



# Strata Regression Analysis-Based Research on the Impact of High-Premium M&A Goodwill on Profitability and Enterprise Value

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**Abstract.** This paper researches GEM-listed companies with performance commitments from 2013 to 2015, and establishes a multiple linear regression model, with Stata as the regression analysis tool, to study the impact of high-premium M&A goodwill on profitability and enterprise value. According to the results, with performance commitment as the guarantee, high-premium M&A goodwill has a negative impact on the company's profitability in the years after M&A and has a positive impact on its enterprise value right after M&A, while it presents a negative impact on it in the next two to four years. The author introduces the concept of performance commitment into the relationship between goodwill, profitability, and enterprise value in times of high-premium M&A, hence filling up some limitations and providing references for improving performance commitment systems and internal governance mechanisms.

**Keywords:** High-Premium M&A Goodwill · Stata; Multiple Linear Regression Model · Profitability · Enterprise Value

## 1 Introduction

Mergers and Acquisitions (M&A) is an important channel for enterprises to integrate upstream and downstream supply chains, expand market share, and achieve diversified operations. M&A is a common phenomenon in the capital market. To ensure fair and reasonable transactions, promote M&A efficiency, and avoid operational risks, performance compensation commitment was created for M&A. As stipulated in the *Measures for the Administration of the Significant Asset Restructurings of Listed Companies* published by the China Securities Regulatory Commission, performance compensation commitment means the target company must reach the expected goal within the commitment period. Otherwise, the transferor should compensate the acquiring company in the way of shares or cash [4]. In recent years, performance compensation commitment has been frequently seen in M&A of listed companies of high valuations and premiums, especially in the Growth Enterprise Market (GEM). The majority of GEM is fast-growing and technology-based listed companies, whose M&A target assets are

mostly high-technology and intangible assets, etc. As a result, the M&A considerations tend to be overvalued, and the M&A premiums are much higher than those on the main-board. According to the Accounting Standards for Business Enterprises, goodwill will inevitably arise from premium M&A. Along with the high premium, the goodwill scale of GEM listed companies kept increasing in the past few years. In 2013, the goodwill recognized of GEM-listed companies accounted for 150.29 billion yuan, while in 2017, the value reached its peak at 247.068 billion yuan. As of 2019, the total goodwill recognized reached 1,041.218 billion yuan. Therefore, GEM-listed companies are always accompanied by high premiums and high goodwill in M&A.

With the support of performance commitments, can goodwill generated during high-premium M&A achieve expected effects and help enhance corporate profitability and value? By sorting relevant literature, the author has classified major studies into the following three types: (1) In the short term, the goodwill generated in M&A will enhance the enterprise's profitability and value. However, the enhancement won't last. The Resource-based Theory refers to goodwill as a "special asset" that can bring "special profitability" to a firm. Mu Ye (2018) studied and analyzed the financial data of companies listed on Shanghai and Shenzhen Stock Exchanges, and found that recognized M&A goodwill significantly increases the enterprise's current revenue. Better M&A goodwill brings higher profitability [6]. However, this special resource can only generate excess profits on the premise that synergy is formed during the M&A. If an enterprise fails to combine its resources with M&A, it will not only lose the advantages generated by this "special asset", but also cause damage to its inherent income. Generally speaking, M&A are manifestations of corporate expansion. The investor will have higher expectations of the company, so they tend to increase their capital investment, which will drive up stock trading. And when the demand increases, the stock price also goes up. Based on this theory, Yu Lingyun (2015), Zhang Xin (2015), Yuan Jianguang (2019) studied A-shares listed companies and found that goodwill and enterprise value are positively correlated [9, 10, 12]. However, due to information asymmetry, most investors cannot fully understand the real motives of corporate M&A, leading to their bad investment judgment. Moreover, as time passes by, the positive M&A signals targeted investors will gradually fade away. They are replaced by new information. Therefore, stock price rises caused by investment enthusiasm cannot last for long. (2) M&A goodwill has negative impacts on corporate profitability or value. Chen Lijie (2017) studied GEM-listed companies and discovered that in the GEM M&A market, merger goodwill was negatively correlated with the operating performance with Phase I and II after the M&A took place [1]. Zhao Xibu (2016) selected non-financial listed companies from 2008 to 2014 and found that M&A goodwill tends to generate excess profits, but the value-generating from M&A goodwill quickly dropped after the M&A take place [13]. Zuo Meiqi et al. (2019) selected companies listed on Shanghai and Shenzhen Stock Exchanges from 2013 to 2017 and found a significant negative correlation between M&A and enterprise value [15]. (3) Performance compensation commitments are thought to be beneficial and contribute to high M&A valuation. As performance compensation commitments were accepted by more people, more researchers turned their eyes on the topic. Lv Changjiang and Han Huibo (2014) found that performance commitment clauses can positively impact M&A

transactions with highly asymmetric information [5]. Yang Zhiqiang et al. (2017) conducted research on mixed-ownership reform of state-owned enterprises and concluded that performance compensation clauses can significantly enhance synergies generated in M&A [8]. However, other scholars still doubted the functionality of performance commitments. Fang Zhong et al. (2016) believed that the “one-way interest protection” formed in performance commitments could interfere with the decisions of transaction prices, disrupt fairness, and affect the market’s basic function of allocating resources [2]. Zhao Lixin et al. (2014) proposed that performance commitments contribute to high-profit forecasts and high premiums, and improper uses of capital transfer when paying high M&A considerations [13]. Zhai Jinbu et al. (2019) in their research indicated that performance commitments apparently caused excessively high valuations of underlying assets and stock prices of listed companies as the acquirers, resulting in higher risks of small and medium investors [11].

In summary, most studies focus on the impact of listed companies’ M&A goodwill on their profitability and enterprise value, some on the performance commitment mechanism and its influence. Only a few papers went deeper and studied the impact of high premium M&A with performance commitment compensation on the company’s profitability and enterprise value. For high-premium M&A transactions, GEM-listed companies are the most representative. Besides, performance commitments have become a common phenomenon in times of M&A [7]. Therefore, the author chose the relationship of goodwill, profitability, and enterprise value of GEM-listed companies as the research objects. By “goodwill”, we mean the goodwill generated in high-premium M&A with performance commitment. With this research, we aim to enrich relevant studies and provide references and suggestions for future decision-making on compensation commitments, M&A valuation, market regulations, etc.

## 2 Theoretical Analysis and Research Hypothesis

As a special asset, goodwill can bring additional income to an enterprise. From the nature of goodwill and the basic motive for enterprises to conduct M&A, it can be seen that goodwill should be positively correlated with the company’s future profitability. As pointed out by the Resource-based Theory, in nature, M&A is a process of regrouping the resources owned by two formerly separate enterprises. For the acquirers, the acquirees possess certain resources that are not obtainable in the short term even with a tremendous amount of human, financial, and material resources. These unique and exclusive resources are thought to bring economic benefits to the acquirers, improve their business operation, and thus enhance profitability. However, for companies that undergo high-premium M&A, huge uncertainty exists as to whether the acquirers have sufficient cash flow and financial resources to effectively integrate the acquired resources and improve their operation after paying the high M&A considerations. There is still a possibility that the companies will become less profitable after M&A. Besides, using performance commitments as a guarantee of future expected earnings in M&A transactions often means that the acquirees are sending out positive signals that the underlying assets will generate excess earnings in the future. They are implying that the acquirers should pay a higher premium for this. From this perspective, the signing of performance compensation commitments could possibly promote high-premium M&A. Once the performance does not

reach the expectation, goodwill impairment is required, which will cause damage to the enterprise and weaken its profitability. From the data collected in the GEM, we can see that the average net recognized goodwill of enterprises is decreasing year by year since 2018, down around 8% compared to the same period in 2017, and in 2019 the figure has soared to 14%. This indicates that some enterprises are already preparing goodwill impairment and somewhat proves that after several years of operation, the companies have failed to reach the expectations set in the M&A.

Therefore, due to the excessive pay brought by high-premium M&A, we cannot be certain that the business operations will go well and bring expected profits. If the enterprise fails to reach the performance commitment, the goodwill generated during high-premium M&A will induce goodwill impairment. In this scenario, goodwill cannot sustain a positive impact on the company's profitability. Therefore, the author came up with the following hypothesis:

**H1:** High-premium M&A goodwill with performance commitments has a negative impact on the enterprise's profitability, and this negative impact cannot be seen during the M&A.

As pointed out by Resource-based theory, in nature, M&A is the process of regrouping the resources owned by two separate enterprises. For the acquirer, the role of goodwill in high-premium M&A depends on whether the company has an effective internal governance mechanism, and can form M&A synergy as well as increase enterprise value. Otherwise, it will only become a financial burden and damage enterprise value. According to the signaling theory, for investors, M&A indicates a greater strength, while performance commitments send out a positive signal, which to some extent, contributes to a high premium and the rapid rise of the company's stock price in the short term. However, on the one hand, due to its limited time frame, the impact of a message will not exist permanently, and the positive responses will gradually fade away. On the other hand, when the enterprise fails to reach the expectation set for the performance commitment period, the market will react negatively to its failure. The investors will lose their interest and start to have doubts about the company's future, resulting in the selling of their shares in the company. Moreover, the risks of high M&A valuations are hard to predict. They will only show up after the M&A are finished. If it turns out that the goodwill formed by high-premium M&A cannot form synergy and bring expected profits, it will not be able to enhance the enterprise value. Therefore, the author came up with the following hypothesis:

**H2:** The high-premium M&A goodwill with performance commitments has a positive impact on enterprise value within a limited time frame, but will have a negative impact after a certain period.

### 3 Empirical Study Design

#### 3.1 Sample Selection and Data Sources

Since the launch of GEM in 2009, M&A has been frequently seen among listed enterprises. In 2015, the number of M&A cases reached its peak, with over 470 cases in 2015. The number has gradually declined after 2015. In the meantime, since 2013, GEM-listed companies started to introduce the use of performance commitments. Therefore, the

author selects companies listed on GEM between 2013 and 2015 as the research samples. These companies are witnessed to have the fastest-growing total transactions and M&A goodwill accumulation. A total of 143 valid samples have been obtained. Here are the notes for the sample: (1) As stipulated in the *Measures for the Administration of the Significant Asset Restructurings of Listed Companies* published by China Securities Regulatory Commission in 2014, companies with a 3-year performance commitment period, successful M&A transactions, and financial data are taken as the research objects. (2) Generally speaking, M&A premiums within 5 times are reasonable for most industries. Therefore, this paper takes M&A premiums  $\geq 500\%$  as the standard for high-premium M&A [14], where the M&A premium = (total transaction price – net assets of target company) / net assets of the target company. (3) Since the financial and insurance industries don't share the same ways of statement preparation and standards formulation with other industries, all data related to these two industries have been excluded. The data in this paper comes from the CSMAR (China Stock Market & Accounting Research Database), with the analysis and processing software being Stata 16.

## 3.2 Variables Selection

### 3.2.1 Explained Variables

**Profitability:** Originally used by Zheng Haiying et al. (2014), the return on equity (ROE) was adopted as an indicator to measure a company's profitability. ROE can measure the efficiency of capital use and reflect the capability of an enterprise to obtain net income with their equity capital.

**Enterprise value:** In this paper, the enterprise value is the natural logarithm of the stock market value and net debt combined at the year-end. The measurement of enterprise value includes the calculation of equity capital and debt [3]. Since preferred stocks are almost negligible in the stock structure, we can simplify the calculation of equity value by reducing them to common stocks. The amount of corporate debt is subject to changes in bank interest rates and loan defaults. When both interest rate and default risk are very low, market price fluctuations of corporate debt are also negligible. To maintain the consistency of the values, the variables were to be taken logarithmically.

### 3.2.2 Explanatory Variables

**High-premium goodwill:** Standardized M&A goodwill (GW) was selected as an explanatory variable in this paper. Since we didn't consider the provision for goodwill impairment, the net goodwill that has been provisioned for future impairment was selected as alternative data, on which standardization is performed. Standardized goodwill is measured by dividing the combined net goodwill at the end of the commitment period by the total assets.

### 3.2.3 Control Variables

The company's characteristics, such as its size, leverage, equity concentration, etc. will pose an important impact on the M&A premium. Therefore, the author controlled

**Table 1.** Variables and their definitions.

Types	Variable	Definition
Explained variable	ROE	Net profit/average shareholders' equity
	Tobin Q	Enterprise market value/book value of assets
Explanatory variable	GW	Net combined goodwill at the term-end / total assets
Control variable	SIZE	Natural logarithm of total assets at the term-end
	LEV	Total liabilities/total assets at the term-end
	TOP <sub>1</sub>	The shareholding ratio of the largest shareholder
	SGR	(Business income of the current year – business income of the previous year)/business income of the previous year
	EPS	Net profit/total shares

the variables of company size (SIZE), leverage (LEV), degree of equity concentration (TOP<sub>1</sub>), self-sustainable growth rate (SGR), and earnings per share (EPS). Their respective definitions are shown in Table 1.

SIZE: The size difference of enterprises is a factor that cannot be neglected in empirical research. The sizes for the companies to gain competitive advantages are not the same in different industries. Generally speaking, the larger the enterprise is, the greater the competitive advantage will be.

LEV: Companies with high leverages are facing greater financial risks. Operating under high leverage for a long time may cause the company's liquidity to be depleted and affect product launch, resulting in a smaller market share, which in turn will have adverse effects.

TOP<sub>1</sub>: TOP<sub>1</sub> or degree of equity concentration is a quantitative indicator to measure the distribution of enterprise equity. An enterprise with more concentrated equity will possess stronger stability. In our model, the shareholding ratio of the largest shareholder was selected as a measurement index.

SGR: SGR is used to measure the potential ability of an enterprise to enlarge its business size and increase its market share. Whether an enterprise has potential is an important factor that every investor will consider before they put investment. Companies with huge potential usually maintain a high level of operation, gradually increasing their profitability and enterprise values.

EPS: Earnings per share is the ratio of a company's net profit to the sum of total shares. Companies with higher EPS possess higher economic value per share.

### 3.3 Model Construction

Based on the concept proposed by Zheng Haiying et al. (2014), the author performed variable substitution in this paper. In terms of Hypothesis 1, two multiple regression models, Model 1 and Model 2, were constructed, and empirical analysis was conducted on the ROE based on the GW in  $t$  and the following 4 periods, to study the impact of

high-premium M&A goodwill on the current and future profitability of the enterprises.

$$ROE_{i,t} = \beta_0 + \beta_1 GW_{i,t} + \sum \beta_n Controls_{i,t} + \varepsilon_{i,t} \tag{1}$$

$$ROE_{i,t+n} = \beta_0 + \beta_1 GW_{i,t} + \sum \beta_n Controls_{i,t} + \varepsilon_{i,t} \tag{2}$$

In light of Hypothesis 2, two multiple regression models, Model 3 and Model 4, were constructed, and empirical analysis was conducted on the GMV based on the GW in *t* and the following 4 periods, to study the effect of high-premium M&A goodwill on enterprise values in the current phase and lag phase.

$$GMV_{i,t} = \beta_0 + \beta_1 GW_{i,t} + \sum \beta_n Controls_{i,t} + \varepsilon_{i,t} \tag{3}$$

$$GMV_{i,t+n} = \beta_0 + \beta_1 GW_{i,t} + \sum \beta_n Controls_{i,t} + \varepsilon_{i,t} \tag{4}$$

## 4 Empirical Analysis

### 4.1 Descriptive Statistics

The author selected a total of 715 valid samples during a range of 5 years. The statistics are shown in Table 2. From the table, it can be noted that ROA and ROE changed in a similar way. However, ROE was more fluctuating than ROA, as the maximum was almost 3 larger than the minimum. The standard deviation (SD) of Tobin Q is 1.4862, the largest among all indicators, indicating that the GEM-listed companies chosen for this study have changed a lot in enterprise value, and the GMV only showed a small degree of dispersion. With regard to GW, a clear gap existed between the minimum of 0.0011 and the maximum of 0.8835, with the mean being 0.2023 and SD being 0.1761. This indicates that the goodwill-to-total assets ratios of the selected companies are concentrated around 0.2, yet a few extreme values still exist.

**Table 2.** Descriptive statistics.

	Sample	Average	SD	Minimum	Maximum
ROE	715	0.0249	0.2233	-2.5491	0.3797
ROA	715	0.0257	0.1136	-0.7255	0.2301
GMV	715	22.8178	0.7019	20.4538	25.0764
Tobin Q	715	3.5239	1.4862	0.8022	19.5664
GW	715	0.2023	0.1761	0.0011	0.8835

**Table 3.** Regression Table of ROE and GW.

Variables	$t$	$t + 1$	$t + 2$	$t + 3$	$t + 4$
GW	-0.0437** (-1.64)	-0.0598** (-2.06)	-0.0672*** (-2.68)	-0.0795*** (-3.48)	-0.0997*** (-3.96)
SIZE	0.0012 (0.38)	0.0035 (1.02)	0.0021 (0.48)	0.0113 (1.32)	0.0193* (1.67)
LEV	-0.0228** (-1.77)	-0.0226* (-1.29)	-0.03732** (-1.71)	-0.0601* (-1.62)	-0.2256*** (-5.27)
TOP <sub>1</sub>	0.0176* (1.15)	0.0201* (1.05)	0.0184 (0.68)	0.0505 (0.88)	0.0756 (0.88)
SGR	0.0381** (1.91)	0.0421** (2.03)	0.0394** (1.98)	0.0079 (0.78)	0.0137 (0.63)
EPS	0.0513*** (5.12)	0.0477*** (4.05)	0.0319*** (3.76)	0.0428*** (3.99)	0.0233*** (2.32)
_cons	-0.0254 (-0.37)	-0.0735 (-0.97)	-0.0222 (-0.24)	-0.1899 (-1.00)	-0.3342 (-1.28)
N	715	715	715	715	715
R <sup>2</sup>	0.7123	0.7012	0.7899	0.7658	0.7215

Notes: \*\*\*, \*\*, and \* indicate significance at 1%, 5% and 10% levels, respectively; inside the brackets is T value

## 4.2 Empirical Analysis

### 4.2.1 The Impact of High-Premium M&A Goodwill on Profitability

Table 3 lists the regression results of high-premium M&A goodwill and profitability for the current period and the next 4 periods. A significant negative correlation can be seen between GW and ROE in  $t$  at 1% level, indicating that the M&A goodwill generated by high-premiums has a significant negative impact on the profitability in the current period  $t$ . The financial pressure caused by high M&A consideration prevents the goodwill from generating excess profitability as it deserves to be. From the regression results of high-premium M&A goodwill and profitability after  $t$ , it can be known that GW is negatively correlated with the ROE in the corresponding periods at 1% level, indicating that the high-premium M&A goodwill had an obvious negative impact on  $t + 1$ 's profitability. From  $t + 2$  to  $t + 4$ , the absolute value of the negative correlation coefficient continues to rise, indicating that the goodwill generated by high-premium M&A has a continuous effect on the enterprise's profitability.

Under normal circumstances, due to the involvement of consideration at times of high-premium M&A, the goodwill synergy won't show up immediately, and excess profits won't be obtained temporarily. After M&A takes place, the synergy starts to show itself, but as seen from the empirical results, the high-premium M&A goodwill in the lag period did not improve the company's profitability. For this reason, relevant systems such as performance commitments, methods of valuation, and corporate supervision may contribute to this phenomenon. Admittedly, performance commitment was introduced



**Table 4.** Regression Table of GW and GMV.

Variables	$t$	$t + 1$	$t + 2$	$t + 3$	$t + 4$
GW	0.8442*** (2.99)	0.7124*** (2.17)	-0.5631* (-1.95)	-1.0771*** (-3.00)	-1.1948*** (-3.22)
SIZE	0.8638*** (10.60)	0.6442*** (10.58)	0.3643*** (4.59)	0.6679*** (13.01)	0.6021*** (11.03)
LEV	-0.0108 (-0.03)	-0.1332 (-0.45)	0.2742 (0.75)	-0.1167 (-0.24)	-0.3418 (-1.29)
SGR	-0.0041 (-0.04)	0.0506 (0.86)	-0.0791 (-0.86)	0.1708 (1.02)	-0.1676 (-1.38)
EPS	0.2368 (1.30)	0.0605 (0.46)	0.3297** (2.30)	-0.0335 (-0.31)	-0.0023 (-0.05)
TOP <sub>1</sub>	0.2189 (0.88)	0.1164 (0.75)	-0.5408 (-1.27)	0.5636 (0.89)	-0.7163* (-1.74)
_cons	3.8224** (2.29)	8.5957*** (6.87)	8.6872*** (7.35)	7.7371*** (6.78)	5.6947*** (4.69)
N	715	715	715	715	715
R <sup>2</sup>	0.6123	0.6389	0.6891	0.6739	0.6611

as a guarantee to reduce information asymmetry, yet it gave birth to the high-premium M&A goodwill. To this end, it has become a “reservoir” of M&A risks [15]. In the wake of the acquisition, if the enterprise cannot form synergy from the merger, and the subsequent information disclosure is not under timely supervision, the goodwill generated during M&A certainly cannot bring excess profits to the enterprise. But instead, it may have a negative impact on the enterprise’s future profitability.

#### 4.2.2 The Impact of High-Premium M&A Goodwill on Enterprise Value

To verify H2 that high-premium M&A goodwill is positively correlated with the enterprise value within a certain period but negatively correlated with the value after, the author selected Model 3 and Model 4 for regression, and the results are shown in Table 4. During the performance commitment period, i.e.,  $t$ , a significant positive correlation can be seen between GW and GMV at 1% level, indicating that M&A goodwill has a significant positive impact on the enterprise value during this period, which is consistent with the signaling theory that we mentioned above. In  $t + 1$ , GW and GMV were still positively correlated at 1% level. Though the correlation is slightly weaker than that of the previous period, it still proves that high-premium M&A goodwill only has a positive impact on enterprise values in the short term. Since  $t + 2$ , the relationship between the two has gradually become negative, indicating that after  $t$ , the high-premium M&A goodwill started to have a negative impact on enterprise value.

High-premium M&A along with their performance commitments have sent out positive signals to the investors, so the investors can form confidence in the company, and

**Table 5.** Regression Table of ROA and GW

Variables	<i>t</i>	<i>t</i> + 1	<i>t</i> + 2	<i>t</i> + 3	<i>t</i> + 4
GW	-0.0344** (-1.79)	-0.0419** (-1.91)	-0.0515** (-2.01)	-0.0835*** (-2.64)	-0.1091*** (-3.01)

**Table 6.** Regression Table of Tobin Q and GW

Variables	<i>t</i>	<i>t</i> + 1	<i>t</i> + 2	<i>t</i> + 3	<i>t</i> + 4
GW	4.3989*** (2.87)	4.5090*** (3.89)	-0.8267** (-1.05)	-1.0862** (-1.61)	-1.5242** (-1.94)

the expectation that the company would develop rapidly in the future, which will, in turn, lead to the increase of enterprise value in the short term. However, after M&A, market participants have gradually regained their rational minds towards the event. Besides, there's still a possibility that high-premium M&A goodwill could fail to bring excess profits, and cause goodwill impairment if the company fails to realize the performance commitments. Therefore, after the acquisition, it is hard to sustain the positive impact of high-premium M&A goodwill on enterprise value.

### 4.3 Robustness Test

ROA was used as a substitute index for ROE inserted into Model 1 and Model in this paper, while Tobin Q was used as a substitute index for GMV inserted into Model 3 and Model 4, in order to re-verify the impact of high-premium M&A goodwill on a company's profitability and enterprise value. The results proved the robustness of our conclusions. As shown in Tables 5 and 6: (1) GW and ROA have a negative correlation since *t*, indicating that even in the performance commitment period, the high-premium M&A goodwill fails to have a positive impact on the profitability of the company; (2) During *t* and *t* + 1, the high-premium M&A goodwill is positively correlated with the enterprise value, and then negatively correlated with it in the next years.

## 5 Conclusions and Suggestions

The following conclusions of this research can be drawn: (1) High-premium M&A goodwill is negatively correlated with the enterprise's profitability, the negative correlation becomes more significant after the performance commitment period, and the impact on the profitability has long endurance; (2) Correlation exists between goodwill and enterprise value in high-premium M&A, presenting as an inverted U-shape, and the positive correlation between goodwill and enterprise value is time-sensitive.

From the above conclusions, it can be found that high-premium M&A goodwill is not good for the enterprise in the long run. Even with the guarantee of performance commitments, investors tend to be over-optimistic about the synergy formed by the M&A

premium and the company's ability to obtain excess profits in the future. Their overestimation of the synergy and the company's future advantages results in high premiums, which in turn recognizes a large amount of goodwill. If the company's performance fails to meet the expectations, a large amount of goodwill impairment will be required, which will affect the company's profitability in the future. In terms of enterprise value, since performance commitments are considered as the promoters of high valuation and high-premium M&A goodwill for GEM-listed companies, the business operations, and investor behaviors will help increase enterprise value during the commitment period. However, during the period, to achieve the set profit goal, the company may try to hide its poor performance through earnings management. The problem won't be revealed until the end of the performance commitment period. Besides, the restricted shares paid with the consideration are open to sales after the period. Most shareholders will choose to sell them at a lower price, affecting the enterprise value.

Based on these conclusions, the author proposed the following suggestions: (1) Performance commitments should be discreetly treated and supervision is supposed to be enhanced. Appraisal agencies should handle performance commitments with caution and perform independent risk warnings; for companies involved in M&A, they should remain prudent, strictly evaluate and select appraisal agencies and other intermediaries, formulate reasonable transaction considerations, and minimize the risk of huge goodwill impairment. Regulators need to strengthen their supervision, step up punishment for those who fail to meet the performance commitment, and increase their default costs. (2) Commitment is made to improve M&A valuation and the quality of information disclosure. Ways of valuation should be established and improved to ensure the accuracy and authenticity of value assessment. It is critical to disclose more relevant information by listing more valuation methods, evaluation basis and calculation process of M&A, and the specific reasons and procedures for high-premium M&A. (3) Acquirers should strengthen their internal governance mechanism, design the M&A strategy ahead of time to avoid pursuing short-term achievements; M&A's role of resource integration ought to be utilized to improve profitability and increase enterprise value.

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