

Research on the Relationship Between Enterprise Green Transformation and Financial Performance Under the Background of "Double-Carbon"

Huanyu Guo

Xi'an Polytechnic University, School of Management, Xi 'an, Shaanxi 71000, China

ABSTRACT

Under the background of "double carbon", green development has become an important direction of manufacturing enterprises. Taking Company A as an example, this paper analyzes the strategic measures of each stage of the green transformation of enterprises, in order to study the impact of the green transformation on the financial performance of enterprises. The results show that: (1) the green transformation of enterprises can be divided into traditional development period, green transformation period and green development period, and different in different stages.(2) Enterprises can effectively improve their profitability and operating ability through green transformation, but the financial performance caused by the transformation lags behind; (3) merger and acquisition and innovation are the main ways for enterprises to achieve rapid green growth quickly. Based on the characteristics of the three stages of green transformation, enterprises should timely pay attention to the adaptation of their own development strategy and the macro environment, and actively seek for green transformation.

KEYWORDS

Green transformation; Financial performance; "Two-carbon" goal

1. INTRODUCTION

The concept of green development has become a global consensus, and the concept of green development has become a global consensus. The ninth meeting of the Financial and Economic Commission of the CPC Central Committee stressed the goal of "striving to achieve carbon peak by 2030 and carbon neutrality by 2060". The "double carbon" target proposal emphasizes the direction of China's green and high-quality economic development in China, and also puts forward new requirements for the development of China's manufacturing enterprises. Manufacturing industry is the foundation of the national economy. It can promote the progress and development of human civilization. However, it also brings about a series of problems, such as resource depletion and environmental pollution, which hinder the sustainable economic development. At present, China has issued a number of policies for the green development of high-energy consumption enterprises, which means that low-carbon green transformation has become the only way for enterprises to achieve high-quality development. A Shares Co., Ltd. actively responds to the "14th Five-Year" national development plan and "double carbon" target. On the basis of consolidating the industrial advantages of circular economy, it is optimizing the industrial structure and focusing on new materials and new energy industry. Therefore, this paper with the "double carbon" as the background, with A company case enterprise, in-depth analysis of the motivation of the green transformation, path and performance, for the green transformation of manufacturing enterprises to provide A new theoretical basis,

encourage private listed companies to adapt to the "double carbon" environment, change the traditional high pollution, high energy consumption and high water consumption development model.

2. CASE ANALYSIS

2.1. Traditional Development Period (1999 to 2013)

2.1.1. The coal industry is depressed

Since 2008, the development of China's coal industry has been in a downturn, and the problem of overcapacity in the coal industry has been highlighted in the unoptimistic global economic environment. Especially in 2012, China's macroeconomic growth slowed down, but the coal output maintained a growth trend, leading to a particularly serious backlog of coal products. At the same time, China's coal imports increased significantly, reducing the market demand for domestic coal. According to the China Coal Economic Research Institute, domestic raw coal production increased by 9.64 percent in 2012. Among them, Inner Mongolia, where A Company is located, produced 998 million tons, an increase of 14.3%, making it the largest output place in China in 2012. For Company A in Inner Mongolia, it should not only face the downturn of the domestic market, but also face the growing competitive pressure in the region.

2.1.2. Buy out the right to sell high-quality coal

In the face of increasing industry competition and increasing industrial transformation requirements, in order to further expand coal trade and explore new profit models, Company A can sign the Coal Sales Right Purchase Agreement with its partners. Although the move has increased A's current upfront payments by 250.12% and reduced the net cash flow generated by operating activities by 70%, which somewhat reduces the company's risk-bearing capacity, the move is usually effective in improving A's financial performance in the long run. On the one hand, by purchasing the right to sell high-quality coal, it can enhance the bargaining power of Company A. On the other hand, when the overall situation of the industry is not optimistic, high-quality coal is usually more competitive than ordinary coal, which helps to improve the competitiveness of Company A, and on the basis of risk control also improves the company's ability to allocate coal resources and the profitability of the company.

2.2. Green Transition Period (from 2014 to 2018)

2.2.1. Reset assets and carry out new green projects

Since 2014, Company A has sought to transform in clean energy, using the merger model to carry out new projects to reduce construction costs and shorten the construction cycle. In 2014, Company A acquired 60% of the equity of Tianli Energy with 45 million yuan in cash. This acquisition enabled it to obtain A complete industrial chain of upstream clean pulverized coal processing, midstream boiler design and manufacturing, and downstream system operation and maintenance. In the month when the acquisition was completed, the stock price of Company A company began to recover, indicating that the acquisition had A good market effect on the company in the short term.

In order to accurately develop clean energy business and improve the quality and efficiency of industrial transformation, Company A transferred part of its tradable share rights in the pharmaceutical sector to Shanghai Pharmaceutical Park Xinhai Pharmaceutical Co., Ltd. in June 2014, which made the net cash flow generated by the current investment activities of Company A increased by 157.29%. Subsequently, in order to accelerate the building of A green industry, Company A acquired 60% of the equity of Sanming New Energy in China through equity transfer and capital increase in January 2015, and acquired A mature heating project with stable operation. In November

2017, Company A acquired 49% equity of Zhengli New Energy and 70% equity of Kubuqi Ecological New Energy in cash in order to carry out ecological photovoltaic projects.

2.2.2. Multi-channel financing to ease the pressure of green transformation

In the clean energy industry of Company A company, micro-coal atomization is its main project. At the same time, the project also needs a huge amount of capital investment, investing nearly 5 billion yuan to transform and build more than 5,000 tons of steam boilers. On the one hand, the company's industry emphasizes assets, and its daily operation and maintenance need a large amount of cash reserves, so the company has a strong demand for funds. On the other hand, the company's investment in the early stage cannot be quickly recovered in A short time, so the cash holding level of Company A in the first two years of the transformation is lower than that in the previous and later periods.

In the period of green transformation, Company A has just experienced industrial structure adjustment, and its profit prospects are uncertain. Therefore, external financing is its main source of financing. In order to reduce its dependence on bank loans, Company A issued two bonds in 2015 and 2016, and conducted trust financing in 2016 to repay bank loans and replenish working capital. In addition, Company A issued A non-public stock offering in 2017 to invest in clean energy projects and replenish working capital. Company A raised funds through multiple channels, optimized the corporate debt structure, and stabilized its asset-liability ratio at about 50% during the green transformation period.

2.3. Green Development Period (2019-present)

2.3.1. Increasing R & D investment

In 2019, Company A entered the green development period and continued to increase its investment in technological innovation to stimulate its own green development. Compared with the previous year, company A's R & D investment increased by 320.37% in 2019, mainly in the company's two parks and high-tech enterprises. The overall increase in the number of patents granted in the past three years is an intuitive change caused to the increase in R & D investment, which remains stable above 200.

2.3.2. Focus on green industries

Due to the macroeconomic fluctuations in the coal industry and company A's entry into the green industry, corporate profits are extremely uncertain. In 2019, Company A chose to transfer all the assets and business of Hongbin Coal Mine to Inner Mongolia Guanghui Coal Co., LTD. The move directly affects the company's total assets, operating income, number of employees and other indicators, but in the long run, the sale of coal mines may be the most appropriate measure in the future, in line with the green ecology initiative. Since the transformation, Company A has successively disposed of the pharmaceutical industry, trade and coal assets, and other non-environmental protection industries. At the same time, it has actively purchased the ecological photovoltaic industry to develop the energy conservation and environmental protection industry. These measures have led to the gradual growth of the green industry, whose operating revenue is mainly the revenue from clean energy and photovoltaic power generation, accounting for 16.97% of the company's main business revenue in 2021. In 2019, the company's business activities consisted of clean energy, circular economy and ecological recovery.

2.4. Green Transformation Path and Performance

2.4.1. Profitability

In the transformation process of Company A, the evolution trend of the three profitability indicators is basically the same, namely, net interest rate of sales, gross profit rate and return on equity. Profitability "V" shape change. In the traditional development period, its profitability continued to decline, promoting the green transition. In the first two years of the green transition, company A's

profitability indicator decreased due to new investments in green projects and the sale of certain assets. After 2015, with the promotion of green transformation and the gradual completion of green industry, the ability of technological innovation has been strengthened. The financial performance provided by green transformation for the company has begun to show, and finally reached a climax in 2019. Although the profitability of Company A decreased slightly in 2020, the profitability in 2021 increased as the company entered the period of green development and its strong stability.

2.4.2. The solvency of the debt

During the traditional development period, the current ratio and quick ratio are increasing, but generally at a low level, and current assets cannot cover current liabilities, which will cause great pressure on short-term debt. The substantial improvement in the short-term solvency of Company A is also due to the lag that the company's green transformation requires capital investment and the construction of green assets. The advantages of the transformation cannot be reflected in the short term, which weakens the company's solvency. Subsequently, due to the improvement of the profitability generated by the green transformation and the multi-channel financing of Company A, the company's solvency has been significantly improved. From 2011 to 2021, the asset-liability ratio of Company A declined significantly, even during the green transformation period, mainly because Company A maintained a reasonable financing structure and capital structure while optimizing the industrial structure. The green transformation was mainly derived from mergers and acquisitions, and gained rapid income without a large amount of additional investment. In the period of green development, Company A continued to promote the research and development of green technologies, and the overall competitiveness of the company was further improved, and the asset-liability ratio also decreased.

2.4.3. Operating capacity

Between 2011 and 2021, the change in the fixed asset turnover rate of Company A was not obvious, because company A is a heavy asset operation before and after the transition, and the fixed assets were almost unchanged. During the transition period of green transformation, the turnover rate of fixed assets drops first and then rises, indicating that the investment of new large equipment for green transformation has weakened the operating capacity of the company's fixed assets, but the increase in income brought by the transformation has increased the turnover rate of fixed assets.

Company A's inventory turnover and accounts receivable turnover from 2011 to 2018 changed consistently, improving significantly during the green transition period, because Company A no longer promoted product sales based on credit sales strategy, and enhanced the liquidity of inventory and accounts receivable in the context of green transition and the company's favorable policies. The sharp decline in receivables turnover since 2019 is mainly due to the company's implementation of new financial instrument guidelines, which reclassified note receivable receivables financing. In addition, the difficulty in recovering accounts receivable leads to a further decline in the accounts receivable turnover rate.

3. STUDY CONCLUSIONS AND RELATED RECOMMENDATIONS

3.1. Study Conclusions

First, the green transformation of enterprises can be divided into the traditional development period, the green transformation period and green development period. In the traditional development period, enterprises seek new breakthroughs while innovating the original industries; in the green transformation period, enterprises focus on adjusting the industrial structure, which is the layout stage of green transformation; in the green development period, enterprises pay attention to consolidate the foundation of green transformation, and the main measure is to strengthen the green industry.

Second, enterprises can effectively improve their profitability, solvency and operating capacity through green transformation, but there is a certain lag in the financial performance brought about by the transformation. The green transformation of enterprises has improved their profitability and solvency. Through green transformation, the production work of enterprises is cleaner and more efficient, the market competitiveness of products is strengthened, and the operating capacity is further improved. Due to the high investment in the early stage of green transformation, the cost cannot be recovered in the short term, but it seems to improve financial performance in the long term.

Third, in the process of green transformation, mergers and acquisitions, improving the ability of technological innovation are the main ways to achieve rapid transformation. Self-built green industry projects often go through a long time of construction, and upgrading the production structure through mergers and acquisitions has the advantages of short cycle and quick results. On the one hand, independent innovation of core technology can reduce production cost and improve market competitiveness through technological advantages; on the other hand, it can reduce energy consumption and reduce pollution emission, which has important practical significance to realize green development.

3.2. Relevant Suggestions

First, in the traditional development period, the old development mode of manufacturing enterprises is no longer suitable for the changing external environment, and the changes in the external macro environment lead to poor internal operating conditions. In the case of internal and external troubles, the main goal of the enterprise is to survive, followed then to find the development direction in line with its own transformation as soon as possible, to get rid of the dependence on non-renewable resources.

Second, in the green transition period, the biggest problem faced by manufacturing enterprises in green transformation is financial constraints. Enterprises should actively expand the financing channels, optimize the financing structure, and provide a reliable capital guarantee for the enterprise transformation. In addition, retaining and strengthening the main business can not only maintain the business vitality, but also provide a funding channel for green transformation.

Third, in the green development period, the new development model of enterprises has begun to take shape. At this time, enterprises tend to be conservative in a relatively comfortable environment. At this stage, we can increase the investment in technology research and development, form a monopoly effect through the mastery of the core technologies, continue to optimize the industrial structure, form new competitiveness, and truly realize sustainable development, so as to adapt to the increasingly complex macroeconomic situation.

REFERENCES

- [1] Zhang Bing. Implement green management, develop green science and technology to promote the green transformation of the development model [J]. *Taiyuan Science and Technology*, 2007 (6): 1-3.
- [2] Huang Jiqiang. How to reduce tax burden to help enterprises green transformation and upgrading: an empirical study based on heavy pollution industries [J]. *Contemporary Economic Management*, 2022 (1): 90-96.
- [3] Xia Dan. Research on the action mechanism of consumer behavior on the green transformation of manufacturing enterprises: Based on the perspective of government supervision [J]. *Business Economics Research*, 2019 (15): 181-184.
- [4] Ren Xiangwei, Sun Liwen. Research on the motivation and path of green transformation of Chinese enterprises under the low-carbon perspective: a multi-case exploratory study based on rooted theory [J]. *Soft Science*, 2020 (12): 111-115 + 121.
- [5] Jiao, Zhao Guohao. Research on the selection of green and low-carbon development strategies of coal enterprises: based on the hierarchical analysis method [J]. *East China Economic Management*, 2019 (5): 168-176.