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# RVIM Journal of Management Research

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# RVIM Journal of Management Research

## Aims and Scope

RVIM Journal of Management Research (RVIM JMR) is a peer-reviewed journal published by the R. V. Institute of Management (RVIM), Bengaluru, India, since 2009. It is biennial with editions published in January and July every year. RVIM Journal of Management Research is a peer-reviewed journal that uses a double-blind review process for evaluation and selection of all submitted materials.

### The Aims of RVIMJMR are to:

- ◊ Seek and disseminate original theoretical and applied research in the field of management and allied areas.
- ◊ Provide a platform for publishing quality research work and case studies undertaken by academicians, industry practitioners and research scholars.
- ◊ Bridge the gap between academia and practice by promoting the publication of original, novel and industry-relevant research.

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RVIM Journal of Management Research welcomes submissions in different areas of the management discipline as below:

- ◊ Banking, Financial Services and Insurance (BFSI)
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- ◊ Business Intelligence (BI)
- ◊ Business Law
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- ◊ Technology Management
- ◊ Total Quality Management (TQM)
- ◊ Tourism and Hospitality Management

It is our pleasure to present you the second issue of Volume 15 of RVIM Journal of Management Research, indexed in SCOPE, ICI, J-Gate, IJIFACTOR and COSMOS with an impact factor of 5.395. In this issue of RVIMJMR, eight research papers and two book reviews have been presented for further dissemination across academia and industry, as summarized here-in-under:

The first paper aims to investigate the relationship between institutional ownership and firm performance in the Indian context, using data of 273 Bombay Stock Exchange (BSE) listed firms from 2007 to 2021. The findings indicate institutional investors to be passive in monitoring firm performance and exit firms when performance is declining. Institutional investors, both domestic and foreign, are attracted to hold shares of high performing companies. On the other hand, higher ownership stakes by institutional investors do not increase firm performance.

The significance of Retirement Planning Activity cannot be overstated, as it directly affects individuals' ability to lead fulfilling lives during their golden years, particularly in the defined contribution system. Second paper investigates how financial literacy and financial risk tolerance influence Retirement Planning Activity among individuals enrolled in pension schemes under the defined contribution framework. By using multiple regression analysis on data from 386 individuals in the north Indian region, the study found that financial literacy and financial risk tolerance play a vital role in shaping Retirement Planning Activity.

Embracing diversity involves recognizing, respecting, and appreciating differences, while inclusivity demands extending dignity to all, regardless of gender, caste, race, or religion. Research findings in general indicate that companies featuring at least one woman on the board experience superior return on equity, increased earnings, and more robust growth in stock prices compared to those with exclusively male boards. In this context the third paper aims to find out the impact of gender in reducing misconduct and increasing transparency, inclusiveness in the workplace and also to measure the efficiency of diversified workforce in Indian IT Companies. 180 responses from the employees working in Listed Indian IT Companies are collected and study found that fostering inclusivity through diversity initiatives has proven effective in mitigating occupational fraud within the workforce.

The fourth paper sheds light on the critical role played by Asset Reconstruction Companies (ARCs) in addressing the challenges posed by Non-Performing Assets (NPAs) in the Indian banking sector. The study analyzes the effectiveness of ARCs in reducing NPAs during the period from 2014 to 2023. The study found that there is a reduction in Gross Non-Performing Assets (GNPAs) of public sector banks from 14.1% in fiscal year 2018 to 5.0% in fiscal year 2023. This highlights the positive impact of ARCs in mitigating NPA-related risks.

The fifth paper discuss the transformative journey of Corporate Social Responsibility Disclosure (CSRD) and its impact on companies and society. Charting the shift from profit-centric strategies to the Triple Bottom Line (TBL) framework—prioritizing social justice, environmental quality, and economic welfare—it navigates through pivotal debates on the voluntary versus obligatory nature of CSRD and its potential financial implications. Through an exhaustive literature review, the study investigates influential factors, including effective tax rates, corruption, liquidity ratios, solvency ratios, and activity ratios, shaping CSRD practices. The study found that the concept of CSRD development has advanced significantly in a number of publications that have been examined; it is also connected to the SDGs and environmental, social, and governance (ESG) concerns. The Sustainable Development Goals (SDGs) are an international initiative with the goal to improve people's lives everywhere. More than 193 countries have agreed to implement this program, which is a sustainable development program with 17 goals and 169 targets.

To foster the business and scale up to the global markets and global standards, the business houses need people from across the world. Diversity, Equity and Inclusion has become the need and necessity of today's business. The organization is expected to create equal opportunities to all the people, irrespective of age, caste, creed, gender, geography they belong to. The sixth paper examines the correlation between Diversity, Equity, and Inclusion (DEI) and instances of fraud in Indian companies, with a sample size of 102 employees working in various Indian Companies. The study found that organizations that actively promote diversity and create equal opportunities for all individuals are likely to reap multiple benefits including reduced fraud risk and more inclusive and innovative work environment.

Fast moving consumer goods sector (FMCG) is fourth largest sector in Indian economy. FMCG sector's contribution is around 20% and has reached US \$56.8 billion as of Dec 2022 (ibef.org, 2023). Investors can make an informed investment decision by conducting fundamental analysis as it helps to assess the company's financial health, competitive position and growth potential. The seventh paper explores the investment opportunities for investors in FMCG sector. The findings of the study indicate that Nestle India Ltd and Hindustan Unilever Ltd are top performing companies in terms of ROI, ROE, EPS and P/E ratio.

As per the Equal Employment Opportunity Act of 1972, Female employees needed office survival guides more than male employees when they found themselves in unfamiliar territory. Numerous studies have been conducted over the years to track women's advancement to the top of organizations. While there are more ladies working today, the research found that they are still laboring with career elevation and need mentors for successful managerial guidance. Females held nearly 52% of all specialized roles in 2014, but only 14.6% of upper management positions and 4.6% of Fortune 500 CEO positions. There are numerous reports providing professional advice and points for working females. There is a dearth of articles addressing apt practices for female executives. The eighth paper tries to fill this gap by offering lessons learned from Katharine Graham, the first female Fortune 500 Company CEO.

The two book reviews in this issue, the first one on the book 'Rocketing Through the skies: An event full life at ISRO by G. Madhavan Nair and the second one on the book 'Data Visualization: Storytelling Using Data by Sharada Sringswara, Purvi Tiwari, U Dinesh Kumar give an overview on these two contemporary books.

We express our gratitude to all the members of our Editorial Board and Advisory Body and to the reviewers for their continued support and encouragement. We hope this issue of RVIM Journal of Management Research will play a crucial role in creating and disseminating new knowledge in management and the allied areas, which is the sole purpose of this journal.

Happy Reading and Researching!

**Purushottam Bung**  
Chief Editor

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## Book Reviews

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## Institutional Ownership and Firm Performance: Additional Evidence from Indian Companies

Pramod A Kulkarni\*  
Dr Raju L Hyderabad\*\*

### Abstract

*This study aims to investigate the relationship between institutional ownership and firm performance in the Indian context. Using data of 273 Bombay Stock Exchange (BSE) listed firms from 2007 to 2021, the study performs regression analysis to test the association of institutional ownership, taken as a whole and separately for domestic and foreign institutional investors, with firm performance. The results of Ordinary Least Square regression indicate a positive impact of institutional ownership on performance. However, when endogeneity is factored and Two- stage regression with simultaneous equation system is applied, the study finds evidence of negative effect of institutional ownership on performance. Results of Two- stage regression also suggest a reverse causality of accounting performance having significant positive impact on the institutional ownership. The findings indicate institutional investors to be passive in monitoring firm performance and exit firms when performance is declining.*

**Keywords:** Institutional Ownership, Endogeneity, Firm Performance, Foreign Institutional Ownership, Institutional Investors

### Introduction

The rise of global corporations and their contribution in economic growth has indeed been reaffirmation of significance of corporate form of business. As these corporations involve resources contributed by various stakeholders, their accountability towards the stakeholders is imperative. Instances of corporate scandals and financial crisis bring back the attention to corporate governance and its role in mitigating agency problem. Berle and Means (1932) were among the earliest to caution that managements of widely held corporations could potentially undermine the rights of dispersed shareholders. When ownership is diffused, agency problem surfaces from the conflict of interests between outside shareholders and the managers of the firm (Jensen and Meckling, 1976).

Atypical to agency conflict emanating from dispersed ownership prevalent in developed markets like USA and UK, emerging markets have principal-vs.-principal type of conflict where large dominant shareholder expropriates the dispersed minority shareholders. Shleifer and Vishny (1986) and Sarkar and Sarkar (2000) emphasize the role of large shareholders like

institutional investors in resolving such conflicts by monitoring corporate performance thorough activism. Claessens and Fan (2002) also underline that the presence of institutional investors can enhance the credibility of management towards the minority shareholders.

Studies in the area of ownership structure have mainly analyzed ownership by identity of owner, ownership concentration and its relationship with performance. Some studies evaluate the effects of managerial ownership (Morck et al., 1988; Welch, 2003; Davies et al. 2005) while others examine effects of insider/promoter ownership (Selarka, 2005; Pant and Pattanayak, 2007; Bhatia and Srivastava, 2017) on performance. Studies investigating the influence of institutional investors (McConnell and Servaes, 1990; Coffee, 1991, Cornett et al., 2007) have been conducted mainly in the backdrop of developed markets like USA, where activism and proxy contests are frequent. With number of institutional investors increasing worldwide, Claessens and Yurtoglu (2012) rightly draw attention to the need for more research in emerging markets. Emerging markets like India are characterized by promoter

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dominated firms with less developed external mechanism of corporate governance. In the midst of growing mutual fund penetration and Indian economy attracting foreign institutional investors, it would be interesting to study their role and the response as large shareholders in monitoring corporate performance. The present study intends to add to this pursuit.

The ensuing sections present an overview of existing literature followed by description of data, methodology and variables used. The succeeding section briefly describes the trends in institutional ownership in the sample firms followed by the results of regression analyses and ends with discussion, conclusion and suggestions.

## Review of Literature

The literature of corporate governance has umpteen studies examining the relationship between ownership and performance but some specifically focus on institutional ownership and its association with performance.

Shleifer and Vishny (1986) highlight the monitoring role of large shareholders, who are unaffiliated with management of the firm, in resolving the agency problems. Pound, (1988) recognizing the role of

institutional investors in corporate voting process, posits three hypotheses on effects of institutional ownership on performance improving measures: (a) efficient monitoring hypothesis (b) conflict of interest hypothesis and (c) strategic alignment hypothesis. Efficient monitoring hypothesis states that institutional investors have the expertise in managing investment and taking informed voting decisions and hence are more competent in monitoring and improving firm performance than dispersed shareholders. This postulates a positive relationship of institutional shareholding with performance. Conflict of interest hypothesis on the other hand suggests that institutional investors like banks and insurance companies are involved with the firm as lenders, insurers and allied financial service providers causing a conflict of interest position that interferes with their fiduciary role as monitors. Ultimately, they are likely to take the side of the management, leading to a negative influence on performance. Strategic alignment hypothesis expects institutional investors and the management to co-operate for mutual benefits suggesting similar negative effects on performance.

Further empirical studies that test these postulations find mixed results. Table 1 provides an overview of the results of analyses made by some of the previous empirical studies.

Table 1. Summary of previous studies and their results

Research Study	Sample and Period of study	Performance Variable	Ownership Variable of interest	Description of Analysis	Results
McConnell and Servaes (1990)	Two samples of 1173 US firms for year 1976 and 1093 US firms for year 1986	Tobin's Q	Fraction of shares owned by institutional investors	Regression analysis of effect of insider ownership, block holders and institutional ownership on Tobin's Q	Significant positive influence of Institutional Ownership on Performance
Li et al. (2006)	433 listed companies of Hong Kong during 1996 - 1998	(Short-term profitability) ROA	Percentage of shares owned by institutional investors	Partial Least Square (PLS) analysis of effects of institutional ownership on corporate governance variables including short - term profitability	No significant direct effect of institutional ownership on short - term profitability
Douma et al. (2006)	1005 Indian listed firms for the financial year 1999 - 2000	ROA, Tobin's Q	Percentage of shares owned by domestic and foreign institutional investors	OLS Regression analysis of ROA and Tobin's Q on Foreign and Domestic Institutional Ownership along with Director Ownership	Significant positive influence of foreign and domestic institutional ownership on performance
Cornett et al. (2007)	S&P 100 indexed US Firms from 1993 to 2000	Industry Adjusted ROA	Fraction of shares owned by institutional investors	OLS Regression analysis of Industry Adjusted ROA on Lagged values of Fraction of Institutional Investors Ownership, their type and number	Institutional Ownership has a significant positive influence on Performance
Bhattacharya and Graham (2007)	116 Finland public traded companies for the year 2004	Tobin's Q	Herfindahl index (being sum) of equity ownership by institutional shareholders	3SLS analysis of relationship between Tobin's Q and equity ownership by institutional investors .	Performance and Institutional ownership are endogenously determined with two-way feedback. Institutional ownership and firm performance have negative influence on each other



Tsai and Gu (2007)	49 publicly traded restaurant firms of USA over the years 1999 to 2003	(proxy) Tobin's Q	Percentage of shares owned by institutional investors	OLS and 2SLS Regression analysis of relationship between Tobin's Q and institutional ownership	Significant positive endogenous relationship between Institutional Ownership and Performance.
Charfeddine and Elmarzougui (2010)	35 listed firms of France during 2002 -2005	(proxy) Tobin's Q	Percentage of shares owned by institutional investors	2SLS analysis of relationship between Tobin's Q and institutional ownership	Endogenous relationship exists between Performance and Institutional ownership with negative influence on each other.
- Najjar (2015)	82 listed firms from Jordan during 2005 -2013	ROA, ROE	Percentage of shares owned by institutional investors	OLS Regression analysis of ROA and ROE on Institutional Ownership	No significant relationship exists between institutional ownership and firm performance
Kansil and Singh (2018)	Panel data of 496 listed Indian firms over the year 2008 to 2014	Market to Book value (M B Ratio)	Percentage of shares owned by institutional investors	OLS and generalized 2SLS Regression analyses for Fixed and Random effects of relationship between M B Ratio and institutional ownership	Significant positive endogenous relationship between Institutional Ownership and Performance considering firm fixed effects. However overall results show firm performance to impact institutional ownership and not vice versa
Sakawa and Watanabel (2020)	436 Japanese listed firms over the period 2010 to 2016	ROA, Tobin's Q	Percentage of shares owned by institutional investors, domestic and foreign institutional investors	Linear regression and 2SLS analysis of effect of institutional ownership, domestic and foreign institutional investor ownership on Performance	Significant positive influence of Institutional Ownership, institutional ownership, domestic and foreign institutional investor ownership on Performance
Putra et al. (2022)	141 Indonesian firms over the period 2015 -2017	Tobin's Q	Proportion of shares owned by institutional investors	Linear regression analysis of effect of institutional ownership along with concentrated and family ownership on Tobin's Q	Statistically Significant positive influence of Institutional Ownership on Performance
Abedin et al. (2022)	180 public listed companies of Bangladesh over the year 2008 to 2018	ROA, Tobin's Q	Percentage of shares owned by domestic and foreign institutional investors	Linear regression analysis of effect of domestic and foreign institutional investor ownership on Performance.	Significant positive effect of Domestic and Foreign Institutional Ownership on Performance

## Need for Study, Objectives and Hypothesis

Previous studies analyzing the relationship between institutional ownership and performance are mainly concentrated in developed economies and recent studies have started giving attention to emerging economies. More studies are needed in emerging markets that analyze endogenous nature of institutional ownership in relation with performance. The present study intends to fill this gap by seeking additional evidence from Indian firms. The study aims to test endogeneity of ownership variable to see if institutional ownership and performance influence each other. The study also distinguishes domestic institutional investors from foreign institutional investors while investigating their association with performance. Based on existing literature the study expects the relationship can be positive or negative and hence following null hypotheses are being tested:

H0\_1: Institutional ownership has no significant relationship with firm performance

H0\_2: Domestic Institutional ownership has no significant relationship with firm performance

H0\_3: Foreign Institutional ownership has no significant relationship with firm performance

## Methodology

The present study employs panel data of 273 Indian companies listed on Bombay Stock Exchange (BSE). The sample is derived from companies included in BSE 500 Index over 15 years from 2007 to 2021. This period has seen several governance reforms and improved disclosure norms that have ensured better availability of governance related data. Initially from the set of 500 companies, the state owned public sector undertaking and banking, insurance and finance sector companies were excluded understandably for their distinctive regulatory environment and reporting features. Further non availability of data reduced the sample size to 273 companies, which still forms 54.6 percent of the index. Data for all the 273 companies across 15 years add up to 4095 observations. The data is mainly sourced from Center of Monitoring Indian Economy (CMIE) ProwessIQ database, supplemented by annual reports of companies and data from BSE website. The study employs Ordinary Least Square (OLS) and Two-Stage Least Square (2SLS) regression for analysis and Durbin, Wu-Hausman tests for testing endogeneity.

## Variables

### Performance Variables

For measuring performance, the study uses Return of Assets (ROA) and natural log transformed Tobin's Q

ratio. ROA is an accounting measure commonly used in several studies to evaluate corporate performance (Barber and Lyon, 1996). Alternatively, Tobin's Q is applied as a forward looking market based measure. In its original form Tobin's Q is the ratio of market value of the firm to the replacement cost of its total assets. Since assessing replacement cost poses practical difficulties, a proxy way of computing Tobin's Q, commonly used in literature (Demsetz and Villalonga, 2001) has been used i.e. sum of market value of equity and book value of outside liabilities divided by book value of total assets as at the financial year end. The distribution of Tobin's Q values for our sample appears to be positively skewed requiring further transformation for regression analysis. In order to address its non-normality and to reduce heteroscedasticity effect of its skewed distribution, natural log transformed values of Tobin's Q are used throughout this study, which is denoted as LNTQ.

### Ownership Variables

Percentage of shares held by institutional investors as at the end of financial year is used as ownership variable indicator. This measure is calculated for overall institutional holdings (INST\_OWN) as well as separately for shares held by domestic (DOM\_IO) and foreign institutional investors (FORGN\_IO). Domestic institutional investors include mutual funds, banks, financial institutions, insurance companies, domestic venture capital funds and other institutional non-promoters. Foreign institutional investors include non-promoter Foreign Institutional Investors (FIIs), Foreign Venture Capital Funds (VCFs) and institutional Qualified Foreign Investors as per SEBI (ICDR).

### Control Variables

In order to control for other factors determining firm performance, variables like firm age, firm size, Leverage (debt levels), Research and Development effects, Advertisement effects, stock beta and corporate governance factors like board size, its composition and independence are introduced in the model. Control variables used for determining ownership variables are firm age, firm size, Leverage, stock beta, growth potential and holding period stock returns. Previous studies like McConnell and Servaes (1990), Cornett et al. (2007), Charfeddine and Elmarzougui (2010), Al-Najjar (2015), Kansil and Singh (2018) etc. have applied similar control variables in their analysis

Table 2 provides description of variables used along with expected relationship with performance and ownership variables.

SEBI (ICDR): Securities Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations

**Table 2. Definition of Variables**

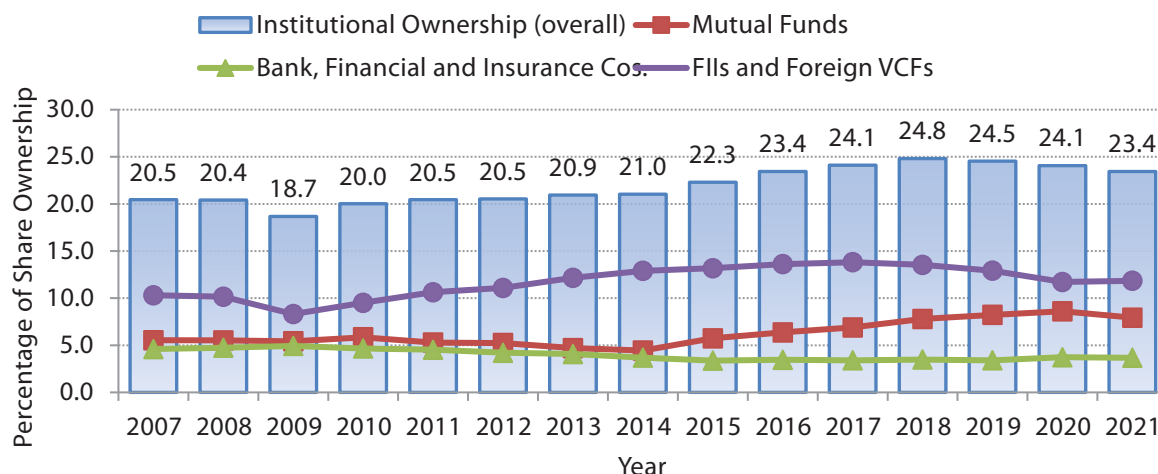
Symbol	Variable Name	Description	Hypothesized Relationship with	
			<b>Performance</b> (ROA and LNTQ)	<b>Ownership</b> (INST_OWN, DOM_IO and FOREGN_IO)
ROA	Return on Assets	Earnings before Interest and Tax divided by Total Assets as at the year -end multiplied by 100		(+/-)
LNTQ	Log natural transformed Tobin's Q Ratio	Tobin's Q ratio is calculated as sum total of market value of equity and book value of outside liabilities divided by book value of total assets as at financial year end. Natural log of this Tobin's Q ratio is used as LNTQ.		(+/-)
INST_OWN	Institutional Ownership	Percentage of shareholding by Institutional investors as at financial year end	(+/-)	
DOM_IO	Domestic Institutional Ownership	Percentage of shareholding by Domestic Institutional investors as at financial year end	(+/-)	
FORGN_IO	Foreign Institutional Ownership	Percentage of shareholding by Foreign Institutional investors as at financial year end	(+/-)	
AGE	Age	Number of years from the date of incorporation of the firm, till the date of observation.	(+)	(+)
SIZE	Size	Natural Log transformed valued of sum of 3 years averages of Total Income and Total Assets of the firm	(+)	(+)
LEV	Leverage	Long Term liabilities divided by Total liabilities as at financial year end	(+)	
R&D	Research and Development Expenses to Sales Ratio	Research and Development Expenses divided by Sales multiplied by 100	(+)	
ADVT	Advertisement Expenses to Sales Ratio	Advertisement Expenses divided by Sales multiplied by 100	(+)	

BETA	Beta	Sensitivity of stock return to market return	(-)	(-)
B_SIZE	Board Size	Number of Directors in the Board	(-)	
B_NED	Board Composition	Percentage of Non - Executive Directors in Board	(+)	
B_INDEP	Board Independence	Percentage of Independent Directors in Board	(+)	
GROWTH	Growth	Percentage change in Sales of the firm from its previous year Sales		(+)
HPR	Holding Period Return	Current Closing Market price minus Previous Closing Market price per share added by Dividends declared, expressed as a percentage of Current Closing Market price as at financial year end		(+)
Industry Dummies	Industry Dummies	Dummy variable with value 1 if firm belongs to particular industry; else 0. Industry Classification indicator across; 11 industrial sectors as per CMIE classification, viz. Diversified, Industrials, Basic Materials, Energy, Healthcare, CDGS (Consumer Discretionary Goods and Services), FMCG (Fast Moving Consumer Goods), Utilities, Telecom, Finance, Information Technology	(+/-)	(+/-)

## Data Analysis and Interpretations

### Trends in Institutional ownership

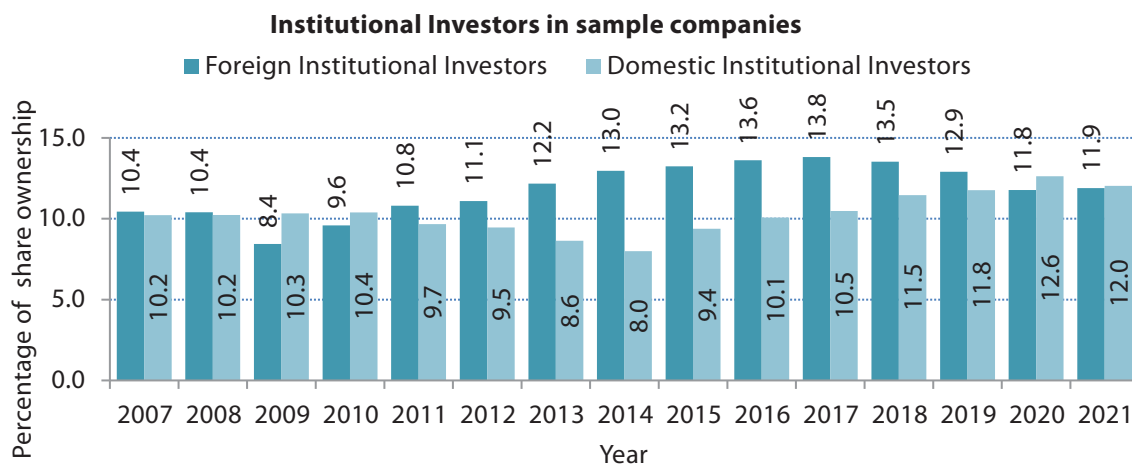
Institutional ownership in India prior to 1991 was largely limited to participation of government sponsored banks, insurance companies and Unit Trust of India (UTI). Post liberalization period saw the entry of foreign portfolio investors and venture capital funds. By the end of the millennium, domestic institutions like private banks, insurance companies and mutual funds also started investing in Indian stock market. Institutional investors have increasingly become a major driver of India's capital markets representing around 30 percent of market capitalization (OECD, 2020). A brief perusal of recent trends in institutional ownership gives a better understanding of their growing significance.

**Figure 1 : Trends in Institutional Ownership in sample companies**

Source: Compiled by authors

Chart 1 indicates the trends in financial year end ownership levels of institutional investors in our sample from 2007 to 2021. Overall institutional ownership level has seen a steady increasing trend especially from 2010 till 2018. The initial increase is mainly contributed by rise in holdings of FIIs and Foreign VCFs supplemented by increased mutual fund participation from 2015. From 2007 to 2021, FIIs and

Foreign VCFs holdings have increased from 10.4 percent to 11.9 percent. Mutual Funds have also seen a rise from 5.5 percent to 7.9 percent. Equity holdings by banks, financial and insurance companies have slightly decreased for 4.6 to 3.7 percent but remained close to average 4 percent. Overall institutional ownership rose from 20.5 percent to 23.4 while reaching highest of 24.8 percent in 2018.

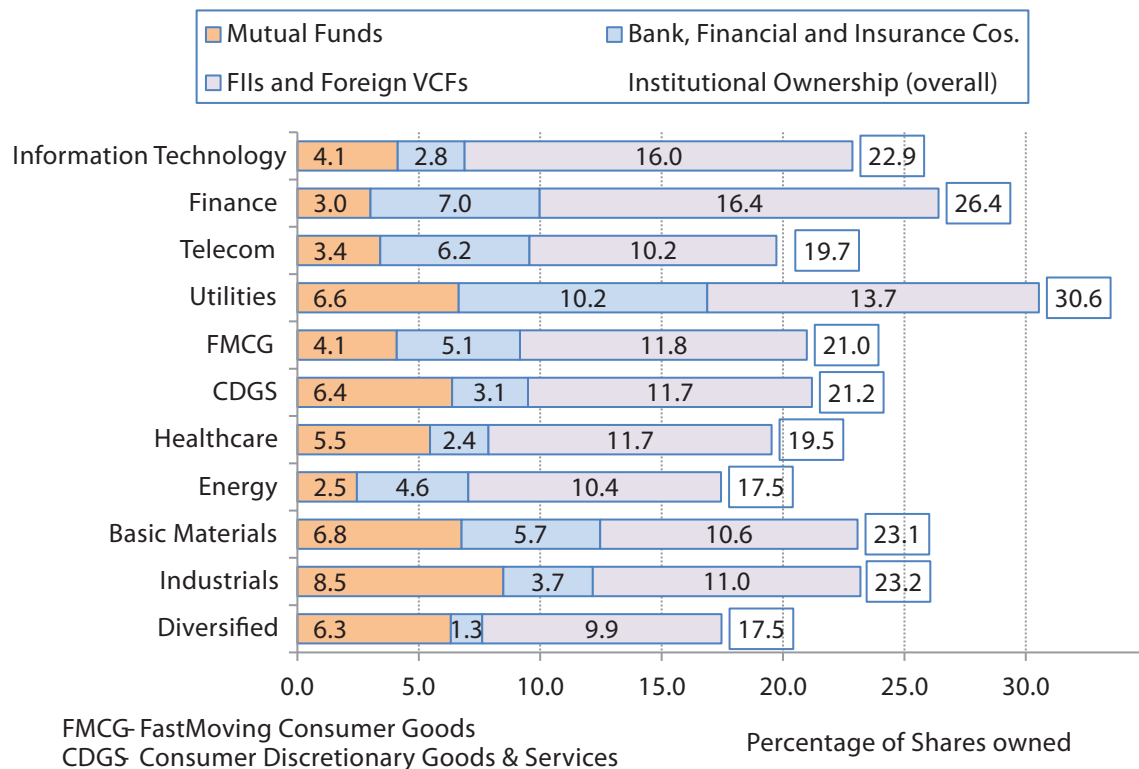
**Figure 2 : Trends in ownership levels of Foreign and Domestic**

Source: Compiled by authors

Chart 2 depicts the trends by grouping ownership levels into Foreign and Domestic institutional investors. The rise in foreign institutional holdings over the years 2010 to 2017 seems to correlate with India's phenomenal GDP growth rates for that period. The

slight fall in their holding in later years amidst global recession fears and ramifications of pandemic scenario, is balanced by increased participation of domestic institutions reaffirming their trust in India's growth story.

**Figure 3 : Industry wise Average Institutional Ownership in sample companies (2007-2021)**



Source: Compiled by authors

Chart 3 gives an overview of industry-wise preference of institutional ownership. The top three sectors for equity holdings by Mutual Funds are in Industrials, Basic Materials and Utilities. For Banks, Financial

Institutions and Insurance Companies Utilities, Finance and Telecom industries are the top three sectors. Finance, Information Technology and Utilities sector are the top three preferred sectors by FIIs and Foreign VCFs.

**Table 3. Descriptive Statistics**

Variable	No. of obs.	Minimum	Maximum	Median	Mean	Standard Deviation
ROA	4095	-398.26	128.01	11.18	12.56	12.52
LNTQ	4095	-1.11	3.24	0.67	0.75	0.70
INST_OWN	4095	0.00	79.32	20.09	21.95	13.56
DOM_IO	4095	1.29	48.28	9.10	10.32	8.02
FORGN_IO	4095	0.00	68.27	9.53	11.78	10.24
AGE	4095	1.00	158.00	34.00	42.91	25.98
SIZE	4095	3.23	15.63	10.08	10.12	1.38
LEV	4095	0.00	1.33	0.09	0.15	0.16
R&D	4095	0.00	297.79	0.07	1.07	7.02
ADVT	4095	0.00	28.72	0.12	1.48	3.07
BETA	4095	-0.12	2.64	0.96	1.00	0.41



<b>B_SIZE</b>	4095	3.00	23.00	10.00	9.89	2.72
<b>B_NED</b>	4095	25.00	100.00	75.00	74.19	12.47
<b>B_INDEP</b>	4095	10.00	100.00	50.00	52.43	11.11
<b>GROWTH</b>	4095	-95.61	3046 .03	10.92	89.23	476.08
<b>HPR</b>	4095	-97.57	2455.90	7.07	28.27	101.41

Source: Compiled by authors

Table3 summarizes the descriptive statistics of the variables used in the analysis. A perusal of mean and median values of all the variables reveals close proximity indicating normal like distribution. Notably

the average shareholding of overall institutional investors is about 22 percent with Domestic and Foreign institutional ownership averaging to 10 and 12 percent respectively.

**Table 4. Correlation Analysis**

	ROA	LNTQ	INST_OWN	DOM_IO	FORGN_IO	AGE	SIZE	LEV	R&D	ADVT	BETA	B_SIZE	B_NED	B_INDEP	GROWTH	HPR
ROA	1															
LNTQ	0.422**	1														
INST_OWN	<b>0.048**</b>	<b>0.073**</b>	1													
DOM_IO	-0.012	<b>-0.051**</b>	0.653**	1												
FORGN_IO	<b>0.055**</b>	<b>0.136**</b>	0.798**	0.106**	1											
AGE	0.016	0.022	0.156**	<b>0.314**</b>	-0.035*	1										
SIZE	-0.067**	-0.018	<b>0.515**</b>	<b>0.344**</b>	<b>0.397**</b>	0.233**	1									
LEV	<b>-0.353**</b>	<b>-0.414**</b>	-0.073**	-0.044**	-0.052**	-0.062**	-0.041**	1								
R&D	-0.048**	-0.009	-0.032*	-0.039*	-0.006	-0.037*	-0.032*	-0.043**	1							
ADVT	0.171**	0.298**	-0.025	-0.078**	0.033*	0.016	-0.141**	-0.162**	-0.028	1						
BETA	<b>-0.330**</b>	<b>-0.404**</b>	-0.024	0.018	-0.047**	0.046**	0.162**	0.239**	0.004	-0.250**	1					
B_SIZE	0.038*	0.001	<b>0.324**</b>	0.228**	0.256**	0.132**	0.397**	0.028	-0.043**	-0.048**	0.004	1				
B_NED	-0.037*	0.031*	0.057**	0.094**	-0.010	0.069**	0.068**	-0.026	-0.018	-0.043**	0.040**	-0.072**	1			
B_INDEP	-0.050**	-0.126**	0.079**	0.022	0.095**	0.030	0.078**	0.069**	0.056**	-0.021	0.079**	-0.059**	0.161**	1		
GROWTH	-0.007	0.003	-0.003	-0.009	0.002	-0.025	0.016	0.017	-0.003	0.004	-0.033*	-0.034*	0.032*	0.031*	1	
HPR	0.067**	0.133**	-0.085**	-0.064**	-0.062**	-0.024	-0.077**	-0.010	0.007	0.002	0.035*	-0.036*	0.003	0.011	0.001	1

**\*\* . Significant at the 0.01 level (2-tailed). \* . Significant at the 0.05 level (2-tailed).**

Source: Compiled by authors

The results of correlation analysis among the variables are presented in Table 4. Ownership variables (INST\_OWN, DOM\_IO and FORGN\_IO) and performance variables (ROA and LNTQ) exhibit very low but statistically significant correlations. Control variables like LEV and BETA display negative correlation with performance variables. SIZE, B\_SIZE and AGE show significant positive correlations with the ownership variables.

### OLS Regression

For assessing the effect of institutional ownership on firm performance, ordinary least square (OLS) linear regression analysis is done keeping the following base model:

Firm Performance it =  $b_0 + b_1$  (Ownership variable it) +  $b_{2-10}$  (Control variables it) +  $b_{11-20}$  (Industry dummies it) + e it  
.....equation (1)

where,

Firm Performance = represented by ROA and LNTQ; each taken separately

Ownership variable = INST\_OWN, DOM\_IO and FORGN\_IO

which are individually substituted against the each of the dependent variables

(ROA and LNTQ)

Control variables = (AGE, SIZE, LEV, R&D, ADVT, BETA, B\_SIZE, B\_NED, B\_INDEP)

which are retained across all the equations

Industry dummies = indicator with value 1 if belongs to corresponding industry; else 0.

A set of six linear models are thus generated and used in the OLS regression. Table 5 presents the results of the regression analysis of the six models. The results indicate institutional ownership to have significant positive influence on firm performance, both for ROA and LNTQ. When domestic and foreign institutional ownership are separately assessed, foreign institutional ownership has a significant positive effect on ROA and LNTQ but domestic institutional ownership shows a negative influence on LNTQ. Control variables – LEV and BETA have notable significant negative impact on ROA and LNTQ. Other control variables like ADVT and B\_SIZE have significant positive influence while R&D and B\_INDEP show negative influence on performance. SIZE and B\_NED show mixed effects.

**Table 5. OLS Regressions Results of Performance on Institutional Ownership**

Independent Variables	ROA		Dependent Variable		LNTQ	
	(1)	(2)	(3)	(4)	(5)	(6)
(Constant)	31.692 (15.81)**	29.765 (14.93)**	31.146 (15.74)**	1.423 (10.1)**	1.25 (9.22)**	1.51 (10.93)**
<b>INST_OWN</b>	0.05 (3.28)**			0.003 (3.64)**		
<b>DOM_IO</b>		0.001 (0.05)			-0.005 (-4.38)**	
<b>FORGN_IO</b>			0.055 (2.58)*			0.008 (7.85)**
<b>AGE</b>	0.003 (0.45)	0.003 (0.51)	0.006 (1.04)	-0.0004 (-1.07)	-0.000005 (-0.01)	0.00004 (0.11)
<b>SIZE</b>	-0.895 (-6.27)**	-0.657 (-5.08)**	-0.833 (-6.01)**	0.019 (2.03)*	0.04 (4.5)**	0.008 (0.83)
<b>LEV</b>	-23.334 (-11.2)**	-23.429 (-11.2)**	-23.457 (-11.2)**	-1.324 (-20.72)**	-1.335 (-20.89)**	-1.333 (-20.91)**
<b>R&amp;D</b>	-0.102 (-3.09)**	-0.103 (-3.13)**	-0.102 (-3.12)**	-0.002 (-1.45)	-0.002 (-1.51)	-0.002 (-1.39)
<b>ADVT</b>	0.143 (2.4)*	0.154 (2.61)**	0.138 (2.31)*	0.031 (6.48)**	0.031 (6.66)**	0.029 (6.3)**
<b>BETA</b>	-6.608 (-13.25)**	-6.784 (-13.45)**	-6.693 (-13.43)**	-0.433 (-15.5)**	-0.452 (-16.31)**	-0.43 (-15.43)**

<b>B_SIZE</b>	0.23 (3.7)**	0.266 (4.19)**	0.24 (3.88)**	-0.002 (-0.68)	0.001 (0.3)	-0.004 (-1.16)
<b>B_NED</b>	-0.027 (-2.01)*	-0.026 (-1.89)	-0.025 (-1.84)	0.005 (5.48)**	0.005 (5.72)**	0.005 (5.69)**
<b>B_INDEP</b>	-0.001 (-0.09)	0.002 (0.15)	-0.001 (-0.09)	-0.007 (-7.87)**	-0.007 (-7.57)**	-0.007 (-8.22)**
<b>Industry Dummies used</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>R-Square</b>	0.220	0.218	0.220	0.337	0.338	0.345
<b>Adj R Square</b>	0.216	0.214	0.216	0.334	0.335	0.341
<b>F</b>	47.010	47.270	46.930	99.850	101.480	104.310
<b>p-value</b>	0.000	0.000	0.000	0.000	0.000	0.000
<b>No. of Obs.</b>	4095	4095	4095	4095	4095	4095
<b>** . Significant at the 0.01 level. * . Significant at the 0.05 level</b>						

Source: Compiled by authors

## Endogeneity and 2SLS Regression

Extant literature have pointed out that incorporating the endogenous nature of ownership variable while assessing its effects on performance is imperative for arriving at accurate conclusions (Liang et al., 2011; Demsetz and Villalonga, 2001). To address this issue Durbin, Wu-Hausman tests of endogeneity are performed. Further a set of simultaneous equations are formulated for applying 2SLS regression, as follows:

Firm Performance it =  $b_0 + b_1$  (Ownership variable it) +  $b_2-10$  (Control variables it : AGE, SIZE, LEV, R&D, ADVT, BETA, B\_SIZE, B\_NED, B\_INDEP) +  $b_{11-20}$  (Industry dummies it) +  $e_{it}$   
 .....same as equation (1)

Ownership variable it =  $b_0 + b_1$  (Firm Performance it) +  $b_2-10$  (Control variables it: AGE, SIZE, LEV, BETA, GROWTH, HPR) +  $b_{11-20}$  (Industry dummies it) +  $e_{it}$   
 ..... equation (2)

where,

Firm Performance = represented by ROA and LNTQ each taken separately

as dependent variable in equation 1 for Table 6 and as endogenous variable in equation 2 for Table 7  
 Ownership variable = INST\_OWN, DOM\_IO and FORGN\_IO substituted individually  
 as endogenous variable in equation 1 for Table 6 and as dependent variable in equation 2 for Table 7.

The results of Durbin-Wu-Hausman tests confirm the existence of endogeneity between Ownership variable and Performance. Table 6 presents the results of 2SLS regression with Performance as dependent variable. The results indicate that each of the endogenous variables for the three models - INST\_OWN, DOM\_IO and FORGN\_IO has significant negative effect on both performance measures – ROA and LNTQ. Exogenous control variables like SIZE, ADVT, B\_SIZE, B\_NED and B\_INDEP show significant positive effect on Performance variables. Consistent with results of OLS regression, coefficients of LEV, R&D, and BETA have significant negative values. Age has mixed effect on performance with positive effects seen in case of domestic institutional investors, and negative effects for foreign institutional investors.

**Table 6. 2 SLS Regression results of Performance on Institutional Ownership**

<i>Independent Variables</i>		<i>Dependent Variable</i>				
		<b>ROA</b>			<b>LNTQ</b>	
(Constant)	-32.057	-10.564	-48.264	-5.901	-3.427	-7.729
	(-1.49)	(-0.61)	(-1.34)	(-2.41)*	(-1.73)	(-1.66)
<i>Endogenous variables</i>						
<b>INST_OWN</b>	-1.596			-0.186		
	(-2.94)**			(-3.02)**		
<b>DOM_IO</b>		-3.111			-0.366	
		(-2.42)*			(-2.52)*	
<b>FORGN_IO</b>			-3.078			-0.357
			(-2.19)*			(-1.97)*
<i>Exogenous variables</i>						
<b>AGE</b>	0.02	0.227	-0.169	0.002	0.026	-0.02
	(1.43)	(2.42)*	(-2.10)*	(1.00)	(2.45)*	(-1.96)
<b>SIZE</b>	6.993	3.83	9.287	0.926	0.56	1.185
	(2.67)**	(2.04)*	(2.03)*	(3.12)**	(2.64)**	(2.02)*
<b>LEV</b>	-26.486	-26.846	-21.958	-1.686	-1.731	-1.158
	(-8.17)**	(-7.52)**	(-5.83)**	(-6.56)**	(-5.49)**	(-3.25)**
<b>R&amp;D</b>	-0.137	-0.105	-0.161	-0.006	-0.002	-0.008
	(-3.9)**	(-5.34)**	(-2.82)**	(-1.1)	(-0.34)	(-1.02)
<b>ADVT</b>	0.505	0.033	1.052	0.072	0.017	0.135
	(3.08)**	(0.23)	(2.36)*	(3.87)**	(1.05)	(2.4)*
<b>BETA</b>	-12.447	-12.246	-11.986	-1.104	-1.085	-1.046
	(-5.57)**	(-4.74)**	(-4.31)**	(-4.64)**	(-3.9)**	(-3.1)**
<b>B_SIZE</b>	1.439	1.226	1.768	0.136	0.112	0.174
	(3.31)**	(2.8)**	(2.46)*	(2.88)**	(2.35)*	(1.91)
<b>B_NED</b>	0.013	0.071	-0.068	0.009	0.016	-0.0004
	(0.41)	(1.36)	(-1.53)	(2.78)**	(2.8)**	(-0.08)
<b>B_INDEP</b>	0.111	0.044	0.191	0.006	-0.002	0.015
	(2.31)*	(1.1)	(1.98)*	(1.16)	(-0.39)	(1.26)
<b>Industry Dummies used</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Robust t - values used</b>	Yes	No	Yes	No	Yes	No
<b>F</b>	14.600	12.080	8.490	7.610	5.350	3.310
<b>p-value</b>	0.000	0.000	0.000	0.000	0.000	0.000
<b>No. of Obs.</b>	4095	4095	4095	4095	4095	4095
<i>Test of endogeneity</i>						
Durbin: Chi -square(1)	27.828**	25.367**	26.687**	136.465**	127.364**	135.797**
Wu -Hausman: F (4,4073)	27.868**	25.408**	26.718**	140.411**	130.747**	139.700**
<i>Over identification test</i>						
Hansen's J / Saran chi-square (1)	0.092	0.849	0.839	0.010	0.083	0.114
p-value	0.762	0.357	0.360	0.919	0.773	0.736
<b>t - values in parentheses. ** Significant at the 0.01 level. * Significant at the 0.05 level.</b>						

Source: Compiled by authors

**Table 7. 2 SLS Regression results of Institutional Ownership on Performance**

<i>Independent Variables</i>			<i>Dependent Variable</i>			
	INST_OWN		DOM_IO		FORGN_IO	
(Constant)	-63.113	-33.06	-16.794	-9.283	-49.366	23.191
	(-8.65)**	(-12.56)**	(-6.03)**	(-5.41)**	(-7.94)**	(-11.19)**
<b>Endogenous variables</b>						
<b>ROA</b>	1.092		0.248		0.968	
	(4.87)**		(2.85)**		(5.07)**	
<b>LNTQ</b>		0.75		-0.322		0.992
		(0.53)		(-0.34)		(0.83)
<b>Exogenous variables</b>						
<b>AGE</b>	0.009	0.014	0.073	0.074	-0.059	-0.055
	(0.91)	(1.95)	(13.35)**	(14.04)**	(-6.65)**	(-10.37)**
<b>SIZE</b>	5.803	5.324	1.793	1.697	3.988	3.555
	(26.41)**	(38.02)**	(17.57)**	(18.76)**	(21.31)**	(33.14)**
<b>LEV</b>	23.86	-0.43	5.058	-1.163	22.986	1.931
	(4.36)**	(-0.19)	(2.36)*	(-0.77)	(4.94)**	(0.96)
<b>BETA</b>	4.047	-3.562	-0.01	-1.986	5.019	-1.559
	(2.28)*	(-3.95)**	(-0.01)	(-3.36)**	(3.32)**	(-2.16)*
<b>GROWTH</b>	0.000003	-0.000008	-0.00001	-0.00001	0.00001	0.000003
	(0.05)	(0.000004)*	(-3.81)**	(-5.29)**	(0.28)	(0.95)
<b>HPR</b>	-0.015	-0.006	-0.005	-0.002	-0.011	-0.004
	(-4.72)**	(-2.45)*	(-2.97)**	(-1.72)	(-4.15)**	(-1.96)
<b>Industry Dummies</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>used</b>						
<b>Robust t - values used</b>	No	Yes	Yes	Yes	No	Yes
<b>F</b>	54.610	124.670	72.600	90.690	31.250	84.110
<b>p-value</b>	0.000	0.000	0.000	0.000	0.000	0.000
<b>No. of Obs.</b>	4095	4095	4095	4095	4095	4095
<b>Test of endogeneity</b>						
Durbin: Chi -square(1)	43.068**	0.097	6.118*	0.167	53.677**	0.651
Wu - Hausman: F (4,4076)	43.323**	0.097	6.099*	0.166	54.138**	0.649
<b>Over identification test</b>						
Hansen's J / Saran chi -square (4)	38.447	134.853	46.107	53.467	25.814	123.830
p-value	0.000	0.000	0.000	0.000	0.000	0.000
<b>t - values in parentheses. * * Significant at the 0.01 level. * Significant at the 0.05 level.</b>						

Source: Compiled by authors

Table 7 shows results for 2SLS regression where ownership variable is dependent variable. Results indicate ROA to exhibit significant positive influence on INST\_OWN, DOM\_IO and FORGN\_IO. LNTQ displays positive effect on INST\_OWN and FORGN\_IO and a negative effect on DOM\_IO but the coefficients are not statistically significant. Control variables like SIZE and LEV show positive influence on institutional ownership. AGE has significant positive effect on DOM\_IO but a negative effect on FORGN\_IO. Effects of other variables like BETA, GROWTH and HPR are largely negative.

## Discussion, Conclusion and Suggestions

The results of OLS regression initially indicate positive influence of overall institutional ownership on performance. Foreign institutional ownership has positive effect on performance. Domestic institutions however exhibit a negative effect. Results of endogeneity tests confirm the presence of endogenous relationship between institutional ownership and performance. When endogeneity is factored in the 2SLS regression, the results clearly indicate significant negative influence of overall institutional ownership on performance. This negative effect persists even for domestic and foreign institutional ownership. However, when ownership is taken as dependent variable, the 2SLS regression reveals a significant positive effect of performance on overall institutional ownership. This positive effect holds good even for domestic and foreign institutional investor ownership. Overall results lead to rejection of all three null hypotheses.

To put the findings succinctly, institutional investors, be it domestic or foreign, are attracted to hold shares of high performing companies. On the other hand, higher ownership stakes by institutional investors do not increase firm performance. The findings contradict the results of studies like McConnell and Servaes (1990), Douma et al. (2006), Tsai and Gu (2007), Sakawa and Watanabel (2020) and Abedin et al.(2022). These findings rather corroborate with the findings of Bhattacharya and Graham (2007) and Charfeddine and Elmarzougui (2010) as far as the negative effect of institutional ownership on performance is concerned. The present study partially endorses findings of Kansil and Singh (2018) to the extent that performance positively impacts institutional ownership. Analogous to Kang and Stulz (1997), this study also documents the investment preference of institutional investors towards large size firms and firms with good accounting performance.

Institutional investors do not necessarily take up active monitoring role as envisaged in the literature but

rather view their ownership in the firms as mere short term investments. As Coffee (1991) points out, institutional investors act as passive monitors owing to reasons like liquidity pressures from their own investors, conflict-of-interest with the investee firm's management, 'short-termism' attitude of fund managers and to some extent overregulation. Diversification policies adopted to mitigate unsystematic risk keeps their exposure to individual firms at minimal levels. Institutions like mutual funds, banks and insurance companies are further bound by exposure limits placed by regulators. This 'thin-equity' problem diminishes their ability and incentive to exert pressure on management for performance improvements. They would rather choose to divest their stakes from poorly performing firms and fetch outperformers in the open market than pressing for action against management or execution of corporate restricting plans. Thus preferring the 'exit' option over 'voice' option appears to be cost effective. As average institutional holdings continues to be below 25 percent levels, well-coordinated monitoring efforts by all the institutional investors coming together is yet to prove effective in the Indian context.

The present study provides additional evidence on understanding the relationship between institutional ownership and performance and offers inputs for policy makers, institutional investor and academicians. Policy makers and regulators can create an atmosphere of well-regulated proxy advisors to induce constructive activism among the dispersed institutional investors. Relaxing the firm level exposure limits can also nudge the institutional investors to have their skin in the game. Institutional investors also need to encourage fund managers to ensure active representation in corporate voting decisions that enhance the value of their investments. Further research studies may focus on understanding the interaction effects of promoter holdings on firm performance in the presence of institutional ownership.

*Clause 2 of Regulation 44 (1) of Securities and Exchange Board of India (Mutual Funds) Regulations, 1996 puts a limit on investment by mutual fund to 10 percent of paid-up capital of the investee company.*

*Section 5 of Master Direction- Reserve Bank of India (Financial Services provided by Banks) Directions, 2016 puts a general limit of 10 percent of paid-up capital of the investee companies other than own subsidiaries of the bank*

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## Unveiling the Interplay of Financial Literacy and Financial Risk Tolerance: Impact on Retirement Planning Activity among Employees Under Defined Contribution System

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### Abstract

*The significance of Retirement Planning Activity cannot be overstated, as it directly affects individuals' ability to lead fulfilling lives during their golden years, particularly in the defined contribution system. This study investigates how financial literacy and financial risk tolerance influence Retirement Planning Activity among individuals enrolled in pension schemes under the defined contribution framework. By using multiple regression analysis on data from 386 individuals in the north Indian region, we found that financial literacy and financial risk tolerance play a vital role in shaping Retirement Planning Activity Level. These findings have profound implications for policy makers, financial institutions, pension agencies, employers, and personal financial consultants, as they reveal the mechanisms that boost retirement savings for employees under this system. Armed with a keen understanding of these factors, stakeholders can devise strategies to enhance retirement planning and ensure a secure financial future for individuals as they enter the post-work phase of their lives.*

**Keywords:** Financial Literacy, Financial Risk Tolerance, Retirement Planning

### Introduction

Retirement represents a significant life transition for working individuals, signifying end of their career and the beginning of a new chapter. To ensure a well-prepared retirement, individuals must understand their retirement needs while still employed, gaining clarity on the financial resources required to support themselves during this phase of life. Early savings become crucial in laying the foundation for accumulating sufficient funds to sustain their lifestyle post-retirement. Considering the potential impact of life events on one's financial standing during retirement is essential, as unforeseen expenses can pose challenges for those with limited savings. Proactive preparedness is vital to tackle unexpected financial hurdles. For those seeking a retirement free from excessive debt, prudent financial planning is of utmost importance, especially for those with modest incomes.

In the contemporary Indian landscape, retirement planning assumes heightened significance, with a shift from the traditional defined benefit pension system to reliance

on defined contribution system. Growing living standards and extended life expectancies underscore the urgency to address concerns regarding financial retirement planning. The increasing dependence emphasizes the need for comprehensive retirement preparations. In the context of India, this study aims to analyze the factors that influence financial retirement planning among individuals who are empowered by the defined contribution system. The study seeks to identify these variables to help individuals achieve a secure and contented retirement by thoroughly exploring the intricacies associated with retirement.

Retirement, being a distant aspiration, requires individuals to display unwavering discipline in saving sufficiently for a future that may be far off. However, conventional wisdom posits that only a select few possess such resolute determination. According to the comprehensive reports by CRISIL and PFRDA (2017), a substantial number of Indian states are anticipated to witness a noteworthy surge in their elderly population (aged 60 and above). LIMRA and Society of Actuaries 2018 projections indicate that India's overall population is set to experience significant growth from

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2015 to 2050, resulting in an astonishing 171 Percent rise in the elderly population, effectively tripling the proportion of elderly individuals during this time span. Astonishingly, despite a robust active labour force comprising around 450 million individuals, a mere 12 Percent are covered by formal retirement systems, as reported by the Asian Development Bank (2010). Peering into the future, by 2050, the ratio of working individuals to elderly persons in India is expected to decrease to 5:1 from 13.8:1 in 2000, as indicated by (CRISIL & PFRDA, 2017; LIMRA & Society of Actuaries, 2018). Alarming, over 71 Percent of elderly people will find themselves compelled to work for their livelihood, either due to necessity or obligation, as stated by UNFPA (2012).

Within the realm of retirement planning, the defined contribution system places a weighty responsibility on employees to make crucial decisions regarding the allocation of their retirement savings (Yuh & Devaney, 1996). In this endeavour, possessing a strong foundation of financial knowledge becomes paramount, as individuals must navigate the intricacies of diverse investment options and strategize how to nurture their retirement nest egg.

In contrast, those embraced by the defined benefit system experience a sense of tranquility, shielded from the anxiety of uncertain future income. Upon retirement, they are assured of a predetermined amount, providing a sense of financial security. However, within the defined contribution system, individuals bear the onus of contemplating their post-retirement income, fostering a heightened focus on diligently accumulating funds until the time comes to bid farewell to the workforce.

Given this significant responsibility, employees in the defined contribution system find themselves entwined with the investment risk inherent in their retirement savings (Yuh & Devaney, 1996). Each choice they make carries potential consequences, underscoring the need for prudence and well-informed decisions as they endeavour to safeguard their financial future amidst the ever-changing tides of the market.

The current body of academic research on retirement financial planning seems to predominantly focus on developed nations, revealing a noticeable gap in studies specifically dedicated to the Indian context (Kumar et al., 2019). This gap prompts a thorough investigation into whether the factors relevant to retirement planning in developed economies exhibit similar patterns in developing nations like India. The unique cultural nuances that shape savings behaviours in India provide a distinct backdrop for research. Moreover, the recent transition within India's pension system, moving from a defined benefit to a defined contribution system as outlined by Holzmann and Hinz

(2005), introduces another layer of complexity. Economic policies and structural elements of pension systems worldwide are anticipated to exert diverse pressures on savings, influencing variations in the underlying behavioural foundations of retirement planning (Kemp et al., 2005). In the specific context of India, its unique economic policies and pension system structure are likely to contribute distinctively to these influences, shaping retirement planning behaviours in a way that differs from other countries. Given these apparent gaps in the existing scholarly literature, there is a compelling need for academic inquiry aimed at a nuanced clarification and comprehensive understanding of the intricacies involved in retirement financial planning within the Indian context.

The lack of saving for retirement can lead to financial insecurity, dependence on others, and increased poverty among the elderly. It may also strain social welfare systems, limit opportunities for younger generations, and create economic challenges for the country. Overall, the consequences of inadequate retirement savings can be far-reaching, affecting both individual retirees and the broader society, leading to financial hardships, social challenges, and economic implications. Studying the factors influencing retirement planning activity is vital for developing effective strategies and addressing barriers, thereby promoting better financial preparation among retirees. Research in this area contributes to creating a more resilient and financially secure retirement landscape for individuals and society as a whole.

## Review of Literature

The life-cycle saving and investing theory is a fundamental economic concept that provides insights into how individuals make financial decisions over their entire lifetime, taking into account factors like life expectancy, income levels, retirement goals, and motivations related to intergenerational transfers of wealth (Chaffin, 2015). At its core, the theory suggests that individuals aim to maximize their overall lifetime utility, which refers to the satisfaction or well-being they derive from consuming goods and services throughout their lives. This means that people strive to achieve a balance between their current consumption and saving for the future, including retirement.

One of the key premises of the life-cycle theory is the idea that individuals face different income levels at different stages of their lives. Typically, people experience higher income levels during their working years when they are actively employed and earning a salary. During this period, individuals are expected to save a portion of their income to ensure a financially secure retirement in the future (Baranzini, 2005).

As individuals take on more responsibility for their financial affairs, understanding how to effectively manage and allocate their resources becomes crucial. This includes making informed decisions about investment options, understanding different financial products, and creating a personalized financial plan that aligns with their long-term goals, including retirement. The framework for effective retirement planning also recognizes the critical role financial risk tolerance. By considering their risk tolerance, individuals can make responsible and wise financial choices, ensuring they save and invest sufficiently to support their retirement needs.

## Financial Literacy

In the vast landscape of financial decision-making and resource management, financial literacy stands as a formidable cornerstone, empowering individuals with the wisdom and acumen to navigate the intricate paths of fiscal. Researchers, including Hershey and Mowen (2000), Hershey and Walsh (2000), and Jacobs-Lawson and Hershey (2005), have consistently demonstrated the pivotal role of financial literacy in shaping people's attitudes towards planning for retirement. As the foundation of informed decision-making, financial knowledge stands as a powerful tool that empowers individuals to navigate the complexities of retirement savings with confidence and prudence.

Over the years, numerous esteemed studies have unveiled a compelling positive correlation between investment knowledge and savings behaviour (Agnew et al., 2003; Agnew & Szykman, 2005; Grable & Lytton, 1997). A well-informed individual possesses the essential acumen to make astute investment choices, skillfully aligning their financial aspirations with prudent savings strategies. The enlightening work of Clark-Murphy and Gerrans (2001) brings to light the challenges faced by Australian superannuation fund members who lack financial knowledge, leading to difficulties in discerning between defined benefit (DB) and defined contribution (DC) plans. This revelation serves as a poignant reminder of the irreplaceable value of financial literacy in guiding individuals towards optimal retirement options.

Further bolstering this notion, Lusardi and Mitchell (2011) and Lusardi and Mitchell (2006) suggest that individuals equipped with greater financial knowledge are more likely to embark on thoughtful retirement planning journeys. Educational interventions, such as enlightening seminars, have been shown to wield transformative effects on retirement savings behaviour, as gracefully illuminated by the pioneering study of Clark et al. (2006) on US women. Based on the insights gained from the previous study, this research

proposes the following hypothesis:

H1: There exists a positive association between one's financial literacy and the level of retirement planning activity.

## Financial Risk Tolerance

The studies highlighted in the passage provide compelling evidence for the crucial role of financial risk tolerance in predicting individuals' retirement investment strategies. Researchers such as Bajtelsmit (1999), Grable and Lytton (1999), Jacobs-Lawson and Hershey (2005) and Sundén and Surette (1998) have conducted extensive investigations that demonstrate the profound influence of financial risk tolerance on shaping individuals' financial decisions concerning their retirement savings.

Financial risk tolerance, as eloquently articulated by Grable (1999) and Grable and Lytton (1999), refers to an individual's willingness to embrace a certain level of volatility when making financial choices. This intrinsic factor significantly influences one's investment preferences, particularly in the context of prudent retirement planning. Understanding an individual's risk tolerance becomes essential for crafting suitable investment strategies that align with their willingness to bear financial uncertainties.

Moreover, the literature has diligently explored the intricate relationship between financial risk tolerance and various demographic factors. Comprehensive studies by Eker and Anbar (2010) and Grable and Lytton (1999) have illuminated the influence of demographic, socioeconomic, and attitudinal factors on financial risk tolerance. Notably, factors such as educational level and personal finance knowledge have been observed to yield significant variations in risk tolerance among respondents.

Pertaining to retirement savings, van Rooij et al. (2007) have compellingly reported that self-assessed risk tolerance stands as a critical explanatory variable for individuals' attitudes toward pension systems. Those inclined to embrace risk were found to favour a defined contribution (DC) plan and seek investor autonomy, while individuals with lower risk tolerance tended to opt for options that are more conservative. Similarly, Yuh and Devaney (1996) have eloquently demonstrated that individuals with higher risk tolerance tend to embrace larger DC plans in contrast to their risk-averse counterparts. These insights highlight the interplay between risk tolerance and retirement savings preferences, which can significantly impact one's financial security in the later stages of life.

The study by Croy et al. (2010) offers nuanced insights by suggesting that the influence of financial risk tolerance on intentions to save for retirement may be



less pronounced, emphasizing the intricacy of human decision-making and calling for comprehensive investigations into the myriad of factors shaping retirement planning.

The evidence presented in the literature predominantly originates from studies conducted in well-established developed economies. However, it is crucial to acknowledge that emerging economies possess distinct economic contexts, cultural norms, and institutional frameworks, which could introduce unique dynamics affecting the correlation between risk tolerance and retirement savings. This intriguing observation calls for dedicated efforts to investigate whether financial risk tolerance similarly influences investment decisions in retirement savings among individual employees in the specific context of India. Based on the aforementioned discussion, the study puts forth the following hypothesis:

H2: There exists a positive association between one's financial risk tolerance and the level of retirement planning activity.

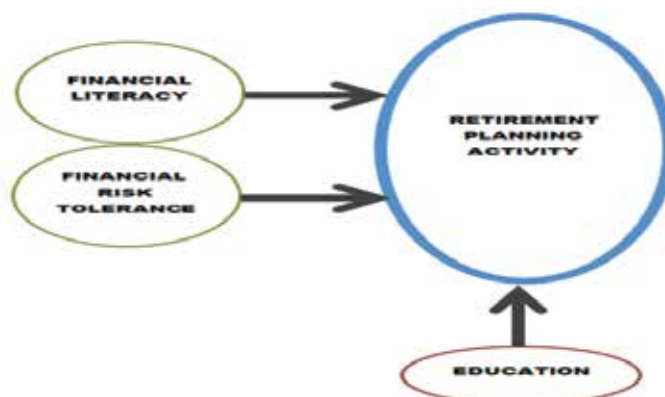
### Control Variable

Education serves as a critical factor that may impact both financial literacy and risk tolerance, and controlling for it allows us to gain a clearer understanding of the unique contributions of financial

literacy and risk tolerance to retirement planning decisions. Furthermore, education can act as a proxy for individuals' cognitive abilities, problem-solving skills, and access to financial knowledge. Yuh and Olson (1977) demonstrate a strong association between education and financial planning disposition, indicating that individuals with higher levels of education tend to engage in more proactive and informed financial planning behaviours. By incorporating education as a control variable in our multiple regression analysis, we can disentangle and examine the specific influence of financial literacy and financial risk tolerance on retirement planning activity, without the potential confounding effect of educational attainment. By accounting for education in the model, we can address these cognitive and knowledge-related factors, ensuring that any observed relationship between financial literacy, risk tolerance, and retirement planning is not merely a reflection of differences in education levels.

The discussion brings to light a research gap pertaining to the investigation of how financial literacy and financial risk tolerance influence retirement planning activity, specifically within a defined contribution pension system. To bridge this gap, the current study introduces a comprehensive research framework designed to explore the interplay and effects of these factors on individuals' retirement planning decisions as illustrated in the figure 1.

**Figure 1: Framework for retirement planning activity**



### Research Methodology

The study employs a descriptive research design, utilizing an empirical and quantitative methodology for data collection. This chosen approach is specifically implemented to rigorously test and evaluate hypotheses, ensuring a systematic examination of the proposed relationships within the research study (Malhotra & Dash, 2019).

The study, in adherence to the convenience sampling technique (Cooper & Schindler, 2017; Malhotra & Dash, 2019; Sekaran & Bougie, 2016), entailed the physical distribution of questionnaires to individuals within the employee cohorts of numerous organizations operating in both government and private sectors across the North Indian region.

The study included 400 participants who were enrolled in various defined contribution pension plans. Among them, 391 actively participated by completing and returning the questionnaires. The sample was diligently collected across a diverse array of demographic profiles, as shown in the Table 1. However, during the data analysis phase, only 386 responses were considered valid and included in the final results. The exclusion of the remaining responses occurred due to incomplete or missing information. As

a result, the study achieved an impressive effective response rate of approximately 96.5%. In its pursuit of comprehensively evaluating financial literacy (Jacobs-Lawson & Hershey, 2005), financial risk tolerance (Jacobs-Lawson & Hershey, 2005), and retirement planning activity (Hershey et al., 2007), the study judiciously employed a five-point Likert scale as measurement instrument. This scale underwent careful refinement and thoughtful adaptation, specifically tailored to harmonize with the unique local context.

## Data Analysis and Interpretation

**Table 1: Profile of respondents**

Gender	Frequency	Percentage
Male	242	62.7
female	144	37.3
Education		
Primary	19	4.9
Secondary	91	23.6
Undergraduate	189	49.0
Postgraduate	87	22.5
Age		
21-30 years old	29	8
31-40 years old	267	69
41-50 years old	86	22
Above 50 years old	4	1

### Reliability

In order to assess the internal reliability of the items, Cronbach's alpha (Nunnally & Bernstein, 1994) was computed. Nunnally and Bernstein (1994) proposed a minimum alpha of 0.6 as an acceptable threshold. The calculated Cronbach's alpha values for financial literacy, financial risk tolerance, and retirement planning activity were 0.863, 0.895, and 0.936, respectively. All three constructs exhibited Cronbach's alpha values well above the recommended threshold

of 0.6, indicating a satisfactory level of reliability.

### Normality

Data normality was assessed by examining the skewness and kurtosis scores. To retain a variable or item based on normality considerations, the acceptable range for skewness is between -2 and +2, while for kurtosis, it falls within -3 to +3 (Bollen, 1989). As depicted in the Table 2, all the variables lie within the acceptable range.

**Table 2: Data Normality**

Variable	Skewness	Kurtosis
Financial literacy	-1.513	1.623
Financial risk tolerance	-1.134	0.028



Retirement Planning Activity	-1.375	0.558
Education	-0.371	-0.308

### Multicollinearity

The study assessed multicollinearity among independent variables using the tolerance test and variance inflation factor (VIF) (Hair et al., 2018). Upon examining the results in Table 3, it is evident that all tolerance levels exceed 0.25, while all VIF values comfortably remain below 3.

**Table 3: Multicollinearity**

Variable	Tolerance	VIF
Financial literacy	0.614	1.629
Financial risk tolerance	0.635	1.574
Education	0.703	1.423
Dependent Variable: Retirement Planning Activity		

### Hypotheses testing

Table 4 presents the outcomes of multiple regression analysis conducted to assess the robustness of the proposed relationship. Two hypotheses were thoughtfully formulated, and all variables successfully withstood reliability testing. The individual hypotheses underwent rigorous examination through a multiple regression prediction model, adhering to the guidelines set forth by Hair et al. (2018) with financial

planning activity serving as the dependent variable. The results shown in Table 4 reveal the significance of both H1 and H2 within the prediction model. Moreover, the control variable, level of education, emerges with noteworthy significance. These compelling findings powerfully bolster hypotheses H1 and H2, confirming the profound impact of Financial literacy ( $\beta = 0.319$ ,  $p < 0.000$ ) and Financial risk tolerance on retirement planning activity ( $\beta = 0.191$ ,  $p < 0.000$ ).

**Table 4: Results of a multiple regression**

Variable	$\beta$	t-value	p-value
Financial literacy	0.319	7.045	0.000
Financial risk tolerance	0.191	4.295	0.000
Education (Control)	0.362	8.548	0.000
$R^2 = 0.518$ , Adjusted $R^2 = 0.514$ , Dependent Variable: Retirement Planning Activity			

### Conclusion

The main objective of this study is to explore how financial literacy and financial risk tolerance could facilitate in predicting the level of retirement planning activity in employees enrolled in defined contribution system of pension. The study results show that the model could explain 51.4 % of the variance in retirement planning activity of an individual. The

model was statistically significant and this study results demonstrates the role of financial literacy and financial risk tolerance in explaining the level of retirement planning activity.

Numerous comprehensive studies have consistently illuminated a compelling and affirmative correlation between an individual's financial knowledge and their propensity for adopting prudent saving behaviours

(Agnew & Szykman, 2005; Grable & Lytton, 1997). Moreover, these studies have provided compelling evidence that financial literacy is directly associated with the practice of prudent financial saving habits (Hershey & Mowen, 2000; Hershey & Walsh, 2000; Jacobs-Lawson & Hershey, 2005; Yuh & Devaney, 1996). Aligning with this wealth of knowledge, our own study contributes to this body of evidence by uncovering a significant and positive relationship between financial knowledge and the level of engagement in retirement planning activities.

Furthermore, building on previous research, our study ventured to explore the conjecture of a favourable association between an individual's financial risk tolerance and their propensity to engage in effective retirement planning. The results of our rigorous multiple regression analysis admirably supported this hypothesis, echoing the findings of earlier investigations (Grable & Joo, 1997; Jacobs-Lawson & Hershey, 2005; Yuh & Devaney, 1996). Conclusively, individuals exhibiting greater willingness to assume higher financial risks were found to be more inclined towards meticulous retirement planning. Nonetheless, as the study by Croy et al. (2010) suggests, financial risk tolerance may not significantly influence intentions to save for retirement.

Equally noteworthy in this realm of study are the compelling revelations from other investigations that highlight the role of education and income in shaping one's financial planning disposition (Yao & Cheng, 2017; Yuh & Devaney, 1996; Yuh & Olson, 1977). These studies collectively underscore the positive association between higher levels of education and financial planning. Through our multiple regression analysis, wherein we carefully accounted for educational levels, we further support the idea that educational attainment is closely linked to retirement planning activity. The results revealed a significant and meaningful relationship between the two variables, affirming this notion.

Our research contributes significantly to the existing literature on retirement planning for employees participating in a defined contribution pension system. The study highlights the beneficial impact of financial knowledge and risk tolerance on their retirement outcomes. Furthermore, our research establishes the crucial role of educational attainment as a contributing catalyst towards attaining financial preparedness for retirement.

### Implication of the findings

The implications arising from the discussed findings bear profound significance for employees engaged in defined contribution retirement plans. To ensure a secure retirement for these individuals, organizations

can adopt various policy measures.

Firstly, comprehensive financial education programs are essential to improve employees' financial literacy and decision-making skills regarding retirement savings. These programs, conducted through workshops, seminars, or online resources, empower individuals to make informed choices on their retirement journey.

Secondly, organizations can instill confidence in employees' retirement savings decisions by offering a diverse range of investment options within defined contribution plans that cater to their individual risk tolerance levels.

Thirdly, incorporating auto-enrolment and auto-escalation features promotes higher savings and better retirement preparedness among employees, ensuring they take proactive steps towards securing their financial future.

By implementing the aforementioned policy measures, organizations can cultivate a retirement-friendly workplace culture that fosters a more secure and prosperous retirement for individuals. These policies not only benefit employees individually but also contribute to building a financially resilient and thriving society as a whole. The study's emphasis on the importance of financial knowledge and risk tolerance in retirement planning highlights the necessity of adopting these policy measures to encourage informed decisions and enhance financial preparedness. Policymakers, financial practitioners, and educators can draw upon the insights from this study to collaborate towards securing better financial futures for individuals as they approach retirement. Ultimately, these efforts can lead to a more financially secure and fulfilling retirement experience for employees enrolled in defined contribution retirement plans.

### Directions of future research

Researchers have a wide range of avenues to explore in this field. Longitudinal studies that track individuals' financial behaviours and retirement planning over extended periods can offer valuable insights into how financial literacy and risk tolerance evolve and impact retirement decisions throughout different life stages.

Cross-cultural studies focusing on retirement planning behaviours and the roles of financial literacy and risk tolerance in diverse cultural contexts outside of North India could provide valuable information on whether these factors are universally applicable or context-specific.

Moreover, evaluating the effectiveness of educational programs on financial literacy and risk tolerance aimed at enhancing retirement planning, while also considering the influence of socioeconomic factors,

would be beneficial for creating targeted interventions and support systems. From a behavioural economics perspective, researchers could delve into retirement planning decisions, examining how financial literacy and risk tolerance interact with behavioural biases.

Additionally, understanding the role of technology in retirement planning could offer new insights. Furthermore, investigating the impact of employer-sponsored retirement programs and government policies on retirement preparedness, as well as exploring the relationship between retirement planning, financial well-being, and overall well-being, are crucial in shaping effective policies and ensuring a secure financial future for individuals during their retirement years. By pursuing these research directions, researchers can deepen their understanding and make valuable contributions to the development of well-informed policies and strategies for retirement planning.

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## Forms of Workforce Diversity and its Implication in Curtailing the Frauds in Listed IT Companies in India

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### Abstract

*Embracing diversity involves recognizing, respecting, and appreciating differences, while inclusivity demands extending dignity to all, regardless of gender, caste, race, or religion. The cohesion of diversity relies heavily on active inclusion. Barriers to presenting gender diversity as a business case include factors such as unconscious bias, adherence to legal compliance, risk mitigation, reputation management, and conservative thought processes. Notably, discomfort among male managers in interacting with female counterparts often hinders efforts to promote gender diversity, puncturing the overall initiative. Research findings indicate that companies featuring at least one woman on the board experience superior return on equity, increased earnings, and more robust growth in stock prices compared to those with exclusively male boards. McKinsey's 2016 study on women in the workplace reveals that many companies face challenges in reshaping their work environments to fully leverage the potential of gender diversity. It highlights the ongoing struggle of numerous companies in achieving fair representation of women in top management roles. In this context our study aims to find out the impact of gender in reducing misconduct and increasing transparency, inclusiveness in the workplace and to measure the efficiency of diversified workforce. To confine the study, objectives and its implications, a structured questionnaire was circulated to 230 MNC employees working in Bengaluru region. Ultimately 180 valid responses were considered. The study used snowball technique for collection of responses. This background of the study also carries out survey to understand how employees perceive corporate fraud from the DEI perspective.*

**Keywords:** Diversity, Equity, Frauds, Inclusion, Misconduct, Mitigating, Workforce

### Introduction

No human being is made alike and same is the case with workforce there are similarities and differences amongst working colleagues in terms of physical abilities disabilities, race, caste religion, cultural background, gender and sexual orientation. For ages society has discriminated on these aspects and in the current scenario diverse workforce is more by default and necessity than a choice. This has come up with diverse challenges. Diversity presents wide spectrum of ideas, profile, backgrounds, skill sets etc. which will kick off innovative thought process devoid of tunnel vision. Limited studies reveal that anti-fraud compliance initiatives have been overlooked, and recent fraud occurrences have compelled regulators to consider the absence of structured anti-fraud compliance programs as tantamount to non-compliance. Consequently, organizations face

heftier fines and penalties for instances of misconduct. Effectively mitigating the repercussions of fraud necessitates businesses to allocate resources towards establishing a robust anti-fraud compliance program. This program should encompass anti-fraud policies and procedures, reporting mechanisms, training on said policies and procedures, and initiatives to enhance awareness. These are commonly undertaken by most of the companies, but they must even consider revamping their board filled with more women brains and management and also more women employees on par with male employees. This doesn't mean that they must hire incapable people just to hire more women employees, but training should be given to make them more capable.

The 2020 PWC Global Economic Survey on crime and fraud revealed that 46% of organizations disclosed

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experiencing fraud within the preceding two years. While many business owners primarily associate fraud with external threats, the study showed that 31% of reported fraud originated from internal participants, and an additional 26% resulted from collusion between internal parties and external actors. In essence, a combined total of 57% of the fraud incidents analyzed by PWC occurred with the involvement of an employee.

As per a 2022 report from CFS on occupational fraud and abuse, employee fraud imposes an average cost of \$8,300 on businesses. These incidents typically persist for an entire year before being identified. Types of employee fraud includes theft, embezzlement, kickbacks, benefits fraud, payroll fraud, time theft Etc. There are many reasons for fraud like remote working, increased digitization, weekend controls etc. The heightened emphasis on ethics and corporate governance in organizations has elevated the significance of the role played by independent directors as a potent deterrent against fraudulent mismanagement and lapses in corporate governance. The disruptions in business brought about by the pandemic have accentuated the necessity for vigilance and the reinforcement of governance frameworks. Historical data indicates that instances of business disruptions or crises are often succeeded by an increase in the prevalence of fraudulent practices. Investigating the impact of gender on reducing misconduct and enhancing transparency in the workplace holds immense significance as it unveils potential disparities that may hinder a fair and inclusive professional environment. Diverse perspectives, including those related to gender, contribute to more informed decision-making and effective risk management. By delving into this aspect, the research can shed light on how diversity at the board level positively influences governance, leading to the implementation of policies that enhance organizational resilience, ethical standards, and long-term sustainability, benefitting both the company and its stakeholders

## Review of Literature

In the 2021 study titled "Being transgender at work" by David Baboolall, Sarah Greenberg, and Maurice Obeid, it was found that over 50% of transgender employees feel uncomfortable disclosing their transgender identity in the workplace. Additionally, they perceive a lower level of support compared to their cisgender colleagues. "Women in the Workplace 2021," (2021), Tiffany Burns, while there has been improvement in the representation of women, progress remains uneven. Women managers are increasingly taking on a more

active role in supporting their teams and serving as champions for diversity, equity, and inclusion (DEI). According to Shefali Anand (2022), although many organizations have long aspired to enhance diversity, it is only in the past two years that a substantial number have initiated efforts to actively pursue this goal. The key Elements of an Impactful DEI Integration Strategy (2022) create a self-sustaining ecosystem simple action like installing inclusion practices as an intrinsic value into employee onboarding, designing the restrooms as gender neutral, adopting the right technology to add the cost evolving the medical policy to cover gender transition surgery. According to William Newburry (2022), the implementation of national-level Diversity, Equity, and Inclusion (DE&I) policies is linked to economic advancement, with potential implications at the firm level. This association can lead to increased creativity, enhanced adaptability, and improved problem-solving capabilities. Dr. Giriraj Kiradoo (2020) emphasizes that DE&I constitute critical components for building a successful and sustainable workforce. Organizations stand to gain from enhanced performance, greater innovation, and improved employee engagement and retention rates. Oluwatoy in Esther (2023) suggests that the inefficiency in applying forensic techniques contributes to loopholes responsible for certain cyber fraud incidents in the banking industry. To mitigate fraud, there is a need for the integration of forensic accounting management control systems and forensic accounting. Seterra D. Burleson, Kristen D. Egger, and Debra A. (2022) point out that major organizations are adopting remote and hybrid work arrangements while concurrently prioritizing Diversity, Equity, and Inclusion (DE&I) in the post-COVID-19 work era. This shift presents new challenges in socializing organizational newcomers. Francois Goxe and Michael Viegas Pires (2019) identified various types of discourse and discursive frameworks in L'Oréal's corporate communication addressing diversity issues, including rationalistic, societal, and appropriative discourse. Muhammad Ali and Oluremi B. Ayoko (2020) drew on social identity theory and faultlines theory to explore the formation of gender and age faultlines in a board, proposing and testing a U-shaped relationship between board size and faultlines strength. Sandra Sun-Ah Ponting and Alana Dillette (2023) presented a framework for Diversity, Equity, and Inclusion (DEI) practices, emphasizing the intersection between individual agency and organizational structure, with insights derived from structuration theory. Nisha Nair and Neharika Vohra (2015) highlighted the shift in discourse from diversity to inclusion, examining the nuanced meanings and interpretations of these terms. Kriti KS and Ramesh Pai (2021) aimed to consolidate literature on workforce diversity and inclusion,



exploring empirical and conceptual studies published between 1987 and 2021 to identify future research avenues. William Newbury (2022) provided insights into the dimensions and challenges of DEI in an international business environment. Antoshchenko (2023) emphasized the need to clarify the roles of leaders in implementing DEI strategies in large multinational corporations. Prof. (Dr.) Shalini Garg (2023) surveyed employees in IT organizations in Delhi-NCR, India, revealing responses to diversity management through legal mandates, programs, policies, and strategies. Dr. Tagaram Kondala Ram (2023) examined the connection between workplace inclusion and employee engagement, using a structured survey of individuals working for multinational enterprises in India's Public Capital Region. Riann Singh (2023) stressed the importance of not just diversity but also inclusion, where different perspectives are valued in organizations. Dana L. Ott (2022) proposed initiatives to harness the strengths and perspectives of neurodivergent employees for improved effectiveness and performance in MNCs. Irwansyah (2023) found that corporate governance, internal audit, and internal control have significant effects on the tendency of fraud in BUMN in Bengkulu City. A study on whistleblowing, fraud prevention, and fraud awareness (2023) revealed positive effects of whistleblowing and good governance on fraud awareness, while fraud awareness did not significantly impact fraud prevention. MEIRYANI (2023) aimed to determine factors influencing the implementation of the whistleblowing system in supporting fraud prevention, examining whistleblowing policy as a

moderating variable on the relationship between factors influencing the whistleblowing system and the implementation of good corporate governance.

From the above review of literature, it is found that, many researchers have done work on DEI in increasing work place productivity and giving various forms of facilities to them, but the connection is missing with regard to reducing frauds in the workplace. This research uniquely bridges the gap between fraud studies and Diversity, Equity, and Inclusion (DEI), investigating the correlation between DEI initiatives and fraud prevention across all organizational levels.

## Objectives

**To find out the impact of representation of women on board in reducing misconduct and increasing transparency in the workplace.**

**To find the inclusiveness of Racial and Ethnically diversified workforce.**

## Research Methodology

This research focuses on DEI in connection to frauds in Indian IT Companies and 180 responses from the employees working in Listed Indian IT Companies are collected. This study has employed a combination of primary data and secondary data sources. Primary data was collected by circulating google form. Secondary data has been collected from various literatures, websites, journals etc.

## Data Analysis and Interpretations

**Table 1: Depicting the Descriptive statistics**

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Gender	180	1	3	1.56	.541	.204	.181	-1.099	.360
Age	180	1	3	1.49	.584	.725	.181	-.445	.360
Designation	180	1	2	1.13	.341	2.175	.181	2.763	.360
Experience	180	1	4	2.31	1.211	.221	.181	-1.528	.360
Fraud in working place	180	1	3	1.80	.688	.283	.181	-.878	.360
Occupational fraud	180	1	3	2.22	.759	-.397	.181	-1.165	.360
Past twoyears Fraud	180	1		1.84	.700	.224	.181	-.940	.360

Efforts in creating diverse workforce	180	1	5	3.56	1.048	-.797	.181	.363	.360
Racial or Ethnic	180	1	3	1.84	.471	-.478	.181	.794	.360
Reduced misconduct	180	1	5	3.18	1.163	-.094	.181	-.691	.360
Women on board	180	1	5	3.18	1.291	-.084	.181	-.892	.360
Relationship conflict	180	1	5	2.80	1.049	-.179	.181	-.837	.360
Empathy	180	1	5	3.29	1.226	-.422	.181	-.546	.360
CG practices	180	1	5	3.56	1.004	-.489	.181	.129	.360
LGBT	180	1	2	1.42	.495	.318	.181	-1.921	.360
Responding to LGBT	180	1	3	1.76	.850	.492	.181	-1.441	.360
Differences are respected	180	1	5	3.51	1.006	-1.298	.181	1.162	.360
Less frauds	180	1	3	1.73	.882	.550	.181	-1.495	.360
DHB	180	1	3	1.84	.633	.136	.181	-.552	.360
Valid N (listwise)	180								

Table 2: Depicting the Correlations

Variables	Pearson Correlation Sig.(2 - tailed)	Gender	Age	Exp	Fraud in WP	Occ fraud	Eff div WF
Gender		1	0.055 (0.463)	0.129 (0.085)	0.120 (0.0109)	-0.139 (0.063)	-0.114 (0.128)
Age		0.055 (0.463)	1	.637 (0.000)	0.145 (0.053)	0.095 (0.203)	0.065 (0.386)
Experience		0.129 (0.085)	.637 (0.000)	1	0.032 (0.668)	0.143 (0.055)	0.004 (0.958)
Fraud in working place		0.120(0.109)	-0.145 (0.053)	-0.032 (0.668)	1	0.000 (1.00)	-0.093 (0.214)
Occupational fraud		-0.139 (0.063)	-0.095 (0.203)	0.143 (0.055)	0.000 (1.000)	1	.237 (0.001)
Efforts in creating diverse workforce		-0.114 (0.128)	0.065 (0.386)	0.004 (0.958)	-0.093 (0.214)	.237 (0.001)	1
Racial or Ethnic		.253 (0.001)	-.210 (0.005)	0.046 (0.538)	.248 (0.001)	.160 (0.032)	.222 (0.003)
Reduced misconduct		0.020 (0.793)	.200 (0.007)	.230 (0.002)	151 (0.043)	0.132 (0.077)	.414 (0.000)
Women on board		0.018 (0.813)	0.121 (0.105)	.265 (0.000)	-.262 (0.000)	.302 (0.000)	.505 (0.000)
Lgbt resp		0.005 (0.943)	0.118 (0.114)	0.143 (0.056)	0.107 (0.153)	.158 (0.034)	0.003 (0.970)
Diff are respected		-	0.067 (0.373)	.181 (0.015)	-0.013 (0.863)	0.085 (0.259)	.429 (0.000)
Less frauds		-.156 (0.036)	-.179 (0.016)	0.036 (0.629)	.206 (0.005)	-0.045 (0.553)	-0.129 (0.084)
Corporate governance		0.046 (0.543)	.297 (0.000)	.298 (0.000)	-.226 (0.002)	0.072 (0.339)	.300 (0.000)
Relationship Conflict		-0.039 (0.600)	-0.058 (0.46)	0.137 (0.066)	-.211 (0.005)	-0.028 (0.708)	.387 (0.000)
Empathy		0.094 (0.212)	.239 (0.001)	.285 (0.000)	-.196 (0.008)	.147 (0.049)	.431 (0.000)

**Table 3: Depicting the Correlations of other Variables**

Table 3: Depicting the Correlations of other Variables										
Correlations										
Variables	Pearson Correlation Sig.(2-tailed)	Race & Eth	Mis	Wob	lgbt resp	diff res	less frauds	CG prac	rela con	empathy
Gender		.253 (0.001)	0.020 (0.793)	0.018 (0.813)	0.005 (0.943)	-0.032 (0.670)	-.156 (0.036)	0.046 (0.543)	-0.039 (0.600)	0.094 (0.212)
Age		-.210 (0.005)	.200 (0.007)	0.121 (0.105)	-0.118 (0.114)	0.067 (0.373)	-.179 (0.016)	.297 (0.000)	-0.058 (0.436)	.239 (0.001)
Experience		0.046 (0.538)	.230 (0.002)	.265 (0.000)	-0.143 (0.056)	.181 (0.015)	0.036 (0.629)	.298 (0.000)	0.137 (0.066)	.285 (0.000)
Fraud in working place		.248 (0.001)	-.151 (0.043)	-.262 (0.000)	0.107 (0.153)	-0.013 (0.863)	.206 (0.005)	-.226 (0.002)	-.211 (0.005)	-.196 (0.008)
Occupational fraud		.160 (0.032)	0.132 (0.077)	.302 (0.000)	-.158 (0.034)	0.085 (0.259)	-0.045 (0.553)	0.072 (0.339)	-0.028 (0.708)	.147 (0.049)
Efforts in creating diverse workforce		.222 (0.003)	.414 (0.000)	.505 (0.000)	0.003 (0.970)	.429 (0.000)	-0.129 (0.084)	.300 (0.000)	.387 (0.000)	.431 (0.000)
Racial or Ethnic		1	0.214 (0.004)	0.340 (0.000)	0.072 (0.337)	0.358 (0.000)	0.007 (0.924)	0.137 (0.067)	0.118 (0.115)	.195 (0.009)
Reduced mis		0.214 (0.004)	1	0.663 (0.000)	-0.295 (0.000)	0.667 (0.000)	-0.280 (0.000)	.412 (0.000)	.579 (0.000)	.544 (0.000)
Women on board		.340 (0.000)	.663 (0.000)	1	-.164 (0.028)	.635 (0.000)	-.213 (0.004)	.630 (0.000)	.604 (0.000)	.801 (0.000)
Respect LGBT		0.072 (0.337)	-.295 (0.000)	-.164 (0.028)	1	0.016 (0.828)	.360 (0.000)	-.180 (0.015)	-0.080 (0.284)	-0.039 (0.602)
Differences respected		.358 (0.000)	.667 (0.000)	.635 (0.000)	0.016 (0.828)	1	0.003 (0.964)	.315 (0.000)	.415 (0.000)	.460 (0.000)
less frauds		0.007 (0.924)	-.280 (0.000)	-.213 (0.004)	.360 (0.000)	0.003 (0.964)	1	-.261 (0.000)	-0.058 (0.439)	-.321 (0.000)
Corporate Governance practices		0.137 (0.067)	.412 (0.000)	.630 (0.000)	-.180 (0.015)	.315 (0.000)	-.261 (0.000)	1	.616 (0.000)	.777 (0.000)
Relation ship conflict		0.118 (0.115)	.579 (0.000)	.604 (0.000)	-0.080 (0.284)	.415 (0.000)	-0.058 (0.439)	.616 (0.000)	1	.549 (0.000)
Empathy		.1959 (0.009)	.544 (0.000)	.801 (0.000)	-0.039 (0.602)	.460 (0.000)	-.321 (0.000)	.777 (0.000)	.549 (0.000)	1

H0: Women Representation on board doesn't impact significantly for reducing misconduct.

H1: Women Representation on board impacts significantly for reducing misconduct.

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.663a	.440	.437	.873

**Table 5: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	106.583	1	106.583	139.777	.000b
	Residual	135.728	178	.763		
	Total	242.311	179			
a. Dependent Variable: Reduced misconduct						
b. Predictors: (Constant), Women on board						

**Table 6: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.278	.173		7.374	.000	.936	1.620
	Wob	.598	.051	.663	11.823	.000	.498	.698

The results from both the ANOVA and regression analysis suggest a robust and significant association between the representation of women on the board and the reduction of misconduct within the organization.

### Findings and Discussions

Fraud occurrences within organizations appear to be unrelated to age and experience differentials. Notably, there is a positive correlation between the presence of women on the board and a decrease in misconduct within the organization. This correlation is attributed to the perceived higher levels of empathy demonstrated by women in the workplace, contributing to a reduction in conflicts. Additionally, organizations are actively promoting diversity by encouraging the inclusion of individuals from various racial and ethnic backgrounds. This emphasis on diversity has proven effective in fostering inclusivity and has been observed to contribute to a decrease in occupational fraud within the workforce. The paper is limited to certain variables and confined to regression test, there is lot of scope for further research.

### Conclusion

The active promotion of diversity, particularly in terms of racial and ethnic backgrounds, emerges as a strategic initiative for organizations. The findings indicate that fostering inclusivity through diversity initiatives has proven effective in mitigating occupational fraud within the workforce. This implies

that a diverse and inclusive workplace culture may serve as a protective factor against fraudulent activities, possibly by fostering a more harmonious and cooperative work environment.

In essence, the study suggests that organizations stand to benefit from not only promoting gender diversity on boards but also from adopting broader diversity and inclusion practices. These efforts not only align with ethical considerations but also contribute to a reduction in fraudulent behaviour.

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## Effectiveness of Asset Reconstruction Companies in Reducing NPAs

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### Abstract

*This study aims to explore the effectiveness of Asset Reconstruction Company (ARC) in reducing the Non-Performing Assets (NPAs) in India. The NPAs (Bad loans) are regarded as the greatest threat to the financial institutions because these inactive assets do not generate any kind of revenue to the banking sector. Recently, the Indian banks has increased the level of precautions when it comes to lending activities in all sectors due to the pernicious impact of the dormant assets. Therefore, Asset reconstruction companies act as the experts to reduce the obligations of NPA based on securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act-2002. According to the recent data, ARC has skilfully taken the steps with the RBI and the government to bring down the NPAs. There is a significant reduction in the gross non-performing assets (GNPA) of public sector banks, with a decline from 8.96 lakhs crores in the fiscal year 2018 to 4.28 lakh crores in the fiscal year 2023. In this study, we analysed how ARCs acquired the dormant assets in last ten years and improved the Indian economy.*

**Keywords:** asset reconstruction, dormant asset, fiscal year, Non-performing assets, securitization, SARFAESI,

### Introduction

The banking sector assumes a significant role in the economic progress of a nation by facilitating the mobilization, preservation, and allocation of capital to various manufacturing businesses. It is well acknowledged that an invisible phenomenon exists. The financial system has the potential to hinder the progress of a specific economy and worsen the existing economic crises. Hence, it is imperative for the government of any nation to prioritize the soundness of the banking sector. Asset quality was not a paramount concern in the Indian banking sector until the year 1991. The government's primary focus lies in achieving performance targets related to many areas, including the establishment of a broad exposure network/agency, development in rural areas, lending to priority sectors, and the generation of job growth. The primary role of a bank is to provide financial assistance by granting loans to various sectors, including agriculture, industry, personal loans, housing loans, and more. However, in recent times, banks have shown an increased level of precaution when it comes

to lending activities. The primary issue for banks in India currently revolves around the attachment of non-performing assets (NPA), which has emerged as a significant factor.

#### Meaning of NPAs

An operating asset refers to a financial instrument that generates revenue for a bank through the collection of interest and other associated expenses. The term "dormant asset" can be used to refer to a non-performing asset within the banking sector. In other words, an imprest account that is no longer producing revenue is considered a dormant asset. If customers fail to return the principal and interest within a specified timeframe, the loans in concern turn into an NPA, or non-performing asset. In a more constrained context, an inactive asset may be defined as a non-revenue generating resource that does not immediately contribute to the financial gains of the organization or have any visible good effects. This

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aspect may hold significance in the context of loan and advance applications.

#### Definition according to SARFAESI Act, 2002

The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 defined NPAs as an asset or account of a borrower, which has been classified by a bank or financial institution as sub-standard, doubtful or loss assets in accordance with the direction or guidelines relating to asset classification issued by the RBI.

#### Current Scenario

Based on the data released by Ind-Ra on 19th June 2023, the gross non-performing advances (GNPAs) have currently reached a level of 4.0% at the system-wide scale. Furthermore, it has been revealed that the net non-performing advances (NNPAs) currently stand at a rate of 1.0%. There was a significant reduction in the gross non-performing assets (GNPA) of public sector banks, with a decline from 14.1% in the fiscal year 2018 to 5.0% in the fiscal year 2023. The private sector banks also exhibited favorable advancements, as indicated by a reduction in their Gross Non-Performing Assets (GNPA) from 6.3% to 2.3%. The non-performing loan ratios seen in public sector banks and private banks were determined to be lower than the credit cost for the fiscal year 2023, with respective values of 1.23% and 0.6%. Moreover, the survey findings revealed a convergence between the two types of banks in terms of their asset quality and loan cost parameters.

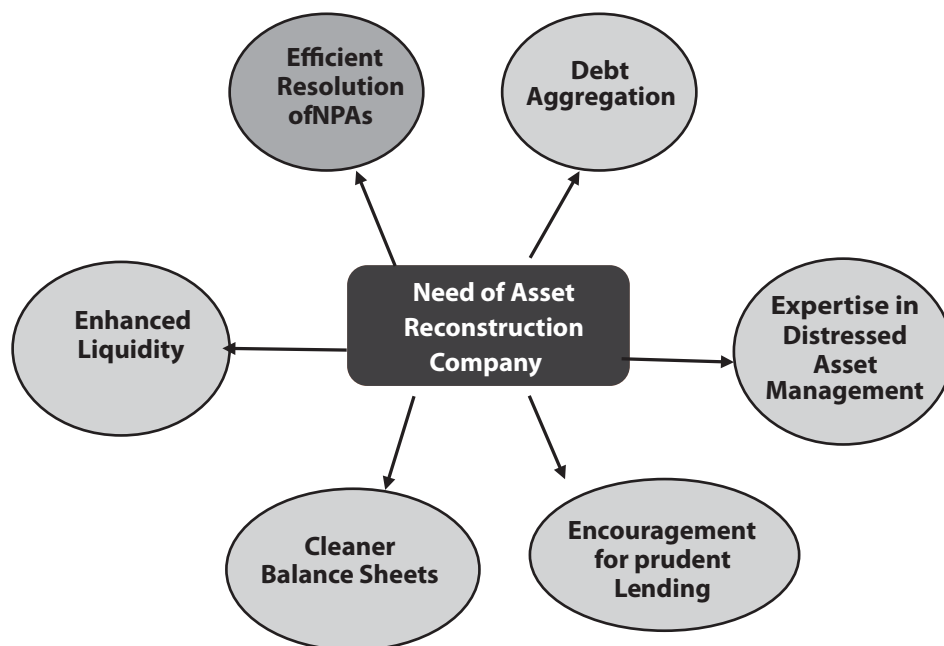
In prior instances, credit rating agencies CRISIL and CareEdge Ratings issued forecasts suggesting positive advancements in the asset quality of banks. Based on CRISIL's projection, it is anticipated that the gross non-performing assets (NPAs) will decline to a historically low level of 3.8% by the completion of the fiscal year 2023-24. Furthermore, CareEdge Ratings predicts that the Non-Performing Assets (NPAs) would approach levels similar to those observed before to the Asset Quality Review (AQR). The aforementioned predictions align with the prevailing optimistic outlook on India's banking sector and its ongoing efforts to improve the stability of its financial institutions.

#### Asset Reconstruction Company

The principal aim of an asset reconstruction firm is to efficiently manage and capitalize on underperforming assets or those that have been officially classified as non-performing assets (NPAs) held by companies that are unable to generate adequate and punctual

revenue to fulfill their present obligations. One drawback is the possible financial damage that may arise when attempting to address challenging debt crises in situations where organizations face the possibility of bankruptcy or insolvency. According to the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, portfolio management businesses are entrusted with the role of serving as middlemen between promoters and trusts. A fee is levied for the services provided by the organization, which mostly involves facilitating the transfer of property or loans to the trust for a nominal price based on the revalued amount. Therefore, the promoters are remunerated for their involvement in the acquisition process.

According to estimates, a significant proportion of businesses that fail, up to 75%, do so as a result of their inability to effectively address financial challenges. These challenges can arise from various sources, such as inadequate management practices or outright mismanagement of borrowed funds. For instance, businesses may utilize working capital loans to fulfill long-term financial requirements, subsequently leading to liquidity constraints. Additionally, businesses may face pressure from banks, which may impose penalties or initiate legal proceedings. Furthermore, private equity partners or public investors may exert pressure on businesses to generate higher dividends or improve their overall financial performance. Occasionally, in the face of intense pressure characterized by multiple creditors demanding payment and numerous unresolved liabilities and obligations, certain businesses and entrepreneurs succumb to the overwhelming strain and ultimately surrender. In order to mitigate an unfavorable outcome, it is advantageous to possess knowledge regarding the diverse alternatives available to enterprises experiencing challenges. Furthermore, it is imperative to recognize that enduring such a phase does not signify the ultimate demise of the organization. Nevertheless, in a context of elevated intellectual capacity, possessing knowledge confers a significant advantage, while conversely, lacking knowledge might have dire consequences. The notion of failure should be regarded as a temporary setback, serving as a stepping stone towards future triumph and ultimate achievement.

**Figure-1: Need of Asset Reconstruction Company**

### Process of Asset Reconstruction

The primary objective of acquiring outstanding debts or non-performing assets (NPAs) is to ultimately recover the debts due by them. Nevertheless, the process is not a simple one. The ARCs possess the following subsequent alternatives in this regard:

- Acquisition or assumption of control over the operational management of the borrower's enterprise.
- Disposition or leasing of said enterprise.
- Revising the repayment of outstanding debts - offering alternative plans and arrangements for the settlement of those debts.
- Implementing safety measures in accordance with legal regulations.

Assuming responsibility for the property that has been offered as collateral.

One potential strategy is to convert a portion of the outstanding debt into equity.

### Review of Literature

**Abhijit Sinha (2016)** examines NPA trends from 2005-06 to 2014-15, critically analyzing the role of ARCs and associated challenges. The findings suggest a need for a comprehensive, multi-faceted approach to address the complexities of NPAs effectively. The research aims to provide insights for policymakers and

industry stakeholders to enhance strategies in tackling non-performing assets in the Indian banking sector

**Ghania Saleh (2021)** aims to comprehensively understand the factors influencing the performance of ARCs in India. The study delves into the structure and market environment of ARCs, analyzing their historical performance against the backdrop of increased non-performing assets (NPAs) following the financial crisis.

**Meher, B. K., & Puntambekar, G. L (2018)** demonstrate efficacy in addressing NPAs, the paper acknowledges a limitation—the combined net worth of existing ARCs may not be sufficient to acquire all stressed assets held by Indian banks. This insight suggests significant growth prospects not only for existing ARCs but also for potential newcomers in the future. The paper draws attention to the correlation between the profits of ARCs, particularly ARCIL, and the Gross NPAs of banks, emphasizing the financial dynamics at play.

**Dhawan, S. (2016)** delves into the options available to banks burdened with non-performing assets, emphasizing the choice between managing NPAs on their books with provisions and recovery efforts, or opting to transfer these assets to ARCs for a cleaner balance sheet.

**H., Aishwarya; Miranda, Rahul (2013)** aims to provide a comprehensive understanding of the context leading to the introduction of the SARFAESI Act and the subsequent establishment of ARCs. By exploring various aspects of ARCs, the paper contributes to the

ongoing discourse on the effectiveness of these entities in addressing NPAs. The analysis attempts to weigh the pros and cons of the ARC model, shedding light on its role in rectifying the impediments faced by banks and financial institutions in managing non-performing assets.

**Kaveri, V. S. (2015)** highlights various challenges associated with the overall functioning of ARCs. Concerns include capital augmentation, effective liquidity management for timely redemption of Security Receipts (SRs), and the imperative to enhance loan recovery within the existing legal framework. Issues such as cost control are also identified as significant considerations. The article underlines the need for a comprehensive overview of ARCs' operations, identifying key issues, and providing suggestions for improvement.

**Saini, R. K., & Tayal, V. K. (2018)** examines the role of banks in a country's development and the historical challenges posed by non-performing assets (NPAs). Despite meticulous risk assessment, the issue of unrecoverable loans persists, particularly prevalent in Indian banks. The paper aims to evaluate the SARFAESI Act-2002's efficacy in NPA recovery, highlighting trends and assessing both successes and failures. This reflects a focus on legislative evolution to address the persistent challenge of non-performing assets in the banking sector.

**Hasanmalek, N. (2023)** delves into the impact of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act (SARFAESI) in addressing the rising issue of non-performing assets (NPAs) in India's banking sector. The study critically examines the implementation of the SARFAESI Act, identifying shortcomings and proposing recommendations for its enhancement. It highlights the dependency on banks for funding developmental projects and emphasizes the adverse impact of increasing NPAs on the financial stability of banks. The study aims to fill a gap in existing research by focusing specifically on the SARFAESI Act's implementation, critically analyzing its effectiveness, and addressing encountered shortcomings. This research adds value by contributing a nuanced evaluation of the SARFAESI Act's impact on NPAs, shedding light on both its successes and areas that require refinement.

**Dey, S. (2018)** delves into NPAs and their recovery, emphasizing the importance of effective credit assessment and recovery management. It highlights the challenges arising from a tendency to compromise asset quality during economic booms. The research analyzes the recovery mechanisms of Lok Adalat, DRTs, and SARFAESI Act, covering 2003-04 to 2016-17 based on RBI data. Despite SARFAESI Act's aim for speedy recovery, the study finds that overall recovery in the

banking industry is inadequate. Statistical analysis reveals a significant difference among recovery channels, with SARFAESI falling short of expectations. The study underscores the need for stronger recovery tools to address the NPA problem.

**Sahoo, M. K., & Majhi, M. (2020)** explores the issue of Non-Performing Assets (NPAs) in the Indian banking sector, focusing on recovery mechanisms through Lok Adalats, Debt Recovery Tribunals (DRTs), and the SARFAESI Act. It aims to assess the effectiveness of these channels in managing NPAs. Data analysis reveals significant differences among recovery channels in cases referred and percentage of amount recovered. In conclusion, the study suggests that existing recovery channels may be insufficient, advocating for combined and more effective measures to address NPAs in the Indian banking sector.

**Misra, T. (2021)** focuses on Non-Performing Assets (NPAs) in Indian banks, emphasizing their impact on financial performance. NPAs, representing unrecovered loans, pose threats to individual banks and the entire financial system. The causes include lack of supervision, political interference, willful defaulters, and poor appraisal systems. NPAs affect profitability, liquidity, and solvency. The study suggests strategies for recovery, highlights policy implementations, and relies on RBI reports and journals for data. It underscores the need for effective measures to curb NPAs and enhance financial health in the Indian banking sector.

**Narang, D., & Kaveri, V. S. (2016)** discusses the rise in Non-Performing Assets (NPAs) that has led banks to consider selling them to Asset Reconstruction Companies (ARCs) for balance-sheet cleanup. Fixing a fair reserve price is challenging, involving careful valuation and negotiation between banks and ARCs. Despite challenges, the urgency to address NPAs by the end of 2016-17 creates business potential for ARCs. This article discusses issues in NPA acquisition, offering suggestions for resolution. Additionally, it evaluates the government's proposal for a Bank Board Bureau and Bad Bank as an alternative to ARCs, adding depth to the evolving landscape of NPA resolution strategies.

**Thirupathi, G. A (2016)** aims to delve into the dynamics of priority sector advances across public, private, and foreign banks. The 'Direct Lending System' by the RBI, mandating scheduled commercial banks to allocate 40% of their credit to the priority sector, is identified as a major contributor to the NPA problem. Banks meeting these targets face challenges as NPAs rise, particularly in the priority sector, leading to detrimental effects on their financial health. It examines the target achievement by these banks and conducts a comparative study on the trends of NPAs in both priority and non-priority sectors over a five-year

period from 2010-11 to 2014-15. The research seeks to provide insights into the impact of priority sector lending on the NPA landscape, shedding light on the challenges faced by different bank groups in meeting social banking objectives.

Lot of research has happened in the field of effectiveness of Asset Reconstruction Companies' role in bringing down the NPAs of various financial institutions and banks. To the best of our knowledge no research has happened in the area of effectiveness of ARCs taken in this study. Hence this research is unique in the context of examining the role of ARCs in reducing the NPAs for the selected period of 2014 - 2023.

### Objective of the study

The research paper aims to investigate the effectiveness of Asset Reconstruction Companies (ARCs) in reducing

Non-Performing Assets (NPAs) in India.

To examine the significance and process used by ARC in reducing the NPAs.

To analyze the trend in purchasing the bad debts during 2014-2023 by all the five selected ARC for this study - Pridhvi, Edelweiss, ASREC, JM Financial, and Reliance

## Research Methodology

The current research is descriptive and analytical in nature. The data is collected only from secondary sources like the company websites, official website of RBI and journals and periodicals. Data is collected from the top performing Asset reconstruction companies from the year 2014 to 2023. The companies selected for this study are Paras, Pridhvi, Edelweiss, Asrec, JM Financials & RARC.

## Data Analysis and Interpretations

**Table 1: Overall Bad Debts offered by the bank to ARCs from 2014 to 2023**

Year	Outstanding amount ( crores)
2013 – 2014	40,000
2014 – 2015	64,000
2015 – 2016	72,000
2016 – 2017	88,200
2017 – 2018	94,500
2018 – 2019	1,47,300
2019 – 2020	51,652
2020 – 2021	21,254
2021 – 2022	22,400
2022 – 2023	1,78,283

Source: <https://www.paras.org.in/>

We can see that the outstanding amount of bad debts offered by the bank to Asset Reconstruction Companies (ARCs) has fluctuated over the years. The numbers have seen some ups and downs, with a significant increase in 2018-2019 and a notable decrease in 2019-2020 may be due to COVID 19 pandemic. However, the trend took a sharp turn in 2022-2023, with a substantial surge in outstanding bad debts.

**Table 2: Purchase of bad debts by Pridhvi Asset Reconstruction and Securitisation Company Limited from 2014 to 2023**

Year	Bad Debt Amount ( Crores )
2013 – 2014	157.86
2014 – 2015	674.10
2015 – 2016	265.16
2016 – 2017	521.26
2017 – 2018	394.98
2018 – 2019	68.01
2019 – 2020	1304
2020 – 2021	476.39
2021 – 2022	1,225.8
2022 – 2023	5,495.27

Source: <https://www.pridhvi.org.in/>,  
<https://www.bseindia.com/>

The data shows a significant increase in the purchase of bad debts by Pridhvi Asset Reconstruction and Securitization Company Limited over the years. The

amounts started relatively low in 2013-2014 and 2014-2015 but experienced a sharp rise in 2015-2016. There was a fluctuating trend until 2019-2020, where the purchase amount spiked substantially. The subsequent years, 2020-2021, 2021-2022, and 2022-2023, witnessed a remarkable increase in the purchase of bad debts, reaching a peak of 5,495.27 crores in 2022-2023. This could suggest a strategic approach by Pridhvi in acquiring distressed assets during this period, possibly driven by market opportunities or a specific business strategy.

**Table 3: Purchase of bad debts by Edelweiss Asset Reconstruction Company Limited from 2014 to 2023**

Year	Bad Debt Amount ( Crores )
2013 – 2014	9,200
2014 – 2015	11,000
2015 – 2016	15,974
2016 – 2017	24,038
2017 – 2018	12,001
2018 – 2019	17,734
2019 – 2020	8,185
2020 – 2021	6,804
2021 – 2022	8,951
2022 – 2023	6,651

Source  
(<https://www.edelweissarc.in/>;<https://www.bseindia.com/>)

The data for Edelweiss Asset Reconstruction Company Limited's purchase of bad debts shows a fluctuating pattern over the years. There was a notable increase from 2013-2014 to 2016-2017, reaching the highest amount in that period. However, the subsequent years witnessed a decline, particularly in 2019-2020. The purchase amounts continued to decrease in 2020-2021 and 2021-2022, with a slight uptick in 2022-2023. This could suggest varying market conditions or shifts in Edelweiss' strategy for adjusting their focus within the distressed asset market.

**Table 4: Purchase of bad debts by ASREC (India) Limited from 2014 to 2023**

Year	Bad Debt Amount ( Crores )
2013 – 2014	494.26
2014 – 2015	789.21
2015 – 2016	865.33
2016 – 2017	565.46
2017 – 2018	820.95
2018 – 2019	256.55
2019 – 2020	1,041.95
2020 – 2021	2,970.32
2021 – 2022	533.89
2022 – 2023	3,256.75

Source : <https://asrecindia.co.in/>

The data for ASREC (India) Limited's purchase of bad debts shows a dynamic trend over the years. There was a consistent increase from 2013-2014 to 2017-2018, reaching the highest point in that period. However, there was a significant drop in 2018-2019. The subsequent years, particularly 2019-2020 and 2020-2021, saw a substantial increase in the purchase of bad debts, reaching a peak in the latter year. The trend continued in 2021-2022, with a notable decrease in the amount in comparison to the previous year, and then a further increase in 2022-2023.

**Table 5: Purchase of bad debts by JM Financial Asset Reconstruction Company Ltd from 2014 to 2023**

Year	Bad Debt Amount ( Crores )
2013 – 2014	6,048
2014 – 2015	5,936
2015 – 2016	5,639
2016 – 2017	4,506



2017 – 2018	3,639
2018 – 2019	4,909
2019 – 2020	23,105
2020 – 2021	1,303
2021 – 2022	2,092
2022 – 2023	9,751

Source: <https://www.jmfinancialarc.com/>,  
<https://www.bseindia.com/>

The data for JM Financial Asset Reconstruction Company Limited's purchase of bad debts reflects a generally decreasing trend from 2013-2014 to 2018-2019. During this period, there was a gradual decline in the amount of bad debts acquired. However, there was a significant spike in 2019-2020, indicating a substantial increase in the purchase of distressed assets. The subsequent years, 2020-2021 and 2021-2022, saw a notable decrease in the amount, and then a subsequent increase in 2022-2023.

**Table 6: Purchase of bad debts by Reliance Asset Reconstruction Company Ltd from 2014 to 2023**

	Bad Debt Amount ( Crores )
2013 – 2014	99
2014 – 2015	159
2015 – 2016	225
2016 – 2017	285
2017 – 2018	281
2018 – 2019	428
2019 – 2020	70
2020 – 2021	325
2021 – 2022	259
2022 – 2023	249

Source: <https://www.rarcl.com/>,  
<https://www.bseindia.com/>

The data for Reliance Asset Reconstruction Company Ltd.'s purchase of bad debts shows a fluctuating trend over the years. There was a steady increase from 2013-2014 to 2018-2019, reaching the highest point in that period. However, there was a significant drop in 2019-2020, indicating a substantial decrease in the acquisition of bad debts. The subsequent years, 2020-2021 and 2021-2022, saw a mixed pattern with a moderate increase followed by a decrease. The trend continued in 2022-2023 with a slight decrease. This trend suggests a deliberate strategy of managing and potentially reducing exposure to distressed assets.

**Table 7: Purchase of bad debts by the top ARCs companies from 2014 to 2023**

Company Name	Bad Debt Amount (Crores)
Pridhvi	9,409
Edelweiss	1,20,538
ASREC	11,591
J M Financials	66,928
RARC	2,380

It seems like these top Asset Reconstruction Companies (ARCs) have been quite active in acquiring bad debts from 2014 to 2023. Edelweiss stands out with a substantial bad debt amount, indicating a significant role in the market. JM Financials also seems to have made considerable acquisitions, signifying a robust presence in the distressed asset market. Pridhvi, though with a lower amount at still demonstrates significant engagement. ASREC takes a more selective approach while RARC, with the lowest amount may adopt a more conservative or specialized strategy in acquiring bad debts.

## Discussion & Results

Analyzing the overall data on bad debts offered by the bank to ARCs from 2014 to 2023, we observe a fluctuating trend in the outstanding amounts. The figures rose steadily from 2013-2014 to 2018-2019, reaching a peak of 1,47,300 crores. However, there was a significant drop in 2019-2020, possibly influenced by the COVID-19 pandemic, with only 51,652 crores outstanding. The subsequent years, 2020-2021 and 2021-2022, showed a slight increase, and a substantial surge occurred in 2022-2023, reaching 1,78,283 crores.



The sharp increase in 2022-2023 may indicate a renewed focus on resolving bad debts or a response to specific market opportunities.

Now, looking at the individual data for ARCs like Pridhvi, Edelweiss, ASREC, JM Financials, and RARC, we notice diverse patterns in their bad debt acquisitions.

Pridhvi Asset Reconstruction and Securitization Company Limited witnessed a substantial increase in the purchase of bad debts over the years, peaking at 5,495.27 crores in 2022-2023. This indicates a strategic and aggressive approach in acquiring distressed assets, possibly capitalizing on market conditions or aligning with their business strategy.

Edelweiss Asset Reconstruction Company Limited, on the other hand, displayed a fluctuating pattern in bad debt acquisitions. While there was a notable increase up to 24,038 crores in 2016-2017, the subsequent years saw a decline, reaching 6,651 crores in 2022-2023. This suggests a dynamic strategy, possibly influenced by changing market conditions or a deliberate shift in focus.

ASREC (India) Limited demonstrated a dynamic trend with a consistent increase up to 3,256.75 crores in 2022-2023, with fluctuations in between. The significant drop in 2018-2019 followed by a spike in subsequent years might signify a strategic adjustment or response to market dynamics.

JM Financial Asset Reconstruction Company Limited exhibited a decreasing trend in bad debt purchases until a significant spike in 2019-2020. The subsequent years showed a decline, indicating potential adjustments to their distressed asset acquisition strategy.

Reliance Asset Reconstruction Company Ltd displayed a fluctuating trend, with a notable drop in bad debt acquisitions in 2019-2020. The following years showed mixed patterns, suggesting a deliberate strategy in managing and potentially reducing exposure to distressed assets.

In summary, the data reflects a dynamic and evolving landscape in the distressed asset market, with ARCs adopting diverse strategies based on market conditions and organizational goals. Like Pridhvi is actively expanding its distressed asset portfolio, Edelweiss is adopting a more conservative approach, ASREC is showcasing adaptability, JM Financial is adapting to market changes, and Reliance ARC is focused on quality over quantity in their bad debt acquisitions. managing distressed assets. Each ARC's approach to bad debt acquisition reflects its unique strategy, responsiveness to market dynamics, and risk management practices to managing distressed assets.

## Conclusion

This research paper sheds light on the critical role played by Asset Reconstruction Companies (ARCs) in addressing the challenges posed by Non-Performing Assets (NPAs) in the Indian banking sector. The study analyzes the effectiveness of ARCs in reducing NPAs, focusing on the period from 2014 to 2023. The Indian banking sector has witnessed a significant shift in its approach to lending activities, primarily due to the rising concerns related to NPAs. The study emphasizes the importance of ARCs in managing and resolving distressed assets, thereby contributing to the overall stability of the financial system. The reduction in Gross Non-Performing Assets (GNPAs) of public sector banks from 14.1% in fiscal year 2018 to 5.0% in fiscal year 2023 highlights the positive impact of ARCs in mitigating NPA-related risks. Examining specific ARCs such as Pridhvi, Edelweiss, ASREC, JM Financial, and Reliance, the findings reveal diverse strategies and approaches adopted by these companies in acquiring and managing bad debts. Pridhvi demonstrates an active expansion of its distressed asset portfolio, while Edelweiss adopts a more conservative approach. ASREC showcases adaptability, JM Financial adapts to market changes, and Reliance ARC focuses on quality over quantity in bad debt acquisitions. The fluctuating trend in bad debts offered to ARCs from 2014 to 2023 indicates dynamic market conditions influenced by economic factors and ARCs' resolution efforts. The surge in bad debt amounts in 2022-2023 suggests changing dynamics in the distressed asset market, possibly influenced by economic recovery efforts. This research contributes valuable insights into the evolving landscape of NPAs and the pivotal role ARCs play in resolving these challenges. The distinct strategies of individual ARCs highlight the need for a nuanced and adaptive approach in managing distressed assets. As the banking sector continues to navigate the complexities of NPAs, the role of ARCs remains integral to fostering financial stability and facilitating the efficient resolution of distressed assets in India.

## Implications of the study

The findings of this research can be or some help to other ARCs, banks, RBI and other policy makers. The study throws light on the trend in the purchase of bad debts by the selected ARCs and the strategies followed by them in reducing the level of distressed debts.

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## Exploring the Landscape of Corporate Social Responsibility Disclosure: A Review of the Literature

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### Abstract

*Disclosure (CSRD) and its profound impact on companies and society. Charting the shift from profit-centric strategies to the Triple Bottom Line (TBL) framework—prioritizing social justice, environmental quality, and economic welfare—it navigates through pivotal debates on the voluntary versus obligatory nature of CSRD and its potential financial implications. Through an exhaustive literature review, the study investigates influential factors, including effective tax rates, corruption, liquidity ratios, solvency ratios, and activity ratios, shaping CSRD practices. Furthermore, it probes the intricate dynamics between CSR practices, financial performance, and stock market outcomes. Employing theoretical frameworks such as Agency theory, Legitimacy theory, and Stakeholder theory, the study meticulously dissects the motivations and consequences of corporate actions in the realm of CSR (Corporate social responsibility). In addressing the contemporary landscape, the study integrates recent developments, including emerging trends, regulatory shifts, and technological advancements, amplifying its relevance for practitioners, researchers, and policymakers committed to fostering impactful, responsible business practices and sustainable development in the ever-evolving business milieu.*

**Keywords:** Agency Theory, Corporate Social Responsibility Disclosure (CSRD), CSR practices, Economic welfare, Environmental quality, Triple Bottom Line

### Introduction

As companies advance in their industrial development, their close integration with the social dynamics of the surrounding community becomes a crucial facet of their operations. Ensuring that a company's actions result in positive and mutually beneficial outcomes for the community it operates within is of paramount importance. In the early 1990s, the primary corporate focus was profit-oriented, often leading to blatant environmental pollution as a means to achieve financial objectives. During this period, John Elkington, an English writer, introduced stakeholders to the concept of the triple bottom line (TBL). This framework highlighted three essential elements: social justice, environmental quality, and economic welfare, emphasizing that a company's responsibilities extend beyond mere business interests to include the well-being of the local community.

Initially, the idea of Corporate Social Responsibility Disclosure (CSRD) sparked debates among companies, questioning whether reporting should be obligatory or voluntary. The implementation of CSRD was viewed as a potential financial burden, utilizing company

reserve funds, particularly profits, with the expectation of a yearly decline. Markus J. delved into the theoretical aspects of Corporate Social Responsibility Disclosure (CSRD), recognizing the ongoing deliberations surrounding its execution.

As CSRD evolved, it garnered broader theoretical consideration as a pivotal factor for stakeholders dedicated to ensuring their company's sustainability. Unfortunately, in the pursuit of CSRD, some companies have been implicated in instances of authority abuse, violations, and fraud. An illustrative example is the Sidoarjo mudflow case in Indonesia, impacting social, environmental, and economic responsibilities and placing burdens on both the affected community and the government in addressing the aftermath of the disaster. Acknowledging the indispensable role of Corporate Social Responsibility Disclosure (CSRD) in securing a company's sustainability, prior research delved into various influential factors and considerations. These factors encompass social, economic, environmental, and employee-related aspects. Additionally, elements such as profitability ratios, liquidity ratios, solvency ratios, and activity

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ratios assume a significant role in shaping CSRD and, consequently, influencing stakeholders' decisions regarding investment in a company's shares.

## Methodology

The literature review is conducted considering both national and international articles, reflecting a comprehensive perspective on Corporate Social Responsibility Disclosure (CSRD). In this study, authors systematically search and evaluate articles from 31 journals, ensuring a thorough exploration of existing research in the field. The review incorporates diverse sources to capture a broad range of perspectives and findings related to CSRD. The selection criteria for articles and journals in this study are likely based on specific criteria, ensuring relevance and credibility. Here, we gather data from the literature, encompassing insights, methodologies, findings, and theoretical frameworks presented in the reviewed articles.

The collected data is critically analyzed and appraised by the authors, indicating a thoughtful evaluation of the literature rather than a mere compilation. Moreover, patterns, trends, and recurring themes across the reviewed literature were identified. Based on the analysis, conclusions and key findings were also outlined, involving the synthesis of information obtained from the literature. Furthermore, literature insights were interpreted in the context of our specific study and research objectives. The conclusions are presented in a clear and organized manner, aligning with the specific requirements of our study. This structured and purposeful communication of findings aims to use the conclusions drawn from the study to enhance the author's understanding of CSRD and deepen their knowledge in this field. By underscoring the importance of the literature review, this method aims to contribute valuable insights to larger academic discussions about CSRD.

## Results and Discussion

Corporate Social Responsibility Disclosure (CSRD) encompasses the information shared by a company concerning its policies, objectives, and endeavors related to the community, customers, employees, and the environment (Gray et al., 1995). Aligned with ISO 26000, CSRD embodies an organization's responsibility for the societal and environmental consequences resulting from its decisions and activities. This responsibility is fulfilled through transparent and ethical practices, guided by sustainable development principles.

Various factors impacting CSRD are investigated in a study undertaken by Zhihua Lian in 2022, with a

specific focus on the dynamic interaction between CSRD disclosure, effective tax rates, corruption, and sustainable company performance across ASEAN countries. According to the study, achieving sustainable business performance necessitates a comprehensive approach that includes CSRD disclosure, competent management of effective tax rates, strategic business administration to combat corruption, an increase in leverage levels, and an increase in company value.

Research conducted by Weny et al. in 2022 within the tourism sector on the Indonesia Stock Exchange reveals that Liquidity does not exert a significant influence on Corporate Social Responsibility Disclosure (CSRD). However, the Activity Ratio exhibits a significant impact on CSRD, while Solvability shows no significant effect on CSRD. Additionally, the study finds that CSRD itself does not have a significant effect on stock prices in this context.

Another study, conducted by Ayu Chairina et al. in 2022, found that CSRD had a considerable beneficial influence on Return on Assets (ROA) and Return on Equity (ROE) for several Indonesian stock exchanges. CSRD, on the other hand, has no discernible effect on Earnings Per Share (EPS). These results demonstrate how important stakeholder management is when making decisions, particularly when it comes to public reputation. Turning to the realm of Islamic banking companies, Ambren et al. (2012) find that the implementation of CSRD in both conventional and Islamic banking shares similarities and differences. Commonalities include a shared commitment to social and environmental responsibility before God. However, differences emerge in the positive valuation of Islamic banking practices, largely tied to Islamic principles such as justice, social accountability, zakat contributions, financial structure, and the incorporation of Islamic ethical values.

Hasan et al. (2020) offer an alternative perspective on the banking industry, suggesting that CSRD has no beneficial impact on a number of financial indicators, such as Return on Equity, Return on Assets, the Margin of Net Profit, Investment Account Holders, Debt, and Financial Ratios. Furthermore, Alia et al. (2019) contributes to the discussion by disclosing that economic and CSRD aspects related to the environment do not have a significant impact on stock returns. These diverse research findings underscore the nuanced relationship between CSR practices, financial performance, and stock market outcomes in different sectors and contexts. Meanwhile, CSRD and social CSRD have a positive and significant effect on stock returns. The positive social impact of Corporate Social Responsibility Disclosure (CSRD) on stock returns is moderated by Return on Assets (ROA). However, ROA



does not exert a moderating effect on the influence of CSRD, specifically in terms of economic and environmental aspects, on stock returns. This implies that higher CSRD disclosure, particularly in the social domain, correlates with elevated stock returns. Furthermore, ROA strengthens the impact of CSRD on the social side in relation to stock returns. Henny Ariani et al. (2021) corroborate these findings in the Sharia mining business, emphasizing a positive and significant influence of CSRD on profitability ratios, contributing to the Good Corporate Governance (GCG) theory.

Another study by Ajeng Tita et al. (2022) explores the relationship between CSRD, Profitability Ratios, and Tax Avoidance in Islamic Jakarta. The results indicate a negative and insignificant effect of CSRD on Tax Avoidance. Additionally, Profitability Ratios exhibit a negative and significant influence on Tax Avoidance. CSRD and Profitability jointly affect Tax Avoidance. This research suggests the need to consider additional variables beyond Profitability Ratios for understanding tax avoidance in companies.

Riska Rumaningsih et al. (2021) introduced the theory of Corporate Financing Performance (CFP), highlighting its analysis of financial statements over a specific period. The study underscores the efficiency in generating corporate income, emphasizing the strong influence of environmental performance on CFP. The environment has been observed to have an impact on CSRD, which in turn has a significant impact on CFP. In addition, environmental performance affects CFP directly and does not always go through CSRD.

Amid the COVID-19 pandemic, the financial performance of companies has been affected, influencing the societal outlook and investor perceptions of risk. Desra Tulhasanah et al. (2017) investigated the influence of CSRD and Good Corporate Governance (GCG) adoption in post-pandemic financial performance. The study revealed that CSRD, an independent board of commissioners, audit committees, and company size significantly affect financial performance, whereas institutional ownership and board of directors do not demonstrate significant effects. These findings underscore the importance of strategic corporate actions during challenging economic times.

Mitria et al. (2018) demonstrates a significant positive effect of CSRD on Return on Assets (ROA) and Return on Equity (ROE) when evaluating the impact of Corporate Social Responsibility Disclosure (CSRD) through yearly reports on the ratios of profitability and Earning Response Coefficient (ERC). However, CSRD has no effect on Net Profit Margin (NPM) or ERC. The study goes on to look at the association between CSRD and profitability ratios and ERC, as well as size and leverage as control factors. Stakeholders view CSRD as a valuable

asset, which boosts investor confidence and increases a company's ROE. While CSRD has no effect on NPM, control variables, which are indicators of financial reporting in the statements, have no effect on NPM. Additionally, CSRD has no influence on the income response coefficient (ERC). Examining CSRD's impact on various company aspects, Fitria et al. (2018) assert that company ownership and leverage do not affect CSRD, while company size and return on assets significantly and positively influence CSRD. Size of the business, ownership, and return on assets all have no bearing on firm value. The impact of leverage (DAR) on company value is considerable and negative, while the impact of CSRD on firm value is positive and significant. The impact of company ownership, return on assets, and leverage (DAR) on firm value is noteworthy as CSRD does not act as a mediator in this regard. In Kenya, Robert A Kingwara (2020) investigates CSRD disclosures using a stakeholder approach and financial reports. The findings suggest no significant impact of CSRD on a company's financial performance, prompting a suggestion for enhanced internal control within companies amid growing competition.

In Jordan, CSRD within the industry sector is found to provide a competitive advantage, contributing to strong financial performance. A way to present detailed reports that are closely related to an organization's social and economic environment and include a mix of financial and non-financial aspects is called Corporate Social Responsibility Disclosure, or CSRD. This presentation is delineated in the company's financial statements and a separate sustainability report (Guthrie & Mathew, 1985). The Global Reporting Initiative (GRI) defines six indicators covering economic, environmental, labor practices, social, product, and human rights performance.

Within a company, CSRD management adheres to principles outlined in ISO 26000, guiding the reporting on Social and Environmental Responsibility. These principles include accountability, transparency, stakeholder respect, ethical behavior, legal compliance, respect for human rights, and adherence to international norms. ISO 26000 emphasizes that Corporate Social Responsibility (CSR) extends beyond companies and can also be embraced by institutions or other agencies.

In the corporate CSRD reporting domain, a connection is observed between heightened debt and equity ratios and an increased likelihood of agreement violations. This correlation leads stakeholders to automatically report higher profits. To enhance reported profits, companies may opt to reduce the numerical content of their reports, thereby diminishing the scope of their CSRD reporting.

## Agency theory

It elucidates the intricate relationship between stakeholders and shareholders. According to this theory, Corporate Social Responsibility Disclosure (CSRD) serves as a mechanism for companies to establish a positive corporate reputation within society. By implementing CSRD, companies aim to reduce monitoring and contracting costs, enhance political visibility, and ultimately achieve improved performance across social, economic, and political dimensions. Notably, a negative correlation is observed between CSRD and regulatory and agency costs, reflecting the theory's emphasis on addressing conflicts of interest between principals and agents.

CSRD frequently employs agency theory as its conceptual framework, highlighting the inherent conflicts of interest between principals (investors) and agents (managers or stakeholders). The theory contends that agency conflicts may arise when stakeholders, entrusted with reporting on company activities, provide information that diverges from the actual conditions.

## Legitimacy Theory

Legitimacy theory serves as an initial framework for understanding the social contract between companies operating in the economic sector and society. Unlike agency theory, legitimacy theory extends beyond investor interests, focusing on gaining legitimacy from both social and environmental perspectives. Companies seek to enhance their legitimacy by incorporating CSRD into sustainability reports, aiming to align their operational activities with societal values and build public trust.

## Stakeholder Theory

Stakeholder theory delves into the impact of organizational decisions on individuals or entities and vice versa. The term "stake" implies ownership, encompassing not only shareholders but also the government and other stakeholders. According to Banham (1990), three crucial arguments within stakeholder theory emphasize the diverse array of stakeholders and their significant influence on organizational dynamics.

### I. Descriptive Argument

In this scenario, it is crucial for the company to prioritize specific elements to ensure smooth operations. The primary emphasis should be on meticulous attention to regular financial reporting, underscoring the agents' significance in adhering to established reporting practices. This approach aims to

enhance operational efficiency and foster transparency in financial matters.

### II. Instrumental Argument

The instrumental argument asserts that cultivating positive relationships with diverse stakeholder groups significantly impacts the company's financial performance. By fostering strong connections with various entities, the company can experience notable improvements in financial outcomes. This argument highlights the instrumental role of stakeholder relationships in contributing to the overall success of the organization.

### III. Normative Argument

In the normative argument, the company's considerable influence on decision-making processes is emphasized. Additionally, the company holds substantial sway over other resource factors. This argument underscores the normative role of the company in guiding actions and shaping decisions, emphasizing its responsibility not only in internal operations but also in broader resource considerations.

In summary, these three theories-Agency theory, Legitimacy theory, and Stakeholder theory provide distinct perspectives on the motivations and consequences of corporate actions, shedding light on the complex interplay between companies and their various stakeholders.

## Conclusion

Numerous studies have used a variety of parameters to measure corporate social responsibility disclosure in general, given the concept of corporate social responsibility disclosure (CSRD) and its rapid rise. The testing phase makes use of a wide range of variables, including capital, assets, business size, and stock prices. Investors also consider a company's transparency and CSRD adoption when determining whether or not to invest in it. Hotels, conventional banking, sharia banking, and the mining industry are just a few examples of the types of businesses where CSRD is significant as a substantial consideration for investors buying shares of the company. If more money is allocated to CSR reporting, that should lead to better financial results. In contrast to businesses that publish less CSR information, a decline in the financial performance of a company will be a significant deterrent to potential shareholders. The signal theory lends support to CSRD by suggesting that if a company's CSRD reporting is superior to its competitors', the company will enjoy greater success



than its competitors and have a more positive effect on society as a whole. The fact that this study only offers a high-level summary of corporate social responsibility disclosure (CSRD) indicates that more research on the subject should be done. The concept of CSRD development has advanced significantly in a number of publications that have been examined; it is also connected to the SDGs and environmental, social, and governance (ESG) concerns. The Sustainable Development Goals (SDGs) are an international initiative with the goal to improve people's lives everywhere. More than 193 countries have agreed to implement this program, which is a sustainable development program with 17 goals and 169 targets.

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## A Research Study Focused on understanding the Nexus of Frauds in the Lens of Diversity, Equity and Inclusion in Indian Organizations

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### Abstract

*To foster the business and scale up to the global markets and global standards, the business houses need people from across the world. Diversity, Equity and Inclusion has become the need and necessity of today's business. The organization is expected to create equal opportunities to all the people, irrespective of whatever age, caste, creed, gender, geography they belong to. If the person can get the employment, it is the responsibility of the company to hire that person and give him the opportunity to grow and to contribute to the organization. By adhering to these changes, even the companies are also welcoming the people from all backgrounds. As a result, we can see some positive changes, that are happening in the company, due to wide variety of people under one roof. At the same time, light is thrown on fraudulent activities that are taking place in the organization due to this trend of Diversity, Equity and Inclusion. In this context the study aims to find out the nexus between the Diversity, equity and Inclusion on the fraudulent activities in the organization. It also tries to understand the extent to which diversity, equity and inclusion have implication on the frauds. It also tries to find out different types of frauds the organization has encountered in the past two years. This study is imperative because ignoring the DEI by the organizations in the current world is a costly affair and it becomes difficult for it to survive without Diversity and Inclusion. So, any company who wants their piece of share in the market and in the minds of stakeholders can't ignore DEI and an attempt in the connection helps them to control people in the organizations.*

**Keywords:** Diversity, Equity Inclusion, Fraud, Forensic Accounting, Prevention.

### Introduction

Diversity encompasses increasing the representation of various populations, including age, gender, education, health condition, lifestyle, sexual orientation, size, mental and physical ability, socioeconomic status, language, and more, within an organization. Equity involves ensuring equal opportunities and benefits for members of both underrepresented and majority group employees. It requires top leadership to establish the organizational culture, allocate budgets for diversity initiatives, formulate formal policies, create a level playing field, and define measurable and meaningful outcomes. Inclusion is about providing a supportive workplace where everyone feels welcomed and valued. When an organization celebrates employees' achievements without regard to their title, tenure, or background, and encourages comfortable sharing of perspectives,

with due consideration for those views, employees develop a strong sense of belonging to their workplace.

Today all the companies are embracing DEI because they know the importance of inculcating it. DEI helps to get knowledge and ideas from different people from different backgrounds. It can help reap the benefits of increased productivity, rewards of enhanced job contentment and amplified profits. DEI is one of our guiding principles and the company continues to create equal opportunities for all- Dr. Pawan Munjal Chairman & CEO, Hero. He also said that a project Tejaswini that is women on shop floor to promote gender parity and influence traditional mindsets. A project is introduced that encourages women to work side by side with men at shop floor. The project got appreciation in the form of coveted recognition like

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employer of their choice and a great place to work.

The research focuses on DEI in relation to forensic accounting identification and understanding of nexus between frauds and DEI. In recent years, the business world has faced lot of issues on systemic inequality and the COVID pandemic has highlighted the deep divisions within society in many countries. With this the organizations are increasingly communicating their commitments to DEI and publicly attempting their faults and creating plans to do better, American Accounting Association. Efforts towards workplace diversity, equity, and inclusion are gaining prominence in national political discussions. A recent survey by the Pew Research Center indicates that a majority of employed U.S. adults (56%) view the emphasis on enhancing DEI in the workplace as positive. Recognizing diversity, equity, and inclusion as potent catalysts for business performance, companies that embrace diverse talents and incorporate multiple perspectives are poised to emerge stronger from the challenges posed by the crisis. Gender is a crucial element of ESG and now a mainstream business issue. A key aspect of a socially responsible organization has been the need of the hour. Corporate India is now taking proactive measures to comprehend and implement various strategies to protect against the risks of fraud and misconduct. Over the past 24 months, a staggering 99% of fraud incidents occurred on platforms encompassing financial, social media, goods enterprises, media sharing, knowledge sharing, and services. According to PwC's Global Economic Crime and Fraud Survey 2022 for India, 44% of the perpetrators engage in fraud with the primary motive of financial gains. Furthermore, 26% of Indian organizations experienced losses exceeding USD 1 million due to platform-related fraud.

To curtail fraud in an organization there is a need for diversity in boardrooms and in the c-suite and a deeper understanding of this is required. The fraud risk is seen in almost all the sectors like financial sector, information technology, telecom, media, retail, logistics, so on. Many previous studies conducted also tells that maximum threat of fraud is perceived by employees as most of them lack ethical values and due to negligible working conditions, lack of supervision and improper background verification.

In order to curtail the frauds, the organization has to take various measures by tightening internal controls. The board of director should be strong enough to handle the responsibility of compliance carefully so that the organizations won't lose out by mismanagement the employees have to be trained on SEBI requirements/ SOX requirements.

Managing such an environment requires the primary focus on designing and implementing a controlled

framework that proactively prevents, detects, and addresses fraudulent behavior, whether originating from employees, vendors, or intermediaries. While the concept of Diversity, Equity, and Inclusion (DEI) is widely accepted in the Western world, its adoption in India is still in a nascent stage, with progress being made at a gradual pace. Having DEI at work is a good thing and organization should create a place where DEI is respected.

As the previous research tells prevention is better than detection and investigating the frauds as lot of time and money is involved in these jobs. So, the companies have to be very cautious about the frauds and see what can be done in order to prevent the fraud in the initial stages itself. There are many options like increasing the control systems, eliminating the opportunities that create fraud, recruiting right people. These are all few areas that are known to the companies. But along with these the companies can also focus on having diversity in the workplace, ensuring equity and including inclusion to reduce frauds. This paper tries to know this status in the Indian companies. With this research we can bring the historic and systemic issues into light and see how to perpetuate or combat systemic discrimination to reduce fraudulent activities in an organization. It aims to conduct fraud research through DEI lens. This can serve as a useful source of information for Corporate Governance.

## Review of Literature

In his 2023 paper, "Disentangling the Black Box around CEO and Financial Information-Based Accounting Fraud Detection," Rolf Bruhl explores the predictive capabilities of CEO characteristics in accounting fraud using a machine learning approach. Seyed Vali Mostafavi Makrani-2022-in a paper titled "Providing a model for disclosing fraudulent actions for accountants" The purpose of the study is to provide a model for disclosing fraudulent actions for accountants with an emphasis on effective factors. Patric velte-2021 in a paper titled "The link between corporate governance and corporate financial misconduct". The article underscores that numerous studies on corporate governance yield inconclusive findings regarding financial misconduct by firms. Ahmet Ozcan-2018-The use of Beneish model in forensic accounting. This paper aims to analyse the usefulness of Beneish model in the forensic accounting practices. O.S. Bamisaye's 2023 research delves into the dynamic relationship between corporate governance practices and managerial efficiency, specifically focusing on the Nigeria Port Authority. The study titled "Determinants of Accounting Fraud in the State Civil Apparatus Ministry of Religion in Padangsidimpuan



City," published in 2023, aims to assess whether the effectiveness of internal control significantly impacts the propensity for accounting fraud. Natasya Navila Rahma's 2023 study, "Detection of Fraud in Financial Statements through the Hexagon Model, Vousinas Fraud Dimensions," seeks to identify the influence of all factors within the fraud hexagon model on financial statement fraud.

Alexander Dyck's 2023 research, "How pervasive is corporate fraud?" aims to identify the concealed aspect of corporate fraud by leveraging Arthur Andersen's collapse. The demise of Arthur Andersen led to increased scrutiny of its former clients, enhancing the likelihood of detecting pre-existing frauds. Amar Nath Yadav's 2023 paper, "A Study of Regional Rural Banks: The Conundrum of Managing Inclusion with Sustainability," strives to bridge the gap in understanding the performance of Regional Rural Banks (RRBs) concerning their incorporation objectives, supported by evidence-based data. Gurleen Kaur's 2023 paper, "An Insight into Forensic Accounting," delves into the evolving nature of accounting, auditing, and assurance standards. The paper notes that nearly 40% of the top 100 American accounting firms are expanding their forensic and fraud services, as reported by Accounting Today. Spakkur Dagsson's 2011 paper, "How Age Diversity on the Board of Directors Affects Firm Performance," explores the impact of age diversity on firm performance, investigating whether such diversity improves performance, particularly in small firms, and if there are diminishing returns in situations with very high board diversity. Richard D. Lennox's 2022 paper, "Construction and Validation of a Short Inclusion Scale," introduces a Workplace Inclusion Scale applicable in various workplaces and departments within organizations. Soewaro.N's 2022 study discovers a positive influence of ethical organizational culture on moral reasoning and employee integrity. Yang Wang and Simon Gao's study from March-April 2022 investigates the role of gender diversity in fraud commission and detection. The study aims to determine whether companies with more female corporate leaders are less likely to be involved in financial statement fraud. Jaime L. Grandstaff and Lori L. Solsma's 2021 research presents the characteristics of 162 fraud occurrences by public firms that intentionally reported false financial statements during the financial crisis era. The "Journal of Accounting and Public Policy: Gender Diversity and Financial Statement Fraud" in 2022 investigates the correlation between gender diversity and financial statement fraud, exploring whether companies with more female corporate leaders are less likely to be involved in such fraudulent activities.

So far most of the researchers have done separate

research on frauds and DEI but in this research, we are trying to establish the connection between the DEI and frauds in an organization and how DEI can be used as a tool to reduce the frauds at all the levels of Organization. Prominent scandals like Sathyam, PNB, SBI, Yes Bank, ICICI Bank, among others, have significantly eroded public trust. Consequently, there is a pressing need for transformative measures within Indian boards to restore the confidence that has been lost.

## Objectives

1. To find the association between diversity and providing equal opportunity in the organization.
2. To know the impact of age of the employees and fraud in the organization.
3. To find out the impact of diversity in reducing frauds.
4. To understand the types of fraud the organization has encountered in the last two years.

## Research Methodology

This study examines the correlation between Diversity, Equity, and Inclusion (DEI) and instances of fraud in Indian companies, with a sample size of 102 employees working in various Indian Companies. This research has used both Primary data and secondary data. Primary data was collected by circulating google form. Secondary data has been collected from various literatures, websites, journals etc. Convenience sampling and snowball sampling was used.

## Data Analysis in Interpretations

**Table 1: Depicting the Descriptive statistics**

Descriptive Statistics					
	N	Mean	Std. Deviation		
		Statistic	Statistic	Statistic	Std. Error
Diversity of org	102	2.49	0.887	-0.187	0.239
Equal opportunities	102	3.48	1.06	-1.118	0.239
Age for fraud.	102	1.56	0.752	1.077	0.239
Past two frauds.	102	1.67	0.749	0.635	0.239
workplace diversity	102	3.49	0.992	-1.057	0.239
Diversity in boardrooms	102	2.95	1.138	-0.19	0.239
Justice blind	102	1.25	0.432	1.203	0.239
Occupational frauds	102	2.95	1.189	-0.264	0.239
Representation of women in CB	101	1.52	0.807	1.081	0.24
fraud/misconduct/non compliance	102	2.75	1.675	1.019	0.239
Threatened by fraud	102	2.36	1.547	0.926	0.239
Suspicion when it comes to committing fraud	102	2.18	0.737	-0.293	0.239
Inclusive culture	101	3.37	1.247	-0.162	0.24
Detection of fraud	102	2.74	1.949	0.897	0.239
Valid N (listwise)	100				

Source: Author's Compilation, Note: Statistical analysis using SPSS

H0a: There is no significant relationship between perception of employees on Diversity and perception of equal opportunities.

**Table 2: Stating the Correlation between the variables Diversity and equal opportunities.**

Correlations			
		Diversity of org	Equal opportunities
Diversity of org	Pearson Correlation	1	0.042
	Sig. (2 -tailed)		0.676
	N	102	102
Equal opportunities	Pearson Correlation	0.042	1
	Sig. (2 -tailed)	0.676	
	N	102	102

Source: Author's Compilation, Note: Statistical analysis using SPSS



From the above table, we can say that there is a positive correlation among diversity in organization and equal opportunities. It means to understand that

today the organizations are successful in creating equal opportunity for all backgrounds people irrespective of their race, ethnicity, age, gender etc.

**Table 3: Showing the fitness test**

Goodness-of-Fit Tests			
	Value	df	Sig.
Likelihood Ratio	0	0	0
Pearson Chi-Square	0	0	0

Source: Author's Compilation, Note: Statistical analysis using SPSS

A value of 0.00 suggests that the model provides an excellent fit to the data and that the observed data

perfectly matches the expected data based on the models' predictions.

**Table 4: Representing the Measure of Association**

Measure of Association <sup>a,b</sup>	
Entropy	0.051
Concentration	0.049

Source: Author's Compilation, Note: Statistical analysis using SPSS

Assess the strength of association between variables in the model. The entropy of 0.051 indicates a small level of uncertainty or unpredictability in the associations

while the concentration of 0.049 suggest a moderate level of concentration or consistency in the associations.

**Table 5: Showing the chi-square Test**

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi -Square	21.429 <sup>a</sup>	12	0.044
Likelihood Ratio	19.808	12	0.071
Linear -by-Linear Association	0.177	1	0.674
N of Valid Cases	102		

Source: Author's Compilation, Note: Statistical analysis using SPSS

In the Pearson Chi-square test, the asymptotic significance (P value) is 0.44, which is below the conventional significance level of 0.05. As a result, the

findings are deemed statistically significant. The null hypothesis (H0) is rejected, and the alternative hypothesis is accepted.

**Table 6: Representing the Model summary**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change

1	.042 <sup>a</sup>	0.002	-0.008	1.064	0.002	0.176	1	100	0.676
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Source: Author's Compilation, Note: Statistical analysis using SPSS

**Table 7: Showing the ANOVA results**

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.199	1	0.199	0.18	.676 <sup>b</sup>
	Residual	113.26	100	1.133		
	Total	113.46	101			

Source: Author's Compilation, Note: Statistical analysis using SPSS

**Table 8: Depicting the Coefficients**

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.356	0.315		10.64	<.00
	Diversity of org	0.05	0.119	0.042	0.419	0.676

Source: Author's Compilation, Note: Statistical analysis using SPSS

Based on the above observations, it can be concluded that diversity has a limited influence on creating equal opportunities for employees. The ANOVA and coefficients analysis reveal no statistically significant relationship between the predictor variable and the dependent variable. The regression model does not

exhibit a significantly improved fit to the data compared to the null model. Consequently, within the scope of this analysis, the predictor variable does not seem to exert a meaningful impact on the dependent variable.

H0b: There is no significant difference between age of the employees and perception on workplace diversity.

**Table 9: Showing the significance level**

Tests of Between-Subjects Effects					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7.155 <sup>a</sup>	3	2.385	2.531	0.062
Intercept	201.438	1	201.438	213.797	<.001
Age of people committing fraud	7.155	3	2.385	2.531	0.062
Error	92.335	98	0.942		
Total	1342	102			
Corrected Total	99.49	101			

Source: Author's Compilation, Note: Statistical analysis using SPSS

**Table 10: Showing the chi-square Tests**

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	26.942 <sup>a</sup>	12	0.008
Likelihood Ratio	17.74	12	0.124
Linear-by-Linear Association	0.627	1	0.428
N of Valid Cases	102		

Source: Author's Compilation, Note: Statistical analysis using SPSS

The findings are somewhat mixed, with the ANOVA indicating a non-significant relationship between age and fraud perception, while the chi square tests signify

associations between age and the perception of the reduced frauds. Thus, Alternative hypotheses is accepted and H<sub>0</sub> is rejected.

H<sub>0c</sub>: Diversity of organization helps in reducing the frauds.

**Table 11: Depicting the Chi-square tests between the variables diversity and frauds**

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	38.544 <sup>a</sup>	12	<.001
Likelihood Ratio	41.159	12	<.001
Linear-by-Linear Association	1.15	1	0.284
N of Valid Cases	102		

Source: Author's Compilation, Note: Statistical analysis using SPSS

The Pearson chi square test static is 38.544 with 12 degrees of freedom stop the pH value associated with this test is less than 0.01 indicating that relationship between diversity of organization and frauds is

statistically significant. From the above table we can see that Alternate hypothesis is accepted, which says that Diversity of the organization helps in reducing the frauds.

**To understand the type of fraud the organization has encountered in the past two years.**

**Table 12: Showing the Frequencies of Frauds or Misconduct the Organization has faced**

Fraud/Misconduct in last two years		
	N	%
Internet or Cyber fraud	20	19.60%
Financial statement fraud	47	46.10%
Money Laundering	9	8.80%
Corporate Espionage	7	6.90%
Intellectual property fraud	3	2.90%
No frauds	16	15.70%

Source: Author's Compilation, Note: Statistical analysis using SPSS

From the above table most of the respondents say that the financial statement frauds are more compared to any other form of fraud. It is because due to strong internal control system the employees don't have many

opportunities for committing the fraud. Whereas the high-level management are more resorting to financial statement frauds. The next highly experienced frauds are Cyber-attacks by the perpetrators to steal the data.

**Table 13: Showing the Correlation Matrix between Different Variables**

Correlation Matrix						
		EO	WPD & RF	BD & RF	OF	IC
Correlation	EO	1	0.403	0.238	0.122	-0.042
	WPD & RF	0.403	1	0.422	0.114	-0.048
	BD & RF	0.238	0.422	1	0.356	-0.229
	OF	0.122	0.114	0.356	1	-0.194
	IC	-0.042	-0.048	-0.229	-0.194	1
Sig. (1 -tailed)	EO		<.001	0.008	0.111	0.338
	WPD & RF	0		0	0.128	0.317
	BD & RF	0.008	0		0	0.011
	OF	0.111	0.128	0		0.026
	IC	0.338	0.317	0.011	0.026	

Source- Authors Compilation,

**Note:** EO=Equal Opportunities, WPD & RF- Work place diversity and reduced frauds, BD&RF-Board room diversity and reduced frauds, OF, Occupational frauds, IC-Inclusive culture.

The above table signifies that there is a Negative relationship between IC and EO. Whereas WPD & RF & BD & RF have a significant relationship with EO. Further WPD and RF has a negative relationship with IC and BD & RF has a strong relationship with WPD & RF. Moreover, BD & RF has a strong relationship with WPD & RF, BD & RF & IC. Further OF has a strong relationship with BD & RF & IC. Whereas, IC has a negative relationship with EO, WPD & RF & positive relationship with BD & RF & OF.

### Summary of Findings of the study

1. A positive correlation exists between organizational diversity and the promotion of equal opportunities.
2. Most of the organizations are successful in creating equal opportunities to all the people from different backgrounds and inclusion is well practiced in most of the organizations.
3. Diversity of the organization helps in reducing the frauds.
4. In case of different types of fraud, the organization has encountered, financial statement frauds are more and followed by cyber-attacks on data.
5. Workplace diversity and Board room diversity is significant in reducing the frauds in organization.
6. There is a strong association of Boardroom diversity in creating inclusive culture in the organization.

### Suggestions

1. Some organizations should still recognize and promote DEI in their companies and at the same time policy makers can take better steps in framing the policies.
2. The organizations should practice equitable hiring for reducing frauds.
3. The organizations can make use of HR data analytics and other audit data analytics to propel DEI initiatives and curtail frauds in organizations.

### Conclusion

Organizations that actively promote diversity and create equal opportunities for all individuals are likely to reap multiple benefits including reduced fraud risk and more inclusive and innovative work environment. Continuing to give precedence to Diversity, Equity, and Inclusion (DEI) initiatives and utilizing data analytics, organizations can cultivate a culture of integrity and trust, ultimately fostering sustained success and growth. The relationship between diversity equity and inclusion within organizations his complex and multifaceted, with various factors interplaying to shape outcomes. It is found that fostering diverse workforce can contribute to a more equitable environment promoting fairness and providing opportunities for individuals from different backgrounds. Acknowledging the ongoing need for promoting DEI initiatives is crucial, both at the organisational level anthropology making efforts. The nuanced relationships between inclusive culture, equal opportunities and board diversity, highlight the

complexities that arise when striving to balance these factors. The intersection of diversity, equity, inclusion and fraud prevention is a multidimensional challenge that requires a holistic approach. organization should continually assess their strategies, collaborate with policymakers and adopt innovative practices to create a harmless balance that enhances their operations from culture and overall success.

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## Fundamental Analysis: A study of the FMCG Sector in India

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### Abstract

*To foster the business and scale up to the global markets and global standards, the business houses need people from across the world. Diversity, Equity and Inclusion has become the need and necessity of today's business. The organization is expected to create equal opportunities to all the people, irrespective of whatever age, caste, creed, gender, geography they belong to. If the person can get the employment, it is the responsibility of the company to hire that person and give him the opportunity to grow and to contribute to the organization. By adhering to these changes, even the companies are also welcoming the people from all backgrounds. As a result, we can see some positive changes, that are happening in the company, due to wide variety of people under one roof. At the same time, light is thrown on fraudulent activities that are taking place in the organization due to this trend of Diversity, Equity and Inclusion. In this context the study aims to find out the nexus between the Diversity, equity and Inclusion on the fraudulent activities in the organization. It also tries to understand the extent to which diversity, equity and inclusion have implication on the frauds. It also tries to find out different types of frauds the organization has encountered in the past two years. This study is imperative because ignoring the DEI by the organizations in the current world is a costly affair and it becomes difficult for it to survive without Diversity and Inclusion. So, any company who wants their piece of share in the market and in the minds of stakeholders can't ignore DEI and an attempt in the connection helps them to control people in the organizations.*

**Keywords:** Financial health, growth potential, EPS, ROI, ROE

### Introduction

India's FMCG (Fast-Moving Consumer Goods) sector has experienced significant growth, driven by the country's large consumer base, rising disposable incomes, and changing consumer preferences. This research aims to conduct a comprehensive fundamental analysis of prominent Indian FMCG companies to identify the best investment opportunity among Hindustan Unilever Ltd, ITC Ltd, Nestle India Ltd, Britannia Industries Ltd, Godrej Consumer Products Ltd, Dabur India Ltd, Marico Ltd, Adani Wilmar Ltd, Procter & Gamble Hygiene and Health Care Ltd, and Colgate-Palmolive (India) Ltd. By leveraging secondary data, including financial reports, industry analysis, and market research, we seek to evaluate these companies based on their financial performance, market position, management quality, industry trends, and valuation metrics.

Fundamental analysis involves assessing a company's financial health, competitive position, and growth potential. Examining financial statements is crucial in this process. Investors analyze revenue growth rates, profitability measures, and cash flow dynamics. Additionally, debt levels and interest coverage ratios provide insights into financial stability and leverage management.

By conducting a thorough fundamental analysis, investors can make informed investment decisions based on the intrinsic value and growth potential of Indian FMCG companies. It is important to consider both quantitative and qualitative factors while analyzing secondary data, such as financial reports, industry trends, market research, and news updates.

This report analyses and identifies the most promising investment opportunity among the mentioned Indian FMCG companies. However, it is crucial to note that

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investment decisions should be made based on comprehensive research, professional advice, and individual risk tolerance. Market conditions and company-specific developments should be continually monitored to make informed investment choices.

## Review of Literature

Bandyopadhyay and Guha (2023) analyzed the impact of COVID-19 on stock prices. In their study, they tried to analyze the short-term impact of the COVID-19 crisis on ISM by focusing on two sectors, namely fast-moving consumer goods (FMCG) and consumer durables (CD), which are traded on BSE in India. It is interesting to see the impact of COVID-19 on the share prices of manufacturing companies, as the products of both sectors are mostly used in families. Take the time to analyze to understand the impact of the COVID-19 pandemic on the closing price movements of the companies under consideration. We use the Autoregressive Integrated Moving Average (ARIMA) model to forecast monthly closing prices from April 2020 to March 2021 and calculate the variance of each stock.

Srivastava, G. (2023) describes the impact of green marketing on consumer behavior using fast-moving consumers. This study will focus on understanding the future prospects of green economy in the Delhi NCR region of North India and this study will guide the way to change consumer behavior due to access to environmental products that can help in FMCG. Marketers are adopting new methods in the future. The results of this study focus on environmental awareness, marketing image, product design, and ethics as elements of effective green advertising that is good for green customers.

Dachan and Sherif (2023) examined returns for Swedish fast-moving consumer goods (FMCG) retailers and found that returns increased; This is a major concern for companies and retailers. This document aims to analyze the drivers of product returns and their impact on the current B2B supply chain and provide recommendations to reduce their impact and frequency.

Nishad and Ghouse (2023) investigated the integrity of the FMCG industry. This study focuses on risk and return analysis of selected FMCG companies. This indicates that there is greater risk and reward in each stock. Investing involves risk and reward. This project compares the performance of selected Banks and FMCG stocks with the performance of Nifty Banks and Nifty FMCG by calculating alpha-beta, standard deviation, and correlation.

Andiani et al., (2023) found in an important study that there were changes in financial transactions due to the COVID-19 epidemic at the beginning of 2020. This study also shows that the international market is

evolving with the emergence of new companies even in the field of local and international operations.

Chauhan et al (2023) examined the impact of FMCG advertising, packaging, and marketing in the competitive market, as well as the FMCG box, and investigated the importance of strategic design as communication and marketing tools expand. To understand what consumers think about these things, this study used a method called a focus group.

Bednarz (2023) examined the impact of social media on the FMCG industry. This study provides an in-depth understanding of the impact of social media on the FMCG industry in Bangladesh. Research results show that social media changes consumer behavior, product awareness, and purchasing decisions in the FMCG sector.

Companies must understand the importance of social media as a powerful marketing tool and develop strategies to engage beautifully with consumers. By understanding Bangladeshi consumers' preferences and behavior on social media, FMCG companies can adapt their marketing strategies to brand awareness, influence customer behavior, and ultimately increase customer retention and loyalty. Chauhan et al. (2023), the study found that fast-moving consumer goods (FMCG) delivery mainly depends on the transportation and operation of products, which can be improved through digitalization. This article examines the distribution of fast-moving goods and attempts to identify inefficiencies in transportation and storage. Research results show that optimization of transportation and operation of products has a positive impact on the export of fast products.

Bagchi R. (2023) studied the impact of company performance on the market value of selected FMCG companies in India in 2023. This study uses some fundamental factors as well as growth indicators to track the impact of stock prices over a seventeen-year study period. Earnings per share (EPS) is a financial measure and is important in the business world. Price-to-earnings (PE) and price-to-book (PB) ratios are two business metrics that also include independent variables.

Nishad and Ghouse (2023). Conducting equity analysis of the FMCG sector. Ratio analysis is the most important indicator used to measure changes in the stock market and the results and performance of different companies in the stock market, helping in making business decisions on whether to buy or sell stocks.

## Research Objectives

The research objectives for conducting a fundamental analysis of the Indian FMCG companies are:

1. Evaluated the financial performance and stability of the selected companies.

2. Assessed the growth potential and market positioning of each company.
3. Identified key strengths and weaknesses of the companies.
4. Determined which company offers the best investment opportunity in the FMCG sector.

6. Dabur India Limited
7. Marico Ltd
8. Adani Wilmar Limited
9. Procter & Gamble Healthcare Co., Ltd.
10. Colgate-Palmolive (India) Ltd.

## Research Methodology

Ten best-performing FMCG companies by market capitalization were selected for this study. The companies selected for this study are:

1. Hindustan Unilever Limited
2. ITC Ltd.
3. Nestlé India Ltd
4. Britannia Industries Ltd
5. Godrej Consumer Products Limited

The research design of this analysis will be a comparative study in which the financial performance and prospects of selected FMCG companies will be examined and compared. This will include a detailed company analysis of each company's options individually, followed by a comparative analysis. Only secondary data was used for this study consisting of Financial statements of the company for the last ten years (annual report, balance sheet, income statement, cash statement), Historical stock prices, trading volume, market capitalization, and other business information and Industry reports on industry trends and forecasts for the Indian FMCG industry. The analysis is done using MS Excel. Time Period of the Study is 2013-2022

## Data Analysis and Interpretations

**Table 1: Hindustan Unilever Ltd**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	18.33	28.68	85.89	81.93	77.21	70.33	82.71	104.12	130.01	103.11
ROI	214.54	271.32	458.93	209.95	169.70	116.26	149.59	111.18	113.65	136.83
EPS	37.52	33.85	31.19	27.94	24.25	20.79	19.15	19.95	15.75	14.52
Divident per share	34.00	40.50	25.00	22.00	20.00	17.00	16.00	15.00	13.00	18.50
Payout (%)	85.27	110.77	77.11	80.36	74.39	79.53	103.69	88.2	82.54	127.35
Price Earning (P/E)	54.61	71.81	73.68	61.12	55.09	43.76	45.4	43.75	38.33	32.1
Price to Book Value ( P/BV)	9.87	12.04	61.81	48.16	40.79	30.27	29.91	50.72	39.84	37.71

### Findings:

- Hindustan Unilever has shown consistent returns on equity (ROE) and return on investment (ROI) over the years, although there has been a slight decline in recent years.

- The company's earnings per share (EPS) have been steadily increasing, indicating a growth in profitability.

- The dividend per share has varied over the years but shows a general increasing trend.

**Table 2: ITC Ltd**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	25.01	21.18	24.82	22.8	23.2	23.45	25.79	33.77	36.27	36.21
ROI	55.03	48.45	49.88	47.13	46.83	54.19	70.19	111.78	97.10	102.68
EPS	12.22	10.59	12.31	10.17	9.2	8.4	6.93	7.14	6.69	5.67
Divident per share	11.50	10.75	10.15	5.75	5.15	4.75	5.67	4.17	4.00	3.50
Payout (%)	89.97	142.95	46.57	50.43	51.41	67.05	59.93	58.33	59.84	61.79
Price Earning (P/E)	20.52	20.63	13.97	29.17	27.82	33.39	31.57	30.39	35.19	36.36
Price to Book Value ( P/BV)	5.03	4.56	3.3	6.28	6.08	7.51	6.34	8.5	10.71	10.98

**Findings:**

- ITC Ltd has maintained a stable ROE and ROI, with a slight increase in recent years.
- The company's EPS has shown moderate growth over the years.
- Dividend per share has been increasing, except for a decrease in 2020.
- The payout ratio has fluctuated but has been

relatively high overall.

- The P/E ratio has been moderate, suggesting a reasonable valuation in relation to earnings.
- The P/BV ratio has been relatively low, indicating a lower valuation in comparison to book value.

**Table 3: Nestle India Ltd**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	108.52	106.84	105.76	70.39	45.3	36.56	32.83	31.32	45.51	53.62
ROI	306.86	295.92	142.26	112.41	60.45	61.91	57.43	66.85	145.95	130.18
EPS	247.93	219.71	215.97	204.15	166.66	127.07	103.85	58.42	122.87	107.62
Divident per share	220.00	200.00	200.00	342.00	115.00	86.00	63.00	48.50	63.00	48.50
Payout (%)	84.7	91.03	90.75	149.88	67.8	67.68	56.33	100	56.48	45.06
Price Earning (P/E)	79.05	89.7	85.16	72.45	66.65	61.74	58.06	99.69	51.92	49.22
Price to Book Value ( P/BV)	76.84	97.63	87.82	74.32	29.15	22.11	17.71	19.93	21.68	21.56

**Findings:**

Nestle India has consistently high ROE and ROI, indicating strong financial performance.

- The company has shown steady growth in EPS over the years.
- Dividend per share has been increasing, with occasional variations.

- The payout ratio has generally been high, indicating a significant portion of earnings distributed as dividends.

- The P/E ratio has been relatively high, indicating a higher valuation in relation to earnings.
- The P/BV ratio has shown fluctuations, with higher values in certain years.

**Table 4: Britannia Industries Ltd**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	56.04	46.35	35.71	30.85	32.59	36.7	46.9	48.11	49.27	40.2
ROI	306.86	295.92	142.26	112.41	60.45	61.91	57.43	66.85	145.95	130.18
EPS	66.55	73.06	61.72	46.7	39.48	35.16	31.81	24.32	14.4	9.06
Divident per share	56.50	157.50	35.00	15.00	12.50	11.00	10.00	8.00	6.00	4.25
Payout (%)	111.93	161.34	24.29	26.75	27.87	28.44	25.15	32.89	41.72	46.94
Price Earning (P/E)	48.15	49.66	43.58	65.99	62.96	48.11	42.06	44.39	29.29	28.93
Price to Book Value ( P/BV)	32.13	26.33	15.13	18.33	18.45	15.72	15.93	20.89	11.79	9.77

**Findings:**

Nestle India has consistently high ROE and ROI, indicating strong financial performance.

- The company has shown steady growth in EPS over the years.
- Dividend per share has been increasing, with occasional variations.

- The payout ratio has generally been high, indicating a significant portion of earnings distributed as dividends.

- The P/E ratio has been relatively high, indicating a higher valuation in relation to earnings.
- The P/BV ratio has shown fluctuations, with higher values in certain years.

**Table 5: Dabur India Ltd**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	25.46	27.73	27.40	30.85	27.19	29.57	34.52	35.98	38.81	41.28
ROI	28.63	38.65	50.27	42.66	31.49	32.71	35.68	43.20	58.98	56.42
EPS	8.11	7.82	6.62	7.16	6.09	5.67	5.33	3.98	3.56	3.14
Divident per share	5.20	4.75	3.00	2.75	7.50	2.25	2.25	2.00	1.75	1.50
Payout (%)	67.86	42.85	45.77	108.68	38.58	39.70	45.15	50.30	49.20	47.77
Price Earning (P/E)	66.16	69.14	68.01	57.13	53.69	48.88	46.74	66.70	50.44	43.65
Price to Book Value ( P/BV)	16.18	17.73	17.39	18.20	13.63	13.34	14.16	19.96	16.46	15.30

**Findings:**

- Dabur India's ROE has shown stability, while ROI has varied but generally remained positive.
- EPS has shown modest growth over the years.
- Dividend per share has increased over time, with occasional variations.
- The payout ratio has varied, with a relatively high

value in certain years.

- The P/E ratio has been relatively high, indicating a higher valuation in relation to earnings.
- The P/BV ratio has remained within a moderate range.

**Table 6: Godrej Consumer Products Ltd**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	20.82	21.32	23.47	36.69	22.18	20.78	20.17	20.43	19.53	19.34
ROI	27.34	26.82	32.73	51.06	25.25	23.06	27.63	27.84	25.49	32.24
EPS	14.46	11.97	11.54	17.17	9.79	7.91	7.07	6.05	5.23	4.73
Divident per share	0.00	0.00	8.00	10.00	10.00	15.00	5.75	5.50	5.25	5.00
Payout (%)	0.00	0.00	69.31	69.89	70.07	24.23	0.00	30.31	33.43	35.24
Price Earning (P/E)	51.67	60.88	45.12	40.02	74.43	70.40	65.00	57.34	54.25	54.92
Price to Book Value ( P/BV)	9.73	11.72	10.38	14.26	16.04	13.01	12.41	10.47	9.59	9.60

**Findings:**

- Godrej Consumer Products shows a stable ROE and ROI, indicating consistent financial performance.
- EPS has increased steadily over the years, reflecting improved profitability.
- Dividend per share has remained relatively stable.
- The payout ratio has varied but generally remained

moderate.

- The P/E ratio has been moderate, suggesting a reasonable valuation in relation to earnings.
- The P/BV ratio has shown fluctuations, but overall, it remains at a moderate level.

**Table 7: Adani Wilmar Ltd**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	15.47	23.89	17.81	19.88	25.54	19.73	9.98	8.03	0.55	10.38
ROI	10.96	13.71	10.31	8.99	10.00	7.78	3.67	4.20	0.33	5.36
EPS	6.22	57.27	34.53	31.95	32.79	20.09	7.56	4.91	0.39	6.90

Divident per share	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Payout (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price Earning (P/E)	83.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Price to Book Value ( P/BV)	9.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Findings:**

- Adani Wilmar's financial performance data is limited, with fluctuations in ROE and ROI.
- EPS shows significant variations across the years.

Dividends and payout ratio data are not available. P/E and P/BV ratios cannot be evaluated due to missing data.

**Table 8: MARICO LTD**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	74.35	75.03	53.70	52.20	48.13	50.11	64.53	81.59	99.11	107.41
ROI	32.46	35.67	36.50	37.50	39.29	46.04	47.57	48.71	48.91	49.20
EPS	39.65	38.07	30.02	28.52	24.76	21.23	21.20	41.10	39.70	36.53
Divident per share	40.00	38.00	28.00	23.00	24.00	10.00	10.00	24.00	27.00	28.00
Payout (%)	41.15	120.59	53.62	75.65	42.60	38.27	39.53	51.47	62.16	70.45
Price Earning (P/E)	38.88	40.97	41.74	44.13	42.72	47.03	42.82	55.09	39.12	38.96
Price to Book Value ( P/BV)	24.17	36.39	21.38	23.66	18.87	21.32	21.83	35.55	31.14	34.62

**Findings:**

- Marico Ltd has maintained a stable ROE and ROI, with slight fluctuations.
- EPS has shown consistent growth over the years.
- Dividend per share has increased gradually.
- The payout ratio has varied but remains relatively

high.

- The P/E ratio has been moderate, suggesting a reasonable valuation in relation to earnings

**Table 9: Procter And Gamble Hygiene And Health Care Ltd**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	79.31	69.63	41.91	48.89	56.26	39.74	29.34	31.02	33.41	27.05
ROI	25.68	26.07	26.06	25.97	25.77	25.72	25.58	25.43	24.85	24.10
EPS	177.37	200.79	133.42	129.12	115.40	133.31	130.37	106.63	93.04	62.61
Divident per share	160.00	315.00	105.00	88.00	40.00	389.00	36.00	30.25	27.50	8.50
Payout (%)	98.66	169.33	35.98	66.17	23.40	298.56	23.24	30.11	31.12	42.84
Price Earning (P/E)	75.57	66.38	76.11	82.91	85.80	60.36	48.24	63.52	45.78	44.34
Price to Book Value ( P/BV)	58.99	60.57	28.47	38.23	39.90	49.64	12.34	17.89	13.79	11.19

**Findings:**

- Procter and Gamble Hygiene and Health Care have shown consistently high ROE over the years.
- ROI has been relatively stable, albeit with slight fluctuations.
- EPS has shown significant growth over the years.
- Dividend per share has varied but shows an increasing trend.
- The payout ratio has fluctuated but generally remains

high.

- The P/E ratio has been moderate to high, indicating a higher valuation in relation to earnings.
- The P/BV ratio has shown fluctuations, with higher values in certain years.



**Table 10: Colgate-palmolive (India) Ltd**

YEAR	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
ROE	38.23	37.35	31.58	34.58	24.07	30.85	28.32	25.26	29.12	27.55
ROI	25.86	24.67	24.34	23.72	23.61	22.39	20.09	16.87	18.36	13.54
EPS	9.02	8.57	7.79	8.76	5.58	6.55	5.44	8.45	8.95	6.69
Divident per share	9.25	7.50	6.75	4.75	4.25	3.50	4.25	2.50	3.50	1.00
Payout (%)	102.75	87.52	99.54	58.94	87.00	57.48	69.58	30.31	45.42	7.61
Price Earning (P/E)	55.84	48.02	35.19	39.46	58.55	48.33	45.24	46.92	23.79	32.31
Price to Book Value ( P/BV)	20.91	17.26	12.16	12.67	13.64	12.73	12.33	10.66	6.85	6.87

**Findings:**

- Colgate-Palmolive has maintained a stable ROE and ROI, with slight variations.
- EPS has shown moderate growth over the years.
- Dividend per share has increased gradually. The payout ratio has varied but remains relatively high.

**Summary of Findings of the study**

Nestlé India stands out for its return on equity, return on investment and good financial results.

-Hindustan Unilever, Britannia Industries, Marico Ltd and Dabur India reported strong financial results with similar or better results.

-ITC Ltd, Godrej Consumer Products Ltd and Colgate-Palmolive (India) Ltd reported moderate growth in financial results.

-Adani Wilmar Ltd. Limited information.

- Procter & Gamble Health Services Ltd has achieved benefits and achieved results that are considered equal benefits.

- Value measurements such as cost-income and cost-income vary from company to company but generally reflect fair value (fair or premium).

Dabur India Ltd and Godrej Consumer Products Ltd are moderate, indicating a good return on investment. From an earnings per share (EPS) perspective, Nestlé India Ltd. and Procter & Gamble Healthcare Ltd. The stock's consistent extreme returns indicate strong profitability and growth potential. Hindustan Unilever Ltd and Britannia Industries Ltd have also reported earnings per share growth over the years. Dividends and payout percentage per share indicate the income distributed to shareholders. Hindustan Unilever Ltd's earnings per share rose, while Nestlé India Ltd and Procter & Gamble Healthcare Ltd's dividends remained unchanged. It is worth noting that a higher percentage may mean less income for future growth and investment.

When ratios such as price-earnings (P/E) and price-to-book (P/BV) are taken into account, it is seen that each department of the company has its own standards. Hindustan Unilever and Nestlé India have high cost of earnings and potential to market more for future profits. ITC Ltd and Marico Ltd have medium P/E ratios, while Godrej Consumer Products Ltd and Colgate-Palmolive (India) Ltd have low P/E ratios. Looking at the P/E ratio, the low P/E ratio of ITC Ltd and Britannia Industries Ltd indicates that their stocks are undervalued.

Consequently, according to the analysis, Nestlé India is a financially strong company. Record return on equity (ROE) and return on investment (ROI). With its earnings per share (EPS) growth and high payout ratio, Nestlé India shows its potential to deliver good returns to investors. Additionally, Hindustan Unilever, Britannia Industries, Marico Ltd and Dabur India have also indicated they could be profitable by reporting good financial results with similar results or rising earnings.

**Conclusion**

It can be concluded that each company has its own advantages and areas of improvement. In terms of return on equity (ROE), Hindustan Unilever Limited (HUL) has shown high ROE over the years, indicating efficient use of resources. Nestlé India Limited continues to demonstrate a strong ROE despite annual fluctuations. Colgate-Palmolive (India) Ltd has a high ROE, which indicates that it is a profitable company. In terms of Return on Investment (ROI), Nestlé India Limited has performed well over the years. Britannia Industries Ltd also shows a return on investment that shows value for money invested. The ROI levels of

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## Breaking Barriers - Women's Achievement at Work

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### Abstract

*Women have competed for previously all-male-oriented jobs, since the Equal Employment Opportunity Act of 1972. Females needed office survival guides more than office success guides when they found themselves in unfamiliar territory. Numerous studies have been conducted over the years to track women's advancement to the top of organizations. While there are more ladies working today, the research found that they are still laboring with career elevation and mentors for successful managerial guidance. Females held nearly 52% of all specialized roles in 2014, but only 14.6% of upper management positions and 4.6% of Fortune 500 CEO positions were acquired. There are numerous reports providing professional advice and points for working females, and a dearth of articles addressing apt practices for female executives. To fill this gap in the literature, this research approached the topic from a practical standpoint, offering lessons learned from Katharine Graham, the first female Fortune 500 Company CEO.*

**Keywords:** Women leadership, executive women, women's career advancement, best practices, managerial gender issues, motivation, and personality.

### Introduction

A tiny number of females began getting employed by firms in the early 1900s. With the onset of World War II and its following aftermath, many of them who had laboured to help found themselves unemployed, despite their willingness to work. Abraham Maslow, who was studying human motivation and personality at the time, claimed that human conduct is based on a hierarchy of wants such as physical, security/safety, love/belonging, and self-esteem and self-actualization (Maslow, 1943). If the last three levels of Maslow's hierarchy of requirements are not satisfied, the individual finds it uneasy to proceed further, and these wants combine to generate a powerful drive to survive. The desire for self-esteem and self-actualization completes Maslow's hierarchy of requirements. Women struggled for employment in organizations in this setting, but they faced opposition from society and were deprived of chances to acquire higher self-esteem and fulfill their skills.

Since the Equal Employment Opportunity Act of 1972, Women started competing for positions that were formerly exclusive to men only. When they were in unknown territory, females required survival advice in the workplace more than success guides in careers. In all these years, numerous studies have been done to follow women's advancement in organizations. Despite more women in the workplace today, these researches indicated that women continue to struggle with advancements in career and, particularly, role models for successful managerial authority. In 2014, ladies held approximately 52% of all executive occupations in the US, but only 14.6% of Top management spots and 4.6% of Fortune 500 CEO posts. Women are still disproportionately underrepresented in organizations that make decisions in the areas of finance and economics at the local, national, and international levels. There are just 28 female finance ministers, or 14% of all ministers in 193 nations, at the government level. There aren't

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many female leaders in international organizations that influence developing nations. For instance, women constitute less than 10% of governors and about 20% of leadership personnel at international finance-aiding establishments.

In the business arena, women are sadly underrepresented at the top. Out of ten-century global associations, only 25 are led by women. Therefore, there are no encouraging signals that the growing participation of women empowerment is boosted. The division based on gender is prominent in households and communities, even with women entering many previously male-dominated economic professions. This division of labor occurs both within and outside the home. Even in the working sector women are the least in population when compared to men. However, women are 40 percent of the total working population yet contribute only 26 percent of economic concentration

Women's opinions will not be voluntarily considered or encouraged in the sectors involving economic and financial strengths. Positively, for the previous several decades, women's income and job opportunities have greatly improved relative to men's, and they have proved amazing results in enterprises worldwide. Nevertheless, it is uncommon to find women running businesses as owners, managers, or entrepreneurs. There are frequently few female authorities even in the business and other producer groups, which are designed to protect and advocate the interest of employees. With strong male predominance in trade unions, the unique demands and goals of female employees are frequently disregarded. Because of the kinds of jobs, they do and how often their jobs are precarious, women may find it extremely difficult to influence traditional company policy and get support from these organizations.

As a matter of fact, is there is an abundance of publications offering career counselling and ideas for women who are working, but hardly any papers addressing best practices for female CEOs. To remedy this flaw in the secondary information, the author used a practical approach, sharing lessons gained from Katharine Graham, the first lady CEO of a Fortune 500 corporation.

After graduation, Katharine Graham was selected as the manager for the publisher of the San Francisco newspaper, but she was never allowed to take on any duty that the title necessitated, it was a cakewalk to be the first female manager, and the toughest part was being a female leader. Her male counterparts were rude, loud, boisterous, and stinky, and they hazed her in every manner possible. They gave her a sculpted male body part as a gift one day, and all Katharine could do was politely take it and eventually the hazing

ended in its own time.

On the work front, her boss was mortified to have her on the team. He felt humiliated to have a female work under him after considerable thought, he handed her a project that was not her expertise. Furthermore, she never had a refreshment room or even a women's toilet. In retrospect, she realized that the chosen project allowed her to establish and acquire stronger self-esteem in the eyes of her dominating colleagues (Maslow, 1954).

She discovered the delicate boundary between normal and dysfunctional in 1974. It was not always possible to distinguish between regular challenges experienced by everybody, especially concerns that were uniquely feminine. Some instances were plainly "over the line" in terms of sexual harassment, and these were easy to identify nonetheless, they were frequently tough to handle successfully. Important Criteria's failed to exist in place at that time regarding an effective or ineffective strategy. She wondered if success was not having repeat offenders. And, "if she were a man, this would not be happening." "How would she react?" Because there was no sexual harassment statute in place at the time, she was able to manage situations on her own. While she acknowledged that the force of the law is required to protect women from heinous atrocities, legal acceptance and petty problems has diminished the true importance of leadership. Women are still unable to distinguish between actual sexual harassment and typical male/female contact. Teasing was major challenge she encountered, which may be harmful. She had the ability to question sexually harassing situations and manage these difficulties on her own, with no sexual harassment forms or personnel welfare department involved. She could create her own regulations because she was the single lady manager facing the offender alone with no support and guidance. Males could express their thoughts without fear of being labelled as misogynists, a term we rarely hear today. It was motivating for everyone to have the choice to speak freely and appreciate the opinions. Conversations were raucous as it frequently bordered on crude, but we were able to finish any disagreements on Friday afternoons where we discussed shop. It was an incredible opportunity to agree to and learn from the seasoned male-only executive team. She was aware that she was attempting to penetrate their society, form relationships, and gain their trust and respect.

She had once employed a machinist on force and discovered he only added more to her misery. He had the labour union and management on the verge of a discrimination action due to his ailing back and seniority position. He parked his white Cadillac prominently in front of the company. She discovered

that when he vanished, so did his Cadillac. How does she hold him responsible for not working for whatever he is paid for? Even the expert seasoned manager struggled to meet this challenge. She was adamant about dealing with him. She researched the hiring contract as well as the disciplinary procedures. She learnt the rules and was well prepared. When she found that her male friends had "set her up," she became fearless to the point of becoming reckless. Her demeanour shifted to "I'm going to castrate you." Few employees gradually began to listen to her as they understood that they have a tough boss with great self-worth and confidence to deal with the elusive Houdini (Maslow, 1965).

Female managers are often mistaken with female leadership. Manager is exactly what the job entails. Followers, on the other hand, play in striving for the success of the female leader. For example, a true lady leader is both competent and loves to employ a supporting strategy to descend into the interior of a massive tank. That function would most likely be delegated by the female management.

She definitely gained the knowledge to realize when men should lead and when women should lead as she faced few situations. On a day when a senior employee was bid farewell and the department was arranging a celebration, she oversaw the employees, especially Mel, the harshest critic. The liquor flowed freely at the party location. One inebriated male employee made unwanted and aggressive approaches. The situation was out of control, she was confident and determined to handle it alone. Mel appeared out of nowhere, like a hero in shining armour, to defend her. Then she realized that at times wisdom lies in not leading.

Just not this, she remembers another incident in the hotel room where she was assaulted. It was her first business trip, the travel expense and training were sponsored by the company for a week. she was very excited about it. Several of her colleagues were enrolled in different session which was for more senior managers. Because they were staying at different hotels, she was happy when a colleague called and invited her to join them for dinner. One of her colleague was supposed to pick her from the hotel. She believed that her peers had finally accepted her. That notion was interrupted when she opened the door and he began hitting her without hesitation or words. She was terrified and felt it was very inappropriate. It should never have happened, yet it did. She was not physically hurt and chose not to report the event. She came to the conclusion that she was responsible for protecting herself and would face a "she said/he said" situation. Reporting the event may jeopardize her management's reputation. In retrospect, she stated that she did not consider protecting other ladies from

this individual. She learned from her supervisors that she should hire "for values and qualities like a sense of humour, resiliency, "earning your way in" and fitting-in with the company by being passionate for the task. She grew to value the wisdom more when she faced problems on the work. One of the most important lessons she learnt was to be professional come what may the show must go on. She still had to deal with the problems at the end of the day. She discovered that the R's of leadership included being resourceful, resilient, an experienced "reframe," a reality checker, and capable of relegating relational rules. She had to become valuable in making people do things and get work done by them by perseverance, pursuance, and patience. Because there was no precedence, she could create rules to control the relationships at work. She could draw the line with colleagues and subordinates, and she frequently utilized humour to smooth over unpleasant situations. There were a lot of unethical practices and she could let it go if she wanted to but the absence of norms, structures, and laws aided her. This is how she reframes diverse circumstances.

Some may see these encounters as "war stories" of a seasoned woman as these incidents occurred many years ago, however they shaped her to be a better version each day. Each person's experiences will build him or her to be a better person sooner or later. Off course there is no shortage of books and articles about leadership nowadays, and perhaps we are wise enough to distinguish between excellent and terrible leaders but we are not that wise in recognizing leadership's intrinsic uniqueness. Leadership is as individual as fingerprints, varying according to personality, situation, and style. To make a difference in the lives of others, leaders must embrace the unique contributions that only they can provide. Someone rightly said for "ten thousand step of beautiful journey there has to be a first starting step".

## Conclusion

However, women are striding high to keep it up and work hard to achieve self-actualization position. Proficient leaders cultivate a feeling of direction by striving for objectives that coincide with their principles and promote the health of the group. This provides them a strong motive to act despite their worries and uncertainties and enables them to see beyond the present circumstances what is conceivable. Because they aren't hesitant to take chances to further common objectives, these leaders are regarded as genuine and reliable. They encourage dedication, strengthen resolve, and assist colleagues in discovering a greater sense of purpose in their jobs by uniting them behind a common goal.



The three recommendations to guide women advancement into leadership roles are:

(1) Educating men and women about gender bias in the second generation.

(2) Setting up secure "identity workspaces" to facilitate the advancement of women into larger roles and

(3) Focusing women's development initiatives on the purpose of leadership rather than how women are viewed. Women who take these steps will gain an understanding of their organizations and themselves, which will help them more skillfully navigate their path to leadership.

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## Book Review

### Rocketing Through the Skies *An event full life at ISRO*

By G. Madhavan Nair,

**Published by:** Rupa Publications India Pvt. Ltd, New Delhi

**Published in:** 2023

**Frist Impression:** 2023

**Pages:** 338 (Hard Cover)

**Language:**

**ISBN:** 978-93-5702-472-3

### About the Author

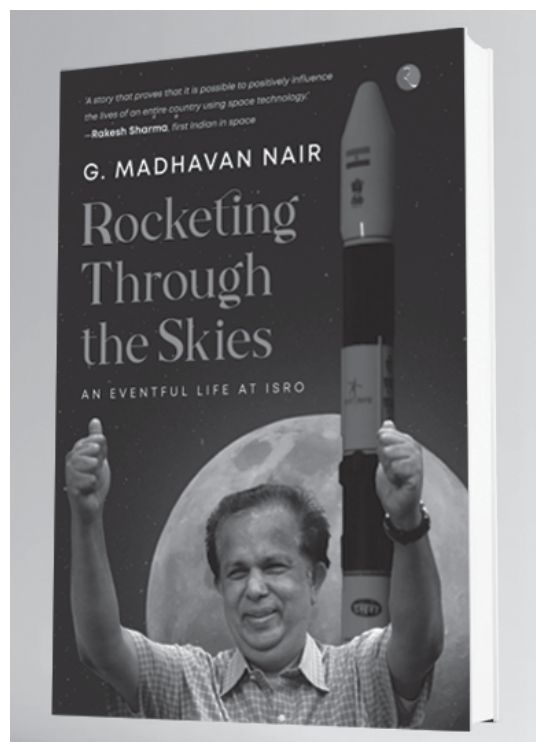
The book provides a comprehensive retelling of the life of G. Madhavan Nair, spanning from his childhood to his tenure as Chairman of ISRO until 2009. Mr. Nair served as the Chairman of the Indian Space Research Organization (ISRO) from 2003 to 2009, overseeing significant milestones such as India's Chandrayaan-1 mission, manned space missions, and the implementation of space-based services like disaster warning and tele-education. His noteworthy contributions led to him receiving the prestigious Padma Vibhushan award in 2009.

Jaya G Nair, the author, penned this book shortly after G. Madhavan Nair's retirement. Having worked for ISRO in technical and techno-managerial roles, she continued her literary pursuit's post-retirement, culminating in this book as a result of her unwavering passion and interests.

### Appreciation and Critique

In his early years, the young boy, born in the old Travancore state, experienced a nurturing upbringing under the loving care of his maternal grandparents. His life was marked by exploration of nature, immersion in streams, and contemplation of rose gardens and spirituality. The seeds of his scientific curiosity were sown during this period. His memories include a modest life with relatives, younger siblings, festive celebrations, and visits to temples for Vidyarambham. Despite facing challenges like the sad demise of his mother and his father's remarriage to his maternal aunt, he recalls these early experiences fondly.

From a tender age, the subjects like Physics and Mathematics captured his interest; Science experiments intrigued him towards the maiden experiment of building a radio with one diode with an antenna which was a long wire connected across two coconut palm trees and radio was designed, when it was



switched could hear the programmes from Thiruvannanthapuram Station of All India Radio. During 10th standard school days a flying model of an airplane was built with the help of his friends Balan and Ashokan. Another feather to a kid was building a Water scooter which will move by the action of water jet created by sucking in water and expunging it through nozzle at the rear with the help of his friend Balan.

Proceeding to plus-two education, he pursued science with French as a language, gaining proficiency in reading French novels. For Engineering he joined and excelled from University College, Thiruvannanthapuram and his soul mate Radha surpassed from Government Women's College.

During this period, he had his first encounter with TERLS- Thumba Equatorial Launching Station was established near the sea of the Village Thumba. Additionally, he familiarized himself with the emerging field of computers, as well as advancements in lasers and atomic power. In his pursuit of employment, he sent multiple applications to various institutions, eventually securing a position as a Laboratory In-Charge in the college where he studied.

Around 1950 he joined BARC training school where subjects on nuclear, thermodynamics were given significance. He was privileged and honored to be trained by Dr. Ramanna from Mysore who himself was much loved disciple of Dr. Bhabha. This period marked a crucial phase in his educational and professional journey.

The aspiration to join the atomic power station in Kota came to a halt with the offer of a new job at TERLS, where the highest entry-level salary for an SC-grade scientist was Rs. 400. This marked the conclusion of

the journey into the microscopic world of atoms, as the focus shifted entirely to the infinite realms of outer space, propelling the individual into a new orbit of exploration and discovery.

As a newcomer in 1968, space research took precedence, and the individual was assigned to the rocket engineering division under Dr. Kalama at the Bishop's house in Thumba. Discussions revolved around the necessary new laboratory instrumentation, telemetry, and radar, with Nair noting down Dr. Kalaam's dictation. The first interaction with Dr. Sarabhai left a lasting impression, with words of encouragement: "Welcome young man to the world of space, which is full of challenges. Keep your eyes and ears open and strive to excel."

The journey continued, and during one of his monthly visits, Madhavan Nair demonstrated the remote-controlled ejection of a rocket nose cone from a distance of 100m using a telecomm and system, earning appreciation from Dr. Sarabhai.

The task of developing SLV-3 was assigned to the young scientist, with a two-year timeline for the launch attempt. French scientists were skeptical, considering the limited time for developing both software and hardware. Despite facing three major tragedies during this period, Dr. Kalama remained determined to complete the project. Although SLV-3 was launched on August 10, 1979, it only travelled for

317 seconds before falling into the Bay of Bengal.

Amidst media criticism, the second launch of SLV-3 in 1980 proved successful, marking the inaugural occasion when an Indian rocket placed the Rohini Satellite precisely into its designated orbit.

The launch of PSLV-D2 in 1994 was a triumph, bringing joy to the entire nation as it successfully positioned the satellite into a polar, sun-synchronous orbit. Following the initial setback with the failed first mission of PSLV, ISRO achieved a remarkable feat with a continuous series of 56 launches, 54 of which concluded successfully.

On October 22, 2008, Chandrayaan was launched, making a historic lunar landing on November 14 and adding another noteworthy achievement to ISRO's repertoire. Madhavan Nair's list of accomplishments extends beyond this, encompassing his contributions to scientific research and his journey through the skies in rocket technology.

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## Book Review

### Data Visualization: Storytelling Using Data

By Sharada Sringswara,  
Purvi Tiwari, U Dinesh Kumar

**Published by:** Wiley

**Published in:** 2022

**Language:** English

**ISBN -10:** 9354643132

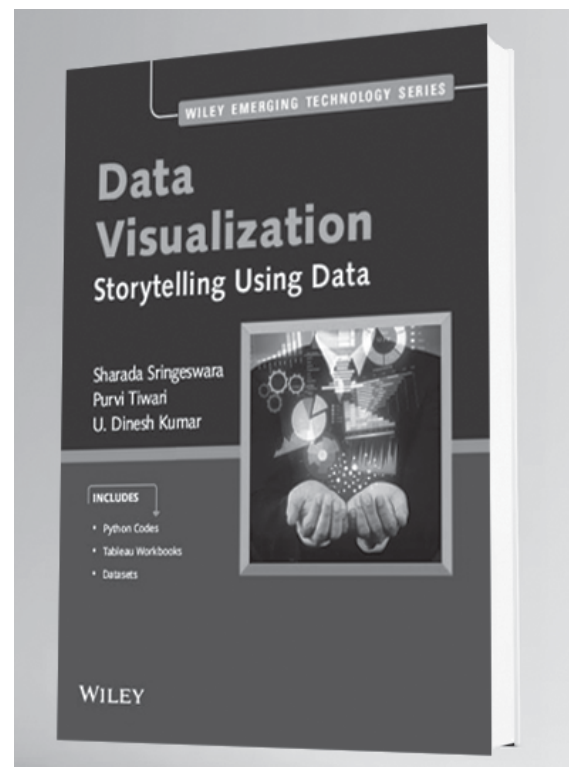
**ISBN: 13:** 978 - 9354643132

### About the Author

Sharada Sringswara is an Associate partner at Acuver Consulting Private Limited and a consultant at the Indian Institute of Management Bangalore – Data Centre and Analytics Lab (IIMB-DCAL). Currently, she is pursuing Ph.D. in Information Systems and Analytics at the Indian Institute of Management, Tiruchirappalli. An alumnus of BITS Pilani and IIMB with over 20 years of experience in leading IT development organizations and delivering IT products. A seasoned analytics executive with hands-on and leadership experience in building business models with an understanding of the digital technology landscape. As a data enthusiast, she brings in product leadership by balancing knowledge and experience in data science and software engineering. She has worked with companies like Walmart, Tesco, Sterling Commerce, Wipro, and Future Group.

Purvi Tiwari, her areas of interest are Data Science, Machine Learning and Data Visualization and Story Telling. Experienced research associate with a demonstrated history of working in the higher education industry. Skilled in Mathematical Modeling, Machine Learning, Statistical Modeling and Data Visualization and Data Storytelling. Strong research professional with Master's Degree focused in Applied Mathematics from Indian Institute of Science Education and Research, Pune. She is Working as Research Associate in IIMB, and as Project Assistant in Tata Institute of Fundamental Research, Research Intern at IISER, IISC, IMS. Her certifications lie in the area of Sequence Models, Convolutional Neural Networks, Improving Deep NN: Hyper parameter tuning, Regularization and Optimization, Structuring Machine Learning Projects and Neural Networks and Deep Learning.

U Dinesh Kumar's research interest includes Business Analytics and Big Data, Artificial Intelligence, Machine Learning, Deep Learning Algorithms, Stochastic



models (Reinforcement Learning Algorithms), Reliability, Optimization, Six Sigma and Performance Based Logistics. He has published several research articles in reputed academic journals such as European Journal of Operational Research, Annals of Operations Research, International Journal of Production Economics, The Journal of Operational Research Society, and so on. He has published more than thirty case studies on Business Analytics and Machine Learning Algorithms based on Indian and multinational organizations such as Aavin Milk Dairy, Akshaya Patra Foundation, Apollo Hospitals, Big basket, Bollywood, Flipkart.com, HP, iD Fresh Food, L&T, Manipal Hospitals, Mission Hospital, HAL, Indian Premier League, Shubham HDFC and VMWare at the Harvard Business Publishing's case portal. He has provided analytics consulting services to organizations such as Boston Consulting Group, GE Healthcare, General Motors, Hindustan Aeronautics Limited, Indian Army, TVS Motors, Wipro and so on.

### Appreciation and Critique

"Data Visualization: Story Telling Using Data" authored by Sharada Sringswara, Purvi Tiwari, and U. Dinesh Kumar is an exemplary work and comprehensive guide to mastering the art and science of data visualization. This comprehensive guide starts with an in-depth Introduction to Visualization, which establishes a strong basis by explaining the importance of visualizing data and providing a thoughtful examination of the seven phases of data visualization. This book stands out for

its holistic approach, which covers everything from comprehension and planning to modelling, assessment, and implementation. Each step is thoroughly explained, giving readers a full toolkit. The chapters devoted to best practices for visualization explore the subtleties of visual encodings, design concepts, and the effectiveness of charts, providing vital information for creating powerful visual representations. Moreover, the book doesn't merely stop at technique; it ventures into the realm of storytelling, illuminating the scientific underpinnings and offering compelling frameworks for narrative construction. With its breadth of knowledge, practicality, and commitment to educating readers on both effective and potentially deceptive practices, this book emerges as an indispensable resource for beginners and seasoned professionals alike, solidifying its place as a beacon of excellence in the field of data visualization literature. Chapter 1 talks about Introduction to Visualization, and meticulously covers the entire spectrum of data visualization processes, from understanding and preparation to modeling, evaluation, and deployment. It offers an extensive array of visualization best practices in Chapter 2, delving into the particulars of visual encodings, design principles, and the utility of 'chart junk.' Chapters 3 and 4 present an in-depth knowledge of visualizing structured and unstructured data, providing a rich toolkit of visualization techniques ranging from bar charts and histograms to text data visualization and content representations. Moreover, the book doesn't stop at techniques but delves into the crucial aspect of storytelling in data visualization. Chapters 5 and 6, emphasizes the significance of storytelling, backed by scientific

principles, while offering comprehensive frameworks for narrative creation and a multitude of data story types. What truly sets this book apart is its honesty in addressing potential pitfalls and misleading practices in Chapter 7, educating readers on recognizing and mitigating misleading visual representations, thereby empowering them to navigate through visual data with informed discernment.

Overall, "Data Visualization: Story Telling Using Data" stands as a beacon in the realm of data visualization and stands as an indispensable resource for both novices and seasoned professionals in the field of data analysis and visualization.

The book offers a comprehensive exploration of data visualization techniques and presents an extensive range of visualization techniques, methodologies and best practices. The extensive detail in each chapter might be challenging for beginners. Additionally, while the book adeptly covers the nuances of visualization, it could further enhance its value by exploring emerging trends or technologies in the field. Despite these minor points, the book remains a robust resource for those seeking an in-depth exploration of data visualization techniques and methodologies.

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2. A separate sheet should be prepared containing the title of the manuscript and an abstract of about 150-250 words with a maximum of six key words (in alphabetical order).
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