

## Women on Board and Firm Value at Different Management Levels: The Moderating Role of Independent Directors

Tahir Saeed Jagirani<sup>1</sup>, Sarmad Ejaz<sup>2</sup>, Madiha Hussain<sup>3</sup>, Shermeen Hasan<sup>4</sup>, Csaba Ballint Illes<sup>5</sup>, Md Billal Hossain<sup>6</sup>

### Abstract

*The firm value deteriorated after the global financial crisis of 2007–2008. It is important to examine the relationship between women directors and firm values. This study investigates the moderating effect of independent directors on the relationship between women directors and firm value in listed banks in Pakistan. This study is based on half-yearly secondary data from 2016 to 2021. Panel data estimation techniques were used for the analysis. The study used Tobin's  $Q$  as a dependent variable and women directors as independent variables. The size of the bank and age were employed as control variables, while independent directors were used as a moderators.*

*The results revealed a low proportion of independent and women directors on the boards of listed banks in Pakistan. Independent directors have a moderating impact on the relationship between women directors and firm value. The results also revealed that there is a positive relationship between the size of the bank, age of the bank, women directors, independent directors, and Tobin's  $Q$ . The study concluded that banks in Pakistan do not strictly focus on considering the nomination of independent and women directors on boards, which exposes a risk of making financial decisions that are biased and decreasing firm value.*

**Keywords:** Firm value, women directors, independent directors, Tobin's  $Q$ , bank size, bank age.

### INTRODUCTION

The European Commission began to promote greater equality between men and women in the workplace. The commission has recommended considering the nomination of women directors on corporate boards. These initiatives encouraged the quota rules to secure the representation of women. The agency, resource dependence, and stakeholder theories emphasized that the nomination of women directors on the board may impact firm value. The corporate board with a mix of men and women has the ultimate impact on the firm's decision-making and plays a supervisory role in monitoring the best practices (Goncalves, Gaio, and Rodrigues, 2022). Women on board in the boardroom have encouraged global reforms of corporate governance. It was first discussed in the revised corporate governance code, United Kingdom 2012. (Doldor et al., 2012). The representation of women on the board ensures that there is no diversity within the firm,

---

<sup>1</sup> School of Economics, Finance and Banking, University Utara Malaysia (UUM), Malaysia

<sup>2</sup> Department of Management Sciences, University of Okara, Pakistan

<sup>3</sup> Department of Sociology, International Islamic University, Islamabad, Pakistan

<sup>4</sup> Faculty of Management Sciences, Riphah International University, Islamabad, Pakistan

<sup>5</sup> Doctoral School of Management and Business Administration, John von Neumann University, 1117 Budapest, Hungary

<sup>6</sup> Business Management and Marketing Department, School of Business and Economics, Westminster International University in Tashkent (WIUT), Tashkent, 100047, Uzbekistan

which is related to board composition, according to the corporate governance literature. To ensure that the board of directors effectively protects the stakeholders' current research has shown the importance of board composition (Claessens and Yurtoglu, 2013). The banking sector, where corporate governance aims to protect the entire financial system and the wealth of the shareholders, is particularly pertinent to this study. Bank boards are specifically responsible for defending the interests of various stakeholders (Birindelli, Chiappini and Savioli, 2020).

Since it obstructs the banking system, failure of the board of directors has serious repercussions for the banking industry since it may lead to financial instability and a decline in firm value (Claessens and Yurtoglu, 2013; Jagirani, Chee, and Kosim 2023). Shareholder wealth has been directly correlated with firm value. The wealth of a firm's stockholders also rises when its value increases. The main goal of the business concern is to maximize firm value. The firms must take actions that can raise the market value of shares to optimize firm value. The global financial crisis warned the banking sector to remain more vigilant especially in the optimization of equity shares due to the fact the share prices were negatively affected and produced a decline in stock returns and market capitalization, which in turn damaged firm value (Liu, Uchida et al., 2012; Saeed, Chee, and Kosim 2023).

This study intends to assess the impact of women directors on the boards of listed banks in Pakistan. Women directors must be appropriately nominated on corporate boards to benefit from their skills and experience. The contribution of women directors is even greater when they are independent. The monitoring role of independent women directors is recognized by earlier studies such as (Ramly et al., 2017; Khan and Wang, 2021; Fama and Jensen, 1983; Hermalin and Weisbach, 2003; Anderson et al., 2004; Fields et al., 2010). This study employs secondary data based on 560 observations from 2009 to 2021 of listed banks of Pakistan. Our study adds to the body of knowledge in two different ways. First, by examining the proper placement of women directors on the board using the percentage of independent directors as the moderating variable, we introduce new perspectives on the role of women directors in listed banks of Pakistan. Our findings imply that women directors add value to the banking sector of Pakistan. Second, we demonstrate the importance of independent directors in maximizing the contribution of women directors to better firm value. To the best of our knowledge, there is a scarcity of literature on the women on board, firm value, and moderating role of independent directors. The available studies are mainly focusing on women directors and the firm value of listed financial and non-financial firms. The earlier studies such as Yasser (2012); and Khan, Tanveer, and Malik (2017) examined the effect of female directors on firm value in listed companies in Pakistan, but their findings were inconclusive. Secondly, earlier studies were on listed firms of Pakistan not on listed banks.

## **LITERATURE REVIEW**

Agency theory reveals that agency conflict occurs between agent and principal when there is asymmetrical of information between them (Jensen and Meckling, 1976). Agency theory also supports that biased decisions made by the corporate board could lead to affect firm value (Ramly et al., 2017). Agency theory supports the idea that having more women on the board increases firm value since a balanced board has both men and women directors (Wagana & Nzulwa, 2017). Women are different from men in terms of experience, communication, and educational background. They are also less power-oriented. Hence their presence on board could support decision-making. Women have the capability to create interactions with different stakeholders and shareholders (Liao et al., 2014; Ramly et al., 2017; Adams and Funk, 2012; Tahir Saeed and Hira Tahir, 2015). Women are more engaged, involved, and committed in professional interactions with corporate stakeholders. This inevitably aids in developing long-term relationships

between stakeholders, clients, and employees, improving the prospects for growth in firm value (Nielsen and Huse, 2010; Liao et al., 2014; Jean et al., 2014). Earlier empirical studies such as Nguyen et al. (2014); Agyemang-Mintah and Schadewitz (2019); Isidro and Sobral (2015), and Vo and Bui (2017) found a positive relationship between women directors and firm value. Some studies found mixed findings, such as Jurkus et al. (2011) found a negative relationship and Mohan and Chen (2004) found no relationship between women directors, firm performance, and firm value.

Independent directors bring more impartiality to decision-making when they are part of a corporate board. They make decision-making more equitable, which could help increase a firm's value. The function of independent directors is enhanced when a firm makes choices that aim to increase shareholder wealth. The firms must consider the required skills of independent directors before appointing them to the board (Thenmozhi and Sasidharan, 2020). The presence of independent directors on the board suggests that it may be better equipped to keep top executives' influence away from its decisions and restrict them from misusing their position. Hence, corporate governance changes have been implemented worldwide to enhance the board's oversight function by ensuring that independent directors make up most of the boards. This aids in lowering the principal-agent problem that deters the firm's possibilities for long-term growth (Vintila and Gherghina, 2013; Fallatah and Dickins, 2012).

According to the agency theory, independent board directors perform a stronger monitoring job than executive directors since they have fewer conflicts of interest than managers because they do not work directly with the top management. Additionally, independent directors might contribute unbiased and different points of view to the board's deliberations. They come from diverse backgrounds, and their extensive experience and talents enable them to offer unique viewpoints to address managerial difficulties and strategic issues. Thus, the board of directors are exceptionally skilled at keeping an eye on top management and minimizing the agency's problem. We anticipate a favorable association between independent directors and firm value (Jensen and Meckling, 1976; Fama and Jensen, 1983). A greater percentage of independent directors on bank boards can increase the reporting system's transparency, which is essential to the sector's safety and soundness. In Pakistan, banking regulators and corporate governance regulations enforce a regulation requiring a minimum ratio of independent directors to be appointed to the boards due to the importance placed on the function of independent directors and their potential contributions. The earlier empirical findings of Pathan and Faff (2013); Jermias and Ghani (2014) found that independent directors on the board decrease bank performance. In contrast, the findings of other empirical studies such as Black et al. (2006); Busta (2007); de Andres and Vallelado (2008); Pathan et al. (2007), and Tanna et al. (2011) found that the presence of independent directors enhance firm performance and firm value. Based on the agency theory, this study predicts that having women directors and independent directors on the board will increase the firm's value. Shareholders trust the board of directors' choices. Hence, the studies of corporate governance and the efforts of regulators to increase the supervision mechanisms within a corporation mostly concentrate on the make-up and qualities of the board. Independent directors are crucial components of the board of directors since they can regulate managerial decision-making (Masulis, 2013). Global corporate governance codes place a strong focus on independent directors. The agency theory also holds that a more diverse board is better for the board's decision-making and oversight functions. A higher percentage of women directors contributes to the diversity of perspectives, knowledge, and problem-solving methods in bank boardrooms, improving the quality of decision-making and strategy creation (Lucas-Pérez et al., 2014).

Given this context, we contend that adding independent and women directors could further increase firm value. The solid qualities of women directors will support the independent directors' monitoring responsibilities and the strong qualities of independent

directors will support women directors. Considering this, we propose that while hiring women as directors will improve firm value, establishing them as independent directors could further strengthen this beneficial effect. Because the board of directors may be better equipped to withstand the influence of the top executives on its decisions and to keep them from misusing their position. The selection of independent women directors suggests a better monitoring process. Due to their tendencies to be more comprehensive and complete in their thinking processes, tenacious in addressing problems, more sensitive to changes in the corporate environment, as well as more benevolent and devoted, women directors may function as independent directors more effectively (Darmadi, 2013; Lucas-Pe´rez et al., 2014). Additionally, we believe that for corporate governance to be effective, it should have a variety or mix of supervision tools. Each mechanism strengthens and completes the others' functions. In this study, we hypothesize that independent directors moderate the connection between women on the board and firm value. The independent directors' capacity for supervision may help women directors. We anticipate that the results of our study will give vital guidance to policymakers who work to raise the proportion of women in corporate boardrooms to improve firm value.

To accomplish the research objectives, the following hypotheses are developed:

H1: Women on board enhance firm value.

H2: The presence of independent directors on the board increases firm value.

H3: Women directors on board are more likely to affect firm value positively when banks appoint independent women directors.

## **METHODS OF RESEARCH**

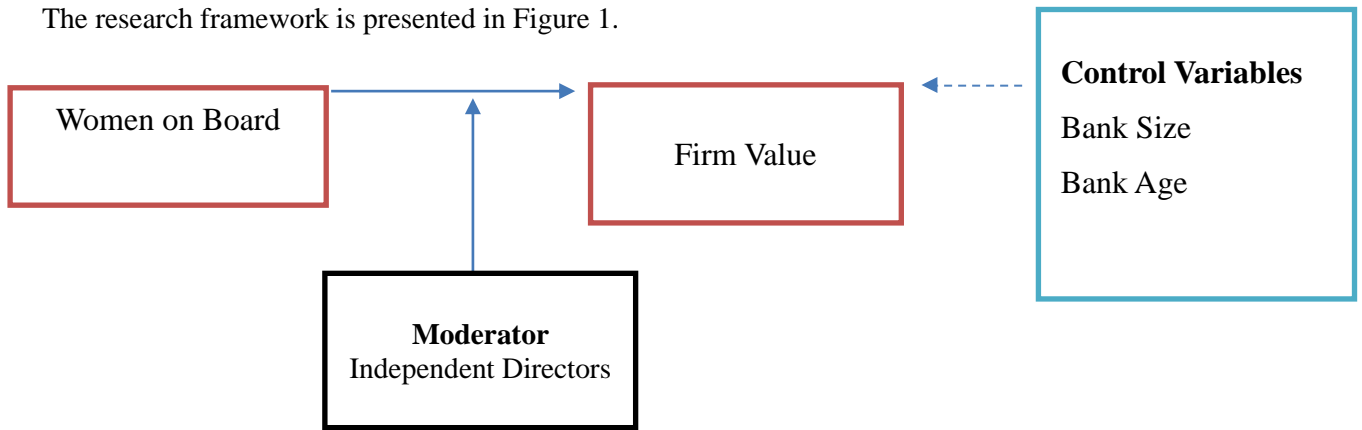
The sample of this study is based on half-yearly data of listed banks in Pakistan from 2016 to 2021 with 242 observations as presented in table 1. This study employs panel data estimation techniques for analysis.

Table 1 The Half-Yearly Observations of Listed Banks of Pakistan

Year	Year-Wise Total Listed Banks	Half-Yearly Observations
2016	21	42
2017	20	40
2018	20	40
2019	20	40
2020	20	40
2021	20	40
Total Observations		242

Source: State Bank of Pakistan, [www.sbp.org.pk](http://www.sbp.org.pk)

The research framework is presented in Figure 1.



The following model is developed for analysis and to test the hypotheses.

$$\text{Firm Value}_{jt} = \beta_0 + \beta_1 \text{Tobin's } Q_{jt} + \beta_2 \text{WDB}_{jt} + \beta_4 \text{SOB}_{jt} + \beta_5 \text{AOB}_{jt} + \epsilon_{jt} \quad \text{Eq. 1}$$

Where:

- Firm Value<sub>jt</sub> = Firm Value of jth bank at time t
- jt = jth bank at time t
- WDB<sub>jt</sub> = Women Director on Board
- ID<sub>jt</sub> = Independent Director
- SOB<sub>jt</sub> = Size of Bank
- AOB<sub>jt</sub> = Age of Bank
- ε<sub>jt</sub> = error term of jth bank at time t

$$\text{Tobin's } Q_{jt} = \beta_0 + \beta_2 \text{WDB}_{jt} + \beta_3 \text{ID}_{jt} + \beta_4 \text{SOB}_{jt} + \beta_5 \text{AOB}_{jt} + \beta_6 \text{WDB} * \text{ID} + \beta_7 \text{SOB} * \text{ID} + \beta_8 \text{AOB} * \text{ID} + \epsilon_{jt} \quad \text{Eq. 2}$$

Where:

- WDB = Women Directors on Board
- ID = Independent Directors
- SOB = Size of Bank
- AOB = Age of Bank

- WDB\*ID
  - SOB\*ID
  - AOB\*ID
- } Interaction Terms

Table 2 Summary of Variables and Measurements

Variables	Code	Measurements	Sources
Tobin's Q	Tobin's Q	Equity + Book value /Book value of total assets	Isidro & Sobral (2015)
Women Director on Board	WDB	% women directors on board	Isidro & Sobral (2015);
Independent Directors	ID	% of independent directors on	Vintila & Gherghina (2013);

		the board	Fallatah & Dickins (2012)
Size of Bank	SOB	The natural logarithm of total assets	Mishra & Kapil (2018);
Age of Bank	AOB	Number of years since the establishment	Nazir & Afza (2018)

## RESEARCH RESULTS

### Descriptive Statistics, Model Fitness, and Regression Results

According to the descriptive statistics in Table 3, Pakistan's listed banks are undervalued, as indicated by the lower mean of Tobin's Q of 0.142. It shows that the stock's value fluctuates between being overvalued and being undervalued because of Tobin's Q's gradual decline. In Pakistan, there are only 3.899, or 4%, women directors on the boards of listed banks in Pakistan. This is a relatively low number. It implies that banks do not consider the appointment of women directors on board. Further, descriptive statistics also reveal that there are only 22.89% independent directors on the board. The listed banks have average total assets of Rs. 19.8 trillion and USD 86 million. However, the average age of listed banks is 38 years.

Table 3. Descriptive Statistics

	TOBIN'S Q	WDB	ID	SOB	AOB
Mean	0.157	3.899	22.89	0.944	0.861
Median	0.042	0.000	25.00	1.000	1.000
Maximum	1.700	25.00	71.00	1.000	1.000
Minimum	0.000	0.000	0.000	0.000	1.000
Std. Dev	0.182	6.052	17.97	0.253	0.195

The model fitness test, often known as the goodness of fit test, is shown in Table 4. With an R-square of 0.677, the regression model successfully explained the variability seen in the target variable. In addition, 67.7 percent of R-square results show that the data fits the regression model.

Table 4. Test of Goodness of Fit

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate
1	0.823a	0.677	0.624	84.45

a. Dependent Variable: Tobin's Q Note:  $p < 0.05$

Table 5 presents the regression results. All variables are statistically significant which shows that all variables affect firm value in listed banks of Pakistan.

Table 5. Regression Results of Financial Risks and Firm Value

Variables	Coefficient	t-statistics	p-values
WDB	0.321	3.365	0.012
ID	0.321	2.232	0.000
SOB	0.982	4.303	0.013
AOB	0.335	6.125	0.020

--	--	--	--

a. Dependent Variable: Tobin's Q Note:  $p < 0.05$

Table 6 reveals the association of dependent, independent, control and moderating variables. Tobin's Q has a positive association with all variables which indicates that increase in women on board and independent directors enhance firm value in listed banks of Pakistan.

Table 6. Pearson Correlation

Variables	Tobin's Q	WDB	ID	SOB	AOB
Tobin's Q	1	0.283	0.223	0.367	0.374
WDB	0.283	1	0.192	0.243	0.333
ID	0.223	0.192	1	0.499	0.512
SOB	0.367	0.243	0.499	1	0.322
AOB	0.374	0.333	0.512	0.322	1

Note: \* $P < 0.05$

Table 7 The Moderating Effects of Independent Directors and Women Directors

Variables	Model 1		Model 2		Model 3	
	$\beta$	p-value	$\beta$	p-value	$\beta$	p-value
ID			0.217	0.011	0.223	0.021
Tobin's Q	0.043	0.016	0.045	0.017	0.176	0.001
WDB	0.029	0.569	0.029	0.612	0.771	0.020
SOB	0.039	0.432	0.498	0.367	0.193	0.000
AOB	0.0213	0.026	0.051	0.008	0.088	0.010
Tobin's Q*ID					0.333	0.011
WDB*ID					0.165	0.002
SOB*ID					0.144	0.004
AOB*ID					0.981	0.001

$p < 0.05$ .

Table 7 indicates that all interaction terms are found to be significant which reveal the moderating effects of independent directors on the relationships of women directors and firm value in listed bank of Pakistan.

## CONCLUSION AND RECOMMENDATION

The study's findings provide credence to the agency theory. The results show that listed banks in Pakistan are facing sustained declines in their stock prices, which causes the stock's value to change from being inflated to being undervalued. The findings of this study are consistent with the empirical findings of Nguyen et al. (2014); Isidro and Sobral (2015), Vo and Bui (2017), Tanna et al. (2011) and inconsistent with the findings of

Jurkus et al. (2011); Chen (2004) and Jeremias and Ghani (2014). The results also show that listed banks have a low percentage of independent and women directors on their boards, which suggests that banks do not consider the appointment of women directors. The world faced several difficulties because of the global financial crisis in 2006–2007, including Pakistan. Thus, increasing corporate value is of more significance to shareholders. As a result, Pakistan's banking industry must develop and practice good risk management strategies emphasizing raising firm value. The results of this study provide empirical proof that independent and women directors are properly selected to increase firm value in banks. This study investigated how independent directors affected the relationship between women directors and the firm value of Pakistan's listed banks. The independent directors are included in this study as moderators to produce a more reliable empirical model. The results of this study show that listed banks have a low proportion of independent and women directors on their boards, indicating that banks may not consider the nomination of women directors. The findings also revealed that independent directors had moderating impacts on the associations between women directors and firm value in Pakistan's listed banks. Based on the empirical findings of this study, it is determined that banks in Pakistan do not strictly focus on considering the nomination of independent and women directors on boards, which exposes a risk of making prejudiced financial decisions that may decrease firm value. This study has some limitations that could be addressed in future research. To examine the more innovative findings, this investigation could be expanded by considering the banking sectors of developing and developed nations.

Availability of data and material: will be available on reasonable request.

Competing interests: None to declare.

Funding: This research received no external funding.

Author Contribution: Authors equally contributed to the analysis and writing of this publication.

Compliance with Ethical Standards

A Disclosure / Conflict of Interest Statement

- None of the authors of this paper have a financial or personal relationship with other people or organizations that could inappropriately influence or bias the paper's content.
- It is to specifically state that “No Competing interests are at stake and there is No Conflict of Interest with other people or organizations that could inappropriately influence or bias the paper's content.

Ethical Procedure

This manuscript has been prepared according to the generally accepted moral standards of conduct, and the following is being certified/declared true. As a researcher and along with co-authors of the concerned field, the paper has been submitted with full responsibility, following the due ethical procedure, and there is no duplicate publication, fraud, or concerns about animal or human experimentation.

Author contributions: Conceptualization, TSJ, MBH and SE.; methodology, CBI, MBH, SE, and SH.; software, TSJ, MH and SE; validation, MBH and CBI; formal analysis, TSJ, SE, MH and SH., investigation, CBI, SE and MBH; resources, TSJ, SE and SH; Data Curation, MH, CBI, and SE; writing-original draft—TSJ, SE, and MH., writing—review and editing, MBH, TSJ, and SE; visualization, MH and CBI; supervision, MBH; project administration, CBI and SE; funding acquisition, CBI.

All authors: have read and agreed to the published version of the manuscript.



## References

- Adams RB, Funk P (2012) Beyond the glass ceiling: does gender matter? *Manag Scien* 58(2):219–235. <https://doi.org/10.1287/mnsc.1110.1452>.
- Anderson RC, Mansi SA, Reeb DM (2004) Board characteristics, accounting report integrity, and the cost of debt. *J Account Econ* 37(3):315–342. <https://doi.org/10.1016/j.jacceco.2004.01.004>.
- Agyemang-Mintah, P., & Schadewitz, H. (2018). Audit committee adoption and firm value: evidence from UK financial institutions. *International Journal of Accounting & Information Management*, 26(1), 205-226. Available at: <https://doi.org/10.1108/IJAIM-04-2017-0048>.
- Birindelli, G., et al. (2020). "When do women on board of directors reduce bank risk?" *Corporate Governance: The International Journal of Business in Society* 20(7): 1307-1327. <https://doi.org/10.1108/CG-03-2020-0089>.
- Black B, Jang H, Kim W (2006) Does corporate governance predicts firm's market value? evidence for Korea. *J Law Econ Organ* 22:366–413. Available at: <https://doi.org/10.1093/jleo/ewj018>.
- Busta I (2007) Board effectiveness and the impact of the legal family in the European banking industry, FMA European conference, May 30–June 1, Barcelona, Spain. <http://www.fma.org/Barcelona/Papers/BustaFMA2007.pdf>. Retrieved 28 March 2014.
- Claessens S, Yurtoglu BB (2013) Corporate governance in emerging markets: a survey. *Emerg Mark Rev* 15:1–33. <https://doi.org/10.1016/j.ememar.2012.03.002>.
- Darmadi S (2013) Do women in top management affect firm performance? evidence from Indonesia. *Corp Gov* 13(3):288–304. Available at: <https://doi.org/10.1108/CG-12-2010-0096>.
- De Andres P, Vallelado E (2008) Corporate governance in banking: the role of the board of directors. *J Bank Finance* 32:2570–2580. Available at: <https://doi.org/10.1016/j.jbankfin.2008.05.008>.
- Doldor E, Vinnicombe S, Gaughan M, Sealy R (2012) Gender diversity on boards: the appointment process and the role of executive search firms. *Equal Hum Right Comm Rep* 2012:1–84.
- Fallatah, Y., & Dickins, D. (2012). Corporate governance and firm performance and value in Saudi Arabia. *African Journal of Business Management*, 6(36), 10025-10034. Available at: <https://DOI: 10.5897/AJBM12.008>.
- Fama EF, Jensen MC (1983) Separation of ownership and control. *J Law Econ* 26(2):301–325.
- Fields LP, Fraser DR, Subrahmanyam A (2010) Board quality and the cost of debt capital: the case of bank loans. Available at SSRN: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1590298](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1590298).
- Gonçalves, T. C., et al. (2022). "The Impact of Women Power on Firm Value." *Administrative Sciences* 12(3): 93. <https://doi.org/10.3390/admsci12030093>.
- Hermalin BE, Weisbach MS (2003) Boards of directors as an endogenously determined institution: a survey of economic literature. *Fed Reserve Bank N Y Econ Policy Rev* 9:7–26. <https://doi.org/10.3386/w8161>.
- Isidro, H., & Sobral, M. (2015). The effects of female on corporate boards on firm value, financial performance, and ethical and social compliance. *Journal of Business Ethics*, 132(1), 1-19. Available at: <https://doi.org/10.1007/s10551-014-2302-9>.
- Jagirani, T.S., Chee C, L., & Kosim, Z.B. (2023). "Relationship between financial risks and firm value: A moderating role of capital adequacy." *Investment Management and Financial Innovations*, 20(1), 2023. [https://doi.org/10.21511/imfi.20\(1\).2023.25](https://doi.org/10.21511/imfi.20(1).2023.25).
- Jean SKL, Lan LL, Rowley C (2014) Why might females say no to corporate board positions? the Asia Pacific in comparison. *Asia Pac Bus Rev* 20(4):513–522.
- Jensen MC, Meckling WH (1976) Theory of the firm: managerial behavior, agency costs and ownership structure. *J Financ Econ* 3(4):305–360.

- Jermias J, Ghani L (2014) The impact of board capital and board characteristics on firm performance. *Br Acc Rev* 46:135–153. Available at: <https://doi.org/10.1016/j.bar.2013.12.001>.
- Jurkus AF, Park JC, Woodard LS (2011) Women in top management and agency costs. *J Bus Res* 64:180–186.
- Khan, I., and M. Wang (2021). "Evaluating corporate performance and bank productivity in China: the moderating role of independent directors." *Sustainability* 13(6): 3193. <https://doi.org/10.3390/su13063193>.
- Khan, A., Tanveer, T., Malik, U. (2017). An empirical analysis of corporate governance and firm value: Evidence from KSE-100 Index. *Accounting 2017 Vol. 3 Issue 2 Pages 119-130*.
- Liao L, Luo L, Tang Q (2014) Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *Brit Account Rev.* doi:10.1016/j.bar.2014.01.002.
- Liu, C., Uchida, K., & Yang, Y. (2012). Corporate governance and firm value during the global financial crisis: Evidence from China. 21, 70-80. <https://doi.org/10.1016/j.irfa.2011.11.002>.
- Lucas-Pe' rez ME, Mi' n' guez-Vera A, Baixauli-Soler JS, Marti' n-Ugedo JF, Sa' nchez-Mari' n G (2014) Women on the board and managers pay: evidence from Spain. *J Bus Ethics* 129:1–16.
- Masulis R (2013) Independent director incentives: where do talented directors spend their limited time and energy? Working paper, University of New South Wales, and University of Alabama. Available at: <https://doi.org/10.1016/j.jfineco.2013.10.011>.
- Mishra, R. K., & Kapil, S. (2018). Board characteristics and firm value for Indian companies. *Journal of Indian Business Research*, 10 (1), pp. 2-32. Available at: <https://doi.org/10.1108/JIBR-07-2016-0074>.
- Mohan NJ, Chen CR (2004) Are IPOs priced differently based on gender? *J Behav Finance* 5(1):57–65.
- Nazir, M. S., & Afza, T. (2018). Does managerial behavior of managing earnings mitigate the relationship between corporate governance and firm value? Evidence from an emerging market. *Future Business Journal*, 4(1), 139-156. Available at: <https://doi.org/10.1016/j.fbj.2018.03.001>.
- Nielsen S, Huse M (2010) The contribution of women on boards of directors: going beyond the surface. *Corp Gov* 18:136–148.
- Nguyen T, Locke S, Reddy K (2014) Does boardroom gender diversity matter? Evidence from a transitional economy. *Int Rev Econ Finance.* doi:10.1016/j.iref.2014.11.022.
- Pathan S, Faff R (2013) Does board structure in banks really affect their performance? *J Bank Finance* 37(5):1573–1589. Available at: <https://doi.org/10.1016/j.jbankfin.2012.12.016>.
- Pathan S, Skully M, Wickramanayake J (2007) Board size, independence and performance: an analysis of Thai banks. *Asia Pac Financ Mark* 14(3):211–227.
- Ramly, Z., et al. (2017). "Women on boards and bank efficiency in ASEAN-5: the moderating role of the independent directors." *Review of Managerial Science* 11: 225-250. <https://doi.org/10.1007/s11846-015-0186-4>.
- Saeed, T., J., Chee Chee, L., & Kosim, Z. B. (2023). Determinants of the firm value of listed banks in Pakistan: A panel data approach. *Asian Economic and Financial Review*, 13(4), 241–250. <https://doi.org/10.55493/5002.V13I4.4764>.
- Tanna S, Pasiouras F, Nnadi M (2011) The effect of board size and composition on the efficiency of UK banks. *Int J Econ Bus* 18(3):441–462. Available at: <https://doi.org/10.1080/13571516.2011.618617>.
- Jagirani, T.S., & Jagirani, H.T. (2015). Relationship between Earning Per Share & Bank Profitability. *International Journal of Novel Research in Humanity and Social Sciences* (Vol. 2). [www.noveltyjournals.com](http://www.noveltyjournals.com).
- Thenmozhi, M., & Sasidharan, A. (2020). Does board independence enhance firm value of state-owned enterprises? Evidence from India and China. *European Business Review*, 32(5) pp. 785-800. Available at: <https://doi.org/10.1108/EBR-09-2019-0224>.

- Vintila, G., Gherghina, S. C. (2013). Board of directors independence and firm value: empirical evidence based on the bucharest stock exchange listed companies. *International Journal of Economics and Financial Issues*, 3(4), 885.
- Vo, T. T. A., Bui, P. N. K. (2017). Impact of Board Gender Diversity on Firm Value: International Evidence. *Journal of Economics and Development*, 19(1), 65-76. Available at: <https://ssrn.com/abstract=3049432>.
- Yasser, Q. R. (2012) Effects of female directors on firms' performance in Pakistan. *Modern Economy* 2012 Vol. 3 Pages 817-825. <https://ssrn.com/abstract=2183848>.