

Agency Cost, Financial Performance, And Women in Board of Commissioners

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Abstract

This study aims to examine the influence of agency costs on financial performance and women on the board of commissioners on the influence of agency costs on financial performance. The sample in this study is a non-financial company listed on the Indonesian stock exchange in 2014-2018. Data analysis was performed using panel data regression. This study indicates that agency costs negatively influence financial performance, and the existence of women on the board of commissioners can reduce the negative influence of agency costs on financial performance. It is indicated that women on the board of commissioners increase the alignment of principals and management. Women in the board of commissioners increase the board's ability to monitor the agent when making the decision, and women have characteristics such as risk-averse, conservatism, and ethics.

Keywords: agency cost; financial performance; women board of commissioners; the board's ability; principals and management

JEL: G23, G32, J16

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1. INTRODUCTION

Agency conflict is a critical issue for attention related to financial performance. This is due to the existence of agency costs to reduce agency conflicts. A previous study was examined by Savitri (2018), who found that agency costs negatively impact financial performance in Indonesian manufacturing firms during 2007-2014. Hoang et al. (2019) also found that agency costs negatively influence the financial performance of Vietnam's non-financial and utility firms. Rashid Khan et al. (2020) found that agency costs negatively impact the financial performance of Chinese listed firms over the period 2008 to 2016.

The board of commissioners is a part of the internal governance mechanism, which supervises the firm's board of directors. The board of commissioners can minimize agency conflicts. The interesting thing that has received attention to be examined in relation to the board of commissioners as an internal governance mechanism is the existence of women in the board of commissioners. The previous study found that

women's participation in business has risen year to year (Grant Thornton, 2020). Based on the Korn Ferry Diversity Scorecard (2016), Indonesia ranked fifth in the Asia Pacific regarding women board representation above Hongkong, India, Singapore, Japan, and South Korea, so we are interested in doing this study.

Previous studies about the association between the existence of women in the board of commissioners and firm performance were conducted by Brahma et al. (2020), who found that board gender diversity positively influence firm performance in UK. Duppati et al. (2020) found that diversity of gender has a positive influence on firm performance in India and Singapore. Ting et al. (2021) found that female directors positively influence corporate performance in Chinese banks and Taiwanese financial holding. Conyon and He (2017) found positive correlation between board gender diversity and firm performance in US firms. The other study by Ahmad et al. (2019) has a different result. Ahmad et al. (2019) found that women on the board negatively influence the financial performance of Malaysia's 200 largest market capitalization listed on Bursa Malaysia during 2011-2013. Lim et al. (2019) also found a decrease in financial performance when higher the existence of women on the board in both financial and non-financial firms Malaysia listed firms over the period 2010-2016. Marinova et al. (2015) found no relation between board diversity and firm performance in Netherlands and Denmark. Dale-Olsen et al. (2013) also found no relation between gender diversity and firm performance in Norwegian.

The above study shows inconsistent results. This study aims to examine the influence of agency costs on financial performance and the existence of women on the board of commissioners on the influence of agency costs and firm performances. Based on the agency theory, Carter et al. (2010) stated that a more diverse board would have better monitoring the management because diversity increases the board's independence, so this study focuses on the moderate effect of the existence of women on the board commissioners. Women in the board of commissioners as moderating variables represent the monitoring role that is expected to strengthen or weaken the influence of agency costs on firm performance. This study measures the women in the board of commissioners by using three measurements: the proportion of women, dummy variables, and the Blau Index. This study contributes to the role of the women board of commissioners as a part of the internal governance mechanism to minimize the influence of agency costs and financial performance. We used three control variables based on Hoang et al. (2019), namely leverage, firm size, and firm age.

2. HYPOTHESIS DEVELOPMENT

Separation of ownership and control can lead to agency conflicts (Jensen & Meckling, 1976). Agency conflicts can occur when the management of the firms makes decisions that generate benefit for themselves and ignore the interests of the principals (Jensen & Meckling, 1976). Agency costs are costs that the firms must incur to reduce agency conflicts. The more complex the agency conflicts that occur in the firms, the greater the agency costs, so the agency costs negatively influence financial performances. Savitri (2018) found that agency costs negatively influence financial performance. Hoang et al. (2019) and Rashid Khan et al. (2020) also found similar results.

H1: The increase in agency costs can reduce the financial performance

The board of commissioners is a board that is responsible for supervising the management board in making policies and running the business (Otoritas Jasa Keuangan, 2014). Women on the board commissioners have more ethical value and can strengthen the monitoring role of the board so the negative influence of agency costs on financial performance can be reduced. The existence of women as members of the board of commissioners can improve the board's performance in conducting supervision due to the characteristics of women. The diversity of gender on the board improves the structures of governance and allocates more effort to monitoring (Adams & Ferreira, 2009). Lucas-Pérez et al. (2015) found that diversity of gender positively influences the board effectiveness because of a monitoring role, better strategic control, better teamwork, and more active participation. Accordingly, Saeed & Sameer (2017) stated that women are less confident and conservative when making financial decisions. Duppati et al. (2020) found that gender diversity positively influences firm performance.

H2: The more existence of women on the board of commissioners positively moderates the effect of agency cost on financial performance

3. METHOD, DATA, AND ANALYSIS

This study used secondary data in the form of unbalanced panel data from 2014-2018. Data on study variables were obtained from the companies' annual reports and financial reports. The annual report and financial report were obtained from the Stock Exchange of Indonesia (IDX). The population of this study is non-financial firms listed on IDX. Firms listed not in rupiahs have negative equity and missing annual reports, or financial reports were dropped. As a result, the total samples obtained were 284 firms and 1398 observations.

The dependent variable used in this study is financial performance. This study measures the financial performances with returns on assets and returns on equity. Return on assets was calculated as the profit after tax divided by the total assets and the return on equity, which was measured as the profit after tax divided by the firm's equity. The independent variable used in this study is agency costs. This study measures the agency cost with asset turnover ratio and operating expenses ratio. Asset turnover was calculated as the net sales divided by the total asset, and the operating expenses ratio was measured as the selling, general, and administrative expense divided by total sales. The moderating variable used in this study is women on the board of commissioners. This study measures the number of women on the board of commissioners with the proportion of women on the board. The proportion of women in the board of commissioners was measured by the number of women in the board of commissioners divided by the number of board of commissioners members. The other measures for women in the board of commissioners are the dummy variable and the Blau index. The dummy variable has the value of 1 when there are women on the board of commissioners and has a value of 0 otherwise.

Leverage, size, and firm age are used as control variables. Leverage was measured as the total debt divided by total assets. The logarithm of total assets calculated the firm size, and the firm age was measured by the logarithm of firm age. Firm age is the number of years since the firm's establishment. The equation of variables showed in Table 1.

Table 1. Research Variables

Variables	Equation	Sources
Dependent Variables		
ROA	Profit After Tax / Total Assets	Hoang et al. (2019)
ROE	Profit After Tax / Total Equity	Hoang et al. (2019)
Independent Variables		
ATR	Net Sales / Total Assets	Hoang et al. (2019) Ain et al. (2020)
OPR	SG&A expense / Net Sales	Hoang et al. (2019) Ain et al. (2020)
Moderating Variables		
PFC	Number of Women in Board of Commissioners / Number of Board of Commissioners Members	Ain et al. (2020)
FCDUM	Dummy variable: 1 if one or more Women in the board of commissioners, otherwise = 0	Rashid Khan et al. (2020)
FCBLAU	$1 - \sum_{i=1}^2 Pi^2$, where P_i is the percentage of each category and $n = 2$ Women (male)]	Ain et al. (2020)
Control Variables		
LEV	Total debt / Total Assets	Hoang et al. (2019)
SIZE	Log of Total Assets	Hoang et al. (2019) Rashid Khan et al. (2020)
FAGE	Log of Firm Age	Hoang et al. (2019)

Panel data regression was used to analyze the data of this study with the regression model as follows:

$$PRF_{it} (ROA, ROE) = \alpha + \beta_1 ATR_{it} + \beta_2 PFC^*_{it} + \beta_3 ATR * PFC_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \beta_6 FAGE_{it} + \beta_7 LV_{it} + \varepsilon \dots \dots \dots (1a)$$

$$PRF_{it} (ROA, ROE) = \alpha + \beta_1 OPR_{it} + \beta_2 PFC^*_{it} + \beta_3 OPR * PFC_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \beta_6 FAGE_{it} + \beta_7 LV_{it} + \varepsilon \dots \dots \dots (1b)$$

$$PRF_{it} (ROA, ROE) = \alpha + \beta_1 ATR_{it} + \beta_2 FCDUM^*_{it} + \beta_3 ATR * FCDUM_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \beta_6 FAGE_{it} + \beta_7 LV_{it} + \varepsilon \dots \dots \dots (2a)$$

$$PRF_{it} (ROA, ROE) = \alpha + \beta_1 OPR_{it} + \beta_2 FCDUM^*_{it} + \beta_3 OPR * FCDUM_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \beta_6 FAGE_{it} + \beta_7 LV_{it} + \varepsilon \dots \dots \dots (2b)$$

$$PRF_{it} (ROA, ROE) = \alpha + \beta_1 ATR_{it} + \beta_2 FCBLAU^*_{it} + \beta_3 ATR * FCBLAU_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \beta_6 FAGE_{it} + \beta_7 LV_{it} + \varepsilon \dots \dots \dots (3a)$$

$$PRF_{it} (ROA, ROE) = \alpha + \beta_1 OPR_{it} + \beta_2 FCBLAU^*_{it} + \beta_3 OPR * FCBLAU_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \beta_6 FAGE_{it} + \beta_7 LV_{it} + \varepsilon \dots \dots \dots (3b)$$

Where, PRF = financial performances; ATR = asset turnover; OPR = operating expenses; PFC = proportion of women in board of commissioners; FCDUM = the dummy variables of women in the board of commissioners; LEV = leverage; SIZE = firm size; and FAGE = firm age.

4. RESULTS

The current study tests and analyzes the influence of agency costs on financial performances and the moderate of women on the board of commissioners on the relationship between agency costs and financial performance. The descriptive statistics of this study showed in Table 2.

Table 2. Descriptive Statistics

Variables	N	Mean	Std. Dev.	Max	Min
ATR	1398	0.8545	0.8752	11.1603	0.0012
OPR	1398	0.2367	0.2798	3.5546	0.0052
PFC	1398	0.1106	0.1728	0.7500	0.0000
FCDUM	1398	0.3462	0.4759	1.0000	0.0000
FCBLAU	1398	0.1371	0.1941	0.5000	0.0000
LEV	1398	0.4503	0.2031	0.9574	0.0076
SIZE	1398	12.4154	0.7187	14.5375	9.8836
SIZE (in million)	1398	9,413,087.0337	23,507,787.7804	344,711,000,000.0000	7,648.1938
FAGE	1398	1.4688	0.2109	2.0212	0.6990
ROA	1398	0.0443	0.0958	1.1026	-0.6384
ROE	1398	0.0719	0.2199	2.0522	-1.8829

As shown in Table 2, the mean of ATR was 0.8545. It indicated that the average sales were 85.45% of total assets. The mean of OPR was 0.2367 and indicated that the average operating expenses ratio was 23.67% from sales. The mean of PFC was 0.1106 and indicated that the average women proportion in the board of commissioners was 11.06%. The mean of LEV was 0.4503 and indicated that the average debt proportion from total assets was 45.03%. The average firm size was 9.413.087 million.

Table 3. Regression Results (Agency Cost Measured by Asset Turnover)

Variabel	DEPENDENT VARIABLE					
	ROA			ROE		
	(1a)	(2a)	(3a)	(1a)	(2a)	(3a)
ATR	0.0319 (3.5674)***	0.0328 (3.3427)***	0.0361 (3.6849)***	0.0809 (4.0519)***	0.0835 (3.8089)***	0.0884 (4.0352)***
PFC	0.0709 (2.2640)**			0.2010 (2.8752)***		
ATR*PFC	-0.0460 (-2.2199)**			-0.1198 (-2.5896)***		
FCDUM		0.0199 (1.8558)*			0.0520 (2.1711)**	
ATR*FCDUM		-0.0164 (-2.0175)**			-0.0429 (-2.3586)**	
FCBLAU			0.0666 (2.4595)**			0.1703 (2.8126)***
ATR*FCBLAU			-0.0450 (-2.4517)**			-0.1090 (-2.6553)***
LEV	-0.2041 (-8.9294)***	-0.2025 (-8.8574)***	-0.2030 (-8.8924)***	-0.5789 (-11.3395)***	-0.5750 (-11.2525)***	-0.5764 (-11.2950)***
SIZE	0.0417 (2.4195)**	0.0418 (2.4185)**	0.0414 (2.3969)**	0.2084 (5.4055)***	0.2092 (5.4121)***	0.2074 (5.3703)***

Variabel	DEPENDENT VARIABLE					
	ROA			ROE		
	(1a)	(2a)	(3a)	(1a)	(2a)	(3a)
FAGE	-0.1506 (-1.2517)	-0.1495 (-1.2412)	-0.1527 (-1.2693)	0.0104 (0.0386)	0.0128 (0.0474)	0.0082 (0.0307)
Constant	-0.1912 (-0.6905)	-0.1938 (-0.6993)	-0.1885 (-0.6806)	-2.3484 (-3.7964)***	-2.3608 (-3.8109)***	-2.3409 (-3.7818)***
F-statistic	6.9917***	6.9779***	7.0042***	7.5839***	7.5557***	7.5843***
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj R-squared	0.5560	0.5555	0.5565	0.5792	0.5781	0.5792

***: Significance at 1% level; **: Significance at 5% level; *: Significance at 10% level

Table 4. Regression Results (Agency Cost Measured by Operating Expenses Ratio)

Variabel	DEPENDENT VARIABLE					
	ROA			ROE		
	(1b)	(2b)	(3b)	(1b)	(2b)	(3b)
OPR	-0.0759 (-4.6619)***	-0.0769 (-4.5536)***	-0.0781 (-4.6970)***	-0.1941 (-5.3477)***	-0.1951 (-5.1797)***	-0.1973 (-5.3219)***
PFC	0.0013 (0.0499)			0.0363 (0.6436)		
OPR*PFC	0.1222 (2.2650)**			0.2352 (1.9559)*		
FCDUM		-0.0027 (-0.2958)			-0.0002 (-0.0082)	
OPR*FCDUM		0.0521 (2.1393)***			0.0981 (1.8060)*	
FCBLAU			0.0025 (0.1115)			0.0281 (0.5571)
OPR*FCBLAU			0.1244 (2.3415)**			0.2339 (1.9741)**
LEV	-0.1916 (-8.3673)***	-0.1884 (-8.1802)***	-0.1901 (-8.2887)***	-0.5454 (-10.6818)***	-0.5399 (-10.5099)***	-0.5430 (-10.6175)***
SIZE	0.0237 (1.3672)	0.0233 (1.3419)	0.0225 (1.2953)	0.1609 (4.1656)***	0.1608 (4.1510)***	0.1585 (4.0928)***
FAGE	-0.0965 (-0.8051)	-0.0955 (-0.7967)	-0.0945 (-0.7884)	0.1397 (0.5231)	0.1416 (0.5294)	0.1436 (0.5374)
Constant	-0.0075 (-0.0270)	-0.0053 (-0.0190)	0.0033 (0.0119)	-1.8502 (-2.9952)***	-1.8519 (-2.9941)***	-1.8272 (-2.9558)***
F-statistic	7.0752***	7.0640***	7.0817***	7.7222***	7.6981***	7.7207***
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj R-squared	0.5594	0.5590	0.5597	0.5842	0.5833	0.5842

***: Significance at 1% level; **: Significance at 5% level; *: Significance at 10% level

Panel data regression was carried out in this study and got the fixed effect as the best estimators. As shown in Table 3 and Table 4, the agency cost negatively influences financial performances, so the first hypothesis of this study is not rejected. As shown in Table 3, the lower asset turnover (higher agency costs) is associated with lower performance. In Table 4, the higher operating expenses ratio (higher agency costs) is associated with lower performance. We have similar results when the dependent variables ROA and ROE.

As shown in Table 3 and Table 4, the more existence of women in board commissioners positively moderated the relationship between agency costs and financial performances, so the second hypothesis of this study is not rejected. As shown in Table 3,

the women in the board of commissioners could reduce the negative influence of agency cost on financial performance, and Table 4, when agency cost measured by operating expenses ratio, also found similar results. We also have similar results when the women in the board of commissioners are measured by the proportion of women, dummy variable, and the Blau index.

5. DISCUSSION

The results of this study show that the higher agency cost leads to lower financial performance. Agency conflicts arise because of the separation between ownership and control. Agency conflicts can occur because managers can meet their interests, harm the company, and manage the funds inefficiently. Agency costs are incurred to minimize agency conflicts that occur. The more complex agency conflict leads to higher agency costs so that higher agency costs can reduce financial performance. The results of this study were supported by Rashid Khan et al. (2020), Hoang et al. (2019), and Savitri (2018), who found that agency cost has a negative influence on financial performance.

This study result indicates that the women in the board of commissioners could reduce the negative influence of agency cost on financial performances. It is indicated that women on the board of commissioners increase the alignment of principals and management. Women in the board of commissioners increase the board's ability to monitor the agent when making the decision because women have characteristics such as risk-averse, conservatism, and more ethical. Women tend to be more ethical, conservative and can prevent groups or certain individuals from dominating the decision-making process (Lakhal et al., 2015). Women can act as an additional governance mechanism and provide better monitoring (Nguyen et al., 2015) and firms with more gender diversity show better performance and lower risk (Perryman et al., 2016). These findings were similar to Duppati et al. (2020). Duppati et al. (2020) found that gender diversity positively influences firm performance. Ain et al. (2020) and Zalata et al. (2019) also found that women directors reduce the manager's opportunistic behavior. There is a decline in the manager's opportunistic behavior due to better monitoring by women on the board of commissioners. These findings were different from the study results by Ahmad et al. (2019) dan Lim et al. (2019). Ahmad et al. (2019) dan Lim et al. (2019) found that the existence of women directors negatively influences financial performance.

6. CONCLUSION

This study examines the women on the board of commissioners influence on the relationship between agency cost and firm performances. This study analyzed all non-financial firms from 2014-2018. This study concludes that agency cost negatively influences financial performances, and the women on the board of commissioners moderated the negative influence of agency cost on financial performances. More existence of women on the board of commissioners can weaken the negative influence of agency costs on financial performance.

This study has a limitation. The limitation is that it only analyzes the women on the board of commissioners' influence on the relationship between agency cost and financial performance. Further study can analyze the board of commissioners' influence more deeply, such as educational background, age, and tenure.

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