Economics and Business Letters

10(3), 262-273, 2021

Do female leaders influence bank profitability and bank stability? Evidence from Vietnamese banking sector

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Received: 6 December 2020
Revised: 29 March 2021
Accepted: 30 March 2021

Abstract

A diverse board has been seen as an important factor contributing to the success and sustainability of a company. Therefore, policies to enhance the diversity of the boards have been implemented in many countries around the globe. However, previous findings on the impact of female leaders on firm performance still remain inconclusive. Using a dataset of 20 Vietnamese commercial banks over the period from 2013 to 2019, this paper examines whether the gender of the bank leaders such as CEOs or members of Management Team (MT), Board of Directors (BOD) have an impact on bank profitability and bank stability in Vietnam. Our findings suggest that banks with female CEOs tend to be more profitable and more stable than those with male CEOs. However, more women appointed to MT do not necessarily result in more profitable or more stable banks. More interestingly, the presence of women on banks' board of directors implies lower profitability and more vulnerability for banks. Obtained findings imply important bank governance policies toward better performance and stability for commercial banks in Vietnam.

Keywords: gender diversity; bank profitability; bank stability; female leaders
JEL Classification Codes: G21, G32, M14, J16, J24

1. Introduction

Board gender diversity has become a central focus of corporate governance transformation efforts around the globe, with many countries have established minimum quotas for female representation on boards in public companies. Research finds that women contribute to the success of corporation with their "different but complementary" leadership style that is beneficial for the organization (Süssmuth-Dyckerhoff, Wang & Chen, 2012). It is also argued that more women in the board can generate a more dynamic, supportive and collaborative environments thanks to their personalities (Konrad, Kramer, & Erkut, 2008). Roles of female leaders are not only highlighted as an important factor that influence the effectiveness of the board, hence, driving firm profitability, women are also believed to be better leaders to effectively run the business overcome economic turbulence during tough time than their male counterparts, thanks to women's higher risk aversion as well as their attitude toward monitoring

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Citation: Hoang, Y., Vu, N., and Nguyen, L. (2021) Do female leaders influence bank profitability and bank stability? Evidence from Vietnamese banking sector, *Economics and Business Letters*, 10(3), 262-273.

DOI: 10.17811/ebl.10.3.2021.262-273

and controlling activities (Rose, 2017). In line with this, evidence of positive relationship between CEOs gender and banks' performance is apparent in studies by Prete & Stefani (2015), Khan & Vieito (2013), Berger, Kick & Schaeck (2014). For instance, Palvia et al. (2015) utilizing a large panel of US commercial banks from 2007 to 2010 find that smaller banks with female CEOs were less likely to fail during the financial chaos.

The above evidence shows the link between board gender diversity and firm performance, however, this nexus is not directly predicted by any extant theory, including agency theory and resource dependence theory (Carter, Simkins & Simpson, 2003; García-Meca, García-Sánchez, & Martínez-Ferrero, 2014), but more of making the study of this relationship become an empirical issue (Carter et al., 2003). In fact, the impact of gender diversity on bank profitability and bank stability is still ambiguous (García-Meca et al., 2014). While a number of studies suggest a positive relationship between gender diversity and a well-functioning board that contributes to the organization success (Ward, Wylie & Hamill, 2011), the contributions of women leaders are being challenged under some certain circumstances (Adams & Ferreira, 2009, Sumbul Sajjad, 2015), such as the time period of the studies, countries, economic environment, regulatory and governance structures, culture, and size of capital markets (Rhode & Packel, 2014; Nkuutu et. al, 2020). For example, the cultures in some developing countries still prefer "homogeneous" boards and women tend to remain silent on the board in a male-dominant society, leading to limited contribution of women to the firm performance (Wellalage & Locke, 2013). In addition to this, adding women directors sometimes can also be seen as the boards' response to public pressure despite the boards might have their own preferences for diversity. This phenomenon often occurs in firms with operating with "tokenism" where women are added to board when there is low or no female presence in the board, making it difficult to conclude whether it can create or destroy value by having more women in the board (Farrell & Hersch, 2005).

The banking sector in Vietnam represents the largest sector the financial system, therefore, plays a very crucial role in the Vietnamese economy. Despite being affected seriously by the financial crisis (2008-2009), the banking sector in Vietnam has bounced back successfully with profitability has been improving following credit expansion to different market segments and diversifying towards non-interest income. Much of the rapid credit growth in recent years has occurred through the banking system (World Bank, 2019).

The Vietnamese banking sector is also an economic sector with a high proportion of female employees (60%), with 23% of the senior leaders in commercial banks are women, of which nearly 50% held key positions in the Board of Directors (Huong, 2020). It is still noteworthy that from a political background, as a Marxist-Leninist one-party socialist republic, Vietnam has pursued 'a socialist-oriented market economy' where the government intervenes in the economy to achieve the socialist ideals of citizens' equality, including gender equality. From a social and cultural background, Vietnamese female entrepreneurs are different from their male counterparts in terms of human values and attitudes to risk (UNIDO, 2010). Due to cultural tradition and social stereotype role, Vietnamese businesswomen tend to be more prudential by consulting different stakeholders before making decisions while their male counterparts are risk-taking investors and tend to make decisions by themselves (UNIDO, 2010). Vietnamese women generally are seen to be more goal-oriented and appear to have greater perseverance and determination to succeed than those of their male counterparts (Al-Fehemi & Msiri, 2014). These strong personal traits can be partly attributed to the presence of matriarchy in the ancient history of Vietnam (Do & Brennan, 2015). However, similar to many other countries, a "glass ceiling" seems exist where the presence of women on the boards of directors and top executive managements still remain a minority compared to men. Our study reports that on average, the percentage of women appointed to board of directors and top executive management team in Vietnamese commercial banks is only 17 percent and 26 percent, respectively. Therefore, the

issue of male-dominant boards as discussed above can be likely to limit the contribution of women to the banks performance, especially when Vietnamese society is deeply influenced by Confucianism placing men superiority over women, despite the consistent effort of the government to promote gender equality.

To sum up, it can be seen that the tendency to be independent, strong and the awareness of leadership roles are known to be the identity of Vietnamese women that shaped from the historical matriarchy. However, when it comes to social relations, Vietnamese women are under the pressure to follow social norms and expectation influenced by Confucianism doctrines which can hinder their success.

Based on the above discussion regarding women characteristics and gender diversity in Vietnamese commercial banks, we propose the below hypothesis:

H1: Female CEOs associate with higher bank profitability.
H2: Female CEOs associate with higher bank stability.
H3: Gender diversity in BOD and MT associate with lower bank profitability.
H4: Gender diversity in BOD and MT associate with lower level of bank stability.

Furthermore, most studies on this topic so far have conducted in developed countries which are at high level of corporate governance. Meanwhile, the corporate governance system in most businesses in Vietnam still remains underdeveloped (Nguyen, Locke & Reddy, 2015). According to ASEAN Corporate Governance Scorecard 2019 Project, the average corporate governance score in Vietnam in 2019 is only 41.7%, which is much lower compared to that of other Asian countries. In addition to this, unlike Norway, Italy or any other European nations where regulations governing the number of women on board of directors are stringently enforced, there are currently no gender quotas for women on boards in Vietnam (Pham & Hoang, 2019). Meanwhile, studies on the nexus of gender diversity in commercial banks are relatively limited in existing literature, especially in a transitional economy like Vietnam. These characteristics constitute a unique context to examine the influence of female leaders on banks performance and bank stability in Vietnam.

In this paper, we find that banks with female CEOs tend to have higher profitability and are more stable than those with male CEOs. More interestingly, our study suggests that the presence of women in MT and BOD do not necessarily result in more profitable banks and banks with more women on board of directors tend to be more vulnerable. The research findings may imply future policy initiatives for Vietnam to address the issue of board gender diversification and support the presence of a female CEO for better bank performance and stability.

2. Research methodology

Our sample consists of 20 commercial banks in Vietnam with data from the period 2013-2019 which is the recovery phase of the Vietnamese banking sector after being seriously affected by Global Financial Crisis 2008-2010. This database contains information on female presence on BOD and MT including CEOs gender. Financial variables were collected from banks' annual reports from 2013 to 2019. Inflation rate throughout the years are collected from CPI Index issued by Vietnam General Statistics, GDP statistics are sourced from World Bank database.

To examine the role of women leaders and women presence on boards on the banks performance and bank stability, we employ OLS method with the regression equation (1) and (2) as following:

$$Y_{it} = a_0 + \theta . Y_{i,t-1} + a_1 . Females_{it} + a_2 . Foreigner_{it} \sum_{j=1}^{n} b_j X_{itj} \quad (1)$$

$$Z_{it} = \gamma_0 + \gamma_1 . Females_{it} + \sum_{m=1}^{n} \mu_j X_{itm} \quad (2)$$

where:

- i indexes banks and t indexes time; Y is the bank performance measure including ROA, ROE;
- Z is the bank stability measure by variable Z-score;
- *Females* measure gender diversity in management team, board of directors and female CEO dummy;
- X_{itj} is the bank control variables for bank characteristics;
- n represents number of banks.

We also run different regressions for each main explanatory variable to ensure the robustness of the results (Column 2, 3, 4 in table 3, 4, 5)

The dependent variables measuring bank performance are return on equity (*ROE)* and return on assets (*ROA). ROE* is calculated as the percentage of net income to total equity capital while *ROA* is calculated as the percentage of net income to total assets. According to Lee and Kim (2013), ROA and ROE are traditional ratios to measure banks' profitability, and can be calculated easily by using public information. Additionally, ROA and ROE are good metrics for measuring the banks' profitability (Yang et al., 2018; Shahid et al., 2020)

The dependent variable measuring bank stability is Z-Score *(ZSCORE)*, which is widely used to analyze bank stability (Berger et al., 2014; Setiyono & Amine, 2014). with Z-score = [ROA + Equity/Total assets)]/stdROA (Boyd, Graham & Hewitt, 1993). A high Z-score means less insolvency risk or the bank is more stable.

The first group of explanatory variables includes the fraction of women presented in management team (*MR)*, in boards of directors (*DR)* and a dummy variable *(CEO)* capturing the gender of a CEO. The variables *DR, MR* are calculated by taking the ratio of females in the boards, the female dummy variable *CEO* reflects as a 1 if CEO gender is female, 0 otherwise. We include the following independent variables in our models: Bank size *(SIZE)* measured as log of total assets, is often used as a control variable in the analysis of firm performance (Kilic, 2015; Lam et al., 2013); *(EQUITYR)* bank equity ratio which is the ratio of equity capital to total assets. This ratio is a measurement of the bank financial leverage which is an important control variable in financial performance (Lam et al., 2013; Wu & Truong, 2013); *(COSTOINCR)* cost to income ratio which is the ratio of total costs to total income of the bank. This ratio is a measurement of bank efficiency and a benchmarking metric (Mathuva, 2009); Enterprises with strong government control are likely to be of strategic priorities of the government, therefore having an advantage to potentially be market leaders (Ng, Yuce, & Chen, 2009; Wei & Varela, 2003). Accordingly, a further control variable *(STATED)* is added in the model, taking the value of 1 if government own more than 50% of bank equity and 0 otherwise; Furthermore, it is suggested that government standards such as a listing standard in the stock exchanges can enhance better performance (Chen, Lin, Wang, & Wu, 2008). Listing standard also requires firms to strictly follow regulations, hence, improve the quality in risk management. Therefore, *(LISTED)* appears as another control variable in the models to capture this effect, with the value of 1 if the bank is listed in the stock exchange market, 0 otherwise; Bank returns are also affected by macroeconomic indicator such as inflation rate (*INFRATE*) and GDP growth rate (*GDPGROWTH*).

3. Empirical analysis

3.1. Descriptive summary

Table 1 shows that the indicators reflecting the profitability of banks have relatively significant differences, of which the lowest values of ROE and ROA are close to zero while the largest value of these two ratios are 6% and 61% respectively. The average return on total assets is about 1.1%, average return on equity is about 14.4% during 2013-2019. The measure of banks stability (Z-SCORE) also largely fluctuated, ranging from the minimum score of 15.18 to the maximum one of 442.71.

Table 1. Descriptive statistics.

Variable	*Obs*	*Mean*	*Std. Dev.*	*Min*	*Max*
ROA	140	0.01107	0.0095	0.00	0.06
ROE	140	0.14414	0.1096	0.00	0.61
Z-SCORE	140	181.84	59.4703	15.18	442.71
DR	140	0.17028	0.15578	0.00	0.60
MR	140	0.26345	0.13688	0.08	1.00
CEO	140	0.11429	0.3193	0.00	1.00
SIZE	140	19.0873	0.98784	17.18	21.12
EQUITYR	140	0.07736	0.02355	0.04	0.16
COSTTOINCR	140	0.87907	0.18596	0.48	2.75
STATED	140	0.25	0.43457	0.00	1.00
LISTED	140	0.52143	0.5013	0.00	1.00
NPL	140	0.01979	0.01049	0.01	0.07
INFRATE	140	0.05	0.00759	0.04	0.06
GDPGROWTH	140	0.06429	0.00731	0.05	0.07

In terms of operational scale, banks in the sample also have significant differences, ranging from the smallest value of 28.9 trillion Vietnam Dong to the largest value of approximately 1.48 thousand billion Vietnam Dong, and quite distant from the average level at 193 trillion Vietnam Dong. The similar pattern can be seen in other control variables of the model such as capital ratio (EQUITYR), cost to income ratio (COSTTOINCR), non-performing loan ratio (NPL), etc. Macro variables such as inflation rate (INFRATE), GDP growth (GDPGROWTH) are relatively stable at 5% and 6.4%, respectively. The average presence of women in management team and board of directors are around 26% and 17%, inferring that women are still under presented in top management level. The percentage of female CEOs is also very limited, at only approximately 11% from the data sample.

3.2. Correlation matrix

Correlation matrix is provided in Table 2 in order to examine potential problem of multicollinearity among independent variables. It can be seen that the level of multicollinearity among independent variables is relatively weak (average variance inflation factor VIF is 1.49). On that basis, multivariate analysis is done to look at the specific correlations between dependent variables and independent variables. In addition, the Hausman test shows that random effect models is selected. We also test the heteroskedasticity and the result suggests that heteroskedasticity is not detected.

Accordingly, the regression results of the dependent variables ROA, ROE, Z-SCORE according to the independent variables are shown in Tables 3, 4 and 5, respectively.

3.3. Female leaders and bank profitability

Table 3 and 4 show the impact of gender diversity on bank profitability (ROA and ROE, respectively). Specifically, our results show that banks with female CEOs are more profitable. The coefficients between ROA, ROE and female CEOs are both positive at 0.008 and 0.095, respectively and statistically significant at 1% level, indicating that female CEO leads to better financial performance of commercial banks in Vietnam.

Nonetheless, we cannot find the relationship between the percentage of female members in the management team (MT) and bank profitability. While the coefficients between MR and ROA or ROE are positive, these coefficients are not statistically significant. These findings are in line with García-Meca et al. (2014). The result for gender diversity in board of directors is quite interesting. While there is strong evidence that female CEOs have positive impact on banks performance, it seems that the participation of women on board of directors lead to less

Table 2. Correlation Matrix of independent variables.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) DR	1.000										
(2) MR	-0.018	1.000									
(3) CEO	0.473***	-0.105	1.000								
(4) SIZE	-0.215**	-0.188**	-0.314***	1.000							
(5) EQUITYR	-0.054	0.003	0.117	-0.374***	1.000						
(6) COSTTOINCR	0.038	-0.086	0.013	-0.011	-0.165*	1.000					
(7) STATED	0.096	-0.177**	-0.052	0.571***	-0.434***	0.164*	1.000				
(8) LISTED	0.109	-0.193**	-0.105	0.478***	-0.102	-0.225***	0.223***	1.000			
(9) NPL	-0.213**	0.000	0.072	-0.061	0.076	0.075	-0.020	-0.156*	1.000		
(10) INFRATE	0.047	-0.077	0.089	-0.100	0.145*	0.036	0.000	-0.095	0.118	1.000	
(11) GDPGROWTH	0.034	0.056	-0.026	0.244***	-0.164*	-0.100	0.000	0.250***	-0.279***	-0.259***	1.000

Notes: *** p<0.01, ** p<0.05, * p<0.1.

Table 3. Women presence in senior roles (CEO, management team, board of directors) and Bank's Return on Assets.

Variables	**1**	**2**	**3**	**4**
C	-0.069	-0.085***	-0.080***	-0.075***
	(0.0242)	(0.023)	(0.025)	(0.027)
DR	**-0.013****			**-0.005**
	(0.001)	-	-	**(0.006)**
MR	**0.002**		**-0.000**	
	(0.005)	-	**(0.005)**	-
CEO	**0.008*****	**0.006*****		
	(0.003)	**(0.002)**	-	-
SIZE	0.004***	0.005***	0.005***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
EQUITYR	0.098***	0.106***	0.120***	0.120***
	(0.033)	(0.033)	(0.034)	(0.033)
COSTTOINCR	-.010***	-0.009***	-0.008**	-0.008**
	(0.003)	(0.003)	(0.003)	(0.003)
STATED	-0.006***	-0.008***	-0.007**	-0.007**
	(0.003)	(0.003)	(0.003)	(0.003)
LISTED	0.003	0.002	0.003	0.003
	(0.002)	(0.002)	(0.002)	(0.002)
NPL	-0.194***	-	-0.146**	-0.151**
	(0.064)	0.1676263***	(0.064)	(0.064)
		(0.063)		
INFRATE	-0.028	-0.041	-0.026	-0.020
	(0.078)	(0.078)	(0.078)	(0.078)
GDPGROWTH	0.074	0.061	0.084	0.090
	(0.092)	(0.093)	(0.094)	(0.093)
No. of observations	140	140	140	140
R-squared	0.367	0.378	0.370	0.369

Notes: Standard errors are reported in parentheses; *, ** and *** denote significance at the 10, 5 and 1% significance levels.

profitability for banks. The coefficients between the percentage of women on boards (DR) and bank profitability ROA or ROE are negative at -0.014 and -0.133 respectively, and statistically significant at 5% level. Our finding is consistent with Wellalage & Locke (2013), Farrell & Hersch (2005), suggesting that when it comes to working in a male-dominant group, Vietnamese women are still likely influenced by the Confucian culture that has deeply rooted in social relations in Vietnam, where a woman tends to be more of a follower than a leader, being more submissive and less critical, which might cause the limited contribution of women to banks performance (Vu, 2019). The results remain consistent with different measurements of bank profitability (ROA, ROE) as well as different model specifications. Overall, the models moderately fit the data set with R-squared values across different models' specification are approximately 35%, indicating that 35% of the variation of ROA and ROE can be explained by the explanatory variables in the models.

3.4 Female leaders and Bank stability

Table 5 shows the impact of gender diversity on bank stability. Specifically, the results show that banks with female CEOs have higher Z-score, hence, tend to be more stable. The coefficient between female CEO and Z-score is statistically significant at 1 percent level. This finding supports the arguments by Faccio et al. (2016), Skała and Weill (2015), Palvia et al. (2009) but different from Adams and Funk (2012) and Berger et al. (2014).

Table 4. Women presence in senior roles (CEO, management team, board of directors) and Bank's Return on Equity.

Variables	**1**	**2**	**3**	**4**
C	0.023	-1.113***	-1.019***	-0.858
	(0.11)	(0.278)	(0.281)	(0.300)
DR	**-0.133****			**-0.111***
	(-2.55)			(**0.067**)
MR	**0.0310**		**0.008**	
	(0.64)		(**0.067**)	
CEO	**0.095*****	**0.052***		
	(4.36)	**(0.028)**		
SIZE	0.036***	0.065***	0.058***	0.049***
	(3.11)	(0.014)	(0.014)	(0.015)
EQUITYR	-0.625**	-0.096	-0.007	-0.037
	(-2.17)	(0.406)	(0.410)	(0.407)
COSTTOINCR	-0.625***	-0.042	-0.040	-0.036
	(-21.58)	(0.042)	(0.043)	(0.042)
STATED	-0.051**	-0.081***	-0.073	-0.061*
	(-2.11)	(0.029)	(0.030)	(0.032)
LISTED	0.031**	0.022	0.026	0.03
	(2.02)	(0.020)	(0.021)	(0.021)
NPL	-0.791	-1.910**	-1.731**	-1.905**
	(-1.44)	(0.791)	(0.795)	(0.791)
INFRATE	0.089	0.111	0.247	0.368
	(0.14)	(0.993)	(1.003)	(0.983)
GDPGROWTH	0.373	1.553	1.809	1.994*
	(0.47)	(1.160)	(1.167)	(1.153)
No. of observations	140	140	140	140
R-squared	0.352	0.357	0.346	0.343

Notes: Standard errors are reported in parentheses. *, ** and *** denote significance at the 10, 5 and 1% significance levels.

Banks with more women in management team tend to increase Z-score, however, the coefficient is statistically insignificant, suggesting that more females in the management team does not necessarily mean higher bank stability. Additionaly, the presence of women in the board of directors tends to decrease banks' stability. As mentioned before, this finding can be associated with the issue of "tokenism" where low presence of women in the board means women can be "categorized, stereotyped, ignored, and excluded", which can have a negative impact on their performance (Konrad et al., 2008). The results are also consistent with different model specifications. Overall, the models fit the data set quite well, with R-squared values across different models' specifications are around 88%, indicating that 88% of the variation of Z-score can be explained by the explanatory variables in the models.

4. Concluding remarks

This study presents further empirical evidence on the impact of women presence on board and bank performance and bank stability. Our study suggests that female CEOs tend to improve bank performance and bank stability. However, we find no evidence supporting the argument that the presence of women in the management team can lead to better profitability or stability. Interestingly, we find that the presence of female directors on board of directors can decrease bank profitability and increase the vulnerability for the banks.

The above findings suggest that Vietnamese banks might want to consider the policy that supports the presence of a female CEO for better performance and stability.

Table 5. Women presence in senior roles (CEO, management team, board of directors) and Bank stability.

Variables	**1**	**2**	**3**	**4**
C	-48.36	-92.568*	-66.513	-35.553*
	(53.884)	(51.452)	(54.334)	(57.402)
DR	**-41.38*** **			**-20.742**
	(13.029)			**(12.850)**
MR	**7.758**		**-0.279**	
	(12.209)		**(12.872)**	
CEO	**22.43*** **	**14.782*** **		
	(5.695)	**(5.280)**		
SIZE	6.590**	8.853***	7.031**	5.369**
	(2.764)	(2.665)	(2.769)	(2.970)
EQUITYR	2189.3***	2212.859***	2238.134***	2232.364***
	(74.567)	(76.056)	(78.715)	(78.104)
COSTTOINCR	-81.50***	-83.083***	-82.410***	-81.985***
	(7.868)	(8.071)	(8.317)	(8.156)
STATED	-9.191	-12.7450*	-10.674*	-8.346
	(5.592)	(5.516)	(5.901)	(6.096)
LISTED	8.259**	5.074	6.178	7.6450*
	(3.873)	(3.818)	(4.059)	(4.056)
NPL	-200.2	-101.760	-60.253	-91.451
	(147.272)	(148.879)	(152.163)	(151.720)
INFRATE	38.12	-3.202	32.843	57.306
	(182.006)	(188.027)	(191.353)	(188.781)
GDPGROWTH	142.9	129.105	194.865	231.235
	(213.657)	(218.939)	(223.211)	(221.188)
No. of observations	140	140	140	140
R-squared	0.891	0.888	0.883	0.883

Notes: Standard errors are reported in parentheses. *, ** and *** denote significance at the 10, 5 and 1% significance levels.

Acknowledgements

This research is funded by the University of Economics Ho Chi Minh City (Vietnam) under the registered project 2021-05-10-0352.

References

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics, 94*(2), 291-309. doi: http://dx.doi.org/10.1016/j.jfineco.2008.10.007

Adams, R. B., & Funk, P. (2012). Beyond the glass ceiling: does gender matter? *Management science, 58*(2), 219-235.

Adams, R. B., & Ragunathan, V. (2017). Lehman sisters. *Available at SSRN 3046451*.

Al-Fehemi, A., & Msiri, A. M. (2014). Women in China, Korea and Vietnam. *World Scientific News*, (2), 39-43.

Berger, A. N., Kick, T., & Schaeck, K. (2014). Executive board composition and bank risk taking. *Journal of Corporate Finance, 28*, 48-65.

Boyd, J. H., Graham, S. L., & Hewitt, R. S. (1993). Bank holding company mergers with nonbank financial firms: Effects on the risk of failure. *Journal of Banking & Finance, 17*(1), 43-63.

Chen, S., Lin, B., Wang, Y., & Wu, L. (2008). Cross-listing, corporate governance and operating performance: evidence from the Chinese market. *Advances in Business Management and Forecasting, 5*, 19-46.

Del Prete, S., & Stefani, M. L. (2015). Women as "gold dust": Gender diversity in top boards and the performance of Italian banks. *Economic Notes*, e12183.

Do, V. H. T., & Brennan, M. (2015). Complexities of Vietnamese femininities: A resource for rethinking women's university leadership practices. *Gender and Education, 27*(3), 273-287.

Faccio, M., Marchica, M.-T., & Mura, R. (2016). CEO gender, corporate stability, and the efficiency of capital allocation. *Journal of Corporate Finance, 39*, 193-209. doi: http://dx.doi.org/10.1016/j.jcorpfin.2016.02.008

Farrell, K. A., & Hersch, P. L. (2005). Additions to corporate boards: the effect of gender. *Journal of Corporate Finance, 11*(1–2), 85-106. doi: http://dx.doi.org/10.1016/j.jcorpfin.2003.12.001

García-Meca, E., García-Sánchez, I. M., & Martínez-, J. (2015). Board diversity and its effects on bank performance: An international analysis. *Journal of Banking & Finance*, 53, 202-214.

Hays, F. H., Day, N., & Belanus, S. (2011). Credit union performance: does CEO gender matter? *Journal of Behavioral Studies in Business, 4*, 1-14.

Huong, G. (2020). Role of female employees in banking sector. The Banking Reviews. Retrieved at https://thoibaonganhang.vn/khang-dinh-vai-tro-vi-the-can-bo-nu-trong-hoat-dong-ngan-hang-109234.html. Retrieved date: 21 January 2021.

IFC & VIOD (2020). *SEAN Corporate Governance Scorecard (ACGS)*. Retrieved at https://viod.vn/en/2020/05/04/vietnamese-companies-have-made-remarkable-improvements-as-seen-in-results-of-asean-corporate-governance-scorecard-acgs-2019/. Date of retrieve: 20 January 2021

Jalbert, T., Jalbert, M., & Furumo, K. (2013). The relationship between CEO gender, financial performance and financial management. *Journal of Business and Economics Research, 11*(1), 25-33.

Khan, W. A., & Vieito, J. P. (2013). Ceo gender and firm performance. *Journal of Economics and Business, 67*, Ferrero55-66. doi: http://dx.doi.org/10.1016/j.jeconbus.2013.01.003

Kilic, M. (2015). The Effect of Board Diversity on the Performance of Banks: Evidence from Turkey. *International Journal of Business and Management, 10*(9), p182.

Konrad, A. M., Kramer, V., & Erkut, S. (2008). Critical Mass:: The Impact of Three or More Women on Corporate Boards. *Organizational Dynamics, 37*(2), 145-164. doi: http://dx.doi.org/10.1016/j.orgdyn.2008.02.005

Lam, K. C. K., McGuinness, P. B., & Vieito, J. P. (2013). CEO gender, executive compensation and firm performance in Chinese-listed enterprises. *Pacific-Basin Finance Journal, 21*(1), 1136-1159. doi: http://dx.doi.org/10.1016/j.pacfin.2012.08.006

Lee, J. Y., & Kim, D. (2013). Bank performance and its determinants in Korea. *Japan and the World Economy*, *27*, 83-94.

Mathuva, D. (2009). Capital adequacy, cost income ratio and the performance of commercial banks: The Kenyan Scenario. *The International Journal of Applied Economics and Finance, 3*(2), 35-47.

McKinsey and Company (2019). Advancing gender equality in Vietnam: A crucial balancing act. Retrieved at https://www.mckinsey.com/vn/our-insights/advancing-gender-equality-in-vietnam-a-crucial-balancing-act. Retrieved date: 20 January 2021.

Ng, A., Yuce, A., & Chen, E. (2009). Determinants of state equity ownership, and its effect on value/performance: China's privatized firms. *Pacific-Basin Finance Journal, 17*(4), 413-443.

Nguyen, T., Locke, S., & Reddy, K. (2015). Does boardroom gender diversity matter? Evidence from a transitional economy. *International Review of Economics & Finance*, *37*, 184-202.

Nkuutu, G., Ntayi, J.M., Nkote, I.N., Munene, J. and Kaberuka, W. (2020), Board governance quality and risk disclosure compliance among financial institutions in Uganda, *Journal of Asian Business and Economic Studies*, Vol. 28 No. 1, pp. 64-81. https://doi.org/10.1108/JABES-04-2020-0036

Palvia, A., Peni, E., & Vähämaa, S. (2009). Do Female CEOs and Chairs Constrain Bank Stability? Evidence from the Financial Crisis☆. *Risk*, *174*(7), 13-41

Palvia, A., Vähämaa, E., & Vähämaa, S. (2015). Are female CEOs and chairwomen more conservative and risk averse? Evidence from the banking industry during the financial crisis. *Journal of Business Ethics*, 131(3), 577-594.

Pham, A. D., & Hoang, A. T. (2019). Does female representation on board improve firm performance? A case study of non-financial corporations in Vietnam. In *International Econometric Conference of Vietnam* (pp. 497-509). Springer, Cham.

Rhode, D. L., & Packel, A. K. (2014). Diversity on corporate boards: How much difference does difference make. *Delaware Journal of Corporate Law*, *39*, 377-426

Rose, C. (2017). The relationship between corporate governance characteristics and credit risk exposure in banks: implications for financial regulation. *European Journal of Law and Economics*, *43*(1), 167-194.

Schulz-Strelow, M. (2015). Women on Board: Female Supervisory Board Members in Shareholder Circles and Their Role in Changing Risk Culture and Sustainable Management. In K. Wendt (Ed.), *Responsible Investment Banking: Risk Management Frameworks, Sustainable Financial Innovation and Softlaw Standards* (pp. 445-451). Cham: Springer International Publishing.

Setiyono, B., & Tarazi, A. (2018). Does diversity of bank board members affect performance and risk? Evidence from an emerging market. In *Corporate Governance in Banking and Investor Protection* (pp. 185-218). Springer, Cham.

Skała, D., & Weill, L. (2015). *Does CEO Gender Influence Bank Risk?* Paper presented at the 32èmes Journées Internationales Monnaie Banque Finance.

Shahid, M.N., Abbas, A., Latif, K., Attique, A. and Khalid, S. (2020), The mediating role of board size, philanthropy and working capital management between basic corporate governance factors and firm's performance, *Journal of Asian Business and Economic Studies*, Vol. 27 No. 2, pp. 135-151. https://doi.org/10.1108/JABES-07-2018-0050

Sumbul Sajjad, K. R. (2015). The Relationship Between Board Diversity and Firm Performance: Evidence from the Banking Sector in Pakistan. *IUP Journal of Corporate Governance*, *14*(3), 25-47.

Süssmuth-Dyckerhoff, C., Wang, J., & Chen, J. (2012). Women matter: an Asian perspective. *McKinsey and Company*.

Umar, M., Maijama'a, D., & Adamu, M. (2014). Conceptual exposition of the effect of inflation on bank performance. *Journal of World Economic Research*, *3*(5), 55-59.

UNIDO. (2010). *Gender related obstacles to Vietnamese women entrepreneurs*. Vienna, Austria: United Nations Industrial Development Organization.

Vu, H. T. (2019). Asian women leadership: A cross-national and cross-sector comparison Chin-Chung Chao and Louisa Ha (Eds.) Abingdon: Routledge, 2019. *Female leadership in Vietnam*.

Ward, A. M., Wylie, J., & Hamill, P. (2011). Stronger Boards: Are Women the Answer?. *Accountancy Ireland*, *43*(5), 26-29.

Wei, Z., & Varela, O. (2003). State equity ownership and firm market performance: evidence from China's newly privatized firms. *Global Finance Journal*, *14*(1), 65-82.

Wellalage, N., & Locke, S. (2013). Women on board, firm financial performance and agency costs. *Asian Journal of Business Ethics, 2*(2), 113-127. doi: 10.1007/s13520-012-0020-x

World Bank. (2019). Vietnam: Strengthening Banking Sector Soundness and Development.

Wu, Y., & Truong, C. (2013). Female Bank Executives: Impact on Performance and Risk Taking. *Available at SSRN 2406492*.

Yang, S., Li, Z., Ma, Y., & Chen, X. (2018). Does electronic banking really improve bank performance? Evidence in China. *International Journal of Economics and Finance, 10*(2), 82-94.