Does corporate governance affect risk management : An empirical study on new generation private banks of India

Farhin Anjum[1] Professor.Mohd. Shamim Ansari[2]
Dept. of Commerce, Aligarh Muslim University, Aligarh (UP), 202002 (India)
Dept. of Commerce, Aligarh Muslim University, Aligarh (UP), 202002 (India)
Email: anjumfar20@gmail.com drshamimansari@gmail.com

Abstract
Purpose: Risk management and Good Corporate Governance go hand in hand, providing a means to investigate. The study aims to analyze how Corporate Governance affects the risks addressed by BASEL II standards on New Generation Private Banks of India. **Research Methodology**: Regression and panel data analysis was used to test the hypotheses and the proposed model.This study covered 7 banks for the period 2011 to 2020. **Findings:**The findings indicate that board size has a substantial impact on Market risk but a negligible impact on Credit risk and Operational risk. Additionally, we found that board independence has a negligible impact on credit, market, and operational risks. A similar finding was made for the Independence of the Audit Committee, which has a negligible effect on the risks of the Bank that exhibit distinct characteristics. **Practical Implication:** The study shows how Corporate Governance impact Risk Management of banks. Bank management can utilize this study to shape their Risk Management policy. Policymakers and the government may use the study's findings to create solid banking policies that can withstand future crises.**Originality/ Value:**In the recent past, several studies have been conducted to determine the effect of corporate Governance on risk management, but this is the first to examine all of the risks associated with BASEL II requirements for Indian banks.
Keywords: Corporate Governance, Risk Management, Board Size, Audit Committee Independence, Board Independence

Abbreviation:	CG, Corporate governance; RM, Risk Management; BS, Board Size; BI, Board Independence; ACI, Audit Committee Independence; MF, Meeting Frequency;MaR, Market risk; CrR, Credit Risk; OpR, Operational Risk; FS, Firm Size; FL, Firm Leverage.

Introduction

This research delves at the connection between corporate governance and risk management (RM) in India's New Generation Banks. Problems with CG structures were identified as the primary reason for the recent global financial crisis by researchers working for the World Bank (Kirkpatrick, 2009; Quang Trinh, 2022). He said that the risk for banks was elevated since CG discouraged individuals from taking unnecessary risks that led to bad debt. Banking services have been available to customers and companies for quite some time..

Due to market shifts, competition, and the emergence of new companies, wholesale and retail banking customers now have access to a broader selection of banking goods and services than ever before (Aslam et al., 2021; Quang Trinh, 2022). A few examples are "new goods and services, such as electronic bill payment systems, personalised financial "portals," account aggregation, and business-to-business markets and exchanges," and "accessing financial information, receiving loans, and creating bank accounts." Suggested

Citation: The banking industry is plagued by too many issues. A non-performing bank has a customer that is not paying back their loan. Reputation management (RM) is the method banks employ to evaluate loan applicants (Mathew et al., 2018). They hedge against excessive exposure by reducing the worth of the financial firm. The difference between those who succeed and those who fail is their comfort level with and approach to risk (Nawaz Khan et al., 2019; Rashid, 2022). The notion of agency is the theoretical foundation of our investigation. CG refers to the management style employed by the respective firms. Numerous studies have demonstrated that these factors can have an impact on businesses' ability to make sound strategic decisions. As a result, it is crucial to investigate CG's function in RM. How CG operates and the financial risks faced by the Indian Bank are the focus of this research.

This research aims to examine how CG has influenced the risk management practises of India's Next Generation Private Banks. Potentially risky for banks are certain CG procedures. With this study, we hope to provide a comprehensive list of the many CG methods now employed to mitigate the unique threats that financial institutions must confront. Many factors are demonstrated to affect a bank's risk. Several aspects of banking are related to these factors. It is unknown how significant CG processes are in Indian banks in terms of the risks that banks confront. The purpose of this research is to examine how CG affects three different types of risk: market risk, credit risk, and operational risk.

Literature Review

CG comprises the standards and practises essential to satisfying investors. Directors' and managers' responsibilities are spelled down, and the role of business owners in decision making is made very clear. It has been said that "CG is a developing sector that plays a key position in the entire functioning of a firm" (Nawaz Khan & Ali, 2018; Kurawa&Ishaku, 2014). Shareholders, executive leadership, and the board of directors all have vested interests in the company's success. When properly implemented, CG acts as a check and balance between investors and management, helping to alleviate agency problems. Companies with strong Governance will have fewer agency problems in the future (Jiraporn et al., 2011; Nakpodia& Olan, 2022). Management, the board of directors, shareholders, employees, customers, and investors all work together to form CG (Elbahar, 2016; Ltifi&Hichri, 2021).

Discovering, assessing, and prioritising risks is what RM entails. After identifying potential threats, a risk manager can work to lessen or eliminate their effects (Altaf et al., 2021; Elbahar, 2016). Banks don't have RM departments since the RM is tied to the credit administration division (Haneef et al., 2012; Munawar et al.,. 2022). Methods and strategies for managing risks and reducing their impact are essential for maintaining a healthy investment climate. Every investor is on high alert because nobody wants to see their investment go down the drain. As reported by (Polinkevych et al., 2021). Management strategies will determine how companies and corporations use RM practises. As a result, restoring investor faith will depend on taking the necessary steps. Bessis (2011) and Mathew (et al. Financial, operational, business, and event risks are the four types of banking risks. There are two categories of financial risks: " Inadequate management of pure risks, such as liquidity, credit, and solvency, can lead to financial loss for a bank. Profit or loss can be realised via financial arbitrage-based speculation depending on how precise the arbitrage proves to be. The principal forms of speculative risk include fluctuations in interest rates, exchange rates, and market prices (Elbahar, 2016; Polinkevych et al., 2021).

Elbahar (2016) and Raheja (2005) argue that directors and company characteristics should be taken into account to determine the ideal size of the board. Based on the collective wisdom of the boar's coworkers, we may infer that there is a positive correlation between Firm Risk and BS for Pakistani enterprises. Company risk increases as boards get larger (Alam& Ali Shah, 2013). Larger boards are linked to lower risk, whereas smaller boards face a greater risk overall (Mathew et al., 2018; Nakano & Nguyen, 2012). There is a negative correlation between Firm Risk and BS, according to the literature. It has been demonstrated that there is a strong link between FR and BS (Nawaz Khan & Ali, 2018; Nakpodia& Olan, 2022).

H1: Board size significantly impacts bank risk (Market Risk, Credit Risk, and Operational Risk).
Studies have shown that BI is correlated with a willingness to take risks (Nawaz Khan et al., 2019; Koerniadi et al., 2014). Both (Mathew et al., 2018) and (Minton et al., 2011) Examine the links between RM and BI and financial professionals on U.S. BODs; they attest that BI is associated negatively with total risk. Having additional non-executive directors on the board has been shown to lower capital risk for major firms (Christy et al., 2013; Nawaz Khan and Ali, 2018).
H2: Board Independence significantly impacts Bank risk (Market Risk, Credit Risk, and Operational Risk).
The 2008 economic collapse highlighted the significance of audit committees. The audit committee's reaction to the 2009 financial crisis was studied by Klynveld Peat Marwick Goerdeler (KPMG). Several members of the audit committee claimed in the survey that they had increased their "direct engagement" with management as a direct result of the financial crisis, and that they had argued for a shift in their responsibilities in order to better support the company's risk management initiatives (Nawaz Khan & Ali, 2018; Sun & Liu, 2014). According to several studies (Alawaqleh and Almasria, 2021; Kyere and Ausloos, 2021) On the basis of the options concept, investors push bank management to back high-risk projects. It's possible that leadership may end up bearing the financial burden of underachieving investment initiatives that don't deliver the expected high returns because of the high stakes involved. To wit: (Maher &Aquanno, 2022). The Audit Committee's sway over management decisions may be weakened by errors in risk assessment and mitigation. The Board of Directors (BOD) may deny management's request for funding if ACI discovers that management plans to support a high-risk, low-return project (Alawaqleh&Almasria, 2021). High-quality ACI has the potential to discourage high-risk, low-profit endeavours while supporting high-risk, high-profit ones. For banks with high ACI efficiency, the correlation between performance and risk-taking is more crucial than for those with low ACI efficiency.

H3: Audit committee Independence significantly impacts bank risk (Market Risk, Credit Risk, and Operational Risk).

Credit risk refers to the potential for a decline in the value of a bank's assets, most notably its loan portfolio. Due to the low proportion of owners' capital to total asset value, a bank is dangerously close to collapse if even a fraction of its loans go into default. As a result, prudent management of credit risk is crucial to the health of financial institutions and the economy as a whole. Mathew et al. (2018); Maher and Aquanno (2022). Effective corporate Governance in Indonesia may have an influence on bank risk, according to the study. Credit, liquidity, and operational risk exposure differed among banks with different governance ratings, whereas market risk exposure was consistent across all grades (Permatasari, 2020). The net asset value of a corporation is defined as its entire assets less its total liabilities (Nawaz Khan & Ali, 2018; Kyere&Ausloos, 2021). The profitability, creditworthiness, and solvency of a corporation may all be gauged by looking at its net asset cost. Assets and cash on hand are subtracted from current obligations to arrive at net asset. The value of a company may also be calculated by looking at its net assets. Yet, there are a variety of additional elements that might influence a company's worth. Assets are a company's financial resources, as stated by (Nawaz Khan & Ali, 2018; Ltifi&Hichri, 2021). Leverage is a method in finance that makes use of borrowed money. In particular, increasing the potential return on investment through the use of economic tools or borrowed monies (Anderson &Reeb, 2003; Ltifi&Hichri, 2021). The level of debt used to finance an organization's assets is another possible definition of "leverage" (Nawaz Khan & Ali, 2018; Pandey, 2004)

Research Methodology
Despite the fact that numerous studies have been conducted to ascertain the effect of corporate Governance on risk management, very little work has been done to cover all the risks involved in complying with BASEL II requirements, especially in the case of Indian banks.This research assesses the impact of Corporate

Governance on the Risk Management of New Generation Private banks in India.The panel data covered 7 banks for the period 2011 to 2020. No primary data were used in the analysis. The research relied on secondary data collected from journals, publications, and the official websites of selected banking institutions.

Table 1: Measurement of Variables

Variables	Measures	References
Market Risk	The ratio of RWA for market risk to Total assets	(Permatasari, 2020)
Operational Risk	The ratio of RWA for Operational risk to total assets.	(Permatasari, 2020)
Credit Risk	The ratio of RWA for Credit Risk to total assets	(Tsorhe et al., 2011) and (Elbahar, 2016)
Board Size	Natural log of total board members	(Fatima et al,. 2018) and (Tsorhe et al., 2011)
Board Independence	The ratio of Independent directors onBoard to Total Board members	(Elbahar, 2016) and (Sajad Nawaz Khan & Ali, 2018)
Audit Committee Independence	The ratio of Independent Directors on Audit Committee to Total Audit Committee Members	(Alawaqleh&Almasria, 2021) and (Elbahar, 2016)
Firm Size	Natural log of Total Assets	(Sajad Nawaz Khan & Ali, 2018) and (Yazid, Razali, &Hussin, 2012)
Firm Leverage	The ratio of Total Loans to Total assets	(Sajad Nawaz Khan & Ali, 2018) and (Pandey, 2004)

Results and Discussions

The relationship of Bank isk and CG is assessed using regression, which is given by the equation shown below:

$$\boldsymbol{MaR_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 ACI_{it} + +\beta_4 FS_{it} + \beta_5 FL_{it} + \mu}$$

$$\boldsymbol{OpR_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 ACI_{it} + \beta_4 FS_{it} + \beta_5 FL_{it} + \mu}$$

$$\boldsymbol{CrR_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 ACI_{it} + \beta_4 FS_{it} + \beta_5 FL_{it} + \mu}$$

Where:

i-represents individual banks,

t -indicates years,

μ-random error term,

β_0-The constant term,

β_n-Co-efficient of independent variables

Descriptive Statistics

According to Table 2, the average value of MaR is 0.077337. The mean value for CrR is 0.861439, whereas the mean value for OpR is 0.085717. ACI-audit committee independence mean is 0.901871; board independence is 0.610316; board size is 2.231084. The results from the control variables reveal that the average for FS is 11.86776, and FL is 0.941305. ACI equals 1, BI equals 0.545455, BS equals 2.397895, MaR equals 0.042249, CrR equals 0.665773, and OpR equals 0.063854; FS equals 12.46430, and FL equals 0.604532. These are the data that make up the median. Every category, with the exception of ACI, BS, and FS, has a positively skewed skewness.

Table 2- Descriptive Statistics

	OpR	MaR	CrR	BS	BI	ACI	FL	FS
Mean	0.085717	0.077337	0.861439	2.231084	0.610316	0.901871	0.941305	11.86776
Median	0.063854	0.042249	0.665737	2.397895	0.545455	1.000000	0.604532	12.46430
Maximum	1.048099	1.989655	10.64260	2.708050	2.750000	2.000000	10.17109	15.40372
Minimum	0.000594	0.000000	0.000000	0.732099	0.000000	0.000000	0.051835	1.730000
Std. Dev.	0.137693	0.239927	1.384516	0.481288	0.574038	0.419754	1.613899	2.365392
Skewness	5.897371	7.427147	6.013529	-2.141183	1.509444	-0.295848	4.246182	-1.985923
Kurtosis	38.87729	59.39723	40.16941	6.532176	5.778384	3.944482	20.82829	8.060190
Jarque-Bera	4160.030	9920.450	4451.461	89.87685	49.09655	3.622941	1137.407	120.6948
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.163414	0.000000	0.000000
Sum	6.000194	5.413614	60.30071	156.1759	42.72215	63.13095	65.89136	830.7434
Sum Sq. Dev.	1.308202	3.971967	132.2650	15.98306	22.73688	12.15733	179.7223	386.0605
Observations	70	70	70	70	70	70	70	70

(Source:Author's Calculation)

Correlation Matrix

The relationship between the different factors is shown in Table 3. The MaR has a positive association with BI and FL, but a negative correlation with ACI, BS, and FS. Nonetheless, the MaR has a positive correlation with FL. The control variable FL shows a strong and positive connection with all of the other variables. The association between the CrR and FS is negative, but the link between the CrR and ACI, BI, BS, and FL is positive. A negative association may be seen between FS and all other variables with the exception of FL.

Table 3- Correlation Matrix

	OpR	MaR	CrR	BS	BI	ACI	FL	FS
OpR	1							
MaR	0.187949	1						
CrR	0.989599	0.201345	1					
BS	0.028186	-0.303687	0.045238	1				
BI	0.061739	0.063658	0.0305321	-0.115022	1			
ACI	0.121985	-0.007463	0.101074	0.037673	0.348241	1		
FL	0.776276	0.155474	0.793410	0.059657	0.017558	0.031357	1	
FS	-0.162902	-0.1184737	-0.1631982	-0.051647	-0.288645	-0.072078	-0.188685	1

(Source: Author's Calculation)

Fixed effect model of Market risk with Corporate Governance Variables

Table 4- FEM of Market risk with Corportae Governance variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACI	-0.003453	0.073954	-0.046688	0.9629
BI	0.005599	0.063315	0.088434	0.9298
BS	-0.184397	0.063675	-2.895902	0.0054
FS	-0.003143	0.017286	-0.181810	0.8564
FL	0.5886	0.018559	1.394803	0.1685
C	0.447689	0.290260	1.542370	0.1285
R-squared	0.198421	Mean dependent var		0.077337
Adjusted R-squared	0.029668	S.D. dependent var		0.239927

(Source:Author's calculation)

The r-square is 0.198421, and the adjusted r-square is0.029668. This indicates that the investigated independent factors are responsible for about 19% of the change in the dependent variable, which in this case is the risk associated with the market. The findings of the regression model with a fixed effect for CG variables and MaR for New Generation Private Banks in India demonstrate that there is no significant relationship between ACI and BI and Market risk. When something is considered insignificant, it signifies that the p-value is more than 5%. The theory suggests that ACI and BI have a substantial relationship with MaR. As a result, hypotheses H2 and H3 cannot be accepted. As H1's p-value is lower than 5%, this hypothesis may be trusted. The relationship between FL and MaR is characterised by a negative insignificance.

Fixed effect model of Credit risk with CG Variables

Table 5: FEM of Credit risk with Corporate Governance Variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACI	0.330534	0.259371	1.274370	0.2077
BI	-0.280694	0.222057	-1.264065	0.2114
BS	-0.089872	0.223320	-0.402437	0.6889
FS	-0.133555	0.060627	-2.202905	0.0317
FL	0.651974	0.065090	10.01650	0.0000
C	1.628945	1.017994	1.600151	0.1151
R-squared	0.703911	Mean dependent var		0.861439
Adjusted R-squared	0.641576	S.D. dependent var		1.384516

(Source:Author's calculation)

The r-square is 0.703911, and the adjusted r-square is 0.641576. This indicates that the investigated independent factors are responsible for around 70 percent of the variation in the dependent variable, which in this case refers to credit risk. According to the findings of the regression fixed-effect model for New Generation Private banks of India among CG variables and CrR, ACI, BI, and BS do not have a significant relationship with Credit risk. When something is considered insignificant, it signifies that the p-value is more than 5%. According to the idea, factors such as ACI, BS, and BI have a considerable influence on CrR. As a result, H1, H2, and H3 cannot be supported. The relationship between FS and CrR is considerable, but in a negative way, while FL is significant, but in a favourable way.

Fixed effect model of Operational Risk with Corporate Governance Variables

Table 6: FEM of Operational Risk with Corporate Governance Variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ACI	0.037086	0.025639	1.446457	0.1535
BI	-0.023052	0.021951	-1.050160	0.2981
BS	-0.011517	0.022076	-0.521719	0.6039
FS	-0.013162	0.005993	-2.196230	0.0322
FL	0.064124	0.006434	9.965946	0.0000
C	0.151913	0.100631	1.509612	0.1367
R-squared	0.707475	Mean dependent var		0.085717
Adjusted R-squared	0.645891	S.D. dependent var		0.137693

(Source:Author.s Calculation)

The r-square is 0.707475, and the adjusted r-square is 0.645891. This translates to the fact that the investigated independent factors are responsible for about 71% of the change in the dependent variable, which in this case is Operational risk. According to the findings of a regression model with a fixed-effect on CG factors and operational risk for New Generation Private Banks in India, the results indicate that ACI, BI, and BS have no significant relationship to operational risk. When something is considered insignificant, it signifies that the p-value is more than 5%. ACI, BS, and BI are said to have a considerable influence on OpR if the theory is correct. As a result, H1, H2, and H3 are rejected. Both FS and FL have a large impact on operational risk; however, FS has a negative impact while FL has a favourable impact.

Conclusion and Suggestions

According to the data, corporations are no longer required to prioritise increasing stockholder returns. The results of this research show that risk management is not just a corporate responsibility; individual companies have some of the responsibility as well. The conclusions of this study suggest that in a complex financial sector like banking, competent risk management strategies should be applied suitably and supported by an effective CG. The Board of Directors is in charge of developing and enforcing the company's risk management strategy. Without the board of directors' buy-in and involvement, efforts to enhance the effectiveness of the CG mechanism and exert direct control over risk management procedures would fail.

The investigation of the connection between corporate Governance and risk management of new generation private banks was the major objective of this study. In order to accomplish this, we make use of four different CG variables, namely BI, BS, MF, and ACI. In order to arrive at this estimate, we looked at seven newer generations of private banks over the course of 10 years, from 2011 to 2020. The empirical findings demonstrate that various CG variables each have their own unique impact on bank risks. We observed that the size of the board has a significant impact on the level of market risk in case of India. Yet, this does not have a significant impact on either the credit risk or operational risk. In addition, we came to the conclusion that the independence of the board has a negligible bearing on credit, market, and operational risks. A comparable finding was made about the independence of the audit committee in India. The ACI has a negligible effect on the risks that banks face that are distinguished by their individual qualities.

This study was based on agency theory, which offers the theoretical foundations that we utilised to examine the relationship between corporate Governance and Risk management. We used these theoretical foundations to study the link between corporate Governance and Risk management.
This research provides those who create policy with suggestions about what actions to take. They must to have stringent guidelines for the implementation of CG's most effective procedures. The efficiency of risk management will improve as a result, which will bring peace of mind for shareholders and be beneficial to the economy.

Implications of the study

Present study has analyzed the impact of Corporate Governance on Risk Management of banks. The study has theoretical implications as it shows how Corporate Governance impactsbanks' risk management. Bank management can find the outcome of this research valuable and they can use these findings to frame their risk management policies. The results of the study may be helpful to the policymakers and Government in formulatingguidelines for a strong banking structure which can withstand such a crisis in the future.

Limitations

This investigation is not without its flaws

- Just seven of the Next Generation Private Banks were used in order to guarantee the availability of enough data.
- Only four Parameters of Corporate Governance were taken into consideration.
- Only secondary data is used.

Future Suggestions

- It is expected that more exciting findings will be produced by selecting all Commercial Banks.
- Since that CG does have an effect on risk management, further research relevant to this subject might include other prameters of corporate governance in order to ensure more reliable results.
- Primary data can also be used.

References

1. Alam, A., & Ali Shah, S. Z. (2013). Corporate Governance and its impact on firm risk. *SSRN Electronic Journal*.
2. Alawaqleh, Q. A., &Almasri, N. (2021). The impact of Audit Committee performance and composition on Financial Reporting Quality in Jordan. *International Journal of Financial Research, 12(*3), 55.
3. Altaf, K., Ayub, H., Shabbir, M. S., &Usman, M. (2021). Do operational risk and corporate Governance affect the banking industry of Pakistan? *Review of Economics and Political Science,7*(2), 108-123
4. Anderson, R., &Reeb, D. (2003). Founding-family ownership, Corporate Diversification, and firm leverage. *The Journal of Law and Economics,46*(2), 653-684.
5. Aslam, E., Haron, R., & Ahmad, S. (2021). A comparative analysis of the performance of Islamic and conventional banks: Does corporate governance matter. *International Journal of Business Excellence,24*(1), 53.
6. Berger, A. N., Kick, T., &Schaeck, K. (2014). Executive Board composition and Bank Risk taking. *Journal of Corporate Finance, 28,* 48-65.
7. Bessis, J. (2011). Risk management in banking: John Wiley & Sons. BraiottaJr, L., Gazzaway, R. T., Colson, R., &Ramamoorti, S. (2010). The audit committee handbook: John Wiley & Sons.

8. Christy, J. A., Matolcsy, Z. P., Wright, A., & Wyatt, A. (2013). Do board characteristics influence the shareholders' assessment of risk for small and large firms? *Abacus,49*(2), 161-196.
9. El-Masry, A. A., Abdelfattah, T., &Elbahar, E. (2016). Corporate Governance and risk management in GCC Banks. *Corporate Ownership and Control,13*(3), 8-16.
10. Fatima, S., Mortimer, T., & Bilal, M. (2018). Corporate governance failures and the role of institutional investors in Pakistan. *International Journal of Law and Management, 60(*2), 571-585.
11. Haneef, S., Riaz, T., Ramzan, M., Rana, M. A., Hafiz, M. I., &Karim, Y. (2012). Impact of risk management on non-performing loans and profitability of banking sector of Pakistan. International Journal of Business and Social Science, 3(7).
12. Jiraporn, P., Kim, J., & Kim, Y. S. (2011). Dividend payouts and corporate governance quality: An empirical investigation. *Financial Review,46*(2), 251-279.
13. Khan, S. N., Yaseen, M. N., Fakhra Mustafa, & Sidra Abbasi. (2019). The interaction effect of financial leverage on the relationship between Board attributes and firm performance; evidence of non-financial listed companies of Pakistan. *Journal of Accounting and Finance in Emerging Economies,5*(1), 115-122.
14. Kirkpatrick, G. (2009). The corporate governance lessons from the financial crisis. *OECD Journal: Financial Market Trends, 2009(*1), 61-87.
15. Koerniadi, H., Krishnamurti, C., &Tourani-Rad, A. (2014). Corporate Governance and the variability of Stock returns. *International Journal of Managerial Finance, 10(*4), 494-510.
16. Kyere, M., &Ausloos, M. (2020). Corporate governance and firms financial performance in the United Kingdom. *International Journal of Finance & Economics,26*(2), 1871-1885.
17. Ltifi, M., &Hichri, A. (2021). The effects of corporate Governance on the customer's recommendations: A study of the banking sector at the time of covid-19. *Journal of Knowledge Management,26*(1), 165-191.
18. Maher, S., &Aquanno, S. M. (2021). The New Finance Capital: Corporate Governance, Financial Power, and the State. *Critical Sociology,48*(1), 55-73.
19. Mathew, S., Ibrahim, S., &Archbold, S. (2016). Boards attributes that increase firm risk – evidence from the UK. *Corporate Governance,16*(2), 233-258.
20. Mathew, S., Ibrahim, S., &Archbold, S. (2017). Corporate Governance and firm risk. *Corporate Governance: The International Journal of Business in Society,18*(1), 52-67.
21. Minton, B. A., Taillard, J., & Williamson, R. G. (2011). Do independence and financial expertise of the board matter for risk taking and performance? *SSRN Electronic Journal*.
22. Munawar, H. S., Mojtahedi, M., Hammad, A. W., Kouzani, A., & Mahmud, M. P. (2022). Disruptive Technologies as a solution for Disaster Risk Management: A Review. *Science of The Total Environment,806*, 151351.
23. Nakano, M., & Nguyen, P. (2012). Board size and corporate risk taking: Further evidence from Japan. *Corporate Governance: An International Review,20*(4), 369-387.
24. Nakpodia, F., & Olan, F. (2022). Corporate governance reform in Nigeria: Upstream and downstream interventions. *Corporate Governance: The International Journal of Business in Society,22*(5), 979-1003.
25. Nawaz Khan, S., & Ali, E. I. (2018). The moderating effect of intellectual capital on the relationship between corporate Governance and companies performance in Pakistan. *Journal of Governance and Integrity,2*(1), 12-22.
26. Pandey, I. (2004). Capital structure, profitability and market structure: Evidence from Malaysia. Asia Pacific Journal of Economics and Business, 8(2), 78.
27. Permatasari, I. (2020) "Does corporate Governance affect bank risk management? case study of Indonesian banks," *International Trade, Politics and Development*, 4(2), pp. 127–139.

28. Polinkevych, O., Khovrak, I., Trynchuk, V., Klapkiv, Y., &Volynets, I. (2021). Business risk management in times of crises and pandemics. *Montenegrin Journal of Economics,17*(3), 99-109.
29. Quang Trinh, V. (2021). Corporate Governance in banking. *Fundamentals of Board Busyness and Corporate Governance,* 19-27
30. Raheja, C. G. (2005). Determinants of board size and composition: A theory of corporate boards. *Journal of Financial and Quantitative Analysis,40*(2), 283-306.
31. Rashid, A. (2022). Impacts of Bank-Specific and Macroeconomic Risks on Growth and Stability of Islamic and Conventional Banks: An Empirical Analysis from Pakistan. The Journal of Asian Finance, Economics and Business, 9(2), 1-14.
32. Saeed, M. B., &Saeed, S. K. (2018). Corporate Governance and Accounting Conservatism: Moderating role of Audit Quality and Disclosure Quality. *Business & Economic Review,10*(2), 123-150.
33. Sun, J., & Liu, G. (2014). Audit committees' oversight of bank risk-taking. *Journal of Banking & Finance, 40,* 376-387.
34. Syaepullah, R. (2022). The influence of financial ratio and corporate Governance on financial distress in Indonesian Islamic Banking period 2013 – 2019. *EKONOMIKA SYARIAH : Journal of Economic Studies,5*(2), 81.
35. Tsorhe, J. S., Aboagye, A., &Kyereboah-Coleman, A. (2011). Corporate Governance and bank risk management in Ghana. University of Ghana Business School.
36. Ullah, F., Qayyum, S., Thaheem, M. J., Al-Turjman, F., &Sepasgozar, S. M. (2021). Risk management in sustainable smart cities governance: A TOE framework. *Technological Forecasting and Social Change,167*, 120743.
37. YAZID, A. S., RAZALI, A. R., & HUSSIN, M. R. (2011). Determinants of Enterprise Risk Management (ERM): A proposed framework for Malaysian public listed companies. *International Business Research,5*(1).

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