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DETERMINANTS OF RISK DISCLOSURE IN TOP-PERFORMING AUTOMOBILE COMPANIES IN INDIA

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ABSTRACT

Considering the business environment, operations, and regulatory environment companies operate in, disclosure requirements per the regulatory authorities have been more stringent. This study examined the degree of disclosure of risk information disclosed by companies established in India in the automobile sector listed on the National Stock Exchange (NSE) and listed international companies with unlisted subsidiaries in India. This study also aims to identify the governance attributes that influenced the practice of risk disclosure among the selected companies in India. The main risks in top-performing automobile companies in India have disclosed are examined in this paper, along with the board characteristics associated with the disclosure of corporate risk information. The variables included in the study are board size, board independence, and ownership concentration. The content analysis approach was adopted to determine the degree of risk disclosure practices. This study has also applied the descriptive statistics method and fixed effect analysis to measure the degree of information disclosure and to elaborate on the interrelationship between disclosure practices in India and governance attributes. Assessing India's top-performing automobile companies eventually unraveled the risk disclosure practices. Agency and signalling theories were adopted in this study to elucidate the company disclosure practice. The study reveals that there is a significant positive association between board size and the extent of risk disclosure; a significant positive association between board independence and the extent of risk disclosure; and a significant negative association between ownership concentration and the extent of risk disclosure.

***KEYWORDS**: Risk Disclosure, Disclosure Practices, Risk Management, Corporate Governance.*

Introduction

Risk disclosure is a financial statement that includes information about managers' assessments, judgments, and reliance on market-based accounting policies, such as impairment; derivatives hedging; financial instruments; the disclosure of concentrated operations; non-financial information about corporations' plans; recruiting strategy; and other operational, economic, political, and financial risks (Hassan, 2009). Risk disclosures play a vital role in determining the safety level of a particular investment, helping to identify liquidation positions under certain market conditions and also about the company's leverage condition, which will greatly impact an investor's investment decision (Dissanayake, 2023). The Companies Act of 2013 stipulates specific disclosures that must be included in the Board's Report. Furthermore, a publicly listed company must adhere to disclosure requirements outlined in the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations of 2015.

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Corporate risk disclosure (CRD) has emerged as a significant global concern, garnering attention from various stakeholders, policymakers, and regulators (Linsley and Shrives, 2006; Lombardi et al., 2016). CRD plays a vital role in assisting corporations in adapting to changes and strategically planning for the future (Abraham and Cox, 2007). It offers stakeholders essential insights into the company's material risks, their interconnectedness, impact, and the strategies employed for risk management. Following the US accounting scandals, corporate failures in the early 2000s, and the 2007–2008 global financial crisis, there has been heightened emphasis on risk management and reporting, highlighting the necessity for more comprehensive risk information. Despite increasing demands for improved risk disclosure, concerns remain regarding the quality and effectiveness of CRD, an area that requires further research.

While previous studies on risk disclosure have predominantly focused on developed countries, where International Financial Reporting Standards (IFRS) mandate specific risk disclosures (Ntim et al., 2013), this study delves into the Indian context, where IFRS is not applicable. In India, risk-related disclosures are neither mandatory nor entirely voluntary. In May 2021, SEBI announced significant amendments to the Listing Regulations.

According to Regulation 21 of these regulations, listed entities are mandated to establish a Risk Management Committee (RMC). As per Clause 49 VIII (D) of the Equity Listing Agreement of the Securities and Exchange Board of India (SEBI), companies are obligated to disclose risks in the management discussion and analysis (MD&A) section of annual reports, with the specifics are left to the discretion of the companies. Consequently, analysing the risk disclosure practices of Indian firms can offer valuable insights into their efforts to address information asymmetry and establish transparency through voluntary risk disclosure (Saggar and Singh, 2017).

An Explanatory Note to the Choice of Research on the Automobile Industry

The Indian automobile industry presents a compelling case study for risk disclosure research due to its unique confluence of factors. Firstly, it's a highly competitive sector, primed for major restructuring driven by globalisation and dwindling oil reserves. This necessitates proactive risk management and transparent communication. Secondly, the industry is undergoing a rapid transformation to align with the seventeen Sustainable Development Goals (SDGs) formulated by the United Nations. The sample companies taken into consideration for this research have disclosed the various practices within the company that align with particular SDGs. The gradual shift towards electric vehicles (EVs) and cleaner technologies presents both opportunities and challenges. Companies must disclose the financial risks associated with R&D and infrastructure development for EVs, while also addressing potential supply chain disruptions. Additionally, stricter emission norms (BS-VI) necessitate investments in new technologies, and the rise of shared mobility and connected vehicles raises concerns about data privacy and cybersecurity. To navigate this dynamic landscape and gain investor confidence, clear and comprehensive risk disclosures around these emerging areas are crucial.

- Mahindra & Mahindra Limited
- Tata Motors Limited
- Maruti Suzuki India Limited
- Honda Motor Company
- Hyundai Motor Company

Review of Literature

The literature on corporate governance and risk disclosure (Dissanayake & Shamil, 2021) has focused on understanding the nuanced relationship between governance mechanisms and firms' risk disclosure practices. Examining this landscape, the study under consideration explores these dynamics within the context of the Colombo Stock Exchange, focusing on a sample of 30 manufacturing sector companies over five years (2013-2017). The research leverages a comprehensive methodology, utilising a risk disclosure index adapted from the model by Shrives & Linsley (2006) to measure the disclosure of various risk categories. The independent variables, including board size, board independence, role duality, and ownership concentration, are meticulously measured to gauge their impact on risk disclosure practices. The findings reveal a notable increase in risk disclosures over time, showcasing the evolving landscape of corporate risk reporting in Sri Lanka.

In the Sri Lankan context, the study by Elshandidy & Neri (2015) emphasises distinguishing between various business sectors when examining the linkage between governance and risk disclosure. Specifically, their findings suggest that governance practices may vary across sectors, necessitating sector-specific analyses for a more accurate assessment of risk disclosure dynamics. The literature thus far reveals a consensus on the positive impact of certain governance elements, such as board size, on the extent of risk disclosures (Elzahar & Hussainey, 2012; Ntim et al., 2013) while also pointing to the role of regulatory contexts in shaping disclosure practices (Said Mokhtar & Mellett, 2013).

However, inconsistencies emerge regarding other governance factors. For instance, the study by Donnelly & Mulcahy (2008) suggests a positive correlation between board independence and risk disclosure, while Elshandidy & Neri's (2015) work in the Sri Lankan context indicates a lack of statistical significance. The negative association between role duality and risk disclosure, supported by Khlif & Hussainey (2014) and Wang et al. (2013), is further corroborated by the present study in Sri Lanka's manufacturing sector. Conversely, findings on ownership concentration and its impact on risk disclosure diverge, with Scholten (2014) indicating a positive association, which contradicts studies such as Chau & Gray (2002) and Ghazali (2007). Overall, the works of literature underscore the complexity of governance structures and their influence on risk disclosure, emphasising the need for context-specific analyses that account for sectoral variations and regulatory frameworks.

Research on the impact of board size, board independence, and ownership concentration on risk disclosures has yielded mixed results. Elshandidy (2017) found that firms with more independent directors and less insider ownership tend to provide higher-quality risk information. Adelopo (2021) similarly found a positive association between board size and independence and risk disclosure, particularly during periods of uncertainty. However, Al- Dubai (2023) found a positive impact of board size but a negative impact of board independence on financial risk disclosure. Suherman (2022) did not find a significant influence of board characteristics on risk disclosure, but noted a moderating effect of family ownership. These findings suggest that the relationship between board characteristics and risk disclosures is complex and may be influenced by various factors.

The study by Adamu & Ivashkovskaya (2021) investigates how corporate governance structures influence risk disclosure practices in emerging economies. It examines the board composition of firms listed on the Nigerian and Johannesburg Stock Exchanges, finding that a larger board with more independent directors and greater diversity leads to more comprehensive risk disclosure. The research highlights a need for improved risk disclosure regulations in emerging markets to enhance investor confidence and reduce the cost of capital. Analysing data from 320 MENA firms (789 observations) between 2007 and 2009, research reveals that board composition and size influence the perceived value of risk disclosures, allowing investors to predict better future earnings (Moumen et al., 2016). Interestingly, CEO/chair duality does not affect investor trust in these disclosures. These findings contribute to the growing body of research on risk disclosure by providing empirical evidence of how board characteristics impact the informativeness of such disclosures.

However, in the Jordanian context, studies have found that risk disclosure practices have a positive effect on board expertise and a negative effect on CEO Duality (Alshirah et al., 2020). The study also explores the moderating effect of family ownership on the relationship between board characteristics and risk disclosure. The findings can inform researchers, regulators, investors, and analysts on improving transparency in Jordanian financial reporting.

Al-Dubai, S. A. A., & Alotaibi, K. O. (2023) delved into an investigation of financial risk information in annual reports, monitoring the extent of disclosure and how it has changed over time. The content analysis method was used to evaluate the annual reports of 4 energy companies over a 13-year period, resulting in 52 firm-year observations. The findings indicate that board size positively impacts financial risk disclosure, whereas board independence has a negative impact. However, no significant effects were found for board busyness and board meetings. Another study by Viola, B., Aryanto, J., Marsetio, N. C., & Yuliati, R. (2023) used board characteristics (gender, age and education) and their impact on Corporate Risk Disclosures using the COSO framework using multiple regression analysis. It revealed that board size and age substantially impact the level of risk disclosure.

Adelopo (2021) used the agency theory and content analysis during corporate uncertainty in the UK during 2006-2015. The regression analyses controlled for the extent of firms' agency costs, firm risk level, and the impact of mandatory risk disclosure regulation, among other control variables. Firms' risk disclosure is positively associated with risk level and mandatory risk disclosure.

According to Khandelwal, Kumar, Madhavan & Pandey (2020), women on board significantly positively impacted risk disclosure. The generalised method of moments (GMM) was applied to test a theoretical framework with sample data of ample data of non-financial Indian firms listed on the Bombay Stock Exchange (BSE). Ridhima Saggar & Nischay Arora & Balwinder Singh (2023) unravel the moderating impacts of board attributes by deploying hierarchical moderated regression on a sample of the S&P BSE-100 index pertaining to the financial year 2018-2019.

Madhani, Pankaj M., (2016) identified nine S&P BSE sectoral indices sectors to establish the relationship between corporate governance, ownership concentration and disclosure practices. The ownership concentration provides two offsetting effects: substitution effect and expropriation effect, thus leading to the principal-agent agency theory as well as the principal- principal theory. This research studies ownership concentration in terms of promoters' holdings and finds that promoters' holdings have a negative but insignificant correlation with corporate governance and disclosure practices of firms.

Makhlouf & Ghosheh (2023) have revealed in their study that institutional ownership, administrative ownership, and foreign ownership have positively impacted risk disclosure. In contrast, there seems to be no significant impact of directors' ownership and concentrated ownership on risk disclosure.

Research Gap

While research in India might address other industries like banking, the Indian automobile industry's risk reporting practices remain unexamined.

This research aims to bridge this gap by investigating how corporate governance factors like board characteristics, committee structures, institutional ownership, and external audit quality influence the extent and level of risk disclosures made by top-performing automobile companies in India. The findings will contribute to a better understanding of risk management and communication within the industry, benefiting companies, investors, and regulators.

Research Problem

Research on corporate governance and risk disclosure practices exists globally, but there's a lack of specific studies in the Indian automobile sector. In countries like Germany, Srilanka and multinational corporations within the NASDAQ OMX Index, various researches have been conducted to find an association between determinants of corporate governance and risk disclosure practices. For instance, in the German context, they have analysed the annual reports in accordance with their accounting standards, and the quality and content of their disclosures are more advanced (Ashish Varma, 2011). In Sri Lanka, they have discussed the influence of several corporate governance factors in determining the level and the extent of the risk disclosures by manufacturing companies listed in the Sri Lanka Colombo Stock Exchange (CSE) (Gimhani Dissanayake, 2023). A study of the reported risk statements within the NASDAQ OMX Index reveals that larger and inherently riskier car manufacturers don't necessarily provide more detailed information about those risks to investors. This is surprising because current theory suggests companies should be more transparent about risks. The findings suggest that car companies have simpler risk reporting processes, which could lead investors to underestimate the actual risks involved (Vyychytilova et al. (2020)). This research provides new, data-driven insights into the link between a company's risk profile and risk reporting practices within the auto industry.

Interestingly, the study found no significant connection between company size and the amount of risk information disclosed. Focusing on current reporting practices in the auto sector, this study offers reliable results considering company-specific risk factors. These findings could be valuable for developing policies that improve risk disclosure practices.

Research Question

The study considers the influence of determinants of corporate governance on risk disclosure practices in India's top-performing automobile sector. Thus, This paper addresses one vital research question- Does corporate governance improve the risk disclosure of automobile entities in India?

Research Objectives

This study specially identified and probes the following objectives:

- To identify the level of risk disclosure in top-performing automobile entities in India.
- To investigate the impact of board attributes on risk disclosure in top-performing automobile entities in India.

Conceptual Framework

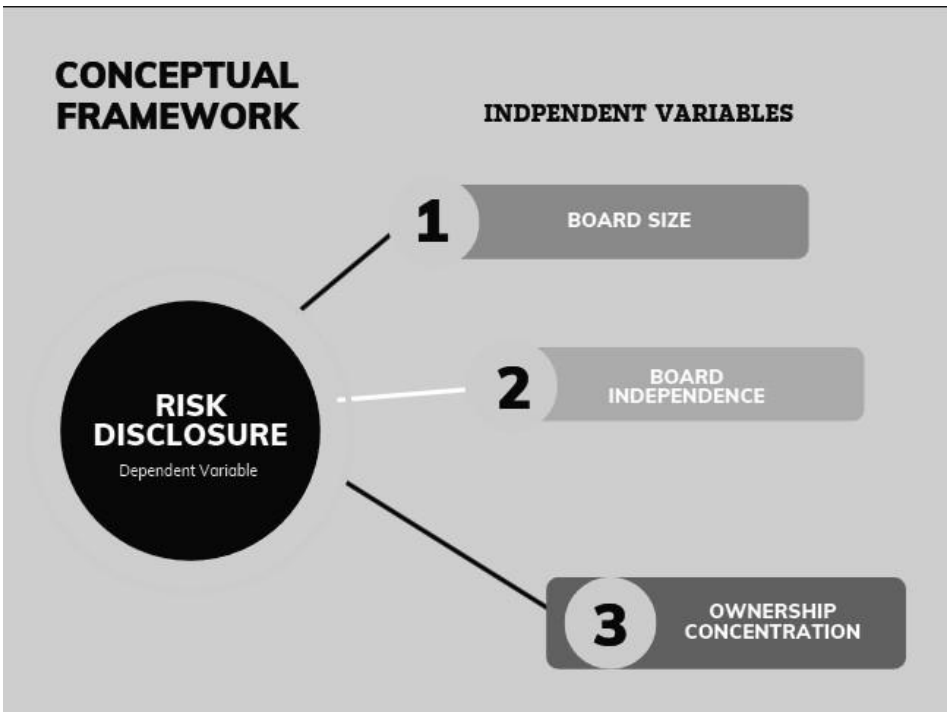

Figure 1

Hypothesis Development

H_1: *There is a significant positive association between board size and the extent of risk disclosure in top-performing automobile manufacturing companies in India.*

H_2: *There is a significant positive association between board independence and the extent of risk disclosure in top-performing automobile manufacturing companies in India.*

H_3: *There is a significant negative association between ownership concentration and the extent of risk disclosure in top-performing automobile manufacturing companies in India.*

Relationship between Board Size and Risk Disclosure

On the one hand, larger boards might enhance monitoring capacity due to a wider range of expertise and diverse perspectives, potentially leading to more comprehensive risk disclosure. This aligns with agency theory, suggesting more directors can better scrutinise management and encourage transparency.

Additionally, the resource-based theory posits larger boards access richer networks and information, facilitating deeper risk evaluations and disclosure. However, contradictory viewpoints exist. Complexity theory argues larger boards become less efficient and suffer from coordination issues, hindering clear communication and potentially weakening disclosure. Likewise, social loafing might occur, where individual responsibility dilutes in larger groups, leading to less rigorous risk assessments. Ultimately, the relationship is influenced by factors like board member independence, industry characteristics, and regulatory pressures. Further research is necessary to fully understand the interplay between board size and risk disclosure, considering these nuances and potential moderators.

Board Independence and Risk Disclosure

Board independence, defined as the proportion of non-executive directors to the total number of directors on the board, plays a crucial role in facilitating the dissemination of risk information to investors. While previous research has yielded mixed findings regarding the association between board independence and risk disclosure, a significant body of literature suggests a positive relationship. Several studies have indicated that independent directors on the board positively influence risk disclosure

practices. Conversely, some research has found insignificant associations or even contradictory results. However, recent empirical evidence, as demonstrated in a study analysing annual reports from banks listed on the Amman Stock Exchange, suggests that board independence acts as a moderator, enhancing the positive relationship between risk disclosure and corporate value. This study sheds light on the importance of transparent risk disclosure in fostering trust between management and stakeholders while highlighting the critical role of board composition, particularly board independence, in maximising the impact of risk disclosure on corporate value. The findings underscore the significance of board independence in promoting effective risk management practices and ultimately enhancing corporate value, offering valuable insights for academics and practitioners in the field.

Ownership Concentration and Risk Disclosure

Ownership concentration refers to the distribution of shares among a limited number of investors in a company. While a high level of ownership concentration may lead to significant influence or control wielded by a select few shareholders, concentrated ownership may deter potential investors, impacting liquidity and market valuation.

Empirical studies have shown a negative relationship between ownership concentration and voluntary disclosure. However, the relationship between ownership concentration and risk disclosure is indeterminate. Said Mokhtar & Mellett, (2013) noted a negative association between mandatory risk reporting and ownership concentration and an insignificant association between voluntary risk reporting. Furthermore, the sample organisations' top 10 voting shareholders ownership percentages are considered.

Methodology

The data used in the research study is based on secondary sources ie., the published annual financial statements of the companies. The inferences have been made with the notes to accounts and other disclosures published on the companies' official websites. Furthermore, the collection of relevant data is done according to the variables taken into consideration for the study. The board size, ownership concentration and board independence were studied using the information provided in the annual statements regarding the composition of the members of the board and their stake in the company they represent. Risk disclosures were measured by analysing the various types of risk the company has identified in its financial statements (for instance, credit risk, liquidity risk, operational risk, market risk, management risk, etc), and the significance of the risks identified and reported.

Software and Analysis Used

This study employs Excel for conducting regression and correlation analyses. R-software is utilized for examining regression assumptions like the normality of residuals, homoscedasticity (consistent variance of residuals), autocorrelation (lack of correlation among residuals), and variance inflation (detecting multicollinearity among independent variables). Python is then employed to validate these findings.

Variables Considered

Dependent Variable

- Risk Disclosures in Annual Reports

Independent Variables

- Board independence
- Board size
- Ownership concentration

Implications

The study sample size focuses on three listed and two unlisted automobile companies in India that maintain good risk disclosure practices. While risk disclosures are voluntary, the companies chosen have commendable compliance with risk disclosure practices.

The data collection has been done from audited annual reports published by the company officially on their website. Board size, board independence and ownership concentration have been taken into account to arrive at the most apt conclusions for the risk disclosure practices of the companies sampled.

Risks Identified (as per Financial Statements of the Company)

The study aims to identify the various kinds of risk disclosures mentioned in the audited annual financial statements of the sample companies. This is done so as to provide a clear perspective on the risk index developed, and an elaboration on any other kinds of risks identified apart from those in the index. Considering the companies have different ways of operating, the risks disclosed under each company highlight what significantly poses a threat and in which area/ function of the company.

Analysis

- **Data Screening**

The study has examined for any missing values within the dataset, and no such missing values were identified. Additionally, a thorough inspection of the dataset was conducted to detect any outliers, but none were found.

- **Regression Assumption Testing**

In conducting regression assumption testing using R software, various diagnostic tests are employed to assess the validity of the regression model. These tests include checking for normality of residuals, homoscedasticity (constant variance of residuals), autocorrelation (absence of correlation among residuals), and variance inflation (to detect multicollinearity among independent variables). These tests help ensure the reliability and accuracy of the regression analysis results.

- **Normality**

The Shapiro-Wilk test statistic (W) for assessing normality is calculated as 0.86529, with a corresponding p-value of 0.2479. The null hypothesis in this test is that the data is normally distributed. Since the p-value (0.2479) is greater than the conventional significance level of 0.05, we fail to reject the null hypothesis. This indicates insufficient evidence to suggest that the residuals from the regression model are not normally distributed. Hence, it can be concluded that the residuals approximately follow a normal distribution, satisfying one of the key assumptions of linear regression analysis.

- **Homoscedasticity**

The Breusch-Pagan test was conducted to assess the assumption of homoscedasticity in the regression model. The test yielded a Breusch-Pagan test statistic of 2.3662 with 3 degrees of freedom, resulting in a p-value of 0.5. As the p-value is greater than the typical significance level of 0.05, we fail to reject the null hypothesis.

This indicates that there is no significant evidence to suggest that the variance of the residuals is not constant across the range of predictor variables. Therefore, we can reasonably assume homoscedasticity, implying that the variance of the residuals is uniform and the regression model's predictions are equally precise across the entire range of the independent variables.

- **Autocorrelation Test**

The Durbin-Watson test was employed to evaluate the presence of autocorrelation in the residuals of the regression model. The test yielded a test statistic of 2.775388 and a corresponding p-value of 0.21. The alternative hypothesis tested was that the autocorrelation coefficient (rho) is not equal to zero. Since the test statistic is close to 2, the expected value under the null hypothesis of no autocorrelation suggests no significant evidence of autocorrelation in the residuals. Therefore, we can conclude that the residuals are independent, indicating that the assumption of no autocorrelation is met in the regression model.

- **Variance Inflation Test**

The Variance Inflation Factors (VIF) were computed to assess the presence of multicollinearity among the independent variables included in the regression model. The VIF values obtained for each independent variable were:

Independent Variables	Variance Inflation Test
Board Independence	1.918976
Board size	1.345329
Ownership Concentration	1.503974

Since all VIF values are below the threshold of 5, it indicates low to moderate multicollinearity among the independent variables. While some correlations are observed between the independent variables and others, they are not severe enough to cause significant issues with the interpretation of coefficients. Therefore, the multicollinearity in the model is considered acceptable, and the coefficients of the independent variables can be interpreted reliably.

Correlation Analysis

Correlation Matrix

	RISK DISCLOSURE	*BOARD INDEPENDENCE*	*BOARD SIZE*	*OWNERSHIP CONCENTRATION*
RISK DISCLOSURE	1			
BOARD INDEPENDENCE	0.783059646	1		
BOARD SIZE	-0.318073213	-0.479230819	1	
OWNERSHIP CONCENTRATION	-0.59168098	-0.557602379	0.130756338	1

The correlation matrix illustrates the relationships between variables, particularly focusing on risk disclosure, board independence, board size, and ownership concentration. The correlation coefficients showed a positive correlation between risk disclosure and board independence (0.78) but moderate negative correlations between board independence and board size (0.48) and between risk disclosure and board size (-0.32). This suggests that as board independence increases, there tends to be a higher level of risk disclosure, but at the same time, the level of risk disclosure decreases with an increase in board size. Conversely, there's a negative correlation between risk disclosure and ownership concentration (-0.59), implying that higher ownership concentration is associated with lower levels of risk disclosure. Furthermore, we see a negative correlation between board independence and ownership concentration (-0.56), indicating that board independence tends to decrease as ownership concentration increases. Board size, however, shows relatively weak correlations with other variables.

Regression Model

The multi-variant linear regression model has been used to determine the influence of Board Characteristics such as Board Independence, Board Size and Ownership Concentration on the quality of Risk Disclosures. The model proposed is as follows:

RD **=** β**0 +** β**1BS +** β**2BI +** β**3**O**C +** ε

where the dependent variable is RD = Risk Disclosure

and the independent variables are, BS = Board size

BI = Board Independence

OC = Ownership concentration

ε = Error term

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.805612782
R Square	0.649011954
Adjusted R Square	-0.403952185
Standard Error	1.350976625
Observations	5

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	3.37486216	1.124954	0.616367	0.707517861
Residual	1	1.82513784	1.825138		
Total	4	5.2			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	4.799234736	9.467488707	0.506917	0.70132	-115.4966151	125.0950846	-115.4966151	125.0950846
BOARD INDEPENDENCE	6.074121338	7.345884677	0.826874	0.56015	-87.26419333	99.41243601	-87.26419333	99.41243601
BOARD SIZE	0.026791078	0.516616316	0.051859	0.967015	-6.537441601	6.591023758	-6.537441601	6.591023758
OWNERSHIP CONCENTRATION	-1.305359652	4.351586943	-0.29997	0.814468	-56.59751427	53.98679497	-56.59751427	53.98679497

The Regression Analysis conducted on the ratio for board size, board independence, and ownership concentration in Indian and International automobile sector firms operating or having subsidiaries in India yielded significant results. All the independent variables were statistically significant at the 5 percent level, indicating their importance in predicting risk disclosure practices. The model's overall significance, as indicated by the P-value of 0.7075, suggests that the independent variables collectively contribute to the reliability of predicting risk disclosure practices. Furthermore, the fixed effect model was found to be significant at the 5% level, reinforcing the validity of the regression analysis. The model explains a substantial portion of the variance in risk disclosure practices, with approximately 64.90% of the variability attributed to board size, board independence, and ownership concentration. This suggests a strong relationship between these factors and the level of risk disclosure among automobile sector firms. However, it's noteworthy that approximately 35.1% of the variance remains unexplained by these variables, indicating the presence of other factors influencing risk disclosure practices within the industry. Further exploration may be warranted to identify and understand these additional determinants of risk disclosure behaviour.

RD **= 4.7992 + 6.0741BS + 0.0268BI -1.3053**O**C +** ε

Findings and Discussions

Risk Disclosure Index

The risk disclosure index was developed to analyse the comprehensiveness of risk disclosures in annual reports of automobile companies in India taken as a sample in this research. It categorises risk disclosures into 6 main categories:

- Strategic risks
- Financial risks
- Operational risks
- Compliance risks
- Reporting risks
- Other risks

By applying this index, the extent to which these companies are transparent about the various risks they face can be assessed. This index was derived in reference to Linsley and Shrives (2006) "Examining Risk Reporting in UK Public Companies".

Risk Disclosure Model

This research considers a point-based model dependent on the level of risk disclosures as per the six main categories identified for each of the five companies in the sample.

- 0 points for non-disclosure of particular risk
- 1 point for partial disclosure
- 2 points for complete disclosure

Each company is marked out of 10 points, with an additional point for other risks disclosed apart from the 6 main categories identified.

Descriptive Statistics for Risk Disclosure

Risk model for Risk Disclosure: (dependent variable)

Company	Strategic	Financial	Operational	Compliance	Reporting	Other (if any)	Total
Mahindra	2	1	2	2	0	1	**8**
Tata	2	2	2	2	0	1	**9**
Maruti	1	2	1	2	0	1	**7**
Honda	1	2	1	1	1	0	**6**
Hyundai	2	2	1	1	0	2	**8**

The table above demonstrates the descriptive statistics for the Dependent Variable, i.e., Risk Disclosure, by developing and using a Risk Disclosure model. The companies are marked on the basis of whether risk is disclosed (partly or completely) or not. Three listed and two unlisted companies from the automobile sector have been marked by drawing insights from their annual report of 2022-23. Tata Motors Limited is marked the highest with 9 points, whereas Honda Motor Company is marked 6 based on the qualitative and quantitative aspects of risk disclosure considered.

Descriptive Statistics for Independent Variables

Particulars	Mahindra	Tata	Maruti	Honda	Hyundai
Board Independence	58.33%	66.67%	33.33%	45.45%	53.85%
Board size	12	9	12	11	13
Ownership concentration	18.88%	41.25%	56.48%	66.67%	59.72%

The table above demonstrates the descriptive statistics for the Independent Variables, i.e., Board Independence, Board Size and Ownership Concentration. Board independence is derived as the percentage of independent directors of all the directors constituting the Board of Directors. Ownership Concentration is the percentage of shareholding belonging to Promoters and Promoter groups. Hereby, Tata Motors Limited shows the highest percentage of Board Independence but the smallest Board Size.

Hyundai Motor Company has the largest Board Size of 13, whereas the Promoter group of Honda Motor Company has the highest concentration of shareholding among the 5 companies. Mahindra & Mahindra has the least ownership concentration and moderate Board Independence and Board Size.

Summary of Hypothesis Results

Hypothesis	Result
H_1: There is a significant positive association between board size and the extent of risk disclosure in top-performing automobile manufacturing companies in India.	Accepted
H_2: There is a significant positive association between board independence and the extent of risk disclosure in top-performing automobile manufacturing companies in India.	Accepted
H_4: There is a significant negative association between ownership concentration and the extent of risk disclosure in top-performing automobile manufacturing companies in India.	Rejected

- Positive correlation between risk disclosure and board independence (0.78)
- Moderate negative correlations between board independence and board size (0.48) and between risk disclosure and board size (-0.32)
- Negative correlation between risk disclosure and ownership concentration (-0.59)
- Negative correlation between board independence and ownership concentration (-0.56)
- Board size, however, shows relatively weak correlations with other variables.

Conclusion

In conclusion, this study investigated the risk disclosure practices of listed Indian automobile companies on the National Stock Exchange (NSE) and listed international companies with unlisted subsidiaries in India. The analysis focused on five top-performing companies i.e., Mahindra & Mahindra Limited, Tata Motors Limited, Maruti Suzuki India Limited, Honda Motors and Hyundai and employed content analysis to assess the extent of risk disclosure. Additionally, the study explored the influence of governance attributes on these practices using board size, board independence, and ownership concentration as variables.

The regression analysis revealed a statistically significant relationship between these variables and risk disclosure practices, suggesting that board composition and ownership structure play a crucial role in shaping disclosure behaviour. While the model explained a substantial portion of the variance further research is recommended to identify other factors contributing to the remaining unexplained variance in risk disclosure practices within the Indian automobile industry.

This comprehensive approach, considering both listed and unlisted subsidiaries of international companies, can provide valuable insights for regulators and investors seeking to understand risk management practices in the Indian automobile sector.

Limitations

Our research findings may have limited applicability due to several data constraints. Firstly, the analysis utilises data from a single year, which provides a snapshot in time and might not capture the evolving nature of risk disclosures in the automobile industry in India. Secondly, the focus on just five companies restricts the generalizability of the results. A broader sample size encompassing a wider range of companies within the sector would provide more robust insights. Finally, the risk disclosure model employed utilises only six broad categories, potentially missing important nuances. The limited definition of the "other" category further restricts our ability to comprehensively assess the spectrum of risks disclosed by the companies. These limitations necessitate caution when interpreting the findings and highlight the need for future research with a broader data scope.

Scope for Future Research

The Reserve Bank of India (RBI) presented draft guidelines on disclosure framework on climate related financial risks. The Statement on Developmental and Regulatory Policies, presented along with the Monetary Policy statement on February 8, 2023, had recognised that climate change can translate into financial risks for regulated entities. The proposal drafted by RBI had defined climate related financial risks as 'potential risks that may arise from climate change or from efforts to mitigate climate change, their related impacts and economic and financial consequences.' Although the guidelines mainly relate to the banking sector, taking into consideration the gradual shift to EVs (electric vehicles), this may lay grounds for future research to be conducted on developing risk management practices for environment and climate related challenges that automobile companies may face in the near future.

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Annexures

- **Mahindra**

16. Equity Share Capital (contd.)

b. The Ordinary (Equity) Shares of the Company rank *pari-passu* in all respects including voting rights and entitlement to dividend.

c. Details of Ordinary (Equity) Shares held by shareholders holding more than 5% of the aggregate issued, Subscribed and Paid-up shares of the Company:

Name of the Shareholder	2023		2022	
	No. of Shares	Shareholding %	No. of Shares	Shareholding %
Prudential Management and Services Private Limited	**14,15,21,940**	**11.38**	14,15,21,940	11.38
M&M Benefit Trust	**8,44,70,428**	**6.79**	8,44,70,428	6.79
Life Insurance Corporation of India	**6,21,30,470**	**5.00**	8,55,54,624	6.88

d. Details of Ordinary (Equity) Shares held by Promoter and Promoter group:

Name of the Promoters	2023			2022		
	No. of Shares	Shareholding %	% Change during the year	No. of Shares	Shareholding %	% Change during the year
Promoters:						
Anand Mahindra	**14,30,008**	**0.12%**	–	14,30,008	0.12%	–
Keshub Mahindra	**8,84,592**	**0.07%**	–	8,84,592	0.07%	–
Sub Total (A)	**23,14,600**	**0.19%**		23,14,600	0.19%	
Promoter Group:						
Anjali K Mahindra	**2,04,438**	**0.02%**	**0.00%**	2,12,208	0.02%	–
Anuradha Mahindra	**4,57,090**	**0.04%**	–	4,57,090	0.04%	–
Dhruv S Sharma	**30,000**	**0.00%**	–	30,000	0.00%	–
Deveshwar Jagat Sharma	**30,000**	**0.00%**	–	30,000	0.00%	–
Gautam P Khandelwal	**4,600**	**0.00%**	–	4,600	0.00%	–
Leena S Labroo	**12,51,884**	**0.10%**	–	12,51,884	0.10%	0.00%
Nisheeta Labroo	**1,60,500**	**0.01%**	–	1,60,500	0.01%	0.00%
Aneesha Labroo	**1,60,000**	**0.01%**	–	1,60,000	0.01%	–
Radhika Nath	**93,616**	**0.01%**	–	93,616	0.01%	–
Sanjay Labroo	**2,89,440**	**0.02%**	**0.01%**	1,45,440	0.01%	–
Sudha Keshub Mahindra	**14,52,032**	**0.12%**	–	14,52,032	0.12%	–
Uma R Malhotra	**10,09,604**	**0.08%**	–	10,09,604	0.08%	–
Yuthica Keshub Mahindra	**6,44,744**	**0.05%**	**0.01%**	7,16,744	0.06%	0.00%
Kema Services International Private Limited	**7,34,832**	**0.06%**	–	7,34,832	0.06%	–
Prudential Management and Services Private Limited	**14,15,21,940**	**11.38%**	–	14,15,21,940	11.38%	–
M&M Benefit Trust	**8,44,70,428**	**6.79%**	–	8,44,70,428	6.79%	–
Sub Total (B)	**23,25,15,148**	**18.69%**		23,24,50,918	18.69%	
Total (A+B)	**23,48,29,748**	**18.88%**		23,47,65,518	18.88%	

Tata Motors

TATA MOTORS

REPORT ON CORPORATE GOVERNANCE

Combined Shareholding Pattern (Ordinary & 'A' Ordinary Share Capital)

i) Category-wise Share Holding as on March 31, 2023

Category	Number of Equity Shares held	% of holding
Promoters and Promoter Group	1,57,98,87,957	41.25
Mutual Funds and UTI	45,71,92,219	11.94
Banks, Financial Institutions, States and Central Government	64,88,839	0.17
Alternate Investment Funds	36,18,747	0.09
Insurance Companies	26,52,17,473	6.93
Foreign Institutional Investors and Foreign Portfolio Investors – Corporate	59,48,52,809	15.53
Provident Funds / Pension Funds	2,24,87,628	0.59
Non-Resident Indians / Overseas Bodies Corporates / Foreign Companies	3,31,45,065	0.86
Bodies Corporate / Trust	4,37,95,747	1.14
NBFCs / HUF / LLPs	2,25,70,798	0.59
Indian Public and Others	79,46,98,450	20.75
Directors and Director's Relatives	2,63,582	0.01
IEPF Suspense Account	56,27,907	0.15
GRAND TOTAL	**3,82,98,47,221**	**100.00**

ii) Top 10 Shareholders as on March 31, 2023

Sr. No.	Name of the Shareholder	Number of Equity Shares held	% of holding
1	Tata Sons Private Limited (Promoter)	1,49,06,25,082	38.92
2	Life Insurance Corporation of India	17,30,87,356	4.52
3	ICICI Prudential Transportation And Logistics Fund	12,08,93,525	3.16
4	SBI NIFTY 50 ETF	7,95,01,181	2.08
5	Tata Industries Limited	7,22,03,630	1.89
6	Rekha Rakesh Jhunjhunwala	6,22,56,000	1.63
7	Citibank N.A. New York, NYADR Department	5,19,17,567	1.36
8	HDFC Trustee Company Ltd. A/C HDFC Top 100 Fund	4,52,80,586	1.18
9	UTI - Nifty Exchange Traded Fund	4,25,37,076	1.11
10	Government Of Singapore	4,12,84,776	1.08

Note: Shareholding of Top 10 is consolidated based on Permanent Account Number (PAN) of the shareholder.

Maruti

BOARD COMPOSITION AS ON 31st MARCH, 2023

	No. of Directors	Non-Executive Non-Independent	Independent	Executive
Board of Directors	12	5	4	3
Audit Committee	4	-	4	-
Nomination and Remuneration Committee	4	1	3	-
Corporate Social Responsibility Committee	3	1	1	1
Risk Management Committee	5	1	1	3
Stakeholders' Relationship Committee	3	1	1	1

13.3 Details of shares held by the holding company

	As at 31.03.2023		As at 31.03.2022	
	Number of shares	Amount	Number of shares	Amount
Suzuki Motor Corporation, Japan	170,628,962	853	170,283,762	851
	170,628,962	**853**	**170,283,762**	**851**

13.4 Details of shares held by each shareholder holding more than 5% shares

	As at 31.03.2023		As at 31.03.2022	
	Number of shares	% holding	Number of shares	% holding
Suzuki Motor Corporation (The Holding Company)	170,628,962	56.48	170,283,762	56.37
Life Insurance Corporation of India	9,373,679	3.10	16,107,297	5.33

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