

Women's Presence on Boards and Financial Performance: Evidence from Southeast Asia

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ABSTRACT

The purpose of this article is to assess the impact of female board representation on financial performance in Southeast Asia. To compare the presence of women, three proxies are used: the percentage of women, the Blau Index, and the Shannon Index. The samples for five-year intervals (2017-2021) include 249 Southeast Asian enterprises and 1,245 observations. The Fixed Effect Model results show that, based on all three proxies, women's board participation leads to lower financial performance, which contradicts the Agency and Resource Dependence Theories. This document serves as a resource for regulators and stakeholders in developing effective and proper corporate governance, particularly in board compositions that need a proportion of women in Southeast Asia. The conclusions of this study may be impacted.

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Introduction

The top management, namely the boards of directors (Boards), is a core element of corporate governance (Fernández-temprano & Tejerina-gaite, 2020). In addition to controlling, employing, and monitoring top executives in a company, the responsibilities of the boards include the supervision and formulation of the strategy in the corporation for addressing the target, which the company must contend with as the place to spend or allocate resources appropriately to gain the maximum results (Vairavan & Zhang, 2020). Given its substantial obligations and responsibilities, a proper and fair strategy for selecting the suitable composition of the board of directors must be in place to positively contribute to the performance financially and other business goals. One of the critical issues most frequently discussed on the boards is something diverse, particularly diversity of gender. Gender diversity on the elements of the boards of a company and its effects on the company's performance of finance becomes a crucial assessment and a vital area of study (Velte, 2017).

The number of women in companies and the workforce has grown considerably over the past decades. For example, France and Norway had the highest proportions of women in the work field in 2019, with 43.4% and 42.2%, respectively (Valls & Rambaud, 2019). According to statistics in 44 countries from 7,000 companies, women hold up to 15% of board seats, a 3% rise from the last study in 2015 (Deloitte, 2017). However, the percentage of women in high-level management positions or on the board of directors is still lower than that of men (Deloitte, 2017). IFC and the World Bank stated that half of Indonesia's workforce is comprised of women, but those who become the boards are still below 10% (The Economist, 2019). Southeast Asia has nearly entered an average of 17.1% of high-level seats inhabited by female, climbing by only 2.7% from 2018 (Deloitte, 2022). Women remain underrepresented at top levels of management, including the company's board of directors, because of the famous glass ceiling effect. In addition, Southeast Asian women are impacted by cultural views on the stereotypes, attributes, and characteristics of females (Deloitte, 2022). Working women in the region are often considered to have empathetic motherly traits and not to have entered the criteria for an executive or top position in the business (The Economist, 2019). In comparison, the characteristics of leadership that are full of confidence or aggressiveness, as well as the quality, are often associated with the male personality, which is made worse by the domination of men so that they are made the right gender to fill positions. Meanwhile, research supports the statement that

companies with the capacity of more women workers in board positions are generally associated with good financial ability (The Economist, 2019).

Prior studies on the effect of women on boards on company's performance of finance generally used a dependent variable from ROA (Return on Assets) (Ahmad et al., 2019; Arioglu, 2021; Fernández-temprano & Tejerina-gaite, 2020; Rey et al., 2020). However, this study prefers to use Tobin's Q since it is not calculated from data that is self-reported (Pletzer et al., 2015), so it is an objective index for the research study. Tobin's Q is measured by adding total assets to the market's capitalization minus the shareholder's equity which then divided by the total of all assets (Ullah et al., 2020). It also provides profit as a standard setting that is easy to understand; if the ratio on a scale is > 1 , then investors have an opinion about whether the company optimizes its resources effectively and efficiently. Vice versa, if the ratio has a result of < 1 , it means that the intellectuality and material sector resources are considered less valuable to apply (Valls & Rambaud, 2019). The nondependent variable used in this research is diversity of gender on the boards, where three proxy variables will represent it, namely the women's percentage on the boards or (1) PWomen, (2) Blau index, and (3) Shannon index (Vairavan & Zhang, 2020; Valls & Rambaud, 2019). Using multiple measures or proxies of the independent variable that are the same seeks to check the hypotheses and enable the authors to research the diversity of gender's effect on the boards on company financial performance more comparatively and rigorously. Thus, this will strengthen the findings of this research.

Many studies conclude a strong connection between the company's performance of finance and the presence of women on the boards, and both have a benevolent relationship. It means that companies with more board of directors members, in which women exist, perform better (Rey et al., 2020; Valls & Rambaud, 2019). Women on the boards also provide other benevolent effects that can develop the company, such as increasing company value (Ullah et al., 2020) and enhancing company market value (Garanina & Muravyev, 2020). However, several other studies have found no correlation or even stated a malevolent connection between company's performance of finance and the existence of women on the boards (Ahmad et al., 2019; Yang et al., 2019). On the other hand, male directors often have backgrounds in consulting, the healthcare industry, and academia compared to women. Women directors also have little experience serving on the boards of companies and have fewer connections in their professional networks (Hodigere & Bilimoria, 2015). The mixed results of all of those studies indicate that this topic is still interesting for discussion and research to acquire a deeper comprehension of the effect of the presence or involvement of female boards on financial performance.

The second reason why additional research is required is to assess the outcome of women on the boards in a significant and specific region, particularly Southeast Asia. Previous research was conducted in the European region and was focused or restricted to a single nation, such as Spain (Fernández-temprano & Tejerina-gaite, 2020; Martín-ugedo & Mínguez-vera, 2019; Valls & Rambaud, 2019), Norway (Yang et al., 2019), Colombia (Moreno-gómez et al., 2018), and Russia (Garanina & Muravyev, 2020). A similar study uses Southeast Asian nations as an object, but it is limited to just one country, Malaysia (Ahmad et al., 2019; Lim et al., 2019). Meanwhile, Southeast Asia has the most prominent female population (48.8%) (The World Bank, 2022). This research would give accessibility to readers a comprehensive finding of gender diversity practices in corporations, especially in Southeast Asia.

By examining Southeast Asia companies, this study is oriented toward the impact of women's presence in high-level management, particularly the board of directors, on the company's financial performance for a five-year period (2017 – 2021). This study contributes the following to the existing literature. First, it contributes to the academic literature on women's board representation and its impact on financial performance. It provides empirical data to the literature on the Southeast Asian market since most previous studies have concentrated on a particular country, such as Malaysia or the European markets. Corporations and connected parties can also use the findings of this study as a resource for developing corporate governance, particularly in the board composition sector. Furthermore, the government or relevant officials may consider this when creating national governance systems to promote gender diversity.

Literature Review

This research uses agency theory to clarify the conflict of interest between high-level management positions (agents) and shareholders (principle) (Jensen & Meckling, 1976). This conflict between business owners (shareholders) and agents, who possess different interests and objectives for each other, is the foundation of corporate governance's urgency in the company or businesses. In contrast to shareholders, who are most focused on operating in the best interests of principle, managers are typically more focused on their own personal benefit or goals, in this case, a high salary and status or career. However, these managers can influence corporate strategy (Valls & Rambaud, 2019). Agency costs will result from this contradiction, namely, losses brought on by conflicts of superiority between management and also shareholders of the organization (Jensen & Meckling, 1976). The board's responsibility, per the theory of agency, is to exert control over managers' decisions and actions and minimize interest conflict that may arise between shareholders (principle) and high-level management positions (agents) (Jensen & Meckling, 1976). The more varied the boards' composition, the larger the knowledge, perspective, point of view, and experience, improve the capability to take control or oversight tasks effectively and independently (Fernández-temprano & Tejerina-gaite, 2020; García-Meca et al., 2015) including a variety of gender, education, experience, age, etc. Gender diversity is the aspect to be further discussed (Fernández-temprano & Tejerina-gaite, 2020), which hopes to lower agency costs and raise profitability.

In addition, this research also used the Resource Dependence Theory, which is the same and more clearly demonstrates the potential advantages of diversity. A more diversified board of directors could add value to a business. The boards are viewed as valuably resourceful because of their significant roles and responsibilities in reducing agency costs, which can boost the business's profitability (Pfeffer, 1973). The board of directors can benefit from diverse viewpoints, ideas, and creative solutions because of its diversified

lineup. The range of knowledge of diverse markets can also be indicated by the diversity of gender on boards (Martín-ugedo & Mínguez-vera, 2019). It is resourcefully valuable and can raise a company's value.

Women's Presence on Boards

In the corporate governance context, the diversity of gender on boards is frequently mentioned. Its diversity refers to a composition in which the Board of Directors or Commissioners consists of members with various (non-homogeneous) backgrounds, such as differences in age, educational background, race/ethnicity, work experience, and finally, gender (ACCA, 2020). In addition, the Association of Chartered Certified Accountants notes that diversity of gender on boards is one of the most-discussed research. More than fifty percent (50%) of companies surveyed by the International Labor Organization (ILO) in 2018 had a low proportion female in their corporate boards (less than 50%), and more than 13% had all-male boards (Chang, 2019). Diverse initiatives and solutions have been developed and implemented. For instance, some countries have legalized meeting room quotas for the most prominent public companies, while others have voluntarily stated that they would encourage increasing the number of women on boards to enhance gender diversity among their directors (Chang, 2019). The board of directors is the primary mechanism responsible for implementing sound governance and oversight in publicly traded companies. Several studies have demonstrated that gender diversity on boards enhances oversight effectiveness (Hindasah & Harsono, 2021). Female board directors contribute new points of view and values that enable high-level management positions to offer suggestions leading to better problem-solving decisions. It increases effectiveness and innovation, expands access to information, and improves company performance financially and nonfinancially (Bennouri et al., 2018).

Hypothesis Development of Women's Presence on Boards and Company's Financial Performance

Several theories and literature are used to underlie research on the impact of women's presence on the boards. The theory of agency explains that the responsibilities of boards are to control managers' decisions and actions and minimize interest conflicts that may arise between shareholders and agents (Jensen & Meckling, 1976). With the more diverse composition of the boards, García-Meca et al. (2015) and Fernández-temprano & Tejerina-gaite (2020) said that it would bring more excellent information, knowledge, perspective or point of view, and experience, which the ability to take control or supervisory tasks more effective, efficient, and independent. It will decrease the agency's costs and increase profitability. The Resource Dependence Theory also states that there are potential benefits that a more diversified board of directors can bring. It will enhance the company's reputation, leading to progressive performance.

In addition to the theories above, several past studies have published conclusions of a positive relationship between women's presence on boards and a company's financial performance. Garanina & Muravyev (2020); Martín-ugedo & Mínguez-vera (2019); Rey et al. (2020); and Valls & Rambaud (2019) conclude that companies with more women's presence on the boards would perform better in terms of finances. In addition, the women's presence on the boards also has other progressive effects that can develop the company, such as improving the company's value (Ullah et al., 2020) and the company's market value (Garanina & Muravyev, 2020). However, some other studies have stated that there is no correlation or a contracting relationship between women's presence and financial performance (Ahmad et al., 2019; Yang et al., 2019). Male directors tend to have a diversified backgrounds in several fields, such as academics, consulting, and the healthcare sector, than female directors are. Meanwhile, women directors are less engaged in professional networks and have less expertise serving on the boards of companies (Hodigere & Bilimoria, 2015).

Based on two previous theories, arguments and findings that have been previously elucidated, the hypothesis created for this study is that company's financial performance is affected by the women's presence on boards using three proxies Women in Percentage (PWomen), Blau Index, and Shannon Index which are explain in the measurement of variables section. The authors formulate the research hypothesis using three different proxies as follows:

H1.a: The presence of women represented by Women sized in Percentage on a company's boards affects company's financial performance.

H1.b: The presence of women represented by Blau Index on a company's boards affects company's financial performance.

H1.c: The presence of women represented by Shannon Index on a company's boards affects company's financial performance.

The research framework outlined in this study is composed of three sections. The left side displays the women on boards factor (represented by 3 proxies, namely the women seized in percentage, the Blau index, and the Shannon index), the main independent variables in this research. The arrow points toward company financial performance since this study examines the effect of independent variables (women on boards) on company financial performance. Then, the control variables (company size, board size, and company revenue) are shown on the below side with arrows pointing toward company financial performance, which controls the effect of the independent variables towards the dependent variable (Nielsen & Raswant, 2018) which also influence company financial performance.

Research Methodology

A quantitative methodology was applied in this research. This research uses a quantitative approach, using objective measurements and mathematical or statistical analysis of gathered data using computational approaches. The financial data variables included in this research were obtained from S&P Capital (a database platform that provided a lot of business or economic data and information), and board directors' data (including total women on boards and the size of boards) were obtained from each company reports. This study uses strong-balanced panel data from years one to five (2017 – 2021). The five-year research period was chosen considering the data used is long enough to observe and include the economic contraction due to COVID-19. The variables utilized in this research were examined using a regression model in STATA 17 software. This study analyzes panel data with three regression models for

three proxies (Blau, PWomen, and Shannon), independent variables of gender diversity, and the dependent variable (Tobin's Q) representing company financial performance.

Research Objects

This study focuses on eleven countries in Southeast Asia—Singapore, Cambodia, Indonesia, Myanmar, Malaysia, Thailand, Laos, Philippines, Brunei Darussalam, and East Timor—with public corporations. Due to some restrictions and limitations, this study has chosen Indonesia, Malaysia, Thailand, Philippines, Singapore, and Vietnam as six representative Southeast Asian countries to be studied and analyzed. Due to the incomplete or partial data available for Myanmar, Cambodia, Laos, Brunei Darussalam, and East Timor, these five countries are not included in the study objects. Table 1 lists the number of populations chosen to be the focus of this study.

Table 1: Population

Listed Companies	Number
Indonesia	764
Malaysia	579
Thailand	823
Philippines	265
Singapore	419
Vietnam	1,244
Total Population	4,094

Source: S&P Capital

Then, the authors screened and filtered after obtaining the chosen population to gain the final sample data for this research following the sample data requirements. The authors implemented the following criteria to choose the final sample of data: (1) Public companies that were listed between 2017 and 2021 and (2) Public companies with complete data for the variables considered in this study over the observation period (balanced panel data). As a result, this study's final observation sample data is based on panel data and includes 249 companies in Southeast Asia and 1,245 observations listed in Table 2. The summary of the final sample data gained after using the criteria from the sample data exists in Table 3 below.

Table 2: Sample Criteria

Sample Criteria	Number
Number of countries	6
Observation period (2017-2021)	5
Number of companies	4,094
Uncompleted data and improper criteria	(3,845)
Total Sample (Number of Companies) Balanced Panel Data	249
Total Observations (Number of Companies x Year of Companies)	1,245

Source: Processed by authors

Table 3: Details of Sample

Listed Companies	Number
<i>Indonesia</i>	21
<i>Malaysia</i>	82
<i>Thailand</i>	85
<i>Philippines</i>	19
<i>Singapore</i>	31
<i>Vietnam</i>	11
Total Sample (number of companies)	249
Total Observations	1,245

Source: Processed by authors

Measurement of variables

In examining the influence of women's presence on boards on Southeast Asian companies' financial performance, the operating variables that the authors used to analyze were categorized into three variable categories (independent, dependent, and control variables). The dependent one in this research is Tobin's Q, which shows a company's financial performance. Unlike many other financial performance metrics that rely solely on historical financial data (e.g., return on equity and return on assets), Tobin's Q incorporates the market's future profitability and growth expectations. This forward-looking nature makes it a more comprehensive measure. The independent ones used in this research is gender diversity, which has three proxies: Blau, Shannon, and Percentage of Women (PWomen). The three proxies for diversity of gender are metrics widely used to measure gender diversity (Kurnia & Ardianto, 2024; Valls & Rambaud, 2019) but differ in their approaches. The Blau index calculates diversity by considering the proportion of individuals in each category of gender. It ranges from 0-0.5, with higher values indicating more diversified (Blau, 1977). The Shannon index is an entropy-based measure that accounts for both the richness and evenness of gender distribution, making it more sensitive to rare categories. It's generally more informative in contexts with multiple gender categories beyond just male and

female. Finally, the percentage of women is a simpler, unidimensional metric that measures the proportion of women in a group. While straightforward, it doesn't capture the diversity of other genders and may not fully reflect overall gender diversity. Thus, while the percentage of women is useful for specific cases, Blau and Shannon's indices offer a more comprehensive view of diversity.

The control variables measured in this research are company size (LnAssets), board size (BSize), and company revenue (LnRevenue). Factors like company size or revenue might influence gender diversity and financial performance, creating endogeneity issues. Including these as control variables can help address this problem by accounting for potential reverse causality or omitted variable problems. Another aspect of adding the company size and board size is that larger companies might have different financial outcomes due to their scale, regardless of gender diversity. It happens to board size that contains women proportion in it. By controlling company size and board size, we ensure that any monitored relationship between diversity of gender and financial performance is not simply due to company size and board size differences. All variables definitions and formulas are listed in Table 4.

Research Models and Data Analysis

The panel data, known as cross-sectional time-series or longitudinal data, allows researchers to control potential unobservable heterogeneity among the sample population. Fixed effect estimation would be appropriate if this unobservable heterogeneity were connected or correlated with the independent variables (Hill et al., 2020). Testing the Hausman is also used to choose the most suitable procedure or regression model for the sample, either FEM (Fixed Effect Model) or REM (Random Effect Model). By using alpha value 0.05, or confidence level at 95%, if probability > 0.05, then choose REM, and if probability < 0.05, then choose FEM. All classical assumptions tests were performed to make sure the data is Best, Linear, Unbiased, and Estimator.

Table 4: Operating Variables

Research Variable	Indicator of Measurement	Reference
	Dependent Variable	
Tobin's Q	$\frac{\text{Total Assets} + \text{Market Capitalization}}{\text{Shareholder's Equity}}$	(Ullah et al., 2020)
	Independent Variable	
Percentage of women on the boards (PWomen)	<i>The proportions of women on boards x 100%</i> <i>The number of board members Assets</i>	(Kurnia & Ardianto, 2024; Valls & Rambaud, 2019)
Blau index (Blau)	$Bi = 1 - \sum_{i=1}^k Pi^2$	(Blau, 1977; Kurnia & Ardianto, 2024; Valls & Rambaud, 2019)
Shannon index (Shannon)	$- \sum_{i=1}^s pi \ln pi$	(Valls & Rambaud, 2019)
	Control Variable	
Company size (LnAssets)	<i>Log(Total Assets)</i>	(Valls & Rambaud, 2019)
Company revenue (LnRevenue)	<i>Log(Total Revenue)</i>	(Valls & Rambaud, 2019)
Board size (BSize)	<i>Total women on boards + Total men on boards</i>	(Valls & Rambaud, 2019)

Source: Processed by authors

The three research models are employed to test three hypotheses. The first model is implemented to analyze the effect of women's presence on boards on financial performance using the Women seized in Percentage (PWomen) on boards. The second is to assess the impact of women's presence on boards on financial performance using the Blau index (Blau). The third one examines the effect of women's presence on boards on financial performance, as represented by the Shannon index (Shannon).

$$TobinQ = \beta_0 + \beta_1PWomen_{i,t} + \beta_2LnAssets_{i,t} + \beta_3LnRevenue_{i,t} + \beta_4BSize_{i,t} \dots \dots \dots (1)$$

$$TobinQ = \beta_0 + \beta_1Blau_{i,t} + \beta_2LnAssets_{i,t} + \beta_3LnRevenue_{i,t} + \beta_4BSize_{i,t} \dots \dots \dots (2)$$

$$TobinQ = \beta_0 + \beta_1Shannon_{i,t} + \beta_2LnAssets_{i,t} + \beta_3LnRevenue_{i,t} + \beta_4BSize_{i,t} \dots \dots \dots (3)$$

Table 5: Descriptive Statistic

Variable	Obs	Mean	Std. Dev.	Min	Max
TobinQ	1,245	2.360161	6.308345	.4320303	133.2287
PWomen	1,245	.2285484	.1217814	.05	.75
Blau	1,245	.3229905	.110467	.095	.5
Shannon	1,245	.4966371	.1296283	.1985152	.6931472
LnAssets	1,245	21.04688	1.46841	17.01552	25.28645
LnRevenue	1,245	20.1141	1.538788	11.64765	25.03525
BSize	1,245	9.478715	3.065822	3	21

Source: STATA 17

Results and Discussions

Descriptive statistics

Table 5 statistically depicts all the variables used in regression models. The sample covers the period between 2017 and 2021 (five years), with total observations 1,245. The descriptive statistics show essential findings relating to raw data. Table V shows that the average or mean of independent variables represented by PWomen, Blau, and Shannon are 22%, 32%, and 49%, respectively. Meanwhile, previous research from Valls & Rambaud (2019) is only 11%, 18%, and 29%, respectively. These figures indicate that women's presence on the boards in Southeast Asia corporations is higher. The difference in this ratio has been estimated due to differences in the coverage of the area studied. The control variables show average BSize is 9.5 members, with a minimum of 3 members and a maximum of 21 members. The mean figures are above 8.6 from the United States (a federal republic of 50 states and developed regions) (Noguera, 2020). Even though there is no consensus on optimal board size, according to the Russell 3000 and S&P 100, companies mostly have an average of nine to twelve directors (Griesedieck, n.d.). Getting the average size of firms (LnAssets) and revenues (LnRevenue), the sample of this study provides the following averages: 21.05 and 20.11, respectively.

The Classical Assumption Tests

The sample data, totaling 1,245 observations in this study, have received winsorizing treatment to normalize the data. Winsorizing is a statistical treatment technique that treats extreme values in statistical data to minimize the impacts of possible outlier data (Khairunnisa & Outri, 2020). The results show that the sample data in this research is between a range of not more than -2 and 2, which means that the data is normally distributed (symmetric) (Meiryani, 2021). The data studied tested the Hausman aspect to determine the best estimation model for this research between the FEM and REM. Then, this study performed the classical assumption test in three aspects: (1) performed the Pearson Correlation test to evaluate the multicollinearity of the data used, (2) tested the White Test to determine heteroscedasticity, and (3) performed the Durbin - Watson value to test autocorrelation.

The outcome of the multicollinearity or correlation test is described in Table 6 using the test of Pearson correlation. The results of this test indicate that the data in this research are free from multicollinearity assumptions because the correlation aspect of variables is not worth higher or less than +/- 0.8. Based on the results, it can also be observed that the company's financial performance (TobinQ) has a positive and significantly correlated connection with the presence of women on the boards, represented by the PWomen, Blau, and Shannon variables. In addition, the dependent variable has a positive correlation with company revenue (LnRevenue), unlike company size (LnAssets) and board size (BSize), which show a negative correlation.

Table 6: Pearson Correlation

	TobinQ	PWomen	Blau	Shannon	LnAssets	LnRevenue	Bsize
TobinQ	1.0000						
PWomen	0.1643***	1.0000					
Blau	0.1531***		1.0000				
Shannon	0.1524***			1.0000			
LnAssets	-0.2773***	-0.2090***	-0.2183***	-0.2209***	1.0000		
LnRevenue	0.0053	-0.1999***	-0.2165***	-0.2215***	0.7528***	1.0000	
BSize	-0.0447	-0.3475***	-0.3533***	-0.3627***	0.3275***	0.3579***	1.0000

Source:

STATA

17

*** Highlights significance level at < 1%, ** < 5%, * < 10%.

Meanwhile, the data in this study did not pass the other two assumptions of classical tests, namely the heteroscedasticity and autocorrelation tests. To overcome this problem, the authors decided to carry out or apply the robust regression option (Maulana, 2018). The results of this robust regression are also used as material for discussion.

Panel Regression Results

This research tested the Hausman to determine the appropriate estimation models between FEM and REM. The test outcomes indicate that FEM is considered the best choice for interpretation because the prob>chi2 generated in the three models has a value of less than 0.05, as reflected in Tabel 7. In addition, the appropriate regression models used in this study also use the robust option because there were constraints on the heteroscedasticity and autocorrelation tests in the previous classical assumption test. Table 8 displays the outcomes of the three regression models used in this research.

Table 7: Hausman Test Results for Three Research Models

Model	Hausman Test Result	Regression Model	Option
Model 1	prob > chi ² = 0.0000	Fixed Effect Model	Robust Option
Model 2	prob > chi ² = 0.0000	Fixed Effect Model	Robust Option
Model 3	prob > chi ² = 0.0000	Fixed Effect Model	Robust Option

Source: STATA 17

The effect of boards's diversity of gender (represented by (1) PWomen, (2) Blau, and (3) Shannon as an independent variable) on financial performance (TobinQ), indicating that the greater the women's presence on the boards of companies in Southeast Asia has a significant negative impact on financial performance for each proxy. PWomen has a coefficient of -0.973 and p-value of 0.024)

with a significance level of 5%, Blau has a coefficient of -0.898 and p-value of 0.050 with a 5% significance level, and Shannon has a coefficient of -0.721 and p-value of 0.009 with 10% significance level. Then, the control variable LnAssets shows significance at the 1% level with a negative direction for the three models with coefficients -0.852, -0.845, and -0.845, respectively, and a p-value of 0.000 for all models. Meanwhile, the control variables LnRevenue and BSize have a positive impact, with a significance level of 10% for LnRevenue and 5% for BSize in the three regression models. LnRevenue has a coefficient value of 0.161 and a p-value of 0.097 for model 1, a coefficient value of 0.164 and a p-value of 0.094 for model 2, and a coefficient value of 0.163 and a p-value of 0.095 for model 3. BSize has a coefficient value of 0.049 and a p-value of 0.024 for model 1; the coefficient value is 0.050, the p-value is 0.021 for model 2, and the p-value is 0.021 for model 3. From the three regression models in this study, an F-test was carried out, which showed the result probability was 0.000 ($0.000 < 0.05$); then, it can be concluded that all independent variables were simultaneously significant to the TobinQ as the dependent variable.

Table 8: Regression Results

TobinQ X (PWomen)			TobinQ X (Blau)		TobinQ X (Shannon)	
	Coefficient	p> t	Coefficient	p> t	Coefficient	p> t
PWomen	-0.973	0.024**				
Blau			-0.898	0.050**		
Shannon					-0.721	0.058*
LnAssets	-0.852	0.000***	-0.845	0.000***	-0.845	0.000***
LnRevenue	0.161	0.097*	0.164	0.094*	0.163	0.095*
BSize	0.049	0.024**	0.050	0.021**	0.050	0.021**
R ²	0.098		0.101		0.101	
F-test	0.000		0.000		0.000	
Obs	1,245		1,245		1,245	

Source: STATA 17 then Processed by Authors
 *** Highlights significance level at < 1%, ** < 5%, * < 10%.

Discussions

The research shows that women's presence on the boards significantly decreases the financial performance of companies in Southeast Asian countries (particularly Indonesia, Singapore, Malaysia, Thailand, the Philippines, and Vietnam). This conclusion is based on the three proxies, namely PWomen, Blau, and Shannon, which have negative and significant values at 5% (for PWomen and Blau) and 10% (Shannon) statistically for TobinQ. In other words, female directors on the boards can decrease the company's financial performance.

This finding is consistent and in line with several studies, such as Ahmad et al. (2019), Chadwick & Dawson (2018), Lim et al. (2019), and Suci & Duma (2021), which indicate a negative connection between the women's presence on the boards and company performance. Nevertheless, this is contradictory to the findings obtained by Garanina and Muravyev (2020), Rey et al. (2020), and Valls and Rambaud (2019). The authors find that these results contrast with what is stated in the agency and resource dependence theories. The presence of women (diversity) is likely to enrich the knowledge, perspective, point of view, and experience of the board of directors (Fernández-temprano & Tejerina-gaite, 2020; García-Meca et al., 2015), reduce agency costs and eventually improve overall financial performance. However, this study shows contrary results between diversity of gender and financial performance. Darmadi (2013) and Wellalage & Locke (2013) argue that the higher proportion of women on the board of directors leads to over-monitoring, which can lead to more boardroom conflicts. A higher proportion of women on the boards also requires greater time and effort in the process of decision-making (Lim et al., 2019). This is due to differences in thinking and traits possessed by members of directors of different genders. Therefore, companies may lose their competitive advantage (Lim et al., 2019). This could explain why diversity of gender in high-level management can bring potential costs to the company because of interpersonal conflicts as well as communication problems. Thus, the agency costs and expenses are still there and can reduce the profitability of the company.

The finding of an adverse effect on the relationship in Southeast Asia between women on the boards and company performance can be caused by issues of cultural gender stereotypes (Deloitte, 2022; Lim et al., 2019), patriarchal culture (Kurnia & Ardianto, 2024), and the glass ceiling factor (Lim et al., 2019). Stereotypes that have been rooted in the past and subconscious biases that society has in general regarding women are indicated to be determinants that also influence the prospects of female gender in the workplace and at all levels, including high-level management, such as the boards. The idea of excellent and ideal leadership is often associated with masculinity and men (The Economist, 2019), creating a low of women representatives in top management or even making women figures without proper power and control. Meanwhile, females are often associated with motherly and passive qualities, which are considered unsuitable for executive positions. This undermines the prospects for women to enter and be involved on the board of directors. Most of the people of Southeast Asia are also dominated by the patriarchal or still strongly believe in the patriarchal system (Niaz & Hassan, 2006; Low et al., 2015). For instance, culture, socioeconomic condition, and religion in Indonesia perceive men as highly valued, making women have no malevolence to do much in the company even though has been required a certain proportion by the Indonesian Financial Service Authority (Kurnia & Ardianto, 2024). Those reasons contribute to the persistence of the glass ceiling in Southeast Asian countries (The Economist, 2019) and limit women's opportunities to move up the ladder and contribute more in their careers.

Discussing the control variables, this research found that the firm size represented by LnAssets has a significantly negative/declining relationship with the company's financial performance (TobinQ). These results were also obtained in several previous studies, such as Chadwick & Dawson (2018), Lim et al. (2019), Moreno-gómez et al. (2018), and Valls & Rambaud (2019). Company size is

calculated as natural log assets (Lim et al., 2019; Moreno- gómez et al., 2018; Valls & Rambaud, 2019). The company size, represented by the company's total assets, is a resource that can be used to generate profits. Therefore, having large assets allows companies to obtain and take more chances, which can lead to more excellent performance results (Ahmad et al., 2019).

However, the finding of a negative relationship between firm size and financial performance is very likely to occur. Based on Asian Development Bank (ADB) data as of 2020, there are approximately 71 million micro, small, and medium enterprises (MSMEs) in Southeast Asia (Tan, 2022), also mentioned by Lim et al. (2014) who conducted research in the Malaysian region, that the market perceives and prefers companies that are smaller in size are better in performance because they are more prepared or flexible in dealing with the changes that occur. Companies that are smaller in size find it easier and faster to make decisions and innovate so that they can develop, survive, and adapt to market demands. This makes small-size companies an agile business. In addition, larger companies tend to concentrate more on customer satisfaction, which can lead to more focus on existing customers so that the opportunity to get higher sales from more new customers is lost (Adomako et al., 2019).

Meanwhile, the variable revenue component has a positive and significant influence on the company's financial performance, according to the results of this study. This is also stated by Ali (2022). One crucial factor in the company's financial performance is the company's revenue. Revenue is recognized when non-cash assets, such as commodity inventories, are converted into cash or cash equivalents (Gunu et al., 2021). This also means that all operations necessary to obtain revenue from the sale of goods or services have been completed (Ball et al., 2016). Ali (2022) mentioned that the revenue of a business organization refers to the income generated through business activities or operational activities and determines whether a company is profitable. The financial performance of companies with high revenue is more likely to be in good condition, while companies with low revenue are more likely to be in bad condition.

The findings in this study reveal that the size of the board of directors significantly affects the company's financial performance. The greater the board of directors' size (number of members), the higher the company's performance. This result was also found in several previous studies, such as Koerniawan et al. (2020), Rey et al. (2020), Ward & Forker (2017), and Yang et al. (2019). This is consistent with the view of resource dependency theory. The large size of the board of directors reflects a wide range of viewpoints, ideas, and creative solutions. A larger board will also have better and more excellent knowledge and information due to more directors (Rey et al., 2020). These things are seen as valuable resources because they can be used optimally, leading to or maximizing business profitability (Pfeffer, 1973). In addition, a larger board of directors also indicates that there are more external relations and diversification of expertise that can protect a company from financial difficulties (Koerniawan et al., 2020, as cited in Goodstein, 1994; Zahra & Pearce II, 1989). Minimizing the occurrence of financial difficulties will also lead to maximizing the company's financial performance.

Conclusion

This research is intended to assess how the presence of women on the boards influences the financial performance of Southeast Asian companies. The conclusion indicates that women's presence on the boards negatively impacts the financial performance of Southeast Asian companies. Three proxies of women's presence, namely the (1) Women seized in Percentage, (2) Blau index, and (3) Shannon index, were utilized to gather comparative results of the women's presence variable. This study proves that companies in Southeast Asia are unable yet to welcome the presence of gender diversity on boards, resulting in a negative impact on financial performance. A bigger women's proportion on the boards has been associated with inefficiencies in the monitoring process, leading to more boardroom conflicts and lengthy processes of decision-making, incurring potential costs and eradicating the company's competitive advantage. This phenomenon is against the agency and resource dependence theory. In addition, a culture of patriarchy is still dominant in Southeast Asia, which perpetuates cultural stereotypes of gender and the glass ceiling factor. This belief undermines women's chances of serving on the boards and holding key positions in high-level management.

In addition, this study demonstrates that an increase in company revenue and size of boards significantly positively impacts the company's financial performance. The company's profitability is determined by its revenue, the income generated through business or operational activities. The companies' financial performance with high incomes is likely in excellent shape, and vice versa. Then, the boards' size also positively impacts the financial performance of Southeast Asian companies, as they view it as a precious resource for maximizing business profitability. Lastly, in Southeast Asia, smaller companies have better financial performance than big-sized companies since they focus more on satisfying existing customers, reducing the opportunity to increase sales from new customers. In addition, these small companies make it easier and faster to make decisions and innovate to survive and adapt to market demands.

This research benefits both academically and practically. Other than mainstream research focusing on a developed or single country, This research contributes to the expanding academic literature on women's presence on boards and their impact on Southeast Asian corporations' financial performance. Policymakers can use these findings to develop appropriate corporate governance and encourage women's inclusion by ensuring that a certain percentage of women are on board listed companies in their respective countries. Nonetheless, this research has limitations which could be discussed in future studies. Firstly, this study uses balanced panel data and relies on a secondary database (S&P Capital) that narrows the research sample. Secondly, this study does not assess the impact of each business type or industry. Finally, this study does not include other aspects of women variable that might impact company financial performance, such as education level, age, experience, values, etc. Future research could use unbalanced panel data and add industry type and the women's attributes, such as their age, education level, etc, to the research.

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