

The Impact of M&A Activities on Regional Economy and Industrial Clusters

Bijie Li, Zhangzhong Huang*

Hainan Vocational University of Science and Technology, Hainan, China

**Corresponding Author*

Abstract: This study investigates the impact mechanisms of mergers and acquisitions (M&A) on regional economic development and the formation and evolution of industrial clusters, aiming to reveal their roles in optimizing resource allocation, promoting industrial upgrading, and enhancing regional competitiveness. Through a combination of literature review and theoretical modeling, and grounded in division of labor economics and transaction cost theory, the research explores multiple dimensions such as economic network synergy, technological spillover effects, and regional industrial resource integration. The study first reviews domestic and international literature on the relationship between M&A activities, regional economy, and industrial clusters, establishing a theoretical framework for M&A's multi-level impacts on regional economies. A model based on technological spillovers and synergy effects is constructed to analyze M&A's role in driving the development of industrial clusters. Additionally, from the perspective of regional economic integration and industrial structure optimization, the study explores the dynamic impact of M&A on regional economic development. Results indicate that M&A activities significantly enhance regional economic efficiency through resource optimization and technological spillover effects, while fostering specialization, division of labor, and innovative collaboration within industrial clusters, thus improving cluster competitiveness. However, the actual outcomes of M&A depend on various factors, including regional economic policy environments, industrial foundations, and the degree of inter-enterprise synergy. This research provides theoretical insights and practical references for optimizing M&A policies and regional economic development

strategies.

Keywords: M&A Activities; Regional Economy; Industrial Clusters; Technological Spillovers; Economic Synergy

1. Introduction

1.1 Research Background and Significance

The acceleration of economic globalization and regional economic integration has heightened the importance of mergers and acquisitions (M&A) in driving economic development. As a critical corporate strategy for resource integration and competitiveness enhancement, M&A activities also significantly influence regional economic transformation and the optimization of industrial spatial distribution. In the context of rising global economic uncertainties, M&A fosters resource sharing and technological collaboration among enterprises, providing an essential pathway to mitigate external risks and bolster regional economic resilience. Furthermore, M&A plays a pivotal role in promoting intra-regional specialization, technological spillovers, and innovation, particularly in the development of industrial clusters. In China, under the "dual circulation" strategy outlined in the 14th Five-Year Plan, M&A activities are strategically positioned to support regional coordination and industrial upgrading. Thus, investigating the impacts of M&A on regional economies and industrial clusters not only holds academic significance but also provides theoretical foundations for formulating targeted economic policies.

1.2 Literature Review

Research on M&A activities primarily focuses on three areas:

Impact on Enterprises: Studies highlight how M&A enhances firm performance, market share, and technological innovation

capabilities. For instance, international scholars have examined the role of M&A in improving the global competitiveness of multinational corporations in Europe and the US [1].

Role in Regional Economic Development: International research, often from the perspective of regional economic integration, emphasizes the role of M&A in reallocating resources and improving economic efficiency. These studies suggest that M&A facilitates the transition from unbalanced to coordinated regional development [2]. Domestic scholars, in contrast, concentrate on M&A's effects on industrial restructuring and regional cluster economies, using case studies from areas like Beijing, the Yangtze River Delta, and the Pearl River Delta [3].

Impact on Industrial Clusters: Existing studies reveal that M&A promotes synergy within clusters through technology transfers, innovation collaboration, and enterprise network building. However, the potential negative impacts, such as competitive imbalances and suboptimal resource allocation, remain underexplored [4].

While much of the current scholarship adopts a micro-level enterprise perspective, there is a need for more macro-level, systematic analyses of how M&A activities influence regional economies and industrial clusters. In particular, deeper exploration of the mechanisms underlying these effects is warranted.

1.3 Research Questions and Methodology

This study focuses on the following key questions:

How does M&A optimize resource allocation and generate technological spillovers to influence regional economic development?

How does M&A drive the formation and upgrading of industrial clusters?

What key factors determine the effectiveness of M&A activities?

To address these questions, this study employs a combination of literature review and theoretical modeling. Grounded in frameworks such as division of labor economics, transaction cost theory, and technological spillover theory, the research systematically analyzes the mechanisms through which M&A impacts regional economies and industrial clusters. the goal is to contribute theoretical

innovation to the academic field while providing practical insights for policymakers.

2. Theoretical Foundations of M&A Activities

2.1 Division of Labor Economics and Transaction Cost Theory

Division of labor economics, first proposed by Adam Smith, posits that specialization enhances productivity and drives economic growth. Building on this, Coase's transaction cost theory argues that transactions can occur not only in markets but also within organizational hierarchies. M&A represents a classic example of internalized transactions, enabling firms to consolidate dispersed production factors and technological resources, thereby reducing transaction costs and optimizing resource allocation.

For instance, in the case of technology-driven firms, acquiring upstream suppliers of key components can mitigate procurement risks and safeguard critical technologies, strengthening the firm's competitive edge. At the regional level, M&A reduces redundant resource consumption among enterprises and facilitates the rational allocation of capital and labor, supporting coordinated and sustainable regional economic development [5].

2.2 Technological Spillover and Economic Synergy Theory

Technological spillovers are a key pathway through which M&A activities impact regional economies and industrial clusters. These spillovers manifest in two forms:

Knowledge Transfer: M&A provides small and medium-sized enterprises (SMEs) with access to previously inaccessible technologies, reducing the time and cost of technology adoption.

Enhanced Innovation Capabilities: Particularly in high-tech industries, M&A fosters interactive mechanisms for R&D, driving overall technological advancement across sectors.

Additionally, M&A generates economic synergies by optimizing resource allocation. In industrial clusters, large firms often acquire smaller enterprises to consolidate supply chain resources, improving collaborative production capacity. These synergies not only strengthen inter-firm linkages but also enhance the

competitive edge of the entire cluster [6].

2.3 Mechanisms Linking M&A, Regional Economies, and Industrial Clusters

The impact of M&A on regional economies and industrial clusters can be analyzed through three primary mechanisms:

Capital Redistribution: M&A facilitates the transfer of economic resources from less efficient regions to more productive ones, generating economies of scale and agglomeration effects.

Technology Transfer and Innovation Collaboration: For example, in the semiconductor industry, global M&A cases have significantly advanced regional cluster development through shared technological advancements [7].

Restructuring Enterprise Networks: M&A reshapes market dynamics and regional supply chain relationships, fostering greater integration and synergy within industrial clusters.

By examining these mechanisms, this study aims to provide a comprehensive understanding of how M&A activities influence regional economies and industrial clusters, offering valuable insights for both academic research and policy formulation.

3. Analysis of the Impact of M&A Activities on Regional Economy

3.1 Role of M&A in Resource Optimization

M&A serves as a market-driven mechanism for resource integration, playing a critical role in optimizing resource allocation within regional economies. By reallocating capital, technology, and labor, M&A enhances resource utilization efficiency and reduces waste caused by disordered competition. Regional disparities in development levels and resource endowments are particularly pronounced, with developed regions often possessing abundant capital and technology while underdeveloped areas face constraints like capital scarcity and technological gaps. M&A facilitates the cross-regional flow of capital and technology, redistributing resources to narrow these development disparities.

For example, in China's renewable energy sector, leading enterprises in developed eastern regions have acquired smaller battery manufacturers in the central and western

regions. This has resulted in the centralization of production factors in these underdeveloped areas. Eastern enterprises introduced advanced production lines and managerial experience, while the central and western regions leveraged their labor and land cost advantages, significantly enhancing the competitiveness of the overall renewable energy industry. Since 2018, over RMB 80 billion has been invested in cross-regional M&A in this sector, reflecting M&A's substantial role in resource optimization.

At the intra-regional level, M&A also addresses issues like resource redundancy and idleness in traditional industries. For instance, horizontal M&A in the textile and apparel industry in the Yangtze River Delta has integrated dispersed resources, created economies of scale and improved the sector's overall profitability.

3.2 Driving Regional Economic Growth and Structural Optimization

M&A activities stimulate regional economic growth by revitalizing enterprises, enhancing industry efficiency, and fostering technological progress. Through the concentrated allocation of production factors, M&A increases the effective utilization of capital and technology, thereby improving the quality of economic growth. Simultaneously, the integration and upgrading achieved through M&A contribute to optimizing regional economic structures.

A notable case is the cross-border M&A in high-end manufacturing. For example, China National Chemical Corporation's acquisition of Swiss agrochemical giant Syngenta expanded its global market presence while introducing advanced production technologies and management practices. This deal directly accelerated technological development in China's agricultural sector, supporting the modernization of domestic agriculture. From 2015 to 2022, the contribution of high-end manufacturing to China's GDP increased from 15.7% to 19.2%, demonstrating M&A's potential to drive regional economic growth.

In terms of structural optimization, M&A eliminates outdated capacities and fosters the introduction of emerging industries. In China's steel industry, national policies have encouraged mergers and consolidations to address overcapacity and enhance industrial structure. By 2020, the market share of the top

ten steel enterprises had risen to 60%, significantly reducing excess capacity and guiding the industry toward high-quality development.

3.3 Promoting Regional Economic Integration through M&A

Regional economic integration relies on the efficient flow of resources, technology, and capital, with M&A acting as a vital facilitator. By strengthening industrial linkages and resource sharing within regions, M&A fosters higher levels of regional collaboration.

The Beijing-Tianjin-Hebei integration strategy provides a typical example. Hebei's traditional industries have been integrated into higher-tier industrial networks through M&A with leading enterprises from Beijing and Tianjin. For instance, high-end equipment manufacturers in Beijing acquired traditional manufacturing firms in Hebei, upgrading production lines and enabling the bidirectional flow of labor and technology. Such M&A activities have strengthened collaboration among the three regions, offering robust support for regional integration.

On a global scale, international M&A has also accelerated regional economic integration. For example, cross-border M&A within the European Union (EU) has enhanced economic ties among member states and consolidated regional competitiveness through industrial integration. Studies indicate that a 10% increase in M&A activity among EU countries correlates with a 5% rise in intra-regional trade flows, underscoring M&A's pivotal role in fostering economic integration.

4. Analysis of the Impact of M&A Activities on Industrial Clusters

4.1 Driving the Formation and Development of Industrial Clusters

The formation of industrial clusters often relies on the growth of core enterprises, and M&A provides an effective pathway for these enterprises to expand. By integrating regional resources from small and medium-sized enterprises (SMEs), large firms not only bolster their competitiveness but also lay the groundwork for cluster formation.

A representative example is Shenzhen's electronics and information technology cluster. Leading enterprises such as Huawei and ZTE

have driven the development of this cluster through a series of strategic acquisitions. Huawei, for instance, has acquired numerous domestic and foreign optical communication firms, establishing a comprehensive supply chain system. These acquisitions have not only strengthened Huawei's market position but also amplified the cluster's innovation capacity, transforming Shenzhen into a global technology hub.

4.2 Impact of M&A on Division of Labor and Collaboration within Clusters

Efficient division of labor and inter-firm collaboration are crucial to the success of industrial clusters. M&A restructures resource allocation and capabilities among enterprises, refining the division of labor and enhancing collaborative efficiency within clusters.

For example, in pharmaceutical clusters, leading firms often acquire smaller R&D companies, combining their innovation capabilities with the production capacity of larger firms. This collaboration model accelerates R&D efficiency while shortening the time-to-market for new drugs, thereby enhancing the competitiveness of the entire cluster.

4.3 Enhancing Innovation Capacity within Industrial Clusters

Innovation is a cornerstone of industrial cluster competitiveness, and M&A facilitates innovation by integrating technologies and pooling R&D resources. This is especially evident in cross-border M&A. For instance, Taiwan Semiconductor Manufacturing Company (TSMC) has acquired several international chip research firms, enabling access to cutting-edge semiconductor technologies. These acquisitions have not only reinforced TSMC's global leadership but also bolstered the overall innovation capacity of Taiwan's semiconductor cluster.

Through resource consolidation, specialization, and technological advancement, M&A has emerged as a powerful tool for enhancing the development and competitiveness of industrial clusters in both domestic and global contexts.

5. Key Factors and Challenges Affecting the Impact of M&A Activities

5.1 Influence of Regional Economic Policy

Environment

The success of M&A activities is closely tied to the regional policy environment, which affects both the quantity and quality of M&A deals. Policies such as tax incentives, subsidies, and frameworks for cross-regional cooperation can lower transaction costs and encourage M&A. However, inconsistencies or a lack of coordination in policy implementation can hinder M&A activities.

In China, government initiatives such as the Opinions on Optimizing the Market Environment for Corporate Mergers and Acquisitions and Guidelines for Supporting the Healthy Development of Listed Companies have significantly promoted M&A, particularly in fostering regional economic coordination and resource optimization. However, disparities in policy support remain. For instance, developed eastern regions often benefit from mature policy frameworks, while underdeveloped central and western regions face challenges due to less supportive mechanisms, which discourages M&A activity. Policy stability is also critical. Frequent adjustments to regulations create uncertainty and can disrupt M&A strategies. For example, sudden restrictions on foreign acquisitions due to economic pressures or geopolitical concerns can directly impact cross-border M&A. Studies show a positive correlation between long-term policy stability and the success rate of M&A deals [1].

5.2 Constraints of Industrial Foundation and Enterprise Synergy

The effectiveness of M&A largely depends on the robustness of the regional industrial base and the level of synergy among enterprises. In regions with underdeveloped industrial chains or incomplete division of labor, M&A may merely result in resource relocation without achieving meaningful industrial upgrading. For instance, in the new energy vehicle (NEV) industry, regions with weak technological capabilities and limited local supply chains struggle to benefit from M&A. Conversely, in well-developed regions like the Yangtze River Delta, NEV leaders have successfully established highly integrated supply chains through upstream and downstream acquisitions, enhancing regional competitiveness while reducing operational costs [2].

Lack of enterprise synergy can also lead to

post-merger integration failures. Some firms achieve financial or market-scale consolidation but fail to align their cultures, management practices, or technological systems, resulting in reduced performance post-M&A. Cases of insufficient pre-merger integration planning often lead to internal conflicts, unshared resources, and technology stagnation. Enhancing cross-regional or cross-national integration management capabilities is thus a critical challenge for successful M&A.

5.3 Risks of M&A Activities and Mitigation Strategies

M&A activities carry inherent risks, including financial, policy, and integration challenges.

Financial Risks: High-leverage financing for M&A can burden companies with significant debt, increasing the likelihood of default. For example, a major real estate firm in 2019 faced significant financial distress within two years of acquiring smaller firms due to poor integration and market changes.

Policy Risks: Cross-border M&A is particularly vulnerable to geopolitical tensions. For instance, acquisitions of U. S. semiconductor firms by Chinese companies have faced scrutiny and rejection by the Committee on Foreign Investment in the United States (CFIUS), posing significant barriers to international expansion.

Integration Risks: Post-merger mismanagement of cultural, technical, or market differences often undermines the expected synergies.

To mitigate these risks, companies should conduct thorough due diligence before M&A, balance financial and technological considerations during transactions, and prioritize swift and effective post-merger integration. Establishing dedicated M&A teams and engaging third-party institutions for evaluation and monitoring can also reduce the probability of failure [3].

6. Conclusions

This study demonstrates that M&A activities play a vital role in resource optimization, technological advancement, regional economic integration, and enhancing industrial cluster competitiveness. However, the effectiveness of M&A depends on key factors such as regional policy environments, industrial foundations, and enterprise synergy. Despite challenges like

financial risks, policy uncertainties, and integration failures, these limitations can be overcome through strategic planning and policy support, allowing the positive effects of M&A to be fully realized.

References

- [1] Chen, W., & Liu, S. (2006). New Concepts and Practical Significance of Industrial Clusters. *Statistics and Decision*, (7), 2. DOI:10.3969/j. issn. 1002-6487.2006.07.056.
- [2] Xu, C., Tang, Y., & Liu, R. (2013). Strategic Research on Wuhan's Development as a National Advanced Manufacturing Center. *Regional Economic Review*, (2), 6. DOI:CNKI:SUN:QYHL. 0.2013-02-017.
- [3] Liu, Y. (2013). Cross-Regional M&A Strategies in Enterprise Migration. *Regional Economic Review*, (5), 3. DOI:CNKI:SUN:QYHL. 0.2013-05-024.
- [4] Jin, X. (2021). the Impact of International Technology Spillovers on Overseas M&A by China's Technology Firms. *Science & Technology Economy Market*, (2), 2.
- [5] Du, Y. (2015). Evolution Mechanism of Industrial Clusters Based on Division of Labor Economics and Transaction Costs [Master's thesis, Zhejiang Sci-Tech University].
- [6] Ye, G. (2010). Economic Network Synergy in M&A [Doctoral dissertation, Beijing Jiaotong University]. DOI:10.7666/d. y1854373.
- [7] Zhang, Y. (2006). Current Status of M&A and Restructuring in China's Pharmaceutical Industry. *Science and Technology Information Development & Economy*, DOI:CNKI:SUN:KJQB. 0.2006-07-073.
- [8] Wu, Y., & Yuan, P. (2004). Integration of China's Logistics Industry under the Background of Economic Globalization. *Proceedings of the Third China Logistics Academic Conference*. DOI:ConferenceArticle/5aa4a176c095d72220cbbff5.
- [9] Xie, Y., & Cao, J. (2013). Capital Operation and Clustering of Hospital Industry. China Youth Press.
- [10] Zhao, W. (2023). the Impact of R&D Investment on Enterprise Value under Different Levels of Digitalization: A Study Based on A-Share Listed Companies [Master's thesis, Shanghai University of Finance and Economics].
- [11] Asset Appraisal Journal. (2023). the Impact of R&D Investment on Enterprise Value Under Different Levels of Digitalization: A Study Based on A-Share Listed Companies.
- [12] Xie, T., Mao, S., & Wu, Y. (2023). Policy Analysis for Fostering "Specialized and Innovative" Enterprises in China's Biopharmaceutical Industry. *China Development Observation*, (11), 111–115.
- [13] Zhang, X. (2024). Regulatory Challenges and Solutions for Data Monopoly from the Perspective of Property Rights Division. In *Legal Research Series*, Vol. 3: Rule of Law Studies on Strategic Emerging Industrial Cluster Development.