

A NEW STUDY ON MOTIVATIONS OF M&A FROM THE PERSPECTIVE OF DIGITAL ECONOMIC

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Abstract: The paper is to explore the true motivations why Chinese enterprises carry out low-carbon mergers and acquisitions during ecological civilization construction. By deep analysis of various M&A motivations and their defects, in combination with current new requirements of ecological civilization construction, the paper for the first time puts forward the concept of low-carbon M&A and analyzes its motivations: seek low-carbon energy resources, obtain low-carbon technology, foster low-carbon industry, develop forest carbon-sink channel, and pursue low-carbon technology integration and give play to ecological synergistic effect.

Keywords: Ecological civilization; Low-carbon M&A; Motivation

1 INTRODUCTION

Developing a green and low-carbon economy and promoting the digital economy "is an economic strategic deployment of the country in the new era, and an urgent requirement for completely transforming China's economic development mode. Faced with increasingly severe resource bottlenecks and environmental damage, China has clearly proposed to develop a low-carbon circular economy, strengthen the digital economy, promote the energy production and consumption revolution, thoroughly transform the way resources are allocated, promote the intensive and efficient production mode of enterprises, create a comfortable living environment for people, and create a natural ecological space with beautiful mountains and clear waters, so as to achieve harmonious development between the natural environment and human society, and build a beautiful China. At present, the academic research on the motives and models of mergers and acquisitions is mostly based on the extensive economic development theory analysis framework, which runs counter to the low-carbon economic policies and digital economy requirements formulated by the current country. In the context of fully promoting the digital economy, the motives for corporate mergers and acquisitions will also undergo profound changes, and it is necessary to conduct in-depth research on the motives of mergers and acquisitions in combination with the requirements of low-carbon economic transformation and digital economy. This article deeply analyzes the motives behind mergers and acquisitions in traditional economic theory, and proposes the concept of spatial mergers and acquisitions for the first time in combination with the requirements of digital economy and low-carbon economy transformation. It deeply analyzes the motives behind spatial mergers and acquisitions and compares them with those of traditional mergers and acquisitions, which has important theoretical value and practical significance.

2 THE MOTIVATION OF MERGERS AND ACQUISITIONS UNDER TRADITIONAL ECONOMIC THEORY

Faced with the six waves of mergers and acquisitions that continue to emerge in the world, both the theoretical and practical circles are enthusiastic about exploring the true motives behind mergers and acquisitions. The academic community has explained the motives of mergers and acquisitions from different perspectives such as economics, management, and law, and conducted normative research and empirical analysis in various aspects, forming a mature theory of motives, including the motives caused by internal driving forces and the motive system formed by the motives caused by motives. The motives for mergers and acquisitions caused by internal driving forces include the pursuit of synergies, market power, risk reduction, acquisition of high-quality assets, and industrial organizational innovation, while the motives for mergers and acquisitions caused by incentives include the emergence of low-priced assets, favorable technological and economic conditions, legal permits and relaxed regulations, and market driven factors[1].

2.1 Synergy Motivation

The mainstream Western theory holds that pursuing synergies is the main motivation for mergers and acquisitions, including operational synergies, management synergies, and financial synergies. Specifically manifested as horizontal mergers and acquisitions to achieve economies of scale, vertical mergers and acquisitions to reduce transaction costs, and mixed mergers and acquisitions to achieve diversified operations. The synergy effect mainly provides a theoretical basis for horizontal mergers and acquisitions between enterprises.

2.1.1 The synergistic effect of management mainly comes from economies of scale and scope

Mergers and acquisitions can rapidly expand a company's production scale, reduce costs, integrate existing resources, and improve resource utilization efficiency, effectively solving problems of diseconomies of scale or scope, and improving the efficiency of resource allocation[2]. The prerequisite is that there are economies of scale in the industry

or industry, but the actual situation has not reached the expected operating scale, or the industry may also achieve economies of scope by acquiring existing production and sales channels to achieve low-cost production of similar or related products.

2.1.2 The financial synergy effect mainly comes from the improvement of capital efficiency and the reduction of financing costs

Mergers and acquisitions will bring various financial benefits to both parties, achieving financial synergy through capital efficiency, tax laws, accounting treatment, and securities trading rules. The common insurance effect of both parties in the merger and acquisition, the difference between internal and external funds, and the economies of scale in securities issuance and transaction costs lead to a decrease in the cost of merger and acquisition capital and an improvement in financing efficiency. Reasonable tax avoidance is also an important factor in achieving financial synergy. By taking advantage of the differences in capital tax rates on assets, dividends, and interest among different countries or enterprises, deferred tax provisions for losses can be implemented through mergers and acquisitions to achieve reasonable tax avoidance.

2.1.3 The synergistic effect of management mainly comes from the improvement of management efficiency after mergers and acquisitions

Mergers and acquisitions can integrate the management resources of both parties and improve management efficiency. Management capability is a soft power and core value of modern enterprises. Through mergers and acquisitions, efficient management resources can be transferred to inefficient enterprises, and the management resources of both parties can be integrated, thereby enabling inefficient enterprises to acquire modern management technology and capabilities, achieve value appreciation and improve management efficiency.

2.2 Motivation for Pursuing Market Power

Mergers and acquisitions expand the scale of enterprises, increasing their control over the market in terms of product output, sales channels, and raw material supply, improving industry concentration, and enhancing industry structure. Through mergers and acquisitions, companies can expand their brand territory, influence consumer behavior and preferences, increase their market awareness and influence, thereby enhancing their market dominance, leading to increased market power and potential collusion and market monopoly, in order to achieve the goal of monopolizing profits.

2.3 Reduce Risk Motivation

Faced with fierce market competition, most enterprises will choose diversification strategies to control risks. Expand market size and market share through mergers and acquisitions in multiple related or unrelated fields, fully utilize and develop the company's existing resources, increase production of related products to achieve economies of scope, realize comprehensive benefits of diversified investments, and seek long-term stable growth space and business environment for the enterprise. This motivation mainly explains the mixed mergers and acquisitions characterized by diversified operations.

2.4 Motivation to Acquire Advantageous Assets

Acquiring high-quality assets of the target company through mergers and acquisitions is an important strategy for companies to enhance their competitiveness in the short term. In market competition, some companies have advanced patented technology and management level, a huge sales network, excellent brands, and unique resource advantages, which are essential elements of their core competitiveness. Through mergers and acquisitions, companies can quickly enter these industries and obtain their most important advantageous assets, which is truly the optimal strategy for achieving expansion strategies.

2.5 Motivation of Industrial Organization

The theory of industrial organization holds that enterprises often face many barriers when entering new production fields, such as the need for a large amount of capital to achieve effective business scale, the need to possess patented technology and proprietary information, and the development of sufficient market sales networks to increase market share. Internationally, they also face high tariffs and new trade barriers from host countries. Therefore, direct investment in new industries faces various barrier restrictions, while mergers and acquisitions can effectively break through barrier restrictions, smoothly enter new industries at low cost, and reduce the vicious competition phenomenon of price wars and mutual retaliation caused by new investment, maintaining the order of industrial operation.

2.6 Potential Undervalued Assets Appear

Tobin's theory holds that, without considering capital gains tax, if the value of a company's stock is lower than its reset cost (i.e. Tobin's Q ratio is less than 1), the merger and acquisition gains will be greater than 0, and mergers and acquisitions may occur. The main reasons for the underestimation of the company's value are that the company's management has not reached its potential level, the acquiring company has internal information about the true value of

the target company that has not been disclosed in the market, and the underestimation of the company's value is caused by the difference between the market value and replacement cost of assets due to inflation. Therefore, when the market value of the target company deviates from its true or potential value, mergers and acquisitions in the secondary market will be inevitable.

2.7 The Favorable Situation of Technology and Economy has Emerged

Production technology is the core competitiveness, and mergers and acquisitions based on technology integration are prevalent in the knowledge economy era. The most important change force to promote M&A is technological change, including computer technology, software development technology, Internet information technology, communication and transportation technology, etc. Secondly, operational efficiency, industrial organizational changes, and a prosperous economic and financial situation are catalysts for mergers and acquisitions to occur. The emergence of favorable technology and economic conditions from the outside provides a favorable environment for corporate mergers and acquisitions, promoting the occurrence of M&A activities.

2.8 Relaxation of Legal Regulation

Mergers and acquisitions involve multiple interests, so corporate mergers and acquisitions are often constrained by many domestic laws and regulations, especially in cross-border mergers and acquisitions where the merger declaration system and anti-monopoly system are relatively strict. Therefore, during mergers and acquisitions, the acquirer has to consider the legal and regulatory situation of the target company's country. Once laws and regulations are relaxed and entry barriers are eliminated, new technologies and market competition will intensify, prompting companies to enter new fields through mergers and acquisitions to seek development opportunities and quickly gain competitive advantages.

2.9 Driven by the Capital Market

Due to the inefficiency of the stock market, the stock market may incorrectly estimate the value of the acquirer, target company, and integrated enterprise. The stock market's inaccurate estimation of company value is the main driving force behind corporate mergers and acquisitions. Empirical research has found that among the many factors that affect M&A decisions, the likelihood of M&A occurring is significantly correlated with the level of stock valuation. Companies with overvalued stocks are more likely to initiate M&A and use stock payment methods. Therefore, market driven is an important driving force for mergers and acquisitions.

3 LIMITATIONS OF MERGERS AND ACQUISITIONS THEORY RESEARCH UNDER TRADITIONAL ECONOMIC THEORY

At present, the academic community has formed a relatively complete theoretical framework for the study of the motives of mergers and acquisitions, but the establishment of this research framework is almost limited to existing economic development models and traditional economic theories. Therefore, the research on the motives of mergers and acquisitions mostly considers the value appreciation of both parties' enterprises, highlighting their own economic benefits, while ignoring the social and ecological benefits generated by mergers and acquisitions in the context of the digital economy. This leads to inefficient allocation and serious waste of limited resources, insufficient micro innovation capabilities, increasingly resource bottlenecks in economic development, serious damage to the ecological environment, and unsustainable economic development. Therefore, in the context of the international community vigorously promoting the low-carbon economic development model, the Chinese government is also comprehensively transforming its economic growth mode, vigorously promoting the green and low-carbon economic model, and accelerating the pace of the digital economy. China is vigorously transforming its previous economic development pattern of high energy consumption, high pollution, and high emissions, gradually transitioning towards a digital economy path that saves energy, reduces emissions, and promotes technological progress. Therefore, the environmental protection and energy constraints faced by enterprise development are becoming increasingly strong, and the ecological environment constraints will become more and more severe. The construction of digital economy system will gradually improve. So with the deepening of the digital economy and the drastic changes in the foreign environment, the survival environment and competitive pressure of domestic enterprises will become increasingly fierce, and the endogenous constraints will continue to increase, forcing enterprises to gradually transform their original extensive economic development model, enhance their sense of social responsibility, and be guided by social and ecological values, changing their original values that only focus on their own economic benefits. Under the strict carbon emission constraints of the country, seeking carbon sink resources has become a scarce resource for many high carbon enterprises to maintain sustainable operations. Therefore, consciously considering low-carbon strategies in the process of corporate mergers and acquisitions may be an advantageous strategy. Therefore, in the comprehensive promotion of the digital economy, spatial mergers and acquisitions based on low-carbon technology integration, seeking ecological synergy and social benefits will be a new M&A model, especially for high carbon enterprises with typical three high characteristics such as steel, coal and paper, adopting spatial M&A model may be the optimal strategy to achieve the synergy of their own economic, social and ecological benefits.

In this context, conducting in-depth research on the motivations behind spatial mergers and acquisitions is a practical issue faced by the theoretical community. At present, there is no research literature on space mergers and acquisitions in the academic community. This article will propose the concept of space mergers and acquisitions for the first time and analyze its motives in depth, which has a certain degree of originality.

4 DEFINITION OF SPATIAL MERGERS AND ACQUISITIONS FROM THE PERSPECTIVE OF DIGITAL ECONOMY [3]

The digital economy refers to the conscious adherence of human economic and social activities to the objective laws of nature, economy, society, and human beings themselves, continuously improving and optimizing the relationship between humans, nature, and society, protecting the environment, maintaining ecological balance, and achieving sustainable economic and social development. Through technological and institutional innovation, establish a scientific production and consumption model, promote the digital economy, mainly including ecological culture, ecological industry, ecological consumption, ecological environment, ecological resources, ecological technology and ecological system, and other four basic elements that interact and influence each other.

The report of the 18th National Congress clearly pointed out that building a digital economy is a long-term plan that concerns the well-being of the people and the future of the nation. Environmental protection, energy conservation and emission reduction, and low-carbon economy have been included in the construction of the "digital economy". Resource conservation is the fundamental strategy for protecting the ecological environment, and resource conservation and environmental protection are the basic national policies of China. Implementing major ecological restoration projects is a strategic task that China faces in the current and future periods. Therefore, in the face of the severe situation of resource bottlenecks, environmental damage, and ecological degradation, the whole society should establish the concept of digital economy that promotes harmonious coexistence between humans and nature, a virtuous cycle, and comprehensive development. In the process of economic construction, the digital economy must be given top priority, and efforts must be made to build a beautiful China, achieve sustainable development of the Chinese nation, and actively explore and realize the Chinese Dream with Chinese digital economy characteristics.

The key to the digital economy lies in promoting a low-carbon economic development model, quickly forming an industrial structure, production mode, and consumption mode of energy conservation, emission reduction, and environmental protection, focusing on promoting low-carbon development, green development, and circular development, vigorously developing new and renewable energy, significantly improving the quality of the ecological environment, fully establishing the concept of digital economy, and reversing the deterioration of the ecological environment from the source. Low carbon economy is achieved through various means such as technological innovation, institutional innovation, industrial transformation, and new energy development. It aims to minimize the consumption of high carbon energy such as coal and oil, and reduce greenhouse gas emissions such as CO₂ through efficient energy production and use. It establishes a low-energy and low pollution economic development system composed of a low-carbon energy system, low-carbon technology, and low-carbon industrial system, protects the ecological environment, maintains ecological balance, and achieves sustainable economic and social development. This is a new economic growth model widely recognized and vigorously promoted by the international community. In August 2010, China launched low-carbon industry construction pilot projects in 5 provinces and 8 cities, and is currently vigorously promoting low-carbon economic models nationwide. New concepts such as low-carbon technology, low-carbon living, low-carbon cities, and low-carbon world are increasingly deeply rooted in people's hearts.

In the context of the digital economy, the connotation of corporate mergers and acquisitions will undergo significant changes. Faced with increasingly severe carbon emissions and energy constraints, spatial mergers and acquisitions based on low-carbon technology integration, pursuit of ecological synergies, and promotion of the digital economy will become a new model in the M&A market and gradually become mainstream. Space mergers and acquisitions are a new type of merger and acquisition model that has emerged in the transition to a low-carbon economy. Its core ideas and value standards are reflected in adapting to the requirements of digital and low-carbon economic development, promoting low-carbon green development, and driving the energy production and consumption revolution. The green technological progress characterized by energy conservation, carbon emission reduction, and maximum efficiency in the use of production factors is the main line of the digital economy. Through spatial mergers and acquisitions between enterprises, energy input and carbon emissions are effectively reduced. Alternatively, mergers and acquisitions guided by the digital economy are increasingly focused on industries and enterprises that are more energy-efficient, emit less carbon dioxide, and have faster technological progress, continuously increasing the value and ecological benefits of both parties to achieve improved resource allocation efficiency and Pareto optimality. Therefore, spatial mergers and acquisitions from the perspective of the digital economy give new connotations to the concept of mergers and acquisitions, and the motives and modes of mergers and acquisitions will undergo significant changes, greatly promoting the development of low-carbon economy and the process of digital economy.

5 THE MOTIVATION OF SPATIAL MERGERS AND ACQUISITIONS FROM THE PERSPECTIVE OF DIGITAL ECONOMY

The motives for space mergers and acquisitions are vastly different from mainstream merger and acquisition motives. The mainstream theories of merger and acquisition motives include neoclassical synthesis theory, synergy theory,

principal-agent theory, and new institutional economics merger and acquisition theory. The neoclassical synthesis theory elucidates the classic motives for mergers and acquisitions, mainly including the economies of scale theory, market power hypothesis, and tax effect theory. The synergy effect theory is the most important motive for mergers and acquisitions, which can be divided into types such as operational synergy, financial synergy, management synergy, and technological synergy. The principal-agent theory studies the motives of mergers and acquisitions from the perspective of agency costs, and proposes the agency cost theory, managerial hypothesis, and arrogance hypothesis. The new institutional economics theory of mergers and acquisitions is based on Coase's transaction cost theory, which believes that the main motivation for mergers and acquisitions is the savings in transaction costs caused by mergers and acquisitions, as well as the potential efficiency improvement of the company after the merger[4].

The motives for spatial mergers and acquisitions are clearly different from those of mainstream mergers and acquisitions. From the definition of spatial mergers and acquisitions, it can be seen that spatial mergers and acquisitions are a new type of merger and acquisition model that has emerged in the current digital economy. Therefore, in addition to mainstream motivation theories, the main motivations for spatial mergers and acquisitions are to seek low-carbon energy resources, acquire low-carbon technologies, cultivate low-carbon industries, and develop forest carbon sink channels. From the perspective of carbon emissions, it can be divided into various factors such as high carbon transformation, low-carbon upgrading, and carbon free substitution.

The low-carbon economy provides new development opportunities for enterprises, but also faces serious challenges. In the process of transitioning to a low-carbon economy, enterprises should seize opportunities, strive to cultivate and innovate more new economic growth points. Therefore, more and more enterprises will acquire new energy enterprises through spatial mergers and acquisitions, jointly develop new low-carbon energy channels, vigorously research and develop clean energy such as wind energy, solar energy, biomass energy, etc., and cultivate core competitiveness. At the same time, by acquiring domestic and foreign enterprises with high-tech low-carbon technologies to obtain the latest low-carbon technologies, such as clean coal technology (IGCC), carbon dioxide capture and storage technology (CCS), etc., the time and cost of research and development have been greatly reduced. The basic mechanism for cultivating low-carbon industries in China has been formed, and through mergers and acquisitions of low-carbon industries, one can smoothly enter the industry, seize market development opportunities, and cultivate low-carbon industries. When carbon sinks become a scarce resource for most enterprises to sustain their operations, it is wise for many high carbon enterprises to acquire related carbon sink enterprises (such as forestry enterprises) through the carbon sink trading market. For high carbon enterprises such as steel, coal, and paper, carbon sequestration is a scarce resource for their sustainable operation. Therefore, seeking forest carbon sequestration resources is the main reason for mergers and acquisitions of these high carbon enterprises, which can greatly alleviate the constraints of national mandatory carbon emission rights on enterprise development and create development space for enterprise transformation and upgrading.

With the implementation of the strict carbon emission rights system in the country, energy-saving and emission reduction technologies have become the core competitiveness of enterprises. Today's enterprises have to formulate long-term development plans around "carbon emissions". For high carbon enterprises, they can achieve low-carbon transformation and energy conservation and emission reduction by acquiring enterprises with advanced low-carbon technologies; For low-carbon enterprises, they can achieve optimization and upgrading by acquiring new process technologies and equipment, and leverage their low-carbon leading advantages; For carbon free enterprises, new energy sources can also replace existing inefficient energy sources through mergers and acquisitions, achieving carbon free substitution.

6 CONCLUSION

There are significant differences between the motivations for spatial mergers and acquisitions in the context of the digital economy and traditional mergers and acquisitions. The traditional M&A theory holds that the pursuit of synergies in operations, finance, management, and technology is the main driving force, followed by market power, industrial innovation, and capital driven factors. Space M&A is a new type of M&A model that has emerged in the current digital economy. Therefore, in addition to mainstream motivation theories, the main motivation for space M&A is to seek low-carbon energy resources, acquire low-carbon technologies, cultivate low-carbon industries, and develop forest carbon sink channels, pursuing the integration of low-carbon technologies and the synergistic effect of ecology.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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