016). Does Founder CEO Status Affect Firm Risk Taking? *Journal of Leadership and Organizational Studies*, 23(3), 322–334.
- Tse, T. (2011). Shareholder and stakeholder theory: after the financial crisis. *Qualitative Research in Financial Markets*, 3(1), 51–63.

- Widyawati, N., Trinugroho, I., & Untoro, W. (2018). Family Ownership, Women in Top Management and Risk Taking: Evidence from Indonesia. *Jurnal Keuangan Dan Perbankan*, 22(4), 606–613.
- Williams, R. I., Pieper, T. M., Kellermanns, F. W., & Astrachan, J. H. (2018). Family Firm Goals and their Effects on Strategy, Family and Organization Behavior: A Review and Research Agenda. *International Journal of Management Reviews*, 20, S63–S82.
- Xu, D., Chen, C., & Wu, X. (2019). Ownership structure and the use of non-family executives in family-dominated Chinese listed firms: An institutional logics perspective. *Asia Pacific Journal of Management*, 36(3), 797–820.
- Yang, X., Li, J., Stanley, L. J., Kellermanns, F. W., & Li, X. (2020). How family firm characteristics affect internationalization of Chinese family SMEs. *Asia Pacific Journal of Management*, 37(2), 417–448.
- Zahra, S. A. (2005). Entrepreneurial risk taking in family firms. *Family Business Review*.
- Zahra, S. A. (2018). Entrepreneurial Risk Taking in Family Firms: The Wellspring of the Regenerative Capability. *Family Business Review*, 31(2), 216–226.