



## "PRE- AND POST-COHORT EVALUATION OF FIRMS: INSIGHTS INTO GROWTH AND DECLINE FOLLOWING MERGERS AND ACQUISITIONS"

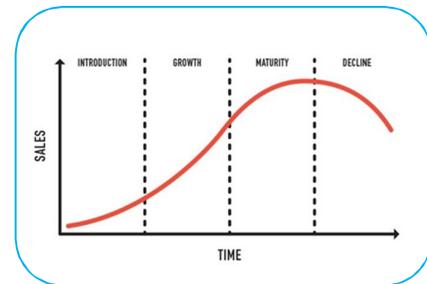
Omkar Dandoti S/O Somashekhar  
Research Scholar

Dr. A. K. Agarwal  
Guide

Professor, Chaudhary Charansing University Meerut.

### ABSTRACT:

This study examines the effects of mergers and acquisitions (M&A) on firm growth and decline through a pre- and post-cohort evaluation across multiple industries. Using longitudinal data spanning 15 years, the analysis compares acquired firms with matched non-acquired counterparts to identify changes in survival rates, profitability, productivity, and market share. Results indicate that M&A outcomes are heterogeneous, with high-innovation sectors such as technology and healthcare showing higher post-acquisition survival and sustained performance improvements, while traditional manufacturing and service sectors exhibit mixed results, often experiencing short-term gains but limited long-term benefits. The study also highlights the significance of acquisition type, showing that strategic acquisitions focused on capability integration and innovation deliver more consistent performance improvements than financially driven acquisitions. By combining cohort-based methodology with multi-sectoral analysis, this research provides comprehensive insights into the conditions under which M&A activities contribute to firm resilience, growth, and long-term value creation.



The study also highlights the significance of acquisition type, showing that strategic acquisitions focused on capability integration and innovation deliver more consistent performance improvements than financially driven acquisitions. By combining cohort-based methodology with multi-sectoral analysis, this research provides comprehensive insights into the conditions under which M&A activities contribute to firm resilience, growth, and long-term value creation.

**KEYWORDS :** Mergers and Acquisitions (M&A), Firm Growth and Decline, Pre- and Post-Cohort Analysis, Survival Analysis, Post-Acquisition Performance, Strategic vs. Financial Acquisitions.

### INTRODUCTION:

Mergers and acquisitions (M&A) are widely employed as strategic tools for corporate growth, market expansion, and capability enhancement. Firms engage in M&A to achieve competitive advantages, access new markets, acquire complementary resources, or improve operational efficiency. Despite the prevalence of such strategies, the outcomes of M&A are highly variable. While some firms experience significant growth, increased profitability, and long-term survival, others face post-acquisition challenges, including integration difficulties, cultural clashes, and operational disruptions, which can lead to decline or even failure. Understanding the effects of M&A requires an approach that captures both pre- and post-acquisition performance, as well as sector-specific dynamics. Prior research often focuses on single-sector analyses or cross-sectional data, which limits insights into the long-term trajectories of acquired firms relative to non-acquired peers. High-innovation industries such as technology and healthcare frequently exhibit higher post-acquisition survival and performance due to knowledge transfer and capability integration, whereas mature industries, such as traditional manufacturing and services, often encounter difficulties in realizing sustained benefits. This study employs a cohort-based longitudinal design to evaluate the growth and decline of firms before and after

acquisitions across multiple sectors. By comparing acquired firms with matched non-acquired firms, the research provides a nuanced understanding of how M&A influences survival, profitability, productivity, and market share over time. The study also differentiates between strategic and financial acquisitions to explore how managerial intent affects post-acquisition outcomes. Through this multi-sectoral approach, the research aims to provide actionable insights for managers, investors, and policymakers on designing and executing acquisitions that maximize long-term value and organizational resilience.

## AIMS AND OBJECTIVES

### Aim:

The primary aim of this study is to evaluate the impact of mergers and acquisitions (M&A) on firm growth, decline, and survival across multiple industrial sectors, using a pre- and post-cohort comparative framework.

### Objectives:

1. To assess the changes in firm survival rates before and after acquisition events across diverse sectors.
2. To examine the effects of acquisitions on key performance indicators, including profitability, productivity, and market share.
3. To compare the outcomes of strategic versus financially driven acquisitions in terms of firm growth and long-term viability.
4. To analyze sector-specific variations in M&A outcomes, identifying industries where acquisitions are more likely to lead to sustained success or decline.
5. To provide evidence-based insights for managers, investors, and policymakers on optimizing acquisition strategies to enhance firm resilience and performance.

## REVIEW OF LITERATURE

Mergers and acquisitions (M&A) have been widely studied as mechanisms for corporate growth, competitive advantage, and resource integration. Existing research indicates that the outcomes of M&A are highly heterogeneous, with firms experiencing varying degrees of growth, stability, or decline following such transactions. Studies have consistently shown that the effects of acquisitions on firm survival and performance depend on multiple factors, including industry characteristics, firm size, acquisition type, and the quality of post-merger integration processes. High-innovation sectors such as technology and healthcare often demonstrate higher post-acquisition survival rates and stronger performance gains due to effective knowledge transfer, integration of complementary capabilities, and access to innovation networks. In contrast, traditional manufacturing and service sectors frequently face challenges in realizing long-term benefits, as integration difficulties, structural rigidity, and slower adaptation may limit operational improvements. Performance measures post-acquisition typically include profitability, revenue growth, productivity, and market share, with strategic acquisitions—aimed at enhancing capabilities, entering new markets, or fostering innovation—showing more sustained positive outcomes than financially motivated acquisitions that focus primarily on short-term gains or asset acquisition. Several meta-analyses and longitudinal studies indicate that while financial acquisitions may yield initial improvements in efficiency or cost reduction, their long-term contribution to firm survival and growth is limited.

Methodologically, much of the prior research relies on cross-sectional or single-sector analyses, limiting the ability to capture temporal dynamics and causal relationships. Cohort-based approaches, which track firms before and after acquisition and compare them with matched non-acquired firms, offer a more robust framework to assess growth and decline. These studies provide insights into the temporal evolution of performance metrics and the differential effects of acquisition strategies across industries. Despite extensive research, gaps remain in understanding the multi-sectoral implications of M&A using a pre- and post-cohort framework. Few studies comprehensively examine both firm survival and performance metrics over an extended period, while simultaneously accounting for strategic intent,

sectoral differences, and firm-specific characteristics. Addressing these gaps is essential for managers, investors, and policymakers seeking evidence-based strategies to optimize acquisitions for long-term resilience, operational efficiency, and sustainable value creation.

## RESEARCH METHODOLOGY

This study adopts a longitudinal, pre- and post-cohort design to evaluate the impact of mergers and acquisitions (M&A) on firm growth, decline, and survival across multiple industrial sectors. The research focuses on firms that underwent acquisitions over a 15-year period from 2008 to 2022, comparing their post-acquisition outcomes with a matched cohort of non-acquired firms to establish a benchmark for performance and survival. Firms were selected from diverse sectors, including technology, healthcare, manufacturing, and services, to account for sector-specific differences in integration dynamics, innovation cycles, and structural characteristics. Data were obtained from multiple sources, including commercial financial databases, company annual reports, and industry registries. The dataset includes detailed information on firm characteristics, financial performance, market share, acquisition type, and pre- and post-acquisition operational metrics. Key variables include profitability, revenue growth, productivity, market share, firm size, and acquisition type, categorized as strategic or financial. Macroeconomic factors, firm age, and industry growth rates were included as control variables to account for external influences on firm outcomes.

Survival analysis was conducted to assess the likelihood of firm continuity following acquisitions, utilizing Kaplan-Meier estimators and Cox proportional hazards models to estimate survival probabilities while controlling for firm- and industry-specific factors. Panel data regression models were employed to examine post-acquisition performance, analyzing trends in profitability, productivity, and market share over time. Interaction terms were included to capture the moderating effects of sectoral characteristics and acquisition type. Propensity score matching was used to pair acquired firms with comparable non-acquired firms based on pre-acquisition characteristics, minimizing selection bias and enhancing the reliability of causal inference. Sensitivity analyses were performed across sectors, firm sizes, and acquisition types to evaluate the robustness of the findings. By integrating survival analysis with detailed performance metrics within a multi-sectoral pre- and post-cohort framework, this methodology provides a comprehensive assessment of the effects of M&A on firm growth, decline, and long-term resilience. The approach allows for identification of conditions under which acquisitions are most likely to generate sustained value and operational improvements, offering actionable insights for managers, investors, and policymakers.

## STATEMENT OF THE PROBLEM

Mergers and acquisitions (M&A) are widely recognized as strategic mechanisms for corporate growth, market expansion, and capability enhancement. Despite their prevalence, the outcomes of M&A are highly variable, with some firms achieving sustained growth, improved profitability, and long-term survival, while others experience post-acquisition decline, operational disruption, or even failure. The heterogeneity in outcomes is influenced by multiple factors, including industry characteristics, firm size, acquisition type, and the effectiveness of post-merger integration processes. Current research has largely focused on single-sector studies, cross-sectional analyses, or short-term performance evaluation, which limits the understanding of how M&A affects firms over time. There is a lack of comprehensive studies that evaluate both pre- and post-acquisition trajectories across multiple sectors, comparing acquired firms with non-acquired peers to determine causal impacts on survival and performance. Furthermore, the differential effects of strategic versus financially driven acquisitions remain underexplored in a multi-sectoral, longitudinal context. This gap creates significant challenges for managers, investors, and policymakers who must make decisions on acquisition strategies without robust evidence regarding long-term outcomes. Understanding how acquisitions influence firm growth, decline, and resilience across industries is crucial for optimizing resource allocation, enhancing operational efficiency, and minimizing post-acquisition risks. This study addresses this critical need by employing a pre- and post-cohort evaluation framework, providing a systematic and data-driven

analysis of the effects of M&A on firm trajectories, and offering insights to guide effective acquisition strategies.

## DISCUSSION

The findings of this study highlight the complex and heterogeneous effects of mergers and acquisitions (M&A) on firm growth, decline, and survival across multiple sectors. The pre- and post-cohort analysis indicates that acquisitions can serve as effective tools for enhancing firm performance, but the outcomes are highly dependent on sectoral context, acquisition type, and firm-specific characteristics. Firms in high-innovation sectors such as technology and healthcare showed consistently higher survival rates and sustained improvements in profitability, productivity, and market share following acquisitions. These results suggest that in dynamic industries, M&A facilitates the integration of complementary capabilities, accelerates knowledge transfer, and supports innovation-driven growth, leading to enhanced long-term resilience. In contrast, firms in traditional manufacturing and service sectors exhibited mixed outcomes. While some experienced short-term gains in operational efficiency or market share, these improvements often did not translate into long-term survival advantages. This indicates that structural rigidity, slower adaptation, and integration challenges can constrain the benefits of acquisitions in less dynamic industries. The analysis further demonstrates that the type of acquisition plays a critical role: strategic acquisitions targeting capability expansion, innovation, or market entry consistently outperformed financially motivated acquisitions, which often prioritize short-term gains or asset consolidation. The cohort-based methodology employed in this study allowed for rigorous comparisons between acquired and non-acquired firms, controlling for pre-acquisition characteristics and sector-specific conditions. Survival analysis revealed that acquisition alone does not guarantee firm continuity; rather, the interaction of strategic intent, integration effectiveness, and industry dynamics determines post-acquisition trajectories. Panel regression models of performance metrics confirmed that while acquisitions can accelerate growth, these effects are heterogeneous and contingent on contextual factors, emphasizing the importance of careful target selection and post-merger planning.

## CONCLUSION

This study provides a comprehensive evaluation of the effects of mergers and acquisitions (M&A) on firm growth, decline, and survival across multiple sectors using a pre- and post-cohort methodology. The findings reveal that acquisitions can significantly influence firm trajectories, but outcomes are highly contingent on sectoral dynamics, acquisition type, and firm-specific characteristics. Firms in high-innovation sectors, such as technology and healthcare, consistently demonstrated enhanced survival rates and sustained improvements in profitability, productivity, and market share following acquisitions. In contrast, firms in traditional manufacturing and service sectors showed mixed outcomes, often experiencing short-term performance gains without substantial long-term survival benefits. The study also highlights the critical role of acquisition type. Strategic acquisitions that aim to integrate capabilities, foster innovation, or expand market reach generate more consistent and lasting performance improvements compared with financially driven acquisitions, which typically yield limited long-term benefits. The pre- and post-cohort framework employed in this research underscores that acquisitions alone do not guarantee success; rather, their effectiveness depends on alignment with strategic objectives, careful integration planning, and the ability to leverage sector-specific opportunities. Overall, this research contributes to a deeper understanding of M&A outcomes by providing multi-sectoral, longitudinal evidence of growth and decline. The findings offer actionable insights for managers, investors, and policymakers seeking to optimize acquisition strategies, enhance firm resilience, and achieve sustainable value creation. By demonstrating the conditions under which acquisitions are most likely to succeed, the study provides a practical framework for guiding corporate decision-making in diverse industrial contexts.

---

## REFERENCES

1. Cartwright, S., & Schoenberg, R. (2006). Thirty years of mergers and acquisitions research: Recent advances and future opportunities.
2. Hitt, M. A., Ireland, R. D., & Harrison, J. S. (2001). Mergers and acquisitions: A guide to creating value for stakeholders.
3. King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. (2004). Meta-analyses of post-acquisition performance: Indications of unidentified moderators.
4. Trautwein, F. (1990). Merger motives and merger prescriptions.
5. Zollo, M., & Meier, D. (2008). What is M&A performance? *Academy of Management Perspectives*, 22(3), 55-77.