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The Impact of M&A on Innovation Performance in the Chinese Pharmaceutical Industry

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Chapter 1. - Area of Research, Relevance and Contribution to the Area

In the last two decades, the pharmaceutical industry has been marked by a consistent increase in mergers and acquisitions. 2014 and 2015 were active years of M&A activity in volume and value. Meanwhile, 2016 saw some signs of fatigue regarding value with 325.8bn USD (vs. 451.5bn in 2014 and 578bn USD in 2015) (Dierks et al., 2017). Figure 1 shows the evolution of M&A deals in the pharmaceutical industry between 2006 and 2016.

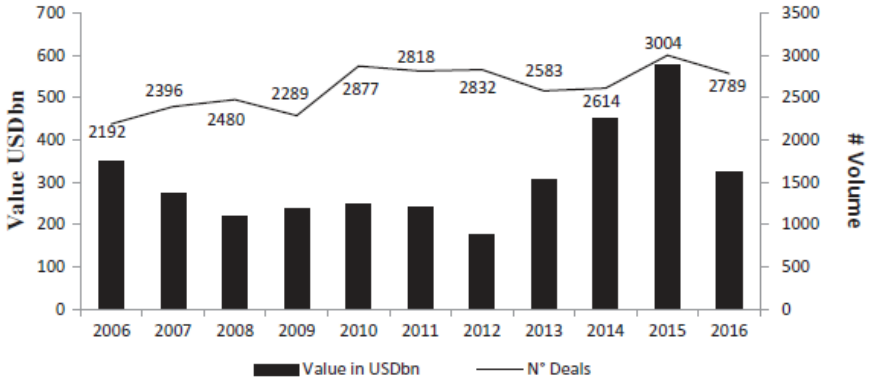

Figure 1: **Evolution of M&A Deals in the Pharmaceutical Industry over a 10-year time horizon**. From "Critical analysis of valuation and strategical orientation of merger and acquisition deals in the pharmaceutical industry" by Dierks, R. M. L., Bruyère, O., & Reginster, J. Y. (2017). *Expert review of pharmacoeconomic & outcomes research*, *18*(2), 147-160.

The ever-increasing competition in the race to launch new products and the presence of expiring patents harming revenues pushed the pharma companies to address the ever-increasing complexity of drug discovery by engaging in M&A activities (Borodin et al., 2019).

The reasons for mergers and acquisitions in the pharmaceutical industry are multifaceted, reflecting the industry's complex dynamics and strategic needs. The following are the core motivations:

Mergers and acquisitions are the source of innovation: large pharmaceutical companies often use mergers and acquisitions to support their innovative activities. The significant increase in the innovation revenue share of small innovation companies highlights the role of large pharmaceutical companies in funding innovation. Once research becomes more market-forward-looking, large pharmaceutical companies typically provide resources for expensive post-trial and marketing activities through mergers and acquisitions (Haucap et al., 2019).

Mergers and acquisitions add strategically valuable resources: Another driving force of mergers and acquisitions is to expand the market footprint to new geographic regions or customer groups by expanding the scale. This involves combining complementary product combinations and organizational structures to save costs and improve operational efficiency (Graebner et al., 2010).

Mergers and acquisitions restructure investment portfolios: Pharmaceutical and biotechnology companies engage in mergers and acquisitions to restructure their investment portfolios, either by strengthening their commercial channels or divesting non-core assets (Comanor & Scherer, 2013).

Understanding the dynamics of M&As in relation to innovation, particularly in the context of emerging economies, is vital (Vyas & Narayanan, 2016). From 2005 to 2015, the total income of China's pharmaceutical industry showed a rapid growth trend. The average annual compound growth rate reached 20%. With the requirement of achieving sustainable development and transformation, Mergers and acquisitions (M&A) have become an increasingly popular way for companies to grow and expand their businesses. The number of M&A transactions (amount) in the Chinese pharmaceutical industry increased from 56 deals (9.5 billion yuan) to 239

transactions (66.6 billion yuan) from 2010 to 2105. Overseas investment in the Chinese pharmaceutical industry and international companies bringing products into the Chinese market are increasing (Ye, 2021).

On June 1st, 2017, the China National Food and Drug Administration officially joined the International Council for the Coordination of Technical Requirements for Human Medicines. This has truly integrated China's drug regulatory system into the international community and provided convenience for foreign drug review and marketing processes. The State Council also proposed reform projects on accelerating laboratory work in clinical trial management and measures to accelerate approval for listing. These measures aim to enable companies with innovative capabilities to benefit from their own R&D and conversion capabilities. They also motivate new drug research enterprises in the pharmaceutical field to increase their R&D investment (Yu & Hu, 2022).

Driven by new national policies, high return on investment, and low industry concentration, Chinese pharmaceutical companies target domestic small pharmaceutical companies, hospitals, chain pharmacies, foreign pharmaceutical companies, drug research and development institutions, and medical institutions. In addition, the new version of the Good Manufacturing Practice for Drugs, China's drug distribution plan, reform of the drug review and approval system, medical insurance supervision, and adjustment of drug catalogues are all factors that affect the merger and acquisition decisions of Chinese pharmaceutical companies (Zhang et al., 2018). China's pharmaceutical industry is still in the early stages of its lifecycle. Pharmaceutical companies can enhance their core competitiveness through higher industry concentration. The centralized procurement of pharmaceuticals (VBP) implemented by the Chinese government and improving industry standards can provide enterprises with opportunities to allocate resources better and achieve larger enterprise scale. Moreover, the industry is gradually becoming standardized and in line with international standards, requiring enterprises to pay

more attention to improving corporate governance and planning strategic structures. Increasing the support of government and financial institutions can promote pharmaceutical companies' research and development and improve investment in new drug innovation.

Against the backdrop of China's constantly evolving economic landscape, the frequency of corporate mergers and acquisitions is increasing. M&A between enterprises can obtain new technologies and resources for enterprises and improve their innovation ability.

Meanwhile, Barbieri et al. (2022) found that tax policies typically provide necessary support for corporate M&A. As an international practice, targeted tax policies can promote corporate restructuring.[1] Empirical evidence shows that R&D tax incentives impacted innovation performance in China's pharma industry. Corporate income tax credit can increase R&D investment for innovators. Tax credits, combined with private returns from research and development, increase the total return for innovators and compensate them at higher prices (Wang & Kesan, 2022).

Therefore, the Chinese government is considering further increasing tax support for corporate restructuring and innovation activities, such as reducing the application threshold of tax incentives, designing a combination of M&A and innovation tax policies, improving tax services, and strengthening tax supervision on high-risk restructuring issues (Yin et al., 2022).

By studying the current context of the Chinese pharmaceutical industry and the ecosystem of innovation and M&A, the paper will focus on understanding the impact of M&A on innovation performance. To achieve a better understanding of the points mentioned above, the following specific questions are addressed:

[1] as per Announcement of the State Taxation Administration of the PRC on Issues Concerning the Collection and Administration of Company Income Tax on the Transfer of Assets (Equity) (No. 40 of 2015) and on the corporate restructuring.

1. Holistic study of the impact of M&A on innovation: This research will focus on studying innovation performance in terms of R&D outcomes or technological achievements, e.g., number of Patents, number of new drugs approved, and annual R&D investments.
2. Does the relationship between M&A and innovation performance depend on the origin of the acquirer (overseas versus non-overseas)?
3. In-depth analysis of financial results of acquirer Pre-M&A and Post-M&A: the research from Zhang et al. (2018) has emphasized the immediate financial performance after M&A. But the longer-term impact on innovation, talent retention, R&D productivity, and even company culture post-M&A has not been deeply explored.
4. Deeply explore the impact of the Chinese tax policy on the relationship between M&A activity and innovation.

Addressing these research gaps can provide a clearer understanding and guide policymakers and industry leaders in crafting strategies that foster innovation while ensuring growth and stability. It will also affect the new company's innovation process, financial results, and corporate culture.

Chapter 2. - Research Questions

As mentioned above, the main research question of this study is the following: "Does innovation drive M&A activity or the inverse?"

This paper intends to contribute to M&A studies in the Chinese pharmaceutical industry by addressing the following specific questions.

- Are overseas M&A activities associated with higher firm-level innovation performance rather than local M&A activities?
- Does the acquired company size positively correlate with higher innovation performance after M&A?
- Does the Taxation policy impact the relationship between M&A activity and innovation?
- Does the acquirer's financial result positively correlate with higher innovation performance after M&A?

Chapter 3. – Literature Review

Mergers and Acquisitions (M&A) refer to consolidating companies or assets through various types of financial transactions, including mergers, acquisitions, consolidations, tender offers, purchase of assets, and management acquisitions (Weston & Weaver, 2001). According to Teramae et al. (2020), mergers and acquisitions are understood as a restructuring of the company's assets due to the sale of the department, transfers, subsidiaries, and full or partial acquisitions of other organizations.

Trend of M&As in Pharmaceuticals

For the time being, the pharmaceutical industry is undergoing major changes due to a changing macro and micro-landscape. To respond to the fast-moving environment and create new innovative drugs, pharmaceutical companies strategically seek to generate organic growth through M&A, venture capital or partnerships. Famous M&A deals in modern history, such as Pfizer's acquisition of Wyeth and Bayer's acquisition of Monsanto, highlight the industry's tendency towards integration (Dierks et al., 2017).

M&A was also a significant driver in finding new drugs, with small companies being the

innovators and large companies being the acquirers of innovations and adding value to the commercialization of new drugs. This shows that M&A changes the industry but does not create any harm, as small companies are creating innovation, and large companies are taking over when it becomes too costly for the small players (Shepherd, 2018).

Mergers and acquisitions are transformative. Pharmaceutical Companies increasingly use mergers and acquisitions as a strategic lever to promote research and development activities and revitalize product lines. However, the true intentions behind these mergers and acquisitions and their ultimate impact are unclear (Hummel & Pennings, 2019).

M&A was a double-edged sword as well. With the continuous development of the pharmaceutical industry, understanding and grasping the subtle differences in mergers and acquisitions will be crucial (Dvulit et al., 2020). Large pharmaceutical take M&A as a cornerstone strategy to combat challenges like productivity gaps and patent cliffs (Shepherd, 2018).

Furthermore, the distinction between technological and non-technological M&As highlights the varied motivations and outcomes of M&A deals. Technological mergers might be more directly linked to innovation, while non-technological ones could focus on market expansion or consolidation (Dvulit et al., 2020).

Innovation Ecosystem in Pharmaceuticals

The pharmaceutical industry has undergone significant structural changes in recent years. R&D is the backbone of the pharmaceutical industry. It is the channel through which new drugs are developed, and innovations are brought to the market (Schuhmacher et al., 2021).

The efficiency of R&D processes is often gauged through the magnitude of investments (input) and the corresponding results, such as the number of approved new drags or the number of patents (output). Despite the development of innovative techniques such as DNA analysis and

gene splicing, the productivity of pharmaceutical innovation has been declining. This phenomenon highlights a decline in R&D output relative to R&D expenditures, leading to a reduction in the number of new drugs approved despite increased R&D spending (Shepherd, 2018). This is called the *Productivity gap* associated with reducing innovative drug discovery rates despite escalating R&D investments. The industry is also facing *Patent Cliffs,* which refers to patent protection loss, leading innovative firms to face steep revenue declines and fierce competition from generic manufacturers (Hummel & Pennings, 2019).

Shepherd (2018) highlights the shifts in the innovation ecosystem in the post-M&A stage. Innovation has shifted from large pharmaceutical giants to more flexible biotechnology companies and smaller institutions. These smaller entities, inspired by a culture that promotes rapid decision-making and adventure, have become pioneers in discovery and innovation.

Interestingly, biotech entities often forge alliances with larger pharmaceutical conglomerates as the drug development process progresses. This partnership leverages the strengths of both parties—while the biotech firms bring to the table their innovative prowess, the pharmaceutical giants contribute with their vast resources to navigate the costly late-stage clinical trials and oversee the drug's manufacturing, marketing, and distribution. Such collaborations have redefined innovation sourcing—with around three-quarters of new drugs being sourced externally. Consequently, the once-dominant internal R&D is no longer the mainstay of innovation within major pharmaceutical outfits (Shepherd, 2018).

Concurrently, the industry has witnessed a surge in generic drug prescriptions due to patent expirations, legal changes, and insurance mandates. This shift has intensified post-patent-expiration price competition, pushing pharmaceutical companies to innovate. Among these challenges, the industry has seen a wave of mergers, consolidating many companies that were once at the forefront of innovation (Comanor & Scherer, 2013).

The relationship between M&A and Innovation

Régibeau & Rockett (2019) explored the nuanced relationship between mergers and innovation, assessing how mergers can impact the innovative capacity of firms and industries. The authors focused on this relationship's regulatory challenges, offering insights into how competition policy might need to evolve to address these complexities. Mergers and acquisitions are expected to strengthen innovation and financial indicators as M&As often lead to streamlining the R&D processes, eliminating duplicate efforts, and renewing focus on specific therapeutic areas (Shepherd, 2018).

With the rapid pace of technological advancement, M&As allow firms to tap into innovative potentials, particularly from young, entrepreneurial organizations emerging as significant sources of new technical knowledge (Graebner et al., 2010). Such collaborations promise to simulate technological innovation, providing firms with a competitive edge. Future research needs to delve deeper into this relationship, evaluate the long-term impact of mergers and acquisitions on R&D output, and explore strategies that can balance the integration and innovation scale of the pharmaceutical industry (Comanor & Scherer, 2013).

Shepherd (2018) points out that M&A could reduce the motivation to develop novel products. His research emphasized a negative correlation between pharmaceutical integration and subsequent innovation efforts.

Considering this constantly evolving ecosystem, any analysis that only focuses on the impact of mergers on internal research and development seems blind. A more comprehensive review will consider whether mergers and acquisitions will enhance the industry's ability to cultivate innovation. If the merged entity dominates innovation in a specific niche market and mainly relies on internal innovation mechanisms, then mergers and acquisitions have a stifling effect on innovation (Schuhmacher et al., 2021).

In the contemporary context, the study from Hummel & Pennings (2019) attempts to bridge the existing literature gap by simultaneously analyzing innovation and financial performance in the

context of mergers and acquisitions. They integrate innovative indicators such as New Molecular Entities (NME) and Biological Licensing Applications (BLA) rather than traditional patent-based indicators.

Another view is that mergers and acquisitions may stifle innovation, especially if they lead to the dissolution of the R&D department after the merger. The true intentions behind these mergers and acquisitions and their ultimate impact are not yet clear (Thakur-Wernz et al., 2019).

Borodin et al. (2019) argue that M&A activities offer a positive and negative impact on R&D. On the positive side, M&A companies can expand their knowledge base (utilizing economies of scale), promote their development of new drug formulations, and improve the welfare of the entire society. On the contrary, if the merged entity has overlapping technological processes or similar end products, the motivation for mergers and acquisitions tends to dilute competition and mitigate risks associated with potential growth barriers. This situation may lead to short-term product price increases for consumers and weaken the long-term innovation impulse of pharmaceutical entities.

In addition, the biggest concerns of M&A deals for scientists and patients are the market concentration, leading to fewer innovations and increasing the market share of a few leading companies, mainly in marketing, sales, and distribution and therefore decreasing competition (Shepherd, 2018). It is understandable that some literature occasionally raises non-traditional concerns about the harm of innovation. The premise of these concerns is that by merging existing competitors into one company, integration will reduce the motivation to develop new products in the future. The negative relationship between integration and innovation activities exists within the newly merged company (Dvulit, 2020).

Ye (2022) finds that for the producible drugs, the generic drug approvals held by the merged companies have a more significant impact than innovative drugs. For the new drugs under development, the main merging enterprises pay more attention to the innovative drugs under

development, and the generic drugs under development have little impact on the merger and acquisition valuation.

According to Hummel& Pennings (2019) research, although M&As play a crucial role in shaping the strategic landscape, their effectiveness in providing continuous innovation and financial results is still questionable. This literature emphasizes the need for pharmaceutical companies to carefully weigh the pros and cons of mergers and acquisitions while considering both short-term and long-term impacts. Technological and non-technical mergers and acquisitions have brought mixed results for large pharmaceutical entities.

In addition, in the past ten years, drug innovation has mainly come from biotechnology and small companies. The pharmaceutical giants contribute with their vast resources to navigate the costly late-stage clinical trials and oversee the drug's manufacturing, marketing, and distribution. Such collaborations have redefined innovation sourcing. Consequently, the once-dominant internal R&D is no longer the mainstay of innovation within major pharmaceutical outfits. These moves are typically justified by the perceived benefits of shared resources, combined R&D capabilities, and economies of scale (Shepherd, 2018).

The relationship between mergers and acquisitions and pharmaceutical innovation is complex and multifaceted. The recent global health crisis has underscored the importance of agility and adaptability in the pharmaceutical sector. The pandemic has acted as a catalyst, emphasizing the strategic relevance of M&As. Such collaborations enable firms to pool resources, share knowledge, and accelerate the development and distribution of vital drugs (Dvulit et al., 2020).

Research Gap and implication of M&A and innovations in pharmaceuticals in China

Chinese enterprises can increase their innovation capabilities by merging with companies with more advanced technologies. Technology mergers and acquisitions can avoid high internal research and development costs, thereby helping enterprises obtain leading core technologies

quickly. The company can and should borrow external technological theories like using internal research capabilities to develop new technology and products through Technology mergers and acquisitions. Therefore, technology M&A, as an investment form, can be understood as open innovation aimed at the external environment (Ma & Liu, 2016).

These findings resonate with the general understanding of commercial operations, where investment often directly affects outcomes. This is particularly important in the pharmaceutical industry because the innovation process is time-consuming, expensive, and uncertain. Higher investments by M&A may offset some of these risks (Schuhmacher et al., 2021).

The research from Zhang et al. (2018) presents a study tendance on M&A in the pharmaceutical industries of China, which mainly focuses on technology mergers and acquisitions. The research has found that the short-term market response to technology mergers and acquisitions of pharmaceutical-listed companies is significant and has a positive impact on improving long-term financial performance.

Enterprises in developing countries are on the bottom level of the industrial chain with, generally, lower innovation capabilities. The research on technology M&A in the pharmaceutical industry is still at an initial stage. Technology M&A significantly affects the innovation output of the target and new enterprises, but it inhibits or promotes the innovation output of the main and combined enterprises. The "inhibition theory" states that technology M&A will distract managers' attention, change the organization and market structure, and reduce the innovation efficiency of internal R&D personnel (Ye, 2022).

In the field of modern market economy, there has been a cyclical peak in M&A activities, especially in the pharmaceutical industry, in the past two decades. Mergers and acquisitions have played an important role in restructuring the corporate landscape and reshaping core competitiveness. More research is focused on how mergers and

acquisitions affect efficiency parameters in strategic management, industry organization theory, and finance performance (Ma & liu, 2017).

This study aims to explore the relationship between M&A and innovation more deeply by analyzing the impact on the innovation performance from basic aspects of M&A methods, the size of the acquiring company, and the financial situation of the acquiring party during the M&A process.

The resource-based theory highlights the specific asset scope of a company that can serve as a resource. This theory reflects the company's asset management and control, as well as their contribution to competitive advantage (James, 2002). In M&A and innovation research, RBV has been used to analyze how acquired resources, capabilities, and competencies contribute to the innovation output of the combined entity. Rhodes Kropf and Robinson's (2008) model supports this viewpoint, stating that the merger has better innovation performance if the merged assets complement each other due to synergies. The merger and acquisition process is a process of resource reallocation. When a consolidated enterprise's aggregate valuation surpasses its constituent entities' cumulative valuation, synergistic effects emerge. Trautwein (1990) delineated that mergers and acquisitions engender three distinct categories of synergies: financial synergy, operational synergy, and managerial synergy. The complementarity of assets can lead to operational synergies and financial synergies. This occurs by improving the innovation process, reducing the cost of capital, and taking advantage of tax shields, which contribute to innovative output (Hummel & Pennings, 2019). M&A has complexities and challenges in integrating and managing resources and capabilities post-merger, contributing to the understanding of post-M&A integration. This research draws on this perspective, seeing acquisitions as a means of redistributing resources to enhance productivity and innovation.

Chapter 4. – Research model or the analytical framework

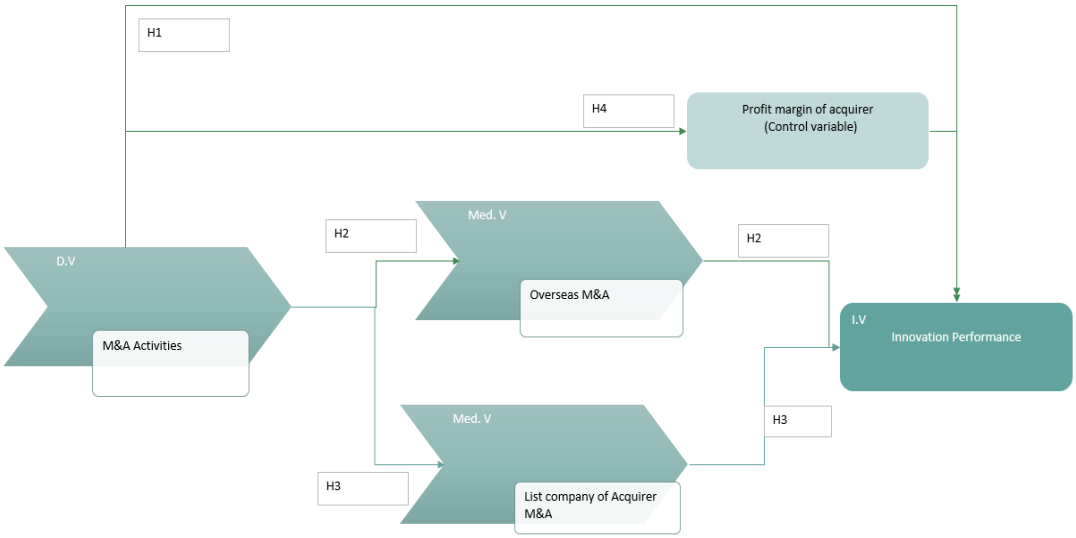

Figure 2. *Research model*

Key Variables:

The main dependent variable (D.V.) in the analysis captures the innovation performance. This could be measured through various indicators such as the number of patents filed, R&D investments, or the number of newly approved drugs. The variable of interest is the M&A activity in the pharmaceutical industry.

As in Figure 2, we also use mediating variables (Med. V), which affect the relationship between M&A activity and innovation performance. The mediating variables we use are Overseas M&A, whether the acquirer is listed, and the ownership of the acquirer.

Finally, we use the list of control variables that are reported to affect the innovation performance of pharmaceutical variables. Such control variables are related to size and financials.

Hypotheses Development:

H1: *M&A activities positively correlate with the innovation performance of the pharmaceutical companies in China*.

H2: *Overseas M&A positively correlate with the innovation performance of the pharmaceutical companies in China.*

H3: *Taxation policy affects the relationship between M&A activities and the innovation performance of pharmaceutical companies in China.*

H4: *The Acquirer's profitability positively correlates with the innovation performance*.

Chapter 5. – Proposed research methodology

When examining the impact of mergers and acquisitions (M&A) on the performance of innovation using variables such as company size, overseas M&A, and profitability of the acquirer, several endogeneity issues might emerge:

Reverse Causality:

Company Size: Larger companies might engage in M&A activities, expecting to boost their innovative capabilities. Conversely, firms with successful innovation might grow larger over time. This creates a feedback loop where company size and innovation influence each other, making it challenging to determine causality.

Overseas M&A: The decision to engage in an overseas M&A might be influenced by

expectations regarding future innovation performance. However, engaging in such M&A could influence subsequent innovation outcomes, leading to potential reverse causality.

Profitability of the Acquirer: Profitable firms might be more inclined to engage in M&A activities, aiming to further enhance their profitability through synergies, which could be related to innovation outcomes. On the other hand, successful M&A activities might boost profitability. This bidirectional relationship can create endogeneity.

Simultaneity:

The variables under consideration might be determined simultaneously with the dependent variable (innovation performance). For instance, firms might strategically adjust their size, engage in overseas M&A, or leverage their profitability based on their existing innovation capabilities, leading to simultaneity issues.

Self-selection Bias:

Firms might self-select into M&A activities based on their inherent characteristics related to innovation. For example, firms with strong innovative capabilities might undertake oversized M&A, or profitable firms might pursue acquisitions to integrate innovative assets. This self-selection based on unobserved characteristics can introduce bias into the estimated relationship between M&A variables and innovation performance.

Omitted Variables:

Unobserved factors that influence both the M&A decisions (e.g., based on company size, profitability, or overseas considerations) and innovation performance can create endogeneity. These omitted variables might include industry-specific trends, managerial capabilities, external market conditions, or other strategic factors.

Chapter 6. – Data analysis plan

The dependent variable (DV) of "Innovation Performance" can be quantified using metrics such as the number of patents or R&D investments. Employing a regression-based model becomes a suitable methodological approach to examine the relationship with the independent variables related to M&A activities.

Data Collection:

The raw data is collected from **the** WIND database. There are 1,183 completed M&A cases in China's pharmaceutical industry (as of May 2023). The sample period is between 2015 and 2022. However, to consider the three-year performance after the transaction year, we analyze transactions between 2015 and 2019. The number of observations is expected to be no more than 700 if we exclude missing data.

Statistical Methods

The regression model will capture the hypothesized relationships between the independent variables (e.g., company size, overseas M&A, profitability of acquirer) and the dependent variable (Innovation Performance).

To address endogeneity issues, we will use the following techniques when possible:

Instrumental Variables (IV): Identify valid instruments correlated with the endogenous independent variables but uncorrelated with the error term. For instance, regulatory changes, industry-specific shocks, or exogenous shocks to capital markets might serve as instruments.

Control Variables: Incorporate relevant control variables to mitigate omitted variable bias. Control for factors such as industry dynamics, macroeconomic conditions, firm-specific characteristics, and other potential confounders that might influence M&A decisions and innovation performance.

Econometric Techniques:

Two-Stage Least Squares (2SLS): If utilizing instrumental variables, employ 2SLS regression to obtain unbiased and consistent estimates of the causal effects.

Fixed Effects or Random Effects Models: Incorporate panel data techniques with firm-level or time-fixed effects to control unobserved heterogeneity across firms or over time, enhancing the robustness of the estimates.

Difference-In-Difference Models: with the change in the taxation of R&D investments, we might be able to use such change to apply this model, which will allow us to mitigate the endogeneity effects.

Robustness Checks:

Conduct sensitivity analyses by altering model specifications, sample periods, or estimation techniques to ensure the robustness of the findings.

Chapter 7. – Expected results & managerial recommendations

We expect the results of this article can be summarized as follows:

(1) There is a positive correlation between enterprise mergers and acquisitions and innovation performance, indicating that when the company size of acquirer is big, the innovation performance of enterprises is higher.

(2) Merger and acquisition activities have increased the innovation output of enterprises, and the profitability of the acquired enterprises is positively correlated with innovation performance.

(3) There is no evidence of the impact of innovation performance or of the difference between overseas and non-overseas M&A.

(4) no clear correlations of impact from taxation on innovation performance of M&A process

Based on the expected results of the thesis, here are some managerial recommendations for enterprises, particularly in the pharmaceutical industry, regarding mergers and acquisitions.

Leverage M&A for Innovation Enhancement: Since there is a positive correlation between M&A activities and innovation output and input, companies should consider M&A as a strategic tool to boost their innovation capabilities. This approach can be particularly effective in industries like pharmaceuticals, where rapid innovation is crucial.

Taxation Policy Consideration: Although the evidence on the impact of taxation policy on M&A and innovation performance is inconclusive, companies should stay informed about relevant tax policies. They should explore how different taxation regimes might influence their M&A

strategies and innovation outcomes. Additionally, we can understand the reasons for the non-effectiveness of the existing taxation policy and propose changes to make it more effective.

Global vs. Local M&A Strategies: The lack of a significant correlation between overseas and non-overseas M&A implies that companies should not overly prioritize global M&A over local or vice versa based solely on the expectation of different innovation outcomes. Instead, the focus should be on the strategic fit and potential for innovation, irrespective of the geographic location of the M&A

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