# Corporate Mergers and Acquisitions & Goodwill Impairment: A Literature Review

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Abstract: In recent years, the landscape of corporate strategies has witnessed a notable shift, propelled by the burgeoning trend of marketization and bolstered by the supportive framework of China's national economic policies. Listed companies are increasingly leveraging mergers and acquisitions (M&A) and restructuring initiatives to propel the expansion of their business operations and fortify their core competitiveness. However, amid this strategic fervor, the looming risk of substantial goodwill impairment stemming from M&A and restructuring endeavors emerges as a pivotal factor, casting a shadow on market stability. This article delves into an extensive examination by amalgamating existing literature on M&A and goodwill impairment studies. It aims to elucidate the root causes behind M&A goodwill impairment and shed light on the economic repercussions associated with such impairments, drawing insights from M&A and goodwill-related concepts and theories. Building upon the foundation of contemporary academic research, the article conducts a thorough exploration into the intricacies of M&A goodwill impairment, culminating in actionable suggestions pertaining to corporate M&A practices and the imperative prevention of goodwill impairment.

Keywords: Mergers and Acquisitions, Goodwill Impairment, Economic Consequences

## 1. Introduction

With the continuous development of the global economy and the intensification of inter-firm competition, mergers and acquisitions (M&A) activities have become an important means of corporate expansion in recent years. However, although M&A activities can theoretically bring many advantages to enterprises, they actually face many risks and challenges. In particular, continuous large-scale mergers and acquisitions are more likely to bring greater risks. Among them, goodwill impairment arising from corporate M&A is a topic of great concern.

After 2017, a number of listed companies in China have been "mined", resulting in huge amounts of goodwill impairment, which has an important impact on the financial status and business performance of enterprises. According to relevant statistics, in 2017, a total of 477 A-share listed companies had goodwill impairment, with a total impairment amount of more than 35.9 billion yuan. Among the companies, J&R had huge amounts of goodwill impairment, which generated 4.6 billion yuan of goodwill impairment after the merger and acquisition of Walmart. The Securities and Futures Commission (SFC) issued the "Accounting Supervision Risk Alert - Goodwill Impairment" regulation in 2018, which is aimed at strengthening the supervision of enterprises and urging them to

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conduct goodwill impairment tests on a regular and timely basis. Among the companies with more prominent goodwill impairment in 2018 was Tian Shen Entertainment. Tian Shen Entertainment accumulated nine mergers and acquisitions from 2015 to 2017, and this aggressive succession of mergers and acquisitions also led to Tian Shen Entertainment's goodwill impairment of more than 4 billion yuan in 2018, totaling more than 7 billion yuan in losses.

This dissertation's research related to M&A goodwill impairment is of great theoretical and practical significance for improving the M&A decision-making and risk management of enterprises, which can help enterprises better understand and grasp the risks and challenges of M&A activities and formulate corresponding coping strategies, so as to improve the operational performance and long-term competitiveness of enterprises, and to promote the high-quality development of listed companies.

#### 2. Theoretical Basis

# 2.1. Mergers and Acquisitions (M&A) & Continuous Mergers and Acquisitions (CMA)

M&A mainly refer to mergers and acquisitions, in which two or more companies agree to merge with each other to form a new company, or a company integrates and expands by purchasing the shares or assets of other companies and incorporating them into its own subsidiaries.

Successive M&A is usually part of a firm's growth strategy, which aims to increase market share, expand product lines, and broaden the scope of business by continuously acquiring other firms. The concept of successive M&A was first proposed by Schipper and Thompson, who defined successive M&A as "not less than three acquisitions within three years. Zhang et al. defined the successive M&A as the transaction behavior of M&A transactions more than one [1]. Wang and Hu, on the other hand, believe that successive M&A refers to the behavior of multiple M&A by the same enterprise within a period of time [2]. In this paper, continuous M&A behavior is considered to be the conduct of multiple M&A transactions by an enterprise within a relatively short period of time to achieve rapid business growth and expansion.

# 2.2. Goodwill and Goodwill Impairment

According to corporate accounting standards, goodwill is defined as the difference between the merger cost of the acquirer and the fair value of the acquiree's identifiable net assets in the process of mergers and acquisitions of enterprises under non-identical control. This definition is from an accounting perspective. From a business perspective, the academic "excess benefit theory" holds that goodwill is the value that can generate excess economic benefits for the acquiring company in subsequent operations. Although goodwill is the "valuation difference" container, but there are such as not downward push identifiable intangible assets, such as a significant portion of the difference should not be recognized as goodwill [3]. This point of view also provides new ideas for the recognition of goodwill. This paper argues that goodwill is the difference in price that exceeds the net assets of the acquired enterprise in business transactions such as mergers and acquisitions or mergers. Goodwill represents the value of an enterprise's intangible assets such as brand reputation, customer relationships, and market share.

Goodwill impairment refers to the process in which an enterprise evaluates the value of its goodwill and finds that its value is lower than its book value, thus requiring the goodwill value to be reduced. According to Yang and Bao, goodwill impairment is a loss determined after a company has conducted a goodwill impairment test, which often becomes a means for company executives to use capital to hollow out the company [4]. Goodwill impairment usually occurs in the event of poor corporate performance, unfavorable market conditions, or changes in the value of the intangible assets

represented by goodwill. Goodwill impairment usually results in a provision for goodwill impairment in the financial statements of the company, which reduces the net profit and net assets of the company.

#### 2.3. Related Theories

There are more theories related to M&A goodwill impairment, and this paper mainly introduces the synergy effect theory and information asymmetry theory.

The theory of synergistic effect of mergers and acquisitions refers to the synergistic effect in the process of mergers and acquisitions by integrating the resources, experience and capabilities of both parties, so as to realize greater economic benefits and competitive advantages in the market. Academics believe that the merger of two companies or businesses for both companies can be able to save expected costs, more growth opportunities and other financial benefits, to achieve the effect of 1 + 1 > 2. At present, scholars at home and abroad basically categorize synergies into management synergy, operational synergy, financial synergy and other aspects.

Information asymmetry theory is reflected in the process of corporate mergers and acquisitions as the existence of information asymmetry between the buyer and the seller, which may lead to unfair and incomplete transactions. According to the information asymmetry theory, the information asymmetry faced by buyers and sellers in M&A transactions mainly includes the aspects of hidden information, incomplete information, and potential risks. Han et al. believe that when the information asymmetry of the M&A transaction company is high, the enterprise management is more likely to utilize the advantage of internal information for information management, conceal or not disclose information that is not conducive to the conduct of the M&A, which is prone to enhance the negative impact of the impairment of goodwill after the merger and acquisition [5]. The practice of the information asymmetry theory of corporate M&A requires buyers and sellers to maintain transparency and integrity in M&A transactions, and to enhance information disclosure and communication in order to realize the fairness and reasonableness of the transaction.

# 3. Analysis of the Causes of Goodwill Impairment in Mergers and Acquisitions

# 3.1. Surplus Management

Corporate surplus management refers to the behavior of enterprises in the process of financial statement preparation and disclosure, taking advantage of information asymmetry, adjusting and manipulating surplus through various means and methods. Filip, in his research on the means of avoiding goodwill impairment in some U.S. corporations, found that managers delay goodwill impairment by manipulating the company's discretionary cash flow in the current period [6]. Although surplus management may temporarily delay the recognition of goodwill impairment, ultimately goodwill impairment is determined by the actual operating conditions and performance of the firm. Lu and Qu empirically found that there are surplus management motives for goodwill impairment, i.e., the washout and surplus smoothing motives, and that firm performance, CEO characteristics, debt-compensation covenants, and supervisory mechanisms all have an impact on goodwill impairment [7]. Liu urther found that high performance promises and accounting flexibility guidelines are the main reasons that contribute to the realization of surplus management motives [8]. Enterprises may overestimate the value of goodwill and underestimate the risk of goodwill by means of surplus management, and may also may adjust the financial indicators by means of surplus management, thus affecting the results of goodwill impairment testing. Ultimately, under surplus management motives, it will lead to goodwill impairment after M&A. Some scholars have found that audit quality and equity concentration can inhibit the role of goodwill impairment of surplus management motives [7]. However, this inhibitory effect is limited, but also need regulatory agencies

to regulate and restrain the corporate surplus management behavior, in order to maintain the fairness and transparency of the market.

## 3.2. Merger and Acquisition Premium

Merger and acquisition premium is the amount paid by the acquirer in excess of the fair value of the net assets of the target company in order to obtain control of the target company. When the merger premium is higher than the expected future cash flows of the target company, it may result in goodwill impairment. The main reason for an acquirer to pursue a merger at a premium may be that the acquirer may believe that the merger with the target company will realize synergies and the company will be able to achieve higher efficiency, lower costs or a better market position, which will improve its overall performance and value. A reasonable premium multiple is therefore favorable to the company's operations. If the premium multiple in mergers and acquisitions is too high, the risk of goodwill impairment in the future of the company will be greatly increased [9]. Wang and Hu analyzed the case of Tian Shen Entertainment and found that the management blindly carried out several high-premium mergers and acquisitions, which led to a substantial increase in the company's goodwill, and because the company did not deal with the provision for goodwill impairment in a timely manner, the company accumulated a greater risk of goodwill impairment [2]. Fang believes that the problem of huge goodwill caused by high premium M&A and goodwill impairment caused by high valuation will show a high incidence at present and in the next few years [10]. Enterprises need to conduct sufficient due diligence and risk assessment when conducting premium M&A to ensure that the expected strategic and economic benefits can be realized.

## 3.3. Other Reasons

There are many other reasons that cause goodwill impairment in corporate mergers and acquisitions. Fang, Meng and some other experts believe that the performance commitment terms are also the reason for goodwill impairment after mergers and acquisitions, and when the performance compensation commitment is unreasonable, it may lead to the rise of corporate goodwill, which will lay a hidden danger for the substantial impairment of goodwill in the later stage [3, 10]. Mergers and acquisitions performance compensation commitment level is higher, perhaps more likely to trigger goodwill impairment. Shen et al. believe that listed companies do not consider the merger cost paid at the time of mergers and acquisitions to be too high, and their inattention to the formation of high goodwill is the most fundamental cause of large goodwill impairment in the later stage [11]. Glaum et al. also found that the economic performance of the company and the management's compensation incentives also affect the impairment of goodwill on outbound purchases through the study [12]. This paper finds from the literature that the causes of goodwill impairment are different for each enterprise because its own situation is different and should be analyzed more deeply according to its own situation.

# 4. Analysis of the Economic Consequences of M&A Goodwill Impairment

## 4.1. Triggering Stock Price Collapse

The most direct economic consequence of goodwill impairment is that it may have an impact on the company's stock price, especially when the amount of goodwill impairment is large or exceeds the market expectation, it may trigger the stock price crash. A related study by Qu and Stunda showed that goodwill impairment is negatively correlated with stock returns, and the degree of goodwill impairment affects the magnitude of stock price decline [13, 14]. This is because goodwill impairment may trigger market concerns about a company's financial condition, causing investor confidence to

decline, which in turn affects the company's stock price. Huang et al. found that M&A goodwill impairment has a significant stock price crash effect, and the risk of stock price crash increases with and the size of goodwill assets [15]. This may be due to the fact that goodwill impairment triggers panic among investors, which in turn leads to investors' tendency to sell the company's stock, driving the stock price down rapidly and triggering a stock price crash. On the other hand, information asymmetry is also an important factor that goodwill impairment triggers stock price crash. By analyzing the data, Han et al. found that information asymmetry is positively correlated with the risk of stock market crash, and enterprises can prevent the occurrence of stock market crash by strengthening disclosure [5].

## 4.2. Decrease in Corporate Financing Ability

Goodwill impairment may lead to an increase in the credit risk of the enterprise, which in turn may affect the company's financing ability. Banks and bond markets may raise the borrowing rate or lower the borrowing amount for enterprises, thus increasing their financing costs. After research, Huang and Tang found that a company's goodwill has an impact on its financing behavior, and if the goodwill is too high, it will lead to a decrease in the expectations of the financiers, which in turn will limit the financing of the company [16]. This suggests that goodwill impairment is usually seen as a recognition of the uncertainty of business prospects by the management of a firm, which may lead to a blow to investor confidence in the firm, causing investors to worry about the long-term growth potential and investment value of the firm. Teng et al. found through empirical research that the higher the M&A goodwill the greater the financing constraints of the enterprise [17]. This is mainly because is high M&A goodwill increases the difficulty of enterprises to fulfill the performance commitment, which increases the risk of debt default, resulting in enterprises difficult to obtain investment. In addition, high goodwill is more likely to have false information, resulting in information asymmetry, which increases the cost of corporate equity financing. Although goodwill impairment increases corporate financing constraints, some studies have shown that effective internal control conducted by enterprises can regulate the positive correlation between goodwill impairment and corporate financing constraints [18].

## 4.3. Decrease in Corporate Profitability

Goodwill impairment may have a negative impact on a company's profitability. Goodwill impairment usually reduces a company's net profit because goodwill impairment is included in the company's income statement, which reduces the company's profitability. This may lead to a decrease in a company's shareholders' profit, which negatively affects a firm's financial position, which in turn affects a company's shareholders' return and market reputation. Zhao et al. found that the risk of goodwill impairment for Chinese companies has increased significantly in recent years, and the impact of goodwill impairment on corporate performance has also increased significantly [19]. It may also limit the ability of the firm to operate. Reduced goodwill assets may affect a firm's borrowing capacity and expansion ability, further affecting the firm's profitability and competitiveness.

#### 4.4. Other Economic Consequences

For enterprises, impairment of M&A goodwill may also lead to an increase in the proportion of liabilities of the enterprise, affecting its solvency and credit rating. Tan et al. also argued that goodwill impairment reduces the quality of firms' innovations by affecting, among other things, their propensity for surplus management [20]. This may cause firms to lose their competitive advantage, reduce market share and competitiveness, and make the firms' position in the competitive market decline. Gros and Koch showed that for the whole capital market the goodwill impairment method

gives management more discretionary space, and goodwill impairment is opportunistic rather than informational, and can disrupt the order of the capital market [21].

## 5. Suggestions to Prevent Goodwill Impairment in Mergers and Acquisitions

## 5.1. Prudent Mergers and Acquisitions

Enterprises should conduct comprehensive due diligence before mergers and acquisitions, including a detailed understanding of the target company's financial condition, operations, market competitiveness, legal compliance, etc., with special emphasis on the assessment of the target company's goodwill. It is important to ensure that the performance commitments of the target company are fully validated and verified to avoid over-reliance on the other party's commitments. Rao et al. believe that commitment agreements can effectively inhibit goodwill impairment during the commitment period [22]. Therefore, enterprises should formulate reasonable commitment agreements, which can be evaluated with reference to market value, financial indicators, future cash flow and other factors, and fully negotiated and negotiated. In addition to this, the performance compensation clause can also play an important role. After analyzing the performance commitment and goodwill of restructured assets on the Shenzhen Stock Exchange, Zhang concluded that enterprises should strengthen the performance compensation provisions and enhance its binding role [23]. These clauses and agreements are beneficial to help enterprises better realize the expected synergies and steadily promote the expansion strategy.

## 5.2. Assessment and Measurement of Goodwill

After the completion of the M&A, regular assessment and adjustment of goodwill is an important risk prevention measure. Regular assessment of the value of goodwill includes analysis of the market prospects, competitive situation and profitability of the business in which the goodwill is located, as well as assessment of the financial indicators of goodwill. Conduct goodwill impairment tests in a timely manner in accordance with the requirements of the Securities and Futures Commission (SFC). Once the risk of goodwill impairment is identified, appropriate measures should be taken to make adjustments. The optimization of the subsequent measurement of goodwill is also an effective means to reduce the risk. Meng has suggested to cope with the risk of goodwill impairment from the perspective of the initial recognition of goodwill, the underlying asset assessment method, and the improvement of the subsequent measurement of goodwill [3]. Enterprise goodwill in the subsequent measurement can increase the amortization mode, which can make goodwill evenly or according to the matching of the allocation, and reasonably reduce the risk of goodwill in the subsequent measurement of artificial manipulation [24]. However, different measurement methods are applicable to different situations, enterprises should choose and optimize according to their own specific circumstances.

# **5.3.** Strengthen the Supervision

Enterprises should also establish a sound internal information disclosure mechanism and consciously disclose goodwill information, including the disclosure of goodwill measurement methods, sources of goodwill and changes in goodwill, so as to increase the transparency of goodwill disclosure. Fang et al. believe that the regulatory system constraints on high valuation and high premium of enterprises need to be strengthened in order to reduce the goodwill impairment problem of corporate mergers and acquisitions [10]. Audit institutions should strengthen the audit supervision of goodwill and conduct a comprehensive audit of the enterprise's goodwill to ensure the authenticity and accuracy of goodwill, and discover the risks and problems of goodwill in a timely manner. Relevant regulatory

bodies should also formulate clear regulations on goodwill disclosure, specifying the definition, measurement method and disclosure requirements of goodwill, in order to ensure that enterprises disclose information in accordance with the regulations, and should discover and deal with goodwill disclosure irregularities in a timely manner, so as to maintain the fairness and transparency of the market.

To summarize, enterprises should take a series of precautionary measures to mitigate the risk of goodwill impairment when conducting M&A transactions. Prudent due diligence, regular assessment of goodwill, and enhanced supervision by third parties are all effective preventive measures. At the same time, timely identification and treatment of goodwill impairment risk is also important for the company's financial position and operating efficiency. Enterprises should adopt appropriate means to prevent the risk of goodwill impairment in M&A according to their own situation.

#### 6. Conclusion

In summary, the problem of goodwill impairment in enterprise mergers and acquisitions is very complex and important, and has been a key topic of concern for relevant academics. At this stage, the research on goodwill impairment is mainly empirical research, with a single M&A case of an enterprise as the research object. Most of the studies show that the risk of goodwill impairment in M&A is mostly related to the theory of synergies and the theory of information asymmetry.

When exploring the causes of M&A goodwill impairment, most studies believe that corporate surplus management and M&A premium are the main reasons for goodwill impairment. Regarding the economic consequences of goodwill impairment on enterprises, the crash of stock price is recognized as a more serious economic consequence, while the decline in financing ability, profitability and other economic consequences will also adversely affect the operation of enterprises and the entire capital market. There is relatively little research on preventive suggestions for this problem, and few studies have measured the effects of preventive or remedial measures taken by firms. In addition, most of the studies focus on goodwill impairment after a single high-premium M&A, and fewer studies on goodwill impairment from the perspective of continuous M&A.

On the issue of goodwill impairment in M&A, it is hoped that there will be more research on measures to prevent goodwill impairment and its effect measurement, and more scholars will explore the causes and economic consequences of goodwill impairment from the perspective of continuous M&A. Based on the research on goodwill impairment in M&A in Chinese and foreign literature, this thesis is of great theoretical and practical significance to improve the M&A decision-making and risk management of enterprises, and it is hoped that it can help enterprises better understand and grasp the risks and challenges in M&A activities, so as to improve the competitiveness of enterprises and promote the high-quality development of enterprises.

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