Risks and Response Strategies in M&A of New Energy Enterprises: BYD's Acquisition of Jabil Circuit

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Abstract. Contemporarily, new energy enterprises have developed rapidly and the momentum is flourishing, and the state has also introduced many relevant policies to support the development of new energy enterprises. Under the condition of multiple advantages, M&A has naturally become a hot area for the expansion of new energy enterprises, and the M&A market is increasingly active. But accordingly, the risk of merger and acquisition is becoming more and more prominent. Taking BYD's acquisition of Jabil Circuit as a case, this study makes an in-depth analysis of potential problems in the case of BYD's acquisition of Jabil based on literature review method, empirical research method and other research methods, discusses the risks brought by arbitrary changes in terms of agreement, increasing market competition and changing government policies in the merger and acquisition of new energy enterprises, and tries to sum up certain coping strategies as well as help more enterprises better predict risks and resist risks.

Keywords: New energy enterprises; M&A transactions; risk response; BYD.

1. Introduction

As attach importance to energy security and environmental protection, new energy enterprises have been valued by countries around the world in the past 20 years. As a representative of emerging economies, China has attached great importance to the development of new energy in the past two decades, and has born and risen a large number of new energy enterprises in the past decade. Some of them have even become leaders in the global new energy field, such as BYD in the automotive industry and Ningde era in the battery field. Wait. After nearly 20 years of development, some new energy enterprises have achieved success worldwide, while some new energy enterprises have encountered certain problems for various reasons and must opt out or be acquired. In addition, to break through the technical constraints, some new energy enterprises often express their intention to merge and acquire other enterprises with relevant technologies. Under such circumstances, mergers and acquisitions of new energy enterprises have been very popular in recent years. According to the mergers and acquisitions of China's new energy industry in 2022 released by Deloitte China's new energy industry completed a total of 519 mergers and acquisitions in 2022, with a total of 3399 billion yuan, with an annual growth rate of 8.5%. At the same time, in addition to the short decline in the number of transactions in 2020, the number of mergers and acquisitions in the industry has been rising from 2019 to 2022, and the total amount of transactions has been increasing, especially from 2021 to 2022. This shows that mergers and acquisitions in China's new energy industry have become a very common phenomenon. At the same time, more than 96% of mergers and acquisitions in China's new energy industry occur in the domestic market, and the most frequent areas of mergers and acquisitions are in the lithium battery and related materials industry. This is mainly because these fields require a lot of R&D investment, and the battery industry is also one of the most critical accessories for new energy products, such as new energy vehicles.

Compared with the number of mergers and acquisitions in the new energy industry, the number of mergers and acquisitions in the new energy vehicle industry shows the opposite trend. The trend of mergers and acquisitions in China's new energy vehicle industry from 2017 to 2021. From 2018 to 2021, the number of mergers and acquisitions in China's new energy vehicle industry has continued to decline, and the proportion of mergers and acquisitions in the automobile industry has also declined year by year. However, mergers and acquisitions in the new energy vehicle industry still dominate mergers and acquisitions in China's automobile industry.

Scholars have conducted a lot of research on the risks in mergers and acquisitions, and explained the possible risks from three stages before, mergers and acquisitions, and after mergers. First of all, before mergers and acquisitions, the usual risk is the risk of overvaluation [1]. When the merger and acquisition party overvalues the acquired party, it will lead to premium problems during the merger and acquisition process. For the acquired party, premium mergers are beneficial and allow the acquired party to obtain more funds to deal with various problems in operation. However, for mergers and acquisitions, too high premiums will cause serious problems, which will not only increase the cost of mergers and acquisitions, but may also lead to problems in the capital flow of mergers and acquisitions, affecting subsequent operations [2]. Like other M&A transactions, in the M&A transaction of new energy enterprises, in the process of estimating the acquired party, due to the bias of factors considered in the evaluation process, the valuation will lead to a situation where the valuation is far from the actual value of the acquired party [3]. Yang pointed out that the excessive premium for the acquired party during the merger process will increase the risk of goodwill depreciation of the merger and acquisition party [4].

In addition to the premium M&A risks brought by the valuation process, the financing risks and payment risks in M&A transactions may also cause M&A transactions to fail, bring huge losses to M&A parties, and even affect the subsequent development of M&A parties. Mergers and acquisitions of new energy enterprises cannot avoid this risk, and may even be more likely to encounter this risk than ordinary enterprises. Financing risk mainly refers to the situation that M&A enterprises obtain funds through financing when their own book assets are insufficient to pay for mergers and acquisitions while maintaining their own operations, because financing will increase the debt repayment pressure of the enterprise, affect the enterprise's own asset structure, and significantly improve the leverage ratio of the enterprise. It will bring more serious financial risks in future development. Payment risk is accompanied by financing risk, which refers to the huge risk arising from the later payment of interest on financing after the M&A transaction funds are paid through financing, especially the impact on the cash flow of the M&A party [5]. When there is a problem with the cash flow of the enterprise, the development of the enterprise will encounter a serious crisis, which will not only affect the solvency of the enterprise, but also affect the operation, management and planning of the enterprise's production [6].

After the M&A transaction, there is a risk that the M&A party overestimates the importance of the acquired party to its own development. When the importance of the acquired enterprise to the development of the acquired enterprise is exaggerated, it fails to promote the development of the enterprise after the merger transaction. On the contrary, the subsequent development of the merger and acquisition party falls into business risks due to debt problems arising in the merger and acquisition process. Ms. Zhu analyzed the development of the enterprise after the merger and acquisition with the case of the acquisition of Watma, a new energy battery enterprise, and pointed out that when the merger and acquisition enterprise overestimated the potential role of the acquired party in the development of the enterprise and its performance after the merger and acquisition did not meet expectations, the merger and acquisition enterprise will be due to the merger and acquisition process [7]. The financing method fell into the high debt problem, which led to huge problems in the later development of M&A enterprises. Others also expressed similar views as Zhu, arguing that the M&A need to bear the risk that the acquired party cannot improve the business performance of the M&A after the M&A transaction [4, 6-10]. When the acquired party cannot improve the business performance of the M&A party or continuously improve the business performance of the M&A party, the M&A will affect their original business status due to a large amount of cash payments or a large amount of debt payments in the M&A transaction, resulting in problems in their own development.

The main reason for choosing to study the case analysis of BYD's electronic mergers and acquisitions of Jiepu Circuits is that BYD Group is a leading enterprise in China's new energy industry, and the analysis of the risks of its mergers and acquisitions cases will be of great significance for the mergers and acquisitions transactions of other new energy enterprises. By analyzing the risks in this case, not only can people accurately realize the huge risks of mergers and acquisitions in the new energy industry, the forms of risks and the factors causing risks, but the results of the case analysis can also guide how other small and medium-sized enterprises in the new energy field to effectively carry out mergers and acquisitions transactions, so as to avoid these winds. Risks may reduce the negative effects of these risks, thus promoting the sound and orderly development of enterprises in the field of new energy in China.

2. Case Descriptions

Founded in 1995 in Shenzhen, BYD Electronics (International) Co., Ltd. covers diversified market areas such as smart phones, tablet computers, new energy vehicles, smart homes, gaming hardware, drones, Internet of Things, robots, communication equipment, and medical and health care. In order to expand the market, BYD Electronics intends to acquire 100% shares of Jabil Circuit (Singapore) Limited for approximately RMB 15.8 billion, and the target business mainly includes the product manufacturing business located in Chengdu and Wuxi, including the parts manufacturing business of existing customers. Jabil Circuits is a private company registered in Singapore and a subsidiary of Jabil Group. Jabil Group is headquartered in the United States and is listed on the New York Stock Exchange. With more than 250,000 employees at 100 locations in 30 countries, the group is one of the top 10 EMS (electronics manufacturing) manufacturers in the world. Its main businesses include electronics manufacturing services and design engineering, manufacturing and supply chain services for the consumer industry, and it is best known for producing Apple product housings.

The acquisition is likely to expand the boundaries of customers and products, broaden the business of smart phone parts, significantly improve the group's customer and product structure, enable BYD Electronics to further seize market development opportunities, increase the strategic layout of core device products, promote the upgrading of BYD electronics industry, enter a new round of high-speed growth cycle, and maintain long-term sustainable development. Byd issued a morning announcement on August 28: On August 26, the board of directors of the Company held a meeting to review and pass the "Motion on the signing of the Acquisition Framework Agreement for the Holding Subsidiary", agreeing that BYD Electronics and Jabp Singapore signed the framework agreement to acquire the seller's product manufacturing business located in Chengdu and Wuxi for approximately RMB 15.8 billion (equivalent to US $2.2 billion) in cash, including the parts manufacturing business of existing customers. In addition, Jabil has set up a new legal entity Jabil Circuit (Singapore) Pte LTD in Singapore. Byd intends to reorganize its mobile electronics manufacturing business, which produces consumer electronics components, to the target company, and BYD Electronics and its subsidiaries will acquire 100% of the equity of the target company. Byd Electronics and Jabil Singapore have completed the signing of the framework agreement on the same day. On September 27, BYD announced that its holding subsidiary BYD Electronics had successfully signed the Equity Acquisition Agreement with Jabil Circuit (Singapore) Pte LTD, a subsidiary of Jabil Singapore, on September 26, 2023. The acquisition is considered to be the largest acquisition in BYD's history and is of great significance for its future development.

3. Analysis

3.1. The Problems and Risks

Due to the information asymmetry and the problems of valuation assumptions, valuation methods, and improper parameter, and et cetera, parameters may lead to a potential risk of overvaluation. The main financial indicators of Jabil are shown in Table 1. Jabil Technology, as a leading international technology enterprise with relatively strong technical and financial strength, Jabil Circuit is its subsidiary, merger and acquisition announcement of Jabil Circuit registered capital from US$210 million to US$560 million. Its shareholding structure for the Jabil Investment (China) Limited accounted for 73%, Juno Newco Target Holdco Singapore Pte. Its 2021 sales will be about $17 billion.

BYD's acquisition announcement on 28 August 2023 stated that the purchase price for Jabil Circuit was 15.8 billion yuan. However, as the latter's main financial information is not released to the public, but is consolidated with its parent company, Jabil Technology. As shown in Table 1, Jabil Technology demonstrated a total net profit of 663 million yuan. The Chengdu and Wuxi businesses acquired by BYD are mainly the GreenPoint GreenPoint business in Taiwan, which Jabil spent $900 million to acquire in 2007, and which is categorised as the DMS business in the financial report. At the time of acquisition, due to the asymmetry of financial information and the hidden liabilities of the legal person are even more unknown, there may be overestimation in the valuation and pricing, resulting in high premiums and loss of value after the actual purchase. On the other hand, as the acquirer, BYD Electronics will also face potential financing and payment risk problems. BYD Electronics' $15.8 billion acquisition fund is mainly partly paid in the form of loans, which may lead to financial constraints and payment difficulties due to high debt (seen from Fig. 1).

Table 1. Main Financial Indicators of Jabil Circuits.

Projects	Sums(RMB)
Total Assets (RMB)	19,436,000,000.00
Current Assets	13,609,000,000.00
Non-current Assets	19,436,000,000.00
Total Liabilities (RMB)	16,699,000,000.00
Current Liabilities	12,796,000,000.00
Non-current Liabilities	3,903,000,000.00
Net Assets (RMB)	2737000000
Revenues	26,244,000,000.00
Operating Costs	24,143,000,000.00
Net Profits(RMB)	663,000,000.00

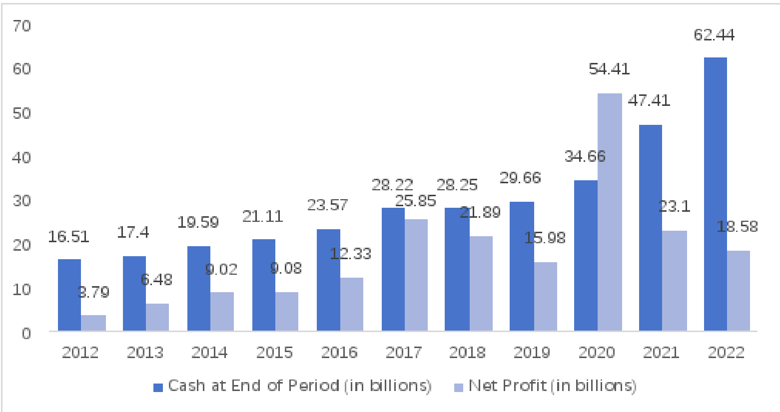

Fig 1. BYD Electronics Closing Cash and Net Profit, 2012-2022.

3.2. Exploration and Analysis of Risk Causes

The M&A announcement states that only a framework agreement for the acquisition of the two parties has been signed, and that the specific transaction programmer, terms of the transaction, consideration, external approvals, the seller's restructuring programmer and delivery procedures have not yet been determined. Both the 15.8 billion yuan merger price and the specific content and structure of the target business in further negotiations. Until the final agreement is finalized, both parties are exposed to the risk of changes in the terms of the agreement that may result from information asymmetry and the incentive to maximize the benefits of the transaction, including changes in the subject matter, transfer of rights and obligations, and merger and demerger of businesses.

Mergers and acquisitions involving international capital handovers are highly influenced by the international political situation and the current government policies governing the smartphone parts business are time-sensitive. BYD Electronics' acquisition of Jabil Circuit involves approvals from governmental departments both inside and outside China, and in the course of such approvals may result in failures or unnecessary cost losses due to the effects of changes in international relations, changes in regulatory policies and the timeliness of the policies, among other things. This risk may exist throughout the course of an M&A transaction, as policies regarding outbound acquisitions are constantly changing at different times in line with the international political environment.

Currently China's smartphone market demand is weak, the competitive pressure increases, the market is under pressure and upstream transmission. 2023 first half, China's mobile phone market shipments totaled 130 million, down 4.8% year-on-year, mobile phone parts production market followed by cold, BYD mobile phone parts business revenue share of the waist to 23.3%, the gross profit margin also fell to 6.06%, with the azure, Geely new energy vehicle enterprises have layout smartphone market, the market competition situation will be even more severe after BYD acquisition of jiepu circuit. With the new energy enterprises such as Azure, Geely, etc. layout smartphone market, BYD acquisition of Jabil Circuit, the market competition faced by the situation will be more severe. This risk mainly occurs after the M&A transaction, i.e. BYD may overestimate the degree of enhancement of Jabil Circuit's market competitiveness for its market competitiveness, which may result in the M&A transaction not being able to achieve the set objectives as expected, resulting in the M&A transaction not only not being able to effectively enhance its market competitiveness, but also affecting its own cash flow due to the cash transactions in the course of the transaction, which will in turn affect its normal operating activities.

4. Countermeasures and Suggestions

In order to avoid the risk caused by any change of the terms of the agreement, BYD Electronics should deal with details such as the specific merger and acquisition plan, transaction details, reorganization plan, delivery procedure, as well as the subjects of both parties to the transaction, the rights and obligations of the parties in the process of the transaction, and the transfer and division of business after the reorganization. It is elaborated in the acquisition framework agreement to avoid arbitrary changes in the merger and acquisition agreement later. At the same time, when refining these clauses, penalties for breach of contract by both parties shall be attached at the same time, so as to protect the interests of the abiding party.

In order to avoid the risks caused by policy changes, BYD Electronics and Jet Circuit can take the following measures to deal with it in mergers and acquisitions. First of all, before the merger and acquisition transaction, BYD Electronics and Jet Circuit should comprehensively understand the relevant legal provisions in the field of digital circuit industry in China and Singapore, especially the current regulatory policies of the two countries and the possible direction of future regulatory policies on the industry, so as to actively avoid supervision when negotiating the M&A framework agreement. Control the minefields that may be caused by policy changes. Secondly, in the process of mergers and acquisitions, BYD Electronics and Jet Circuits should take the initiative to implement the procedures of transnational mergers and acquisitions between China and Singapore, and clarify the responsibilities and obligations of both parties in each process. At the same time, they should take the initiative to publish the details of transactions required by law to be disclosed by law to be supervised by regulatory authorities. Moreover, in order to avoid the conflict between the transaction agreement and the new regulatory policy caused by information lag, BYD and Jiepu Circuit should actively communicate with the regulatory authorities when negotiating the M&A framework agreement, so as to avoid conflicts between the M&A agreement and the new policies to be introduced as much as possible. In order to avoid the risk that the Jet Circuit cannot improve its market competitiveness after the merger and acquisition, BYD Electronics should conduct in-depth research and analysis of the future development trend of the smartphone market, determine the potential profits and risks of entering the market, and carefully evaluate the performance of the company's smartphone products after the acquisition of Jet Circuit. , quality, and the impact of product competitiveness, so as to accurately evaluate the degree of improvement of its market competitiveness, and then judge whether it should continue to complete mergers and acquisitions while taking this risk. If BYD Electronics is not sure that the market competitiveness brought about by the merger and acquisition of Jiepu Circuit exceeds the risk it has to bear, it should reconsider whether the acquisition is worth it, and then make a new decision on whether it should continue the merger and acquisition.

5. Limitations and Prospects

Possible deficiencies in this paper including following. First, the acquisition of Jabil circuit by BYD selected in this paper has a short time, although it has a strong epochal, but it also means that its future development has great variability. This paper can only predict the future risk from the data of previous years, which is uncertain. Second, due to time and resource constraints, this paper focuses on BYD's electronic business and fails to establish a close relationship with BYD in the new energy vehicle sector. Therefore, the diversity of research data in this paper is insufficient. Third, all the data in this paper come from the official published financial statements, and the data from 2018 to now is selected from them, which has certain limitations.

Looking to the future, the development blueprint of new energy companies will further expand, and the number of corporate mergers and acquisitions will continue to increase. Therefore, it is more important to draw feasible countermeasures for the risk analysis of new energy enterprise mergers and acquisitions, and its changes will become more profound. In future research, we can try to broaden the research object, explore other risk influencing factors, and try to conduct a more comprehensive analysis from the aspects of performance analysis and audit risk, so as to draw a more complete conclusion.

6. Conclusion

To sum up, the process of enterprise merger and acquisition is complicated and there are many types of risks. Therefore, before determining mergers and acquisitions, enterprises should do a good job in various investigations and research, comprehensively identify government policies, market environment and other background status, and make reasonable and targeted measures. In the process of M&A, it is necessary to grasp the M&A path of enterprises at all times, try to avoid the arbitrary change of agreement terms, and avoid risks to the maximum extent. After the end of the merger, enterprises should coordinate and integrate resources to prevent business risks after the merger. This paper focuses on the case analysis of BYD's acquisition of Jabp Circuit, researches on enterprise risk response strategies and draws certain results, which is expected to help more new energy enterprises to deal with risks more accurately.

Author Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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