

## CHAPTER 37

### MANAGEMENT STUDIES

#### Doctoral Theses

01. AKSHAY KUMAR  
**Integrating Intertemporal Stewardship into Sustainable Banking: A Mixed Methods Approach.**  
Supervisor: Prof. Sunita Singh Sengupta  
Th 28361

#### *Abstract*

The Indian banking sector, akin to modern-day family firms, faces challenges in communicating its commitment to sustainability while balancing financial success and ethical resource management. Despite some isolated efforts, the sector's sustainability approach remains fragmented and underdeveloped compared to global standards, hindered by the lack of cohesive policy frameworks and insufficient training. Additionally, the role of Workplace Spirituality (WPS) and Organizational Stewardship (OS) in promoting Sustainable Banking is underexplored, limiting the development of strategies that could drive long-term sustainability. The current study investigates the potential of Intertemporal Stewardship Theory (IST) to advance sustainable banking in India by integrating WPS and OS. IST offers a framework for balancing immediate financial goals with long-term sustainability imperatives, marking a significant contribution by applying it to the Indian banking context—an area where its application remains unexplored. It explores how branch managers utilize stewardship climates grounded in spiritual values to align banking practices with sustainability, while examining the ethical foundations within IST that resonate with the moral demands of sustainable banking. Addressing a crucial gap in literature, this research integrates WPS and OS within the sustainable banking framework, which has largely been studied in isolation. The study underscores the moderating role of organizational culture (OC) in reinforcing the relationship between WPS, OS, and sustainability. Through a mixed-methods approach, the research provides both qualitative and quantitative evidence supporting the significant impact of WPS and OS on sustainable banking, with OC acting as a vital moderator. The current work contributes to the theory of employee motivation by exploring how WPS and OS influence intrinsic motivation and commitment to sustainability. By applying IST, the study offers actionable insights for Indian banks to foster ethical, long-term sustainability practices, enhancing their resilience and responsibility.

#### *Contents*

1. Introduction 2. Review of literature 3. Research methodology 4. Qualitative data analysis 5. Quantitative data analysis 6. Discussion: weaving ideas together 7. Research contribution and policy implications. References and Appendices.

02. ALLAIL (Mohammad Helal)  
**Exploring the Nexus Between Supply Chain Finance and Firm Performance: An Empirical Study of Selected Indian SMEs.**  
 Supervisors: Prof. Kavita Singh and Prof. Madhu Vij  
Th 28362

*Abstract*

Supply chain finance (SCF) has emerged as a useful financial tool that can enhance liquidity and mitigate risk, while improving operational efficiency, especially for Small and Medium Enterprises (SMEs). This paper investigates the influence of SCF mechanisms on SMEs' performance, risk, liquidity and operational efficiency, using a panel dataset on Indian listed small and medium enterprises from 2009 to 2024. We categorize SCF into Customer-focused SCF, Supplier-focused SCF and Cash Conversion Cycle (CCC), and study their impact on SMEs' Return on Assets (ROA), Return on Equity (ROE), Tobin's Q, Current Ratio (CR), Inventory Turnover Ratio (ITR) and Altman Z-score. The research makes use of pooled OLS, Fixed Effects and Random Effects models to test multiple hypotheses. The results of the study indicate that Customer-focused SCF is positively associated with ROA and ROE. This suggests that financing extended to customers or SCF, is useful for improving cash flow and increasing profitability. However, its effect on Tobin's Q is uncertain, indicating firm-specific and investor perception factors impact market value. On the contrary, Supplier-focused SCF does not have a significant influence on financial performance which confirms its stabilising than profit-enhancing effect. To operate efficiently, both customer-focused SCF and supplier-focused SCF negatively affect ITR indicating that SCF mechanisms result in more inventory-holding days. However, firm-level factors lessen these inefficiencies as the results of Fixed and Random Effects models are statistically insignificant. In the same way, SCF has no impact on Altman-Z scores, indicating its effect on short-term liquidity and not long-term solvency. When it comes to liquidity, the customer oriented SCF delays cash inflows which causes a negative impact on CR. However, the supplier-oriented SCF allows the company to enhance its liquidity by delaying cash outflows. The CCC showed a high and positive relationship with liquidity, profitability, and operational efficiency, highlighting the importance of WCM. The businesses of SMEs in India need to improve SCF strategies and CCC performance in balancing liquidity, profitability and risk. Future studies would help deploying SCF sector-wise and its adoption during the economic downturn.

*Contents*

1. Introduction 2. Review of literature 3. Research methodology 4. Empirical findings and analysis 5. Conclusion, Implications and Limitations. Bibliography.

03. AMIT KUMAR  
**A Comprehensive Analysis of Corporate Payout Policy: An Empirical Study of Non-Financial Indian Firms using Machine Learning Algorithms.**  
 Supervisor: Prof. Pankaj Sinha  
Th 28363

*Abstract*

Corporate pay-out policy has rapidly evolved with the implementation of a plethora of reforms and the rise in the participation of middle-income retail investors in the 21st century. This study comprehensively examines the pay-out policy of Indian firms in this regard. This study attempts to identify the important determinants of dividend pay-outs from a holistic set of contemporary factors (micro and macro-level) proposed in the literature. It further examines the trend in dividend pay-outs, builds a dividend policy prediction model, and investigates the relationship between accounting transparency, special dividends, and repurchases. Additionally, the study also contributes in understanding the role of dividends in signalling firms' earnings management, and the impact of major tax reforms on corporate pay-outs and investment behaviour. The objectives of this study are achieved by employing modern econometric techniques, such as regularization-based machine-learning methods, data-mining algorithms, trend analysis, linear panel models, and logistic regression. For the analysis, an extensive panel dataset of listed non-financial Indian firms and macro indicators is utilized. The findings suggest that contemporary forces, such as bank monitoring, audit quality, and macro variables significantly impact dividends. A declining trend in dividend payments was also observed. The dividend policy prediction model based on the random forest technique achieved the highest prediction accuracy in binomial and multi-class scenarios. The results show that firms with higher accounting transparency prefer share repurchases over special dividends. Moreover, dividends were found to signal the earnings quality of firms. Furthermore, the findings reveal that the abolition of the dividend distribution tax adversely affected dividends, with no substantial change in repurchases, thereby favouring wealthy shareholders. The study also reveals that the corporate tax rate cut (2019) did not translate into an expected increase in corporate investments. Thus, this study highlights the limited effectiveness of these reforms. These findings have significant implications for financial market participants and policymakers.

*Contents*

1. Introduction. 2. Factors determining dividend policy of Indian firms using regularization-based machine-learning approach 3. Changing dividend pay-out behaviour and predicting dividend policy in emerging markets: evidence from India 4. Accounting transparency and the choice between special dividends and share repurchases in the emerging market: evidence from India 5. Do dividends signal earnings quality in emerging markets? large sample evidence from India 6. Evaluating the impact of major tax reforms in India: empirical and policy effectiveness. 7. Conclusion, Implications and future scope of research. References. Annexures. Research Publications and Conference Presentations.

04. BHAN (Ibna)  
**Impact of Corporate Governance on Sustainability Investments and Disclosures: An International Linkage.**  
 Supervisor: Prof. Monica Singhania  
Th 28364

*Abstract*

This study aims to gauge the impact of three distinct dimensions of corporate governance, i.e., board characteristics, ownership mechanisms, and stakeholder

pressure on firms' sustainability investments and disclosures. The foundations of these relationships are grounded in four prominent theories – agency, resource-dependency, stakeholder, and institutional theories. This thesis comprises six novel research objectives and apparent research gaps in the academic literature. We leverage bibliometric review, meta-analysis, and empirical research methods to meet these goals. The bibliometric review is based on 147 articles from the Web of Science (WoS) and Scopus database for 2004–2023. The results highlight the publication trends, theoretical foundations, impactful journals, keywords, pioneering articles, and dominant themes in the field. The second and third objectives are meta-analytical reviews on 100 empirical studies conducted during 2008–2022, covering 30 countries, 240 effect sizes and 630,328 firm-year observations. To gauge the significance of the estimated mean effect size, a random-effects Hedges and Olkin meta-analysis procedure is adopted, followed by a restricted maximum likelihood-based meta-regression, to test the effect of possible moderators. For the empirical objectives, our sample comprises 1,26,647 firm-year observations of 12,815 global firms from 2013 to 2022. We leverage OLS regression to gauge the impact of stakeholder pressure on sustainable investments and ESG disclosures, whereas logit regression tests the effect of stakeholder pressure on the likelihood of adoption of biodiversity disclosures. The key findings of our empirical objectives highlight that pressure from employees, consumers, and financial analysts significantly impacts both firm-level sustainable investments and sustainability disclosures. Considering an international sample, our findings and implications have tremendous international relevance. This also furthers the global environmental sustainability discussion, in which some stakeholders pressure firms to make real changes. The outcomes and the future research agenda discussed in this study offer an original contribution to the literature.

#### *Contents*

1. Introduction 2. Theoretical framework 3. Literature review 4. Research design 5. Analysis & findings (1) 6. Analysis & Findings (2) 7. Implications of analysis 8. Summary & Conclusion. References.

05. GUPTA (Raveena)

**Attending the Unattended: The Role of Non-Verbal Cues Decision Making Through A Neurophysiological Lens.**

Supervisor: Prof. Harsh Verma

Th 28365

#### *Abstract*

The present research explored the complex dynamics of non-verbal cues (NVC) in static image(s), focusing on their role in political communication. In the past, limited research has explored how NVC impacts political behavior, with most studies focusing on verbal communication. In contrast to previous research, we argue that non-verbal elements also significantly contribute to the attention and emotional responses evoked by political figures. The present research explored the dynamics of non-verbal cues in static images, particularly in political communication. The study comprises seven interconnected studies: five lab-based neuroimaging studies and two exploratory behavioral studies. The study included leaders from three sectors: politics (Narendra Modi and Rahul Gandhi), industry, and academia. Using purposive sampling (n=477) a multi-dimensional framework is proposed to analyze the impact of NVC of political

leaders on engagement levels. The study linked non-verbal cues to specific personality traits. It also identified two regions of interest (RoIs) in static images of leaders—SubjectNVC and ContextNVC—highlighting the categorization of NVC. The study revealed that Narendra Modi showed more focused attention and emotional intensity than Rahul Gandhi in attention patterns and emotional intensity. The findings further highlighted the face as the central source of attention and emotional intensity. The results highlight the "Facial Triad"—the closed-loop contour of eyes, nose, and lips—as the key focus for attention and emotional intensity. It further shows that greater facial asymmetry correlates with higher attention and emotional intensity and identifies two context components: subject-linked and environment-related. Lastly, it was identified that leaders displaying more congruent and abundant NVC exhibited stronger memory retention. The findings have potential implications for theory development in conjunction with consumer behavior, neuromarketing, and neuropolitics. Identifying key non-verbal cues helps marketers craft emotionally resonant messages, enhancing engagement and retention. The study's findings have significant societal implications, especially for social communication and campaigns.

### *Contents*

1. Introduction 2. Theoretical Background of Neuromarketing: Marketing, Neuroscience and Consumer Nexus 3. Systematic Literature Review 4. Neuropolitics 5. Research Methodology 6. Data Analysis and Findings: Exploratory Analysis I (Study 1, 2a and 2b) 7. Data Analysis and Findings: Experimental Analysis I (Study 3a and 3b) 8. Data Analysis and Findings: Experimental Analysis II (Study 4, 5, 6 and 7) 9. Discussion, Conclusion, Implication and Future Scope. References. Annexure A and List of publications and conference presentations.

06. ISHTIYAQUE AHMED

**Strategic Analysis of the Mohalla Clinic Model: Health Policy and Public Management Perspectives for Universal Health Coverage.**

Supervisor: Prof. Vivek Suneja

Th 28366

### *Abstract*

Urban primary healthcare systems in India consistently face significant challenges related to accessibility, affordability, and quality, which disproportionately affect low-income and marginalized groups. In response, Delhi's Mohalla Clinics has emerged as an innovative initiative aimed at advancing the Universal Health Coverage (UHC) agenda through decentralized, community-driven care. However, the strategic analysis and comprehensive system-level evaluations of this model across Delhi remain limited. This study provides a strategic analysis of the Mohalla Clinic model from the perspectives of health policy and public management. This study addresses the critical need to evaluate decentralized healthcare delivery models in urban settings, focusing on their effectiveness, sustainability, and strategic scalability. The primary objectives were to assess the impact of the Mohalla Clinic Model on accessibility, affordability, availability, and quality of services, and to explore its strategic strengths, weaknesses, opportunities, and threats (SWOT) within the public health system. A mixed-methods research design was employed in this study. The quantitative component involved a cross-sectional survey of 660 patients across 11 districts, using stratified random sampling, and analyzed using chi-square tests and Exploratory Factor Analysis (EFA). The qualitative component included semi-structured interviews with 22 doctors, analyzed using NVivo for thematic and node-based interpretation. The findings revealed that the Mohalla Clinic model significantly improved service accessibility and affordability, with patients reporting high satisfaction levels regarding the quality of

service. However, challenges related to infrastructure, timely supply of medicines, diagnostic services, timely payment of staff, integration with higher-level hospitals, and robust referral systems have been identified. The model shows strong potential for strategic expansion, but requires systematic strengthening of supply chain management and workforce planning. By integrating public management principles with health policy frameworks, this study advances a strategic blueprint for strengthening decentralized healthcare delivery models. This emphasises the importance of adaptive leadership, capacity building, and systematic monitoring to ensure the resilience and effectiveness of such initiatives. In conclusion, this thesis underscores the pivotal role of the Mohalla Clinic model in advancing Universal Health Coverage in resource-constrained urban settings and contributes valuable insights for policymakers and administrators seeking to design and implement sustainable, community-centric health systems.

### *Contents*

1. Introduction 2. Theoretical and conceptual frameworks 3. Literature review 4. Research methodology 5. Data analysis and interpretation 6. Findings and discussion 7. Key findings, Policy implications limitations, and Conclusion. References. Appendix.
07. MANCHANDA (Kritee)  
**Target Costing and Performance Management in a Lean Operations Environment.**  
 Supervisors: Dr. Tarunika Jain Agrawal and Prof. Sunil Sharma  
Th 28804

### *Abstract*

This study explores how target cost management affects performance management in organizations with the lean operations environment. Target costing is increasingly recognized as a proactive cost management tool that not only focusses on cost reduction and cost management but also aligns product design and production processes with customers' expectations, product values and strategic objectives. In a lean operations environment, where reducing waste and continuously improving efficiency are at the core, integration with target costing has a significant positive influence on firm performance. The advanced management practices enhance strategic decision-making and operational control. Using a quantitative research approach, data was collected through a structured questionnaire from 272 financial professionals representing firms that are operating in lean environment . The participants included managers and supervisors from different levels of management allowing for balanced views across different functions. The study used Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the relationships among target costing, lean operations, and firm performance. The results show that target costing has a strong positive effect on firm performance management. Lean operations were found to play a mediating role in this relationship. This implies that the benefits of target costing on performance are partly achieved through the lean operations environment. In other words, lean operations create a pathway through which cost management supports improved performance outcomes. The findings highlight that when firms combine target costing with lean-based performance oriented systems, they can achieve better coordination between cost efficiency and operational improvement. This study contributes to the literature by empirically validating a conceptual model that connects target cost management, firm performance, and lean operations through the lens of perceived organizational responses. The results provide both theoretical insights and practical implications for managers seeking to enhance efficiency, cost competitiveness, and strategic coherence in dynamic manufacturing environments.

*Contents*

1. Introduction 2. Review of literature 3. Research methodology 4. Data analysis and structural model testing 5. Conclusion, Managerial implications and future scope. References and Appendices: Questionnaire.

08. MATHUR (Priyamvada)  
**Re-engineering and Transformation of Project Management Processes with Special Reference to Agility and Digitalization.**  
 Supervisors: Prof. Sunil Sharma and M. L. Singla  
Th 28367

*Abstract*

The study investigates re-engineering and transformation of project management processes in India's Energy and allied sectors, focusing on agility and digitalization. Traditional project management approaches often prove inadequate in the changing market environment. This research explores the adoption of agile principles in energy and allied sectors to enhance project performance. A mixed-methods approach combining survey of 114 project practitioners with insights from structured interviews and literature review is employed. It examines the drivers of agile project management (APM) adoption, implementation enablers, and the impact of APM adoption on project performance and project success environment. It examines the mediating role of project success environment on the impact of agile principles on project performance. The research is founded on contingency theory, recognizing the need for project management methodologies to align with context. Key findings include: 1. Team attributes emerged as the strongest drivers of APM adoption 2. Critical enablers for APM implementation include continued management support, team engagement, effective communication, and change management capabilities. 3. The impact of APM adoption on project performance is fully mediated by the project success environment. The study contributes by extending agile research beyond IT contexts and developing an integrated APM adoption model. For practitioners, it offers insights on tailoring agile approaches for industrial projects and creating supportive environments. The study recommends investing in agile leadership development, redefining performance metrics, and exploring hybrid models combining predictive and adaptive elements. Future research should examine long-term APM maturity evolution, external influences, and sector-specific adoption barriers. In conclusion, the research affirms the relevance of agile methodologies for complex industrial projects, while emphasizing contextual adaptation. It highlights that successful agile transformation requires mindset shifts, empowered teams, and aligned organizational cultures.

*Contents*

1. Introduction 2. Review of literature 3. Research methodology 4. Data analysis and interpretation 5. Conclusion and recommendations. References and Appendices.

09. NEELU  
**Study on The Impact of GST on India's Power Sector and Small Enterprises.**  
 Supervisor: Prof. Amit Kumar Bardhan  
Th 28368

*Abstract*

Goods and Services Tax (GST) has been endorsed as a transformative taxation reform. Implemented in India from 1st July, 2017, its impacts on crucial sectors of the Indian

economy remain multifaceted and under-researched or unexplored. This study aims to address this gap by focusing on two critical sectors: the Power sector and Micro, Small and Medium Enterprises (MSMEs). This study first examines the implications of the GST on India's power sector, which has undergone notable structural shifts under the new tax framework. Despite these changes, a comprehensive analysis of GST's impact on both energy producers and consumers remains essential. This study uses a mixed method approach to examine the effects of the GST regime on the power sector, with a specific focus on coal-based thermal generation projects. Our analysis looks into the interaction between Input Tax Credit mechanisms, rationalized tax rates, and existing electricity regulatory frameworks. Considering the changes in indirect taxation and the unique nature of the power sector, this study evaluates the impact of the GST regime on electricity pricing dynamics in India. The research identifies potential ways to reduce per-unit generation costs and investigates how tax efficiencies can lead to lower electricity tariffs for consumers. Secondly, the study evaluates the impact of GST on MSME sector – an important contributor to Indian employment, output. Adopting a case study methodology, the research explores critical dimensions including tax literacy and compliance burden, technological adoption, cash flow dynamics, procurement challenges, business formalisation, and operational efficiency. The study reveals that while GST has enhanced transparency and smoothed cross – border trade, it has increased compliance challenges for smaller enterprises lacking digital infrastructure and tax literacy imposing higher compliance costs. The study concludes that GST has the potential to formalise and strengthen the MSME sector in the long run through appropriate policy support.

#### *Contents*

1. Introduction 2. Literature Review 3. Research Methodology 4. Input Tax Credits and Electricity Pricing Under India's GST Regime: A Thermal Power Generation Study 5. GST and MSMEs in Delhi-NCR: A Case Study of Impact, Adaptations, and Competitive Advantages 6. Conclusion and References.

#### 10. POONAM

##### **Antecedents of Organizational Forgiveness Climate and its Effect on Employees' Psychological Well-Being: a Study of Service Sector Employees in India.**

Supervisor: Prof. Sunita Singh Sengupta

Th 28369

#### *Abstract*

When individuals experience a conflict in the workplace, it is common for them to initially react with negative emotions. These negative feelings can result in behaviours that initiate a harmful cycle of revenge or retaliation between the parties involved, which hampers the overall interests of the organization, unless one person chooses to forgive. Having a forgiving climate at the workplace can lead to reduced levels of stress and emotional pain, fewer conflicts, a lower tendency towards negative feelings, and healthy interactions. These outcomes can enhance job satisfaction, increase employees' psychological well-being, and improve employee performance. Given the important role that a forgiveness climate can play in an organizational setting, this study seeks to identify the antecedents of organizational forgiveness climate and examine its effect on employees' psychological well-being in the service sector, as well as how employees' psychological well-being influences their job performance. To conduct this study, a structured questionnaire was developed based on the scales used in the previous studies. The data were collected from a random sample of 402 employees working in the service sector of Delhi-NCR region. The study utilized quantitative research methods, including descriptive, correlation, and regression

analyses to derive results and test the hypotheses. The findings of this study suggest that the organizational compassion, restorative justice, temperance, and integral leadership are the four factors that help create the climate of forgiveness in service sector organizations and the impact caused by these four factors on organizational forgiveness climate contribute to enhancing the psychological well-being of employees, which in turn lead to an increase in their job performance levels. According to the findings, workplace spirituality is also an important factor and plays a moderating role in enhancing the impact of organizational forgiveness climate on the psychological well-being of employees, ultimately leading to improved job performance. Hence, establishing a compassionate and understanding environment, promoting an integrated and holistic approaches to leadership, advocating restorative justice, temperance, and incorporating workplace spirituality practices are all important strategies for service sector organisations looking to improve employee performance. This well-rounded strategy can enhance employees' psychological health and, as a result, improve work output, which will boost organisational success overall.

### *Contents*

1. Introduction 2. Literature Review 3. Research Methodology 4. Data Analysis, Results, and Interpretation 5. Discussion 6. Conclusion and Implications. Bibliography and Appendices.

11. RANA (Anita)  
**Economics and Ethics: An Empirical Study of Values of the Economics Students in India.**  
 Supervisor: Prof. Sunita Singh Sengupta  
Th 28370

### *Abstract*

The genesis of this topic is inspired by the work of Amartya Sen. Sen's On Ethics and Economics critiques the narrow focus of economics on efficiency and utility maximization, advocating for the integration of ethical considerations into economic analysis. Sen's work, along with Adam Smith's The Theory of Moral Sentiments, highlights the longstanding intersection between ethics and economics, emphasizing how ethical conduct complements economic efficiency to advance societal welfare. Neglecting ethical dimensions, as evident in corporate scandals like Enron, Satyam and Lehman Brothers, reveals a deficiency in the ethical education of economics and business graduates, who often prioritize rational behavior over ethical considerations. This observation motivates a study of the values held by economics students in India to understand and address this gap. This study examines the values of economics students in India, exploring how their education influences ethical orientations. Unlike prior studies linking economics education to rational economic behavior, this research investigates the relationship between economics education and values such as Self-Enhancement (Achievement, Power), Self-Transcendence (Universalism, Benevolence, Spirituality and Peace of Mind), Openness to Change (Self-direction, Stimulation), and Conservation. Research indicates that economics education increases Self-Enhancement values (Achievement, Power) while diminishing Self-Transcendence and Openness to Change values. These shifts may limit ethical decision-making, reducing actions to means-ends calculations. Integrating ethics into economics education can provide a more holistic understanding of economic choices, addressing distributive justice, welfare, and moral responsibilities. John Broome (2008) argues that economic decisions inherently involve ethical judgments, emphasizing the need for ethical theory in economic analysis. Aligning with Sen's views, this approach can promote humane and comprehensive economic outcomes. By examining the ethical underpinnings of

neoclassical economics and their transmission to students, this study seeks to bridge the gap between economic education and ethical decision-making, fostering a generation of economists equipped to address societal challenges responsibly.

### *Contents*

1. Review of Literature 2. Aims, Objectives and Hypotheses 3. Research Methodology 4. Results, data analysis and interpretation 5. Discussion – knitting the threads 6. Summary 7. Research contribution and policy implications. References. Annexures and Appendices.

12. SARNA (Kamaldeep Kaur)

**Food Wastage, WASH Practices, and Water-Attributable Diseases: Implications for Sustainable Development in India.**

Supervisors: Prof. Debadyuti Das and Simrit Kaur

Th 28371

### *Abstract*

Food loss and waste (FLW) and inadequate water, sanitation, and hygiene (WASH) practices continue to undermine food security, compromise public health, and hinder sustainable development, particularly in emerging economies such as India. This thesis, therefore, (i) assesses the potential of Industry 4.0 technologies in minimizing FLW across the food supply chain (FSC); (ii) analyzes operations strategies and public policies for FLW reduction across income-diverse countries; (iii) evaluates the impact of WASH practices on stomach-related diseases among Indian households; and (iv) examines the correlates of broader health outcomes, considering socio-economic, infrastructural, and contextual determinants. Employing a mixed-methods design, the study integrates systematic literature reviews, comparative case study research, cross-tabulations, and binary and multinomial logistic regressions. Econometric modelling is based on 2,89,407 observations from India's 76th National Sample Survey, while qualitative insights are framed through the Antecedents-Practices-Outcomes and Theory-Context-Methodology lenses. Findings reveal pronounced technology-stage synergies: Internet of Things, Blockchain, and Artificial Intelligence yield the highest benefits at production and distribution stages; Digital Twins excel during post-harvest; and Big Data Analytics with Cloud Computing unlock substantial gains at the consumption stage. Cross-country analysis highlights divergent strategies: high-income nations emphasize regulatory enforcement, advanced technological investments, and corporate-led initiatives, whereas low and middle-income economies prioritize redistribution networks, community mobilization, and public infrastructure development. Within India, deficient WASH practices significantly increase the incidence of water-related ailments, and socio-economic disparities magnify the burden on vulnerable communities. The study recommends (i) stage-specific and cost-effective technology deployment; (ii) context-sensitive FLW governance blending regulatory, fiscal and behavioral instruments; (iii) embedding WASH equity in housing and tribal programmes; (iv) strengthening disease surveillance through integrated WASH-health data systems; and (v) ensuring universal access to safe drinking water via continuous quality monitoring and household-level treatment. Collectively, these measures advance SDGs 2, 3, 6 and 12, paving the way for inclusive and sustainable development.

*Contents*

1. Understanding the nexus among food wastage, WASH practices, and water-attributable diseases for sustainable development in India 2. Harnessing industry 4.0 technologies in minimizing food loss and Waste (FLW) across the food supply chain (FSC) 3. A cross-country analysis of operations strategies and public policies for reduction of food loss and waste (FLW) within food supply chain (FSC) 4. Systematic Review of Health Risks Associated with Unsafe Water, Sanitation, and Hygiene (WASH) in India 5. How much water, sanitation, and hygiene (WASH) practices matter for stomach-related diseases: an econometric analysis of Indian households 6. Health outcomes and water, sanitation, and hygiene (WASH) practices in India: evidence from multinomial logistic regression 7. Summary, Conclusion, and Policy Implications. Reference and Appendix.

13. SAINI (Rupali)  
**Adoption of Industry 4.0 and its Impact on the Performance of Selected Indian Manufacturing Companies.**  
 Supervisors: Dr. Vivek Soni and Prof. Sunil Sharma  
Th 28805

*Abstract*

This study examines the Adoption of Industry 4.0 and its impact on firm performance in the Indian manufacturing sector through a mixed-methods design combining survey-based modelling, econometric estimation, and text-mining analysis. The research is organised around three objectives that together explore how Indian firms are advancing toward digital transformation. The first objective investigates the determinants of Industry 4.0 adoption using the Technology–Organization–Environment (TOE) framework. It addresses the limited empirical evidence in India, particularly the lack of frameworks capturing both internal (technological and organizational) and external (environmental) factors. Using survey data from 192 manufacturing professionals analysed through Partial Least Squares Structural Equation Modelling (SmartPLS 4), results show that organisational and technological factors significantly drive adoption, while environmental factors have a limited influence. The second objective, divided into two parts, assesses firm-level performance impacts. Objective 2a applies PLS-SEM to evaluate four dimensions economic, environmental, social, and operational & supply chain, addressing the gap in multidimensional performance analysis. All relationships are positive and significant, with the strongest impact on environmental performance ( $\beta = 0.434$ ,  $p < 0.001$ ). The weakest effect on economic performance reflects high initial investment costs and India’s early adoption stage. Objective 2b uses a Difference-in-Differences (DiD) model with firm and year fixed effects on panel data (FY 2016–2025), overcoming the lack of longitudinal analysis. Results show a short-term adjustment with higher leverage and lower profitability, followed by a recovery in revenue and assets after FY 2023. The third objective employs Python-based Natural Language Processing (NLP) on 1,361 industry online media reports (2015 - February 2025) to capture real-time perspectives. Findings highlight sustainability, intelligent supply chains, and digital readiness, alongside challenges such as high cost, skill shortages, and cybersecurity risks. Overall, the study offers empirical, managerial, and policy insights to strengthen technological preparedness and sustainable competitiveness in Indian manufacturing.

*Contents*

1. Industry 4.0 – Overview and Evolution 2. Review of literature 3. Research methodology 4. Data analysis and interpretation 5. Conclusion, Implications and future scope. References and Appendix.

14. SANJEEV KUMAR  
**Portfolio Implications of Market Connectedness Around Global Crises: An Empirical Study for International Investors.**  
 Supervisor: Prof. Narain  
Th 28806

*Abstract*

The financial crises that have happened in the global arena have raised doubts regarding alternative assets, equity, and commodity markets, which have become interdependent. It creates a scope to design robust portfolio strategies that can help to curtail tail risk exposure. There is a wide body of literature on market spillovers. However, studies in the past have not conducted extensive research by taking such a broad basket of assets. Secondly, these studies also oversee the dynamics of the frequency-dependent nature of tail-risk transmission during periods of heightened volatility. The study looks at these gaps by understanding the time-frequency connectedness between G7 and E7 equity markets, global commodities (gold, silver, oil, natural gas), ESG and REIT indices during three major crises, such as the Global Financial Crisis of 2008, COVID-19 pandemic (2020) and the Russia-Ukraine war (2022-present). The research utilises a demonstrative dataset of selected assets from January 2000 to January 2025. We quantify tail-risk connectedness using the Time-Varying Parameter Vector Autoregression (TVP-VAR) frequency connectedness and Generalized Forecast Error Variance Decomposition (GFEVD), thus allowing for short-(1–5 days) and long-horizon (5+ days) spillovers. For portfolio analysis, a set of techniques is employed to assess the performance of portfolios, which include Minimum Variance portfolio, Minimum Correlation portfolio, Risk Parity portfolio and Minimum Connectedness Portfolios. Also, mean returns, standard deviation, hedging effectiveness and Sharpe ratios are some metrics applied in the evaluation of the portfolios. The study confirms strong connectivity during the crisis period. In a crisis like the GFC, COVID-19 or Russia-Ukraine war, short-term tail-risk spillovers increase. The E7 markets, mainly Brazil, India, and Mexico, act as major transmitters to G7 equities, ESG, REITs and commodities. Long-term spillovers strengthened post-crisis, led by China and Indonesia. G7 markets primarily absorb shocks. Among the portfolio strategies, MCoP has the best risk-adjusted performance while MVP has the worst. Gold remains the most trustworthy safe haven asset, while energy commodities offer mixed benefits in hedging against market shocks and helping adaptive portfolio resilience in extreme market conditions. Theoretically, this study contributes by linking tail-risk, frequency connectedness, and portfolio optimisation frameworks. This linkage can help international investors, portfolio managers, and policymakers in practice. The findings guide flexible investment plans that consider cross-market contagion and make global portfolios more resilient during systemic crises.

*Contents*

1. Introduction 2. Synthesis of previous literature 3. Research methodology 4. Connectedness between G7 markets and other sample assets 5. Connectedness between E7 markets and other sample assets 6. Connectedness amongst G7 and E7 markets and other sample assets 7. Conclusion and policy implications. Bibliography. List of Research papers. List of conference presentations and Published research paper.

15. SIROHI (Garima)  
**Analysing the Impact of Women`s Access to Microcredit and Empowerment on Domestic Violence and Health Outcomes in India.**  
 Supervisor: Prof. Soma Dey  
Th 28372

*Abstract*

The aim of this thesis is to explore the relationships between women's access to microcredit, empowerment, and health outcomes. Using state level data from National Family Health Survey (NFHS-5, 2019-21) for 36 States/UTs of India, this thesis employs multiple regression analysis to examine how different dimensions of empowerment namely female literacy, women's participation in decision making, female employment and freedom of mobility along with women's access to microcredit can impact these health outcomes. The study also considers socio-cultural factors such as sex ratio, women's attitude towards violence, son preference and income inequality, which can mediate the relationships between access to micro credit, empowerment, domestic violence, and health outcomes. The thesis finds that female literacy is associated with significant reductions in both spousal violence and anaemia among women and children. Similarly, women's participation in household decision making is associated with improved anemic health of women and children. However, freedom of mobility is associated with increased anemia and spousal violence, while female employment shows no significant association with either violence or health outcomes. The results show that micro credit access is linked with increased spousal violence. Microcredit access is associated with reduced child stunting but has no significant impact on anaemia. Among the socio-cultural factors, women who have preference for sons have lesser incidence of both anemia and malnutrition for self but experience more stunting in children. The thesis finds that income inequality is positively associated with anaemia and child stunting. The results also show that women's acceptance of violence is associated with increased risk of violence. Sex ratio is positively associated with prevalence of anaemia among women but has no association with spousal violence or malnutrition. The study highlights the need for a context-sensitive, multidimensional approach to women's empowerment, beyond just economic access. Strategies must include education especially for women, challenge patriarchal norms, and address structural inequities to achieve sustainable health improvements for women and children.

*Contents*

1. Introduction 2. Microfinance and women empowerment: background 3. Literature Review 4. Data and methodology 5. Analysing the relationship between women's access to micro-credit, empowerment and spousal violence against women 6. relationship between women's access to micro credit, empowerment and malnutrition among women and children 7. Analysing the relationship between women's access to micro-credit, empowerment and prevalence of anaemia among women and children 8. Conclusion. Reference and Appendix.

16. TARUN  
**Microfinance and Its Role in Socio-Economic Development: Analysis of SHG Beneficiary Outcomes in India and MFI Financial Health in South Asia.**  
 Supervisor: Prof. Soma Dey  
Th 28373

*Abstract*

The role of microfinance in alleviating poverty and promoting socio-economic development has been widely recognised, particularly in regions where traditional banking systems fail to reach marginalized communities. This thesis evaluates the effectiveness of Self-Help

Groups (SHGs) as a pivotal microfinance intervention in tackling rural poverty across India, with a specific focus on their socio-economic impact on beneficiaries and the financial sustainability of microfinance institutions (MFIs) across South Asia. The study aims to (1) assess the post-SHG membership socio-economic conditions of beneficiaries using ten economic indicators such as housing, access to clean water, education, food security, and healthcare affordability; (2) evaluate the social upliftment of SHG members in terms of decision-making within families, entrepreneurial skills, financial literacy, and community participation; (3) analyse the satisfaction levels of SHG members with the microfinance services they receive (the loan amount, interest rate charged, collateral etc.); and (4) evaluate the financial performance of MFIs across select five SAARC countries to understand their sustainability and contribution to poverty alleviation. The findings indicate that SHG membership positively influences economic and social indicators, though challenges such as regional disparities and uneven access to services remain. Satisfaction analysis reveals key strengths and areas for improvement in microfinance delivery, highlighting the importance of member-centric approaches. The evaluation sustainability of MFIs underscores their crucial role in sustaining microfinance initiatives, though their financial stability varies across countries and regions. Policy recommendations include expanding access to larger, productive loans for income-generating activities, promoting financial literacy among SHG members, and incentivizing MFIs to strengthen their collaboration with SHGs. By leveraging the complementary strengths of SHGs and MFIs, this study concludes that microfinance interventions can achieve sustainable poverty reduction and inclusive economic growth, particularly in regions with high socio-economic vulnerabilities.

#### *Contents*

1. Introduction 2. Literature Review 3. Research Methodology 4. Theoretical framework 5. The role of microfinance intervention on socio-economic development in India: motivation, variable selection and data collection 6. Insights from primary survey on SHG members 7. Evaluation of economic well-being of SHG beneficiaries 8. Impact of microfinance interventions on social upliftment of SHG beneficiaries 9. evaluation of satisfaction level of SHG beneficiaries towards SHG services 10. assessment of MFT's financial sustainability & profitability in select SAARC nations 11. Conclusions. Bibliography and Annexures.

17. TETE (Merian)  
**Study of Innovation, its Relationship and Impact on Global Competitiveness with Special Reference to G-20 Countries.**  
 Supervisors: Dr. Prabhjot Kaur and Prof. Sunil Sharma  
Th 28803

#### *Abstract*

At the global level, capitalism drives countries to compete by fostering innovation and productivity. Countries enhance technological capabilities and business environments to attract investment and remain competitive. Innovation serves as the main driver of global competitiveness, enabling economies to create new industries and improve efficiency while replacing outdated practices with dynamic ones. Countries investing in education, research, and digital transformation adapt better to global changes, while those that fail to innovate risk stagnation. Creative destruction promotes higher efficiency and motivates governments and firms to strengthen institutions and strategies. Collaboration between industry,

academia, and policymakers supports innovation ecosystems, ensuring long-term growth. This research examines the relationship between innovation and global competitiveness across G-20 countries. Panel data regression with Pesaran's Common Correlated Effects (CCE) and Driscoll-Kraay methods ensure robust results by addressing interdependence, autocorrelation and heteroskedasticity. Findings show that institutions, infrastructure, business sophistication, and knowledge and technology output significantly influence competitiveness. High-income countries display maturity, focusing on sustaining innovation and global market positions, while middle-income nations can leverage opportunities through technology adoption and skill development. Historical paths and geography also shape current competitiveness, with regional and income-level differences highlighting unique strengths and challenges. The comparative analysis reveals that what drives progress in advanced economies may differ from emerging ones. Overall, global competitiveness evolves through innovation, strategic policymaking, and adaptive capabilities. The experience of G-20 countries underscores that long-term success depends on how effectively countries balance innovation, resources, and institutional strength to navigate global economic transformation.

#### *Contents*

1. Introduction 2. Review of Literature 3. Group of twenty (G-20) countries 4. competitiveness framework with special reference to Porter's diamond model 5. Research methodology 6. Data analysis and interpretation 7. Conclusion, Policy implications and future research. References and Annexures.

18. VAISHNAV (Deepak Kumar)  
**Effect of New Media Intervention on Out-of-Pocket Expenditure on Medicines among Chronic Care Patients in a State in India.**  
 Supervisor: Prof. A. Venkat Raman  
Th 28374

#### *Abstract*

Chronic illnesses such as diabetes, hypertension, and cardiovascular conditions require lifelong medication, placing a significant financial burden on patients, particularly those from rural and low-income households. In India, out-of-pocket expenditure (OOPE) on medicines remains a substantial contributor to health-related impoverishment. While the Pradhan Mantri Jan Aushadhi Pariyojana (PMBJP) was launched to address this by promoting affordable generic drugs through Jan Aushadhi Kendras, its effectiveness has been undermined by limited public awareness, inconsistent availability of medicines, and challenges in access. This study investigates the role of a new media communication intervention, delivered via smartphones, in influencing the purchasing behaviour of chronic patients in Kangra district, Himachal Pradesh, and reducing their out-of-pocket expenses (OOPE) on medicines. A quasi-experimental design was employed with a sample of 400 chronic patients, equally divided into two cohorts: one using branded medicines and the other using Jan Aushadhi medicines. Key variables studied include awareness, access costs, availability of medicines, and changes in out-of-pocket expenses (OOPE). The communication intervention, aimed at educating patients about the benefits of generic medicines and online access options, was found to significantly influence purchase behaviour. Findings revealed that awareness of generic medicines and the PMBJP scheme increased markedly following the intervention. Patients who received the intervention and

switched to generic drugs reported a reduction of over 50% in monthly out-of-pocket expenses (OOPE). Moreover, patients who used digital platforms to procure Jan Aushadhi medicines recorded the highest availability of medicine, the lowest access costs and the lowest out-of-pocket expenditure on medicine. However, systemic issues such as medicine unavailability (with stockouts reported in 39% of cases) and rural-urban disparities in access continue to limit the full potential of the scheme. The study concludes that targeted digital communication can be a powerful tool in bridging information and accessibility gaps, making essential medicines more affordable. It recommends policy-level integration of mobile-based awareness and delivery mechanisms to sustainably reduce out-of-pocket expenses (OOPE) for patients with chronic conditions in underserved regions.

#### *Contents*

1. Introduction 2. Review of Literature 3. Research Methodology 4. The pilot study 5. Data analysis and interpretation 6. Result & Discussion. References and Annexures.

19. YADAV (Mohini)

#### **A Study of Correlates of Post-Merger Employee Organizational Identification.**

Supervisor: Prof. Mahima Thakur

Th 28375

#### *Abstract*

This scientific investigation attempts to identify key predictors of post-merger identification (PMI) and study their relationship with PMI in the Indian market context. Given India's increasing number of M&As, understanding the predictors of PMI is crucial for successful organisational integration. A systematic literature review of 197 research articles from Scopus, Web of Science, EBSCO, and JSTOR, combined with Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA), identified eight key predictors: Pre-Merger Identification (PreMI), Perception of Continuity (POC), Transformational Leadership (TL), Perceived Organisational Support (POS), Perceived Necessity of M&A (PNM), Change Communication (COM), Perceived Inter-Organisational Difference (PIOD), and Organisational Justice (OJ). A quantitative approach was applied to data from 398 employees of merged firms in Delhi-NCR, using Pearson correlation, Structural Equation Modelling (SEM) in SmartPLS 4, and Multiple Regression Analysis (MRA) in SPSS. The SEM model explained 76.3% of PMI variance, supported by MRA ( $R^2 = 0.759$ ). POS emerged as the strongest predictor ( $r = 0.842$ ,  $\beta = 0.587$ ), while PIOD negatively impacted PMI ( $r = -0.310$ ,  $\beta = -0.111$ ). Other predictors showed smaller but notable effects: PreMI ( $r = 0.387$ ,  $\beta = 0.101$ ), PNM ( $r = 0.649$ ,  $\beta = 0.111$ ), COM ( $r = 0.564$ ,  $\beta = 0.087$ ), TL ( $r = 0.611$ ,  $\beta = 0.070$ ), POC ( $r = 0.481$ ,  $\beta = 0.031$ ), and OJ ( $r = 0.684$ ,  $\beta = 0.007$ ) contribute positively to PMI. These findings advance the understanding of post-merger identification by emphasising the need for holistic approaches that integrate support mechanisms, leadership, and justice, to manage post-merger transitions effectively. The results also support several theoretical frameworks, including social identity, organisational justice, sensemaking, social exchange, and transformational leadership theories. The study concludes with theoretical and practical implications and suggestions for future research avenues.

#### *Contents*

1. Introduction 2. Review of Literature 3. Research design 4. Results 5. Discussion. 6. Implications 7. Limitations and future directions. References. Annexures and List of Publications.