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Why does AI Command a Premium in M&A?—A Literature Review of Intangible Capital, Synergy, and Managerial Overconfidence

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Abstract. Artificial intelligence (AI) has increasingly become important in corporate strategy, made AI-intensive enterprises attractive targets in the mergers and acquisition (M&A), and raised questions about whether acquisition premiums reflect value creation or potential overpayment. This article systematically examines acquisition premiums for AI-related acquisition premiums through three perspectives: information asymmetry and intangible capital, synergy and strategic complementarity, and managerial overconfidence. Existing research suggests that AI firms rely heavily on intangible resources that are difficult to accurately evaluate, such as algorithms, data, R&D knowledge and professional human capital, thus exacerbating the uncertainty of valuation. Meanwhile, the strategic complementarity of these resources and acquirer's existing assets may produce an expected synergy effect, building the foundation of value creation for higher premiums. However, valuation uncertainty may also amplify the overconfidence of management, leading managers to overestimate the target value and future synergies. Therefore, AI M&A premiums should not be simply regarded as value creation or irrational payment, but should be understood as a pricing result of the joint effect of potential strategic value and management cognitive bias. Future research should combine long-term performance after mergers and acquisitions to distinguish between reasonable premiums and overpayments. The review identifies this distinction as a central direction for future research.

Keywords: Artificial Intelligence (AI), Mergers and Acquisitions (M&A) Premiums, Intangible Capital, Strategic Complementarity, Managerial Overconfidence

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1. Introduction

1.1. Research background

In recent years, artificial intelligence has increasingly reshaped the global mergers and acquisitions (M&A) landscape. Unlike the firms whose value is primarily supported by tangible assets, AI-intensive targets often derive substantial economic value from algorithms, proprietary data, R&D knowledge, and professional human capital. These resources are difficult to value because their economic returns are uncertain, their quality may not be fully observable to external investors, and their value may depend on how effectively they can be combined with the resources of a particular acquirer. Consequently, the rapid growth of AI-related acquisitions raises an important corporate finance question: whether, and why, acquirers may be willing to pay substantial premiums for AI-intensive targets despite considerable uncertainty surrounding their underlying economic value?

This question is particularly important because a high acquisition premium does not necessarily have a single economic interpretation. It may represent a rational payment for expected synergies and strategically valuable intangible resources, but it may also reflect excessive managerial optimism about target value and post-acquisition integration. Understanding AI-related acquisition premiums therefore requires consideration of both value-creating and behavioral explanations.

1.2. Research motivation

Existing M&A literature has examined the formation of acquisition premiums from different perspectives, but these explanations have largely developed in separate strands of the literature. Research on intangible capital emphasizes that technology, knowledge, intellectual property, and human capital may generate substantial future economic value that is difficult to estimate ex ante. At the same time, some literature focuses more on strategic complementarities and synergies, arguing that acquirers may be willing to pay high premiums that beyond their standalone worth because combining the target firm's resources with those of the acquirer is expected to create additional value. In contrast, other researchers suggest that managers may overestimate their firms' resource integration capabilities and the magnitude of future synergies, thereby paying excessively high acquisition prices. On the contrary, other researchers believe that managers may overestimate the resource integration ability of firms and the size of future synergy, thus paying an overpriced acquisition.

These perspectives become particularly interconnected in AI-related M&A. However, relatively few studies have integrated these three perspectives in the specific context of acquisitions in the AI industry. Because AI acquisitions are simultaneously characterized by the difficulty of valuing intangible assets, high uncertainty surrounding future synergies, and potentially strong managerial expectations. Therefore, integrating these three perspectives a new perspective could provide a more complete explanation of whether AI M&A premiums reflect genuine value creation or potential overpayment.

1.3. Research question

The main research question of this essay is: How do intangible capital, synergistic effect, and managerial overconfidence contribute to the formation of M&A premiums for AI-intensive targets?

RQ1: Intangible Capital and Information Asymmetry

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How does the intangible characteristics of AI-related assets create information asymmetry and valuation uncertainty in M&A transactions?

RQ2: Synergy and Strategic Complementarity

Under what conditions can strategic complementarities between AI targets and acquirers generate synergies that economically justify acquisition premiums?

RQ3: Managerial Overconfidence

Under what conditions may managerial overconfidence lead acquirers to overestimate AI-related synergies and pay premiums beyond those justified by expected value creation?

1.4. Research objective and contribution

This article aims to systematically sort out and integrate existing corporate finance, M&A and AI-related research to explain the formation mechanism of M&A premiums of AI-intensive target enterprises from the theoretical level. Specifically, this article first analyzes how AI-related intangible assets such as algorithms, data, R&D knowledge and specialized human capital increase the valuation uncertainty from the perspective of information asymmetry and intangible capital and potential differences between the resulting market valuation and the acquirer valuation. Secondly, based on the theory of synergy and strategic complementarity, this article considers how complementarities between the target's AI resources and the acquirer's existing capabilities may generate expected synergies and increase willingness to pay. Finally, it introduces managerial hubris theory and overconfidence to analyze whether managers may overestimate the real value, their ability of own resource integration and future synergy of the target enterprise in a highly uncertain AI valuation environment, thus leading to a M&A premium that exceeds the economic fundamentals can support.

The main contribution of this article is to connect mechanisms that are often examined separately. Rather than treating intangible capital, synergy, and managerial overconfidence as independent determinants of acquisition premiums, the article views them as interconnected stages of the valuation process. AI-related intangible capital creates an uncertain valuation environment; strategic complementarity provides a potential source of acquirer-specific value; and managerial overconfidence may lead decision-makers to overestimate the magnitude or realizability of that value. This comprehensive perspective shows that similar acquisition premiums may either reflect reasonable expected strategic value, or may stem from excessive management payments, or be driven by both.

Therefore, this article believes that the economic significance of the acquisition premium related to artificial intelligence cannot be determined by the premium itself. A more meaningful assessment requires examining whether anticipated complementarities are subsequently converted into realized post-acquisition value.

2. Literature review

2.1. Conceptual background of M&A premiums

M&A premium is an important indicator for measuring the pricing and value distribution of mergers and acquisitions transactions. It usually refers to the part of the price paid by the acquirer to obtain control of the target enterprise that exceeds the market value of the target enterprise before the announcement of mergers and acquisitions. In empirical studies, the merger and acquisition premium are usually measured by the excess ratio of the acquisition quotation relative to the stock

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price of the target company before the announcement. In order to reduce the interference of the leakage of merger and acquisition information or the adjustment of market expectations on the stock price, some studies use the stock price of the target company in the first four weeks of the announcement as the benchmark price, that is, the premium is calculated by the difference between the acquisition quotation and the stock price in the first four weeks of the announcement divided by the benchmark price [1]. Therefore, the M&A premium essentially reflects the price that the acquirer is willing to pay in addition to its independent market valuation when acquiring control of the target enterprise.

From the perspective of corporate finance theory, the merger and acquisition premium does not mean that the acquirer will inevitably suffer a loss of value in the transaction. Jensen and Ruback research on the corporate control market shows that corporate takeover usually can create positive overall economic benefits, in which the shareholders of the target company can often obtain significant excess returns [2]. This shows that when mergers and acquisitions can achieve value addition through resource reallocation, business efficiency improvement or synergy, the acquirer may rationally transfer some of the expected profits to the shareholders of the target company in the form of a higher acquisition price in a competitive market environment. Therefore, the merger and acquisition premium can be understood as a structure in which the acquisition parties distribute the potential value creation, not a simple cost or irrational payment.

However, a higher M&A premium does not directly prove that the transaction has a higher economic value. The hubris hypothesis proposed by Roll points out that the acquirer's manager may overestimate the value of the target enterprise by over-reliance on his own judgement and end up paying a price that exceeds its basic value [3]. In addition, Hayward and Hambrick found that CEO hubris was significantly associated with the premium paid for large-scale mergers and acquisitions [4]. The high level of overconfidence in management and M&A premium were associated with the wealth loss of the acquirer's shareholders. Therefore, the existing literature actually forms two competing but possibly simultaneous explanations: M&A premiums may reflect rational expectations of future value creation and collaboration, as well as excessive payments caused by valuation deviations and management overconfidence.

These explanations are particularly relevant to acquisitions related to artificial intelligence. Since the economic value of artificial intelligence-intensive targets largely depends on intangible resources that are difficult to assess, the acquisition price may include the valuation error caused by the acquirer's specific expectations and uncertainty about future value creation. Therefore, the challenge is not only to explain the reason for the existence of the premium, but also to determine the mechanism by which the acquirer obtains a valuation higher than the independent market value of the target company. The following sections examine this process through information asymmetry and intangible capital, strategic complementarity and synergy, and managerial overconfidence.

2.2. Information asymmetry theory and intangible capital

The theory of information asymmetry is one of the important theoretical foundations for understanding the valuation differences in the merger and acquisition market. Akerlof pointed out that when there is a systematic difference in information acquisition between the two sides, the market price may not fully reflect the true quality of the asset [5]. In corporate finance, this problem also exists in enterprise financing and investment decision-making. Myers and Majluf believe that internal managers of enterprises usually have more information about existing assets and future investment opportunities than external investors, so information asymmetry will significantly affect the pricing of securities issuance and the financing and investment behavior of enterprises [6]. In the

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context of mergers and acquisitions, this information asymmetry relationship will be more complicated, and even further extended between the acquirer and the management of the target company, making it difficult to accurately identify the real economic value of the target enterprise. Based on this, Eckbo, Giammarino and Heinkel introduced the theory of information asymmetry into the analysis of mergers and acquisitions, pointing out that the information differences between the two sides of the transaction will affect the payment method of the merger and acquisition and the market's judgement of the transaction value [7].

This theory is particularly important for explaining the valuation of mergers and acquisitions of AI enterprises. The key is that the value structure of AI enterprises has a high degree of intangible capital intensity. Unlike traditional enterprises which rely on tangible assets such as plants and equipment, the competitive advantage of AI enterprises comes from intangible assets such as algorithms, software, proprietary data, research and development knowledge and high-skilled human resources. Such assets usually lack active market trading prices, and their future economic returns are also relatively uncertain, so it is difficult to fully measure them using traditional financial statements and asset valuation methods. Therefore, there may be a large deviation between the book value of an enterprise and its real economic value. Meanwhile, there may be obvious differences in the judgement of the potential value of the same AI technology by different market participants.

This characteristic of intangible capital mainly affects the valuation of enterprises in AI mergers and acquisitions through two paths. First, some key intangible assets often have significant "internal information attributes". Because the management of the target company usually knows more about its algorithm performance, the real information of research and development projects, data quality and the actual ability of core technical personnel than the external market, there will be information asymmetry between the internal personnel of the target company and the external market. Second, there are differences in the depth of information acquisition and technical understanding of the same AI assets by different acquirers. For example, acquirers with relevant technology experience and research capabilities can often more accurately identify the potential application value of target enterprise algorithms or data assets, thus forming a higher private valuation than that of general market investors. Therefore, under the joint action of information asymmetry and heterogeneity cognition, the market price before the announcement of AI enterprises may not be able to fully reflect its real economic value to the acquirer.

The literature related to technical mergers and acquisitions further supports the logic of the above information asymmetry. Ahuja and Katila regarded technical assets as the core elements of technical mergers and acquisitions, and the innovation consequences of technological acquisitions depend partly on the relationship between the acquired knowledge base and the acquirer's existing technological capabilities [8]. This implies that the economic value of an AI target cannot be assessed solely from the characteristics of the target itself. The same algorithm, data, patent or technology team may have essentially different values for different acquirers, which depends on their ability to understand, absorb, integrate and commercialize these resources.

In summary, information asymmetry and intangible capital can provide a basic explanation for the M&A premium of artificial intelligence. However, this does not mean that information asymmetry means a higher acquisition premium. Greater uncertainty will widen the gap between market valuation and acquirer-specific valuation, but its impact on willingness to pay is theoretically vague. Acquirers with superior information or relevant technical capabilities may identify value that is not fully reflected in the market price of the target company, thus giving a higher private valuation. On the contrary, when the technical quality of the target or the realization of future returns cannot be reliably assessed, uncertainty may increase perceived risk and reduce willingness to pay.

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Hence, intangible capital should mainly cause valuation decentralization, not automatic premium. To explain why this valuation difference will be transferred to a higher acquisition price, it is necessary to consider the strategic complementarity between the artificial intelligence resources of the target company and the existing assets of the acquirer.

2.3. Synergy theory and strategic complementarity

The synergy theory explains why acquirers are sometimes willing to pay a relatively high acquisition premium. The M&A premiums does not necessarily mean that the acquirer has paid too much, because the merger of the two companies may generate additional value that cannot be achieved if they operate alone. Jensen and Ruback believe that the market controlled by companies can transfer assets to more efficient users, so as to improve resource allocation and create value through better management and resource utilization [9]. In other words, if a company can create new value after acquiring another company, it may be reasonable for the acquirer to pay part of the expected return to the shareholders of the target company through a higher acquisition price. As long as the expected value created after the merger and acquisition exceeds the premium paid, this high-priced acquisition does not necessarily constitute an overpayment by management.

Subsequent empirical research further proved that the synergy effect in mergers and acquisitions can have multiple sources. Devos, Kadapakkam and Krishnamurthy studied the mechanism of mergers and acquisitions to create value and discussed potential sources of mergers and acquisitions to create value, such as improving operational efficiency, tax incentives and market power [10]. Their research shows that if two companies can get benefits that cannot be obtained by operating alone through mergers, then the merger is likely to create value. This logic also applies to artificial intelligence acquisitions, because artificial intelligence technology can help enterprises improve productivity, reduce costs, enhance innovation, or create new business and growth opportunities.

However, there is a key difference between technology-driven mergers and acquisitions and traditional mergers and acquisitions: whether the technology itself is valuable often depends not only on how advanced the target company's technology is, but also on the degree of fit with the acquirer's existing resources. In the study of technology mergers and acquisitions, Ahuja and Katila found that the acquired knowledge and technology can indeed enhance the innovative ability of the acquirer, but its effectiveness depends on the relationship between the new knowledge and the existing technical capabilities of the acquirer [8]. In other words, getting more technology does not necessarily mean greater value; on the contrary, it depends on whether these technologies can be combined with existing resources. The same applies to artificial intelligence: the same set of algorithms, data or technical teams may have completely different values for different buyers, because each company's absorption, integration and commercialization capabilities are different.

This is especially important for artificial intelligence mergers and acquisitions, because the value of artificial intelligence companies largely comes from intangible assets, such as algorithms, proprietary data, software systems and professional and technical personnel. Unlike physical facilities or equipment, these assets are not easily valued directly. They usually only generate real value when combined with other resources (such as cloud computing infrastructure, customer resources, sales channels or industry expertise). Peters and Taylor pointed out that intangible capital has a significant impact on enterprise investment and valuation, which indicates that traditional accounting data may not fully reflect the real economic value of intellectual assets [11]. Corrado, Haskel and Jona-Lasinio also believe that artificial intelligence is not only an independent technology, but a combination of software, data and other complementary intangible assets [12]. Only through the joint action of these resources can productivity and enterprise value be improved.

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Some studies that are more directly focusing on artificial intelligence also support this explanation of "resource complementarity". Fang, Goyal, He, and Zhang found that enterprises with strong artificial intelligence capabilities are more willing to acquire target companies with rich data resources, and such transactions often produce better shareholder returns and innovative performance [13]. This result shows that the value of artificial intelligence not only comes from the possession of technology itself, but more importantly, whether it can generate greater value when combined with other resources such as data. Chaudhary also believes that artificial intelligence capabilities can affect the value of companies through growth potential, scale expansion and operational efficiency [14]. However, the fact that technology is complementary does not guarantee that these value gains will be realized. Larsson and Finkelstein emphasized the importance of integration after the merger, including how knowledge is transferred, how the two organizations work together, and whether key employees stay in the company [15]. This is especially important for AI mergers and acquisitions, because most of the value of artificial intelligence actually exists in technical personnel, team experience and organizational knowledge.

In general, the literature provides a theoretical basis for linking strategic complementarity with the acquisition premium of artificial intelligence-intensive targets, but it does not mean that such premiums are necessarily value creation. When algorithms, data, technical talents and knowledge can be combined with complementary assets such as technical infrastructure, customer networks, distribution channels or industry expertise, artificial intelligence resources may generate specific value to the acquirer. In this case, the premium may represent the transfer of part of the expected synergistic value to the target shareholder. However, complementarity represents potential, not the synergy realized. Whether the premium is economically reasonable ultimately depends on the knowledge transfer, organizational integration, talent retention and commercialization after the acquisition. When assessing the acquisition premium related to artificial intelligence, the difference between the expected synergy and the achieved synergy is crucial.

2.4. Managerial hubris theory and overconfidence

Although the synergy theory provides a reasonable explanation for the acquisition premium, it becomes insufficient when the price paid exceeds the value that the expected synergy can reasonably support. Therefore, the hubris hypothesis provides another explanation of behavior. Roll pointed out that because acquisition managers are too confident in their own valuation, even if market pricing is effective, they will overestimate the true value of the target company [3]. Therefore, the premium may reflect not only the expected synergy, but also the overconfidence of the management, as managers may think that they can recognize the value ignored by the market. This may lead to a "winner's curse", that is, overly optimistic valuation increases the possibility of the highest-bidding person overbidding the acquisition target.

In behavioral finance research, managers' overconfidence is not a random error, but a long-term feature that has a great impact on corporate decision-making. Through looking at executives' personal investments, Malmendier and Tate evaluated the overconfidence of CEOs [16]. Especially in equity-dependent firms, they found these administrators believe their own judgment far exceeds outside market evaluations, making their investment selection highly sensitive to internal cash flow. In the aspect of corporate acquisitions, Malmendier and Tate pointed out overconfident CEOs are much more likely to start purchasing when the internal funds are enough, although the outside market often gives negative feedback to this kind of news [17]. Also, the high premium happening in large-scale mergers is closely related to CEO hubris, which meets the early research result of

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Hayward and Hambrick [4]. Therefore, these studies suggest that managerial characteristics can systematically influence both acquisition decisions and the prices paid.

The valuation characteristics of AI-intensive targets may make managerial overconfidence particularly consequential. As mentioned in Section 2.2, the value of artificial intelligence-related assets often depends on uncertain future applications, technological developments and successful integration, which gives managers considerable discretion in forming valuation expectations. Emerging evidence shows that the overconfidence of management may also affect the decision-making of enterprises to invest in artificial intelligence [18]. In a merger and acquisition environment, managers who are highly optimistic about artificial intelligence may value potential technology opportunities more and underestimate implementation risks, uncertain returns and integration difficulties. The competitive pressure for strategic artificial intelligence capabilities may further strengthen this trend. Therefore, the uncertainty of technology itself does not produce overconfidence, but it may create an environment in which management judgement plays a greater role in determining the valuation of acquisitions.

Therefore, when discussing the artificial intelligence acquisition premium, management overconfidence and strategic coordination should not be regarded as a mutually exclusive explanation. A transaction may contain real technical complementarity, and managers also overestimate the size or possibility of achieving these complementarities. As emphasized by Larsson and Finkelstein, the potential synergy depends on effective post-acquisition integration [15]. Overconfident managers may correctly identify complementary resources, but overestimate their ability to integrate these resources, retain key employees, or commercialize the technology they will acquire. Therefore, the difference between value creation premium and overpayment may not be whether there is synergy, but whether managers accurately assess the size of synergy and the possibility of realization. This interaction provides an important link between the rational interpretation of the acquisition premium related to artificial intelligence and the behavioral interpretation.

2.5. An integrated framework for AI-related acquisition premiums

The above literature shows that the acquisition premium of artificial intelligence-intensive targets can be better understood through the interaction of the three mechanisms, rather than through any single theoretical explanation. First of all, the intangible nature of artificial intelligence resources causes information asymmetry and valuation uncertainty. Algorithms, proprietary data, R&D knowledge and specialized human capital are difficult to value independently, resulting in differences in market valuation and acquirer-specific valuation. Importantly, this uncertainty has led to the diversification of valuation, not necessarily increasing the acquisition price.

Secondly, strategic complementarity provides a mechanism through which the valuation difference may be transformed into a higher willingness to pay. When the target's resources complement its existing technology, data, infrastructure, customer base or organizational capabilities, the acquirer may give greater value to the target of artificial intelligence. Therefore, the expected synergy provides an economic basis for premiums higher than independent market values. However, this premium is reasonable only if the expected complementarity can then be transformed into the realized economic value.

Third, the overconfidence of the management affects how to evaluate this uncertain potential for collaboration. Managers may correctly identify the true complementarity, but overestimate the size of complementarity, the possibility of achieving complementarity, or the company's ability to

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integrate the resources obtained. Therefore, rational value creation and behavioral overpayment are not necessarily contradictory explanations; they can coexist in the same matter.

Therefore, this comprehensive framework can be summarized as a sequential mechanism: intangible capital related to artificial intelligence generates valuation uncertainty; strategic complementarity generates potential acquirer-specific value; management's judgement determines how to include potential value in the acquisition price; and the integration after the acquisition determines whether the expected value can finally be realized. From this perspective, the level of acquisition premium alone does not distinguish between value creation and overpayment. This distinction requires evidence of the follow-up results after the acquisition.

3. Research gaps and directions for future research

One problem with the existing literature is that there is no standardized method to measure the company's artificial intelligence capabilities at present. Different studies use different indicators: some studies examine the number of employees with artificial intelligence skills in the company, others examine artificial intelligence-related patents, and some studies evaluate the company's artificial intelligence capabilities according to the content disclosed by the company or the overall digitalization level. Although these studies are all focused on artificial intelligence, they may actually not measure exactly the same. Therefore, sometimes it is difficult to directly compare the research results of different papers. The difference in measuring the ability of artificial intelligence may partly explain why the valuation results of existing studies on artificial intelligence have come to different conclusions. Therefore, future research should go beyond a single agent and formulate multi-dimensional measurement standards to distinguish between artificial intelligence human capital, technical knowledge, data assets and organizational artificial intelligence capabilities. Greater consistency of measurement will improve the comparability between studies and help determine whether the observed valuation effect reflects the difference in how the artificial intelligence strength works or the ability of artificial intelligence itself.

The second and more fundamental gap is the identification of artificial intelligence-specific acquisition premiums. Most of the existing literature examines whether artificial intelligence capabilities are related to enterprise value, innovation, productivity or operational performance, while there are relatively few studies that directly test whether artificial intelligence-intensive targets will receive systematic and different acquisition premiums. These are completely different conceptual issues. A company may get a higher independent valuation because of its artificial intelligence capabilities, and not necessarily get a higher premium relative to the valuation when it is acquired. In addition, the acquisition premium is affected by the size of the transaction, payment method, bidder competition, target characteristics, market conditions and bargaining power. Therefore, the existing evidence has not proved that the ability of artificial intelligence itself will generate an incremental acquisition premium. Future empirical research should directly compare artificial intelligence-intensive and non-artificial intelligence acquisitions under the control of traditional transactions and enterprise characteristics, so as to isolate whether the intensity of artificial intelligence is independently related to acquisition pricing.

The third research gap involves the difference between the expected synergy and the realization of synergy. The acquisition premium is predetermined, thus reflecting the expectation of future value creation, and the economic reasonableness of these premiums can only be evaluated after the fact. This difference is particularly important in mergers and acquisitions related to artificial intelligence, because the realization of value may depend on successful knowledge transfer, technology integration, data compatibility, commercialization and retention of professional human capital.

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Therefore, future research should link the acquisition premium to the long-term results after the acquisition, including operating performance, innovative output, productivity, employee retention and shareholder returns. This evidence will enable us to distinguish more clearly between the premium of anticipated subsequent value realization and the premium associated with over-optimistic expectations or management overconfidence.

The last research gap is to study the interaction between management characteristics and the uncertainty of valuation related to artificial intelligence. Existing behavioral mergers and acquisitions research shows that management's overconfidence will affect acquisition decisions, while emerging artificial intelligence research shows that management's beliefs may also affect investment in new technologies. However, limited evidence directly tests whether the relationship between management overconfidence and acquisition premium becomes stronger when the target has highly uncertain artificial intelligence-related intangible assets. Therefore, future research can investigate whether management characteristics regulate the relationship between artificial intelligence intensity, expected synergy and acquisition premium. This analysis will provide a direct empirical test for the comprehensive framework formulated in this review.

4. Conclusion

This paper studies the formation of artificial intelligence-intensive target acquisition premiums by integrating three views that are usually considered separately, namely intangible capital and information asymmetry, strategic complementarity and synergy, and management overconfidence. The synthesis shows that the acquisition premium related to artificial intelligence should not be interpreted as direct evidence of value creation or management overpayment. On the contrary, they arise from the interaction between valuation uncertainty and the specific strategic value and management judgement of the acquirer.

Artificial intelligence-intensive targets rely heavily on intangible resources, including algorithms, proprietary data, R&D knowledge, software and professional human capital, which are difficult to value independently. This feature increases information asymmetry and deviates the market valuation of the target enterprise from the perceived value of the specific acquirer. Strategic complementarity provides a mechanism through which this valuation difference may be transformed into an acquisition premium: when combined with the acquirer's existing technology, infrastructure and customers, artificial intelligence resources may become more valuable.

The overconfidence of the management further complicates the valuation process. Managers may overestimate their size, the likelihood of realization, or their own ability to integrate the resources they have acquired while determining true strategic complementarity. Therefore, rational coordination and behavioral excess payment should not be regarded as mutually exclusive interpretations. The same acquisition premium may include both the expected strategic value and the valuation bias.

The core meaning of this review is that the acquisition premium itself is not enough to determine whether AI-related transactions create value. The key difference lies in the expected value creation and the realized value creation. Therefore, future research should combine a more consistent measurement of artificial intelligence capabilities with transaction-level acquisition premiums and long-term results after acquisition. This will provide a stronger empirical basis for determining when the acquisition premium related to artificial intelligence reflects the economically reasonable strategic value and when it is more consistent with the management value.

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