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A Review of Research on the Drivers and Effects of Goodwill Impairment on Corporate Financial Performance

Ziqi Wei*

School of Public Finance and Taxation, Central University of Finance and Economics, Beijing 102206, China

**Corresponding author: Ziqi Wei.*

Abstract

Massive goodwill impairment risks accumulated through high-premium mergers and acquisitions (M&A) have become a prominent issue in China's capital market. Through a review of the literature, this study defines the concepts and measurement rules of goodwill and its impairment, summarizes the drivers of goodwill impairment from the perspectives of macro-level flexibility in standards, the meso-level industry environment, and micro-level enterprises, and analyzes its financial and capital-market economic consequences. The findings show that goodwill impairment is jointly affected by multiple factors, including institutions, industries, stock price overvaluation, managerial earnings management, and corporate strategy. Impairment affects corporate profitability and capital structure, causes corporate financial performance to follow a U-shaped pattern, leads to a decline in market valuation, and is also subject to delayed recognition. This study summarizes the shortcomings of existing research and proposes directions for future research, thereby providing a theoretical reference for listed companies, investors, and regulatory authorities.

Keywords

Goodwill impairment, financial impact, earnings management, M&A performance, information disclosure

1. Introduction

As mergers and acquisitions (M&A) and restructuring activities in China's capital market have become increasingly active, expansion through acquisitions has become an important means for many listed companies to grow larger and stronger. Numerous high-premium M&A transactions have generated massive goodwill, and the proportion of goodwill on corporate balance sheets has continued to rise, with goodwill impairment risks accumulating accordingly. The current accounting standards have abolished the systematic amortization of goodwill and require an annual impairment test; once an impairment loss is recognized, it cannot be reversed. In practice, some companies recognize large goodwill impairment losses because the performance of target companies falls short of expectations or post-merger integration fails, resulting in sudden performance collapses. At the same time, impairment testing relies on subjective parameters such as cash flow forecasts and discount rates, which also leaves room for management to conduct earnings management. Companies may delay impairment recognition or take a concentrated "big bath," seriously undermining the authenticity of financial information and harming investors' interests. Goodwill impairment has therefore become a practical issue of considerable concern in the capital market.

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A relatively extensive body of academic research on goodwill impairment has been accumulated. On the one hand, the existing literature examines, from an objective perspective, the driving effects of economic factors such as high-premium M&A, stock price overvaluation, and failed post-merger integration on goodwill impairment. On the other hand, based on agency theory, it tests the effects of earnings management motives, such as managerial overconfidence, "big bath" behavior, and income smoothing, on impairment recognition [1]. Meanwhile, a large number of empirical and case studies analyze the economic consequences of goodwill impairment for corporate profitability, solvency, and market performance. However, the internal transmission mechanism through which goodwill impairment arising from different drivers affects financial performance still requires further review and synthesis.

Against this background, this study reviews the multiple drivers of goodwill impairment and explores the specific effects of goodwill impairment on corporate financial performance. The study helps clarify the formation mechanism of goodwill impairment and enrich research on its economic consequences. At the practical level, it can provide a reference for listed companies to conduct M&A prudently and standardize the accounting treatment of goodwill impairment. It can also provide a basis for investors to identify goodwill risks and for regulatory authorities to improve regulatory rules, and thus has practical significance for maintaining the quality of information in the capital market.

2. Definition of the Concept of Goodwill

2.1 Concept of Goodwill

Goodwill refers to the difference between the consideration paid by an enterprise when acquiring another enterprise and its share of the fair value of the acquiree's identifiable net assets. The essence of goodwill is an enterprise's future excess earnings capacity [2]. Goodwill impairment refers to the process of recognizing as an impairment loss the difference when the recoverable amount corresponding to goodwill formed in a business combination is lower than its carrying amount. Goodwill impairment indicates a decline in the enterprise's capacity to obtain excess returns and conveys negative information to the market about its future operating performance.

2.2 Recognition and Measurement of Goodwill

The accounting treatment of goodwill consists of two stages: initial recognition and subsequent measurement.

Goodwill that can be recognized for accounting purposes is the sum of consolidated goodwill made explicit through M&A transactions and internally generated goodwill accumulated through the acquiree's operations, after excluding noise components that cannot generate future excess economic benefits, such as valuation deviations, differences arising from unrecognized assets and liabilities, and excess payments caused by agency problems involving senior executives [2]. The formula is expressed as follows:

$$RG = CPG + IG \text{ [2]}$$

China's Accounting Standards for Business Enterprises regard goodwill as, in essence, an intangible asset with an indefinite useful life. Therefore, goodwill is not systematically amortized; instead, an impairment test is required at least annually. Once the recoverable amount of goodwill is found to be lower than its carrying amount, an impairment provision should be recognized.

3. Analysis of the Drivers of Goodwill Impairment

3.1 Macro Level - Flexibility of Standards

From the perspective of institutional change, the considerable discretion in selecting the amortization period of goodwill under the old standards could easily have negative effects on the healthy development of enterprises. Although the current standards have replaced the amortization method with impairment testing, reducing the likelihood of direct earnings manipulation, they still provide management with new choices in reporting accounting information at the institutional level [3]. This flexibility enables management to use the

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discretion allowed by accounting standards to engage in "rent-seeking" activities [4]. At the same time, the current standards require an impairment test report issued by a professional appraisal institution to serve as the basis for judgment. However, appraisal quality is affected by the appraiser's professional competence and whether management conceals the financial condition. In addition, constraints from internal and external conditions make impairment testing difficult in practice, further reflecting the flexibility and uncertainty in the implementation of the standards.

Economic policy uncertainty is also an important macro-level driver. Relevant research findings show that economic policy uncertainty is significantly positively associated with goodwill impairment, while managerial earnings management is an important moderating mechanism that can weaken the effect of economic policy uncertainty on goodwill impairment [5]. After distinguishing among operating risk, uncertainty in free cash flow, agency conflicts, and the nature of ownership, studies find that, under economic policy uncertainty, enterprises face greater goodwill impairment risk when operating risk is higher, uncertainty in free cash flow is greater, agency conflicts are more severe, and ownership is non-state-owned [5].

3.2 Meso Level - Industry Changes

Industry characteristics and structure are key external factors affecting goodwill impairment. First, "natural" characteristics such as enterprises' asset-liability ratios, operating scale effects, and resource, labor, or capital intensity vary across industries and directly determine the basis for the formation and measurement of goodwill. Second, industry type is closely related to the level of goodwill. Traditional industries, such as real estate, coal, and steel, usually have relatively low levels of goodwill, whereas emerging industries, such as information services, media, and the Internet, rely heavily on expansion through M&A, which often increases the ratio of goodwill to net assets and exposes them to greater impairment risk. Third, changes in internal industry structure, such as adjustments in the proportions of new and old businesses and shifts in growth drivers, directly affect the performance of acquired targets and thereby change the probability of goodwill impairment. Fourth, the industry competitive environment, such as competitors' expansion strategies and changes in market concentration, also has a profound effect on the subsequent measurement of goodwill by influencing enterprises' M&A decisions and subsequent integration outcomes [4].

BlueFocus serves as a case enterprise. China's media industry has shown an overall trend of continuous growth since 2010, but the growth momentum has mainly come from the rapid development of new media, including the Internet and mobile value-added services. Although BlueFocus underwent an Internet-oriented transformation, revenue from its public relations and print advertising businesses began to contract in 2015, and television advertising and new-media advertising did not develop as rapidly as expected. Under the dual pressures of overall industry transformation and internal structural adjustment, the goodwill formed through its acquisitions faced a relatively high impairment risk. Ogilvy Group, a major competitor of BlueFocus, significantly improved its corporate performance through acquisition-driven expansion. This indicates that, against the background of intensified industry competition, M&A has become an important means of promoting corporate development. If subsequent integration is ineffective or performance falls short of expectations, the likelihood of goodwill impairment will be further amplified [4].

3.3 Micro Level - Enterprise Perspective

3.3.1 Internal Corporate Decision-Making Drivers

Goodwill impairment decisions do not merely reflect a decline in the economic value of assets; they are also significantly affected by management's earnings management motives. These motives mainly take two forms. The first is an income-smoothing motive. When a company's earnings before deducting goodwill impairment losses are high, management tends to recognize more goodwill impairment and retain part of the profit for future periods, thereby smoothing fluctuations in performance across periods [1,6]. The second is a "big bath" motive. When a company's earnings before deducting goodwill impairment losses are low, meaning that performance is particularly poor, management tends to recognize more goodwill impairment and recognize potential future losses all at once in the current period, thereby creating room for a rebound in future performance [1,6]. Earnings management involving goodwill impairment results from the combined effects of multiple complex factors. First, corporate performance is negatively correlated with goodwill impairment, and companies with poorer accounting performance are more inclined to recognize impairment. Second, the

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personal characteristics of the chief executive officer (CEO) affect impairment decisions. Third, contractual constraints, such as debt covenants and compensation contracts, encourage management to use goodwill impairment for earnings management [1]. Fourth, external monitoring mechanisms are also important influencing factors. Empirical evidence from Chinese A-share listed companies from 2007 to 2013 shows that high-quality audits, such as those performed by the Big Four, and higher ownership concentration significantly restrain earnings management motives related to goodwill impairment [1].

The mechanism through which corporate strategy affects goodwill impairment is mainly reflected in three aspects: the scale effect of M&A, the transmission of operating risk, and the intensification of agency problems. First, companies with aggressive strategies tend to initiate more high-premium M&A activities, thereby accumulating large amounts of goodwill assets and directly increasing the probability of goodwill impairment. Second, such companies usually face higher operating risks, which makes it more difficult to achieve the expected increases in returns and thus gives rise to greater impairment risk. Third, aggressive companies are often accompanied by serious Type I and Type II agency problems, which not only drive the expansion of goodwill assets but further intensify impairment risk [7].

3.3.2 Capital-Market Pricing Drivers

Stock price overvaluation is regarded as a non-economic factor, and its degree is usually measured using the "market-to-book ratio decomposition method," which decomposes the market-to-book ratio of a listed company into two parts. When a stock price is overvalued, it sends incorrect positive information to the listed company's managers and external parties. This incorrect signal causes managers to become overconfident and thus overestimate the company's future development prospects and the synergies generated by M&A and restructuring. Driven by this overconfidence, the company pays an excessively high acquisition premium in M&A and restructuring transactions, thereby creating excessive total goodwill. The continuously accumulated goodwill has a high impairment risk. Therefore, the higher the degree of stock price overvaluation, the greater the future risk of goodwill impairment [6].

The effect of stock price overvaluation differs significantly across types of enterprises. Compared with private enterprises, the degree of stock price overvaluation has a more significant effect on the goodwill impairment risk of state-owned enterprises. This may be because state-owned enterprises face soft resource constraints and can more easily obtain higher acquisition premiums when participating in M&A and restructuring, resulting in higher goodwill impairment risk in the future. A company's growth moderates the effect of stock price overvaluation on goodwill impairment risk. If a listed company has better growth prospects, managers are more optimistic about its future profitability, and the effect of stock price overvaluation on goodwill impairment risk is weakened. Conversely, companies with poorer growth prospects face higher goodwill impairment risk when their stock prices are overvalued [6].

By changing management's judgment of the future environment for implementing accounting standards, policy expectations prompt management to adjust its goodwill impairment recognition strategy from income smoothing to a one-time "big bath," thereby becoming an important driver of goodwill impairment risk. Before the 2018 annual reports of listed companies were published, experts from the Accounting Standards Committee of the Ministry of Finance proposed changing the treatment of goodwill from "impairment" to "annual amortization." Management expected that the discretion allowed by future goodwill impairment rules would be tightened and therefore tended to recognize large goodwill impairment losses all at once before the policy was implemented. This increased the motive to conduct "big bath" earnings management and reduced the use of goodwill impairment by listed companies for annual income smoothing [6].

4. Financial Effects of Goodwill Impairment

4.1 Consequences for Internal Corporate Financial Indicators

4.1.1 Decline in Profitability

Goodwill impairment losses are included in current profit or loss and directly reduce current net profit, which may cause corporate profits to fall sharply or even result in a current-period loss. In terms of indicators, profitability indicators such as return on equity and return on total assets decline accordingly. The profitability, shareholder profitability, and cash-generating capacity of enterprises that recognize goodwill impairment are

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significantly lower than those of control samples without goodwill impairment [8]. As a key indicator for management performance assessment and for determining special treatment (ST) status and delisting of listed companies, net profit directly changes performance evaluation results when impairment is recognized. Data from some corporate cases show that growth indicators, such as the net profit growth rate, decline markedly after goodwill impairment occurs [9,10].

4.1.2 Deterioration of Capital Structure

Recognizing goodwill impairment reduces an enterprise's total assets, increases the asset-liability ratio after excluding goodwill, and impairs the enterprise's long-term solvency. Cash payments made in the early stage of high-premium M&A consume current assets and, combined with the pressure of bank borrowings, cause short-term solvency indicators, such as the current ratio, quick ratio, and cash ratio, to decline significantly, thereby increasing short-term repayment pressure. For example, in 2016, 2019, 2021, and 2022, the combined pressures of goodwill impairment and bank borrowings at Mengniu Dairy further amplified financial risk [9]. The increase in financial risk further raises the cost of debt capital and equity capital, increases the weighted average cost of capital, and makes external financing more difficult for enterprises.

4.1.3 Pressure on Operations and Resource Allocation

Goodwill impairment itself does not directly affect working capital, but the financial distress caused by impairment forces enterprises to adjust their operating strategies, as reflected in stronger inventory control and faster collection of accounts receivable. At the same time, increases in accounts payable and notes payable indicate pressure on the funding chain. High-premium M&A in the earlier period consume large amounts of cash. After goodwill impairment occurs, the released resources cannot be efficiently reallocated, resulting in resource misallocation, and enterprises find it difficult to direct resources to businesses with greater development potential [9].

4.1.4 U-Shaped Changes in Long-Term Performance

Recognition of goodwill impairment causes a significant negative shock to short-term financial performance in the year in which it is recognized. However, impairment is mostly recognized on a one-time basis. After it is recognized, that portion of goodwill no longer carries impairment risk in future periods, relieving the performance burden in subsequent years. Corporate performance then gradually rebounds, bringing a positive recovery effect in the long term and ultimately producing a U-shaped consequence in which performance first declines and then rises [11]. The level of internal corporate governance has a moderating effect: the poorer the level of internal governance, the more severe the negative short-term performance shock caused by goodwill impairment, and the more pronounced the long-term performance recovery effect [11]. The case of By-Health shows that the negative effect of massive goodwill impairment is concentrated in the period of recognition and hinders subsequent growth capacity and solvency, but comprehensive performance may recover in later periods [10].

4.2 Financial Consequences at the Capital-Market Level

4.2.1 Decline in Market Valuation and Investor Expectations

As a representative negative signal that M&A integration has fallen short of expectations, goodwill impairment is released externally through the information transmission mechanism of the capital market. It directly affects external investors' profit forecasts and value assessments of listed companies, thereby causing a downward revision of corporate market valuation. When an enterprise discloses goodwill impairment information, the market interprets it as a failure of previous acquisition investment and a weakening of the acquired assets' future cash-flow-generating capacity. Investors accordingly lower their expectations of the enterprise's future earnings [8].

In terms of secondary-market performance, investors react negatively after an impairment announcement is released, causing the stock's abnormal return and cumulative abnormal return to decline markedly [9], leading to a short-term decline in the enterprise's stock price [10] and a contraction in market capitalization. The larger the impairment, the more pronounced the pressure on the stock price generally is [8]. At the same time, declining market confidence is further transmitted to investment and financing. On the one hand, investors' risk perceptions increase and their required risk premium for the enterprise rises, increasing the

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enterprise's cost of equity capital. On the other hand, credit rating agencies refer to the risk signals released by goodwill impairment and downgrade the enterprise's credit rating, causing the cost of debt financing to rise and making refinancing more difficult, thus forming a negative cycle of "impairment - damaged confidence - tightened financing constraints" [9].

For small and medium-sized investors, limited access to information and limited professional analytical capacity make it difficult to identify the complex business logic behind goodwill impairment. They are highly prone to investment errors, further amplifying stock price fluctuations and directly harming their immediate interests. In some cases, the market also interprets goodwill impairment as indicating insufficient M&A decision-making capability on the part of corporate management [9], weakening market recognition of the corporate management team and further suppressing the enterprise's overall market valuation.

4.2.2 Impairment of the Timeliness of Financial Information

Under the current Accounting Standards for Business Enterprises, goodwill impairment testing leaves considerable room for subjective judgment, and management has substantial discretion in professional judgment. This creates a practical motive to delay the recognition of goodwill impairment. Management may deliberately postpone the timing of impairment recognition, resulting in situations in which an enterprise's operating conditions have deteriorated but goodwill impairment remains unrecognized [8].

Delayed impairment recognition directly undermines the timeliness of financial information in the capital market [8]. Negative facts concerning a decline in an enterprise's operating quality cannot be reflected simultaneously in externally disclosed financial reports, aggravating the information asymmetry inherent in the capital market. External investors can only rely on publicly available financial reports when making investment judgments. Delayed impairment disclosure conceals the actual deterioration in asset quality, makes it difficult for investors to identify potential acquisition investment risks in a timely manner, and weakens the decision usefulness of accounting information.

This behavior disrupts the pricing logic of the capital market. The enterprise's stock price does not reflect the loss in value of acquired assets in a timely manner, resulting in temporarily inflated valuation. When a large goodwill impairment is recognized in a concentrated manner at a later stage, the concentrated release of risk can easily trigger a sudden stock price collapse and increase market crash risk. In addition, delayed recognition of goodwill impairment interferes with analysts' earnings forecasts, causes large deviations between institutional forecasts and the enterprise's actual performance, further disrupts the judgments of capital-market participants, and is unfavorable to the efficient and rational allocation of capital-market resources.

Goodwill impairment information conveys a negative signal to the market that the enterprise's profitability and cash-flow-generating capacity have declined, prompting investors to lower their expectations of the enterprise's future profitability. Empirical results show that the amount of goodwill impairment is significantly negatively correlated with the market value of shareholders' equity [8], causing the stock price and corporate market capitalization to decline and further worsening the enterprise's financing environment.

5. Conclusions and Future Prospects

5.1 Research Conclusions

By reviewing existing relevant literature, this study systematically examines the core concepts of goodwill and goodwill impairment and the logic of their recognition and measurement, summarizes the various drivers of goodwill impairment from the multiple perspectives of macro-level flexibility in standards, the meso-level industry environment, and micro-level enterprises, and summarizes the economic consequences of goodwill impairment for enterprises' internal financial indicators and at the capital-market level.

From the perspective of drivers, existing research shows that goodwill impairment is not caused by a single factor. At the macro level, the current impairment testing standards have inherent flexibility [3,4], the room for subjective judgment in appraisal parameters creates conditions for managerial accounting rent-seeking [4], and economic policy uncertainty is significantly positively associated with goodwill impairment [5]. At the meso level, industry prosperity, industry M&A characteristics, and changes in industry structure alter the

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profitability of target assets and indirectly affect goodwill impairment risk [4]. At the micro level, stock price overvaluation that increases acquisition premiums, managerial earnings management motives, changes in policy expectations, and corporate M&A strategies jointly induce goodwill impairment [1,6,7]. Management motives can be divided into income smoothing and "big bath" behavior [1,6], while internal and external monitoring mechanisms, such as audit quality and ownership concentration, can restrain opportunistic impairment behavior to some extent [1].

From the perspective of economic consequences, goodwill impairment directly affects corporate profitability and changes the capital structure [8,9,10], placing pressure on operations and resource allocation. Corporate financial performance often shows a U-shaped pattern of a short-term setback followed by later recovery [11]. In the capital market, goodwill impairment often leads to a decline in valuation and increases enterprises' financing difficulties [9]. At the same time, delayed impairment recognition occurs in practice, reducing the timeliness of financial information [8]. Overall, goodwill impairment may be either an objective reflection of a genuine decline in the target assets' excess earnings capacity or the result of management using the flexibility of the standards to conduct earnings management, and the economic consequences of the two differ significantly.

5.2 Research Limitations

First, academia has not reached a consensus on the dominant drivers of goodwill impairment. Some studies support fundamental drivers, while others emphasize opportunistic managerial behavior. This study only summarizes these views and does not empirically test the relative weight of each type of driver. Second, the existing literature has insufficiently explored the heterogeneous consequences of goodwill impairment and rarely distinguishes between the different effects of impairment caused by operating deterioration and impairment caused by earnings management. Because of limitations in the literature, this study cannot conduct an in-depth comparison. Third, this study focuses on the drivers of impairment and its ex post economic consequences and provides an insufficient review of ex ante prevention and control of goodwill bubbles at the M&A stage. Fourth, many studies use samples concentrated in specific periods of the A-share market, and the generalizability of their conclusions requires continued verification.

5.3 Future Prospects

In view of the existing limitations, subsequent research can proceed in three directions. First, heterogeneity analysis can be conducted to distinguish goodwill impairment caused by performance decline from that caused by earnings management, compare their financial and market-reaction differences, and explore the moderating effects of factors such as corporate governance and auditing. Second, the research perspective can be extended to the pre-M&A stage to analyze the effects of valuation methods, performance commitments, and payment methods on impairment risk and explore approaches to controlling goodwill bubbles at their source. At the same time, corporate accounting behavior and economic consequences under the impairment testing and amortization models can continue to be compared. Third, dynamic research can be conducted based on institutional changes, and policy shocks can be used to construct quasi-natural experiments to test the effect of regulatory policies on restraining opportunistic impairment by management. As cross-border M&A increases, cross-border goodwill impairment and integration risks also warrant in-depth research, providing empirical support for goodwill regulation in the capital market.

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The authors declare no conflict of interest.

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