

An Analysis of The Relationship Between ESG Performance and Corporate Value Across Industries

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Abstract. High-quality economic development requires sustainable green development of enterprises. This paper analyses the impact and path of Environmental, Social and Corporate Governance (ESG) practices on enterprise value under the pharmaceutical, coal, and information technology industries. It is found that: (1) ESG performance in the above three industries has a positive impact on enterprise value. (2) Due to the characteristics of the industries themselves, the paths of ESG on corporate value are different: information technology companies focus more on green technological innovation, the coal industry focuses more on internal stakeholder-centered ESG enhancement, and the path of ESG practices in the pharmaceutical industry is more diversified than that in the pharmaceutical industry, which is conducive to the realization of corporate value through a combination of the three major aspects of environmental, social, and corporate governance. This paper points out the shortcomings of the existing ESG practices through the universal experience of the three industries, which is of great significance for the major industries in the development and implementation of ESG activities.

Keywords: Environmental, Social and Corporate Governance; Corporate Value; Sustainability.

1. Introduction

With the "dual-carbon" goal and the "14th Five-Year Plan", the establishment of a green, low-carbon and recycling economic structure is an important goal for the future under the urgent requirements of the state for green transformation, sustainable development and green innovation. As a result, Environmental, Social and Corporate Governance (ESG), a concept proposed by the United Nations Principles for Responsible Investment (PRI), aims to promote green innovation in enterprises at the environmental level, maximize the use of corporate resources, and minimize pollution emissions in order to reduce damage to the natural environment; at the social level, it links the development of enterprises with their social responsibilities, and connects human rights, corporate interests, welfare benefits and social progress to promote social progress. From the social level, the development of enterprises should be linked to social responsibility, and human rights, corporate interests, welfare benefits and social progress should be associated, so as to promote social progress in the pursuit of enterprise development; from the level of corporate governance, enterprises should standardize their business operations, comply with business principles, reasonably and effectively control corporate risks, strengthen the frequency of corporate information disclosure, and shape a good corporate brand image. And in recent years, especially in China, it has been widely researched by academics and initially applied by the business sector, and some enterprises have even integrated ESG concepts into their top-level strategies.

At present, scholars at home and abroad have different opinions on whether ESG can improve enterprise value, which can be divided into two main ideas. The first is the mainstream view that ESG can increase enterprise value, from the financing point of view [1]. ESG good performance of enterprises can be investors and financial institutions to release the expectation of sound development, is conducive to reducing the cost of financing, expanding the scale of investment, in order to improve the competitiveness of enterprises. From the perspective of solving information asymmetry, regular disclosure of ESG reports can effectively alleviate the information asymmetry between investors and enterprises, help investors to understand the underlying returns as well as risks faster, thus increasing the financing efficiency and enhancing the value of the company [2]. At the same time, enterprises to

improve ESG performance can improve their own brand image and external reputation, which is conducive to enhance the enterprise's ability to resist risks when facing external shocks and play the "insurance effect" of ESG [3]. However, some scholars believe that improving the ESG performance of a company has a negative correlation with its own enterprise value. From the perspective of external impacts, enterprises improve their ESG scores due to public opinion or market pressure, which affects their normal business decisions and has a negative effect on enterprise value [4]. At the same time, because the practice of ESG requires companies to invest a large amount of cash flow in the short term to help their green transformation is not conducive to corporate value enhancement, in the long term, ESG enhancement to help companies to improve corporate value therefore presents a U-shaped pattern [5].

In summary, although scholars at home and abroad for the relationship between ESG and enterprise value has been studied to a certain extent, but for whether ESG can improve enterprise value, its conclusion has not been unified. Moreover, in the current research, there are many literatures for the whole industry, as well as individual industry analyses, but it has not yet been summarized in the literature. This paper provides an additional summary of the relationship between ESG practices and corporate value in the three major industries of pharmaceuticals, science and technology, and coal mining.

2. Literature Review & Theoretical Analysis

2.1. Pharmaceutical Industry

Based on the attributes of the pharmaceutical industry, which is a combination of traditional and modern industries, and is an important component of the national economy, pharmaceuticals are the industry with the highest number of disclosure reports among many industries as of 2021, according to the "2022 ESG Development White Paper" published by Wind, a consulting firm. This is also based on the fact that during the epidemic, the pharmaceutical industry was the least affected and most of them adopted anti-epidemic initiatives, which is in line with the ESG concept; at the same time, the pharmaceutical industry covers technology research and development, green manufacturing, green processing, etc., and is subject to strict regulation by the government due to the existence of moral and ethical risks. Therefore, this paper selects the pharmaceutical industry as the object of analysis.

Overall, pharmaceutical companies improve their ESG performance to enhance their enterprise value. According to empirical research, the pharmaceutical industry has a positive effect on enterprise value by improving ESG performance [6]. After splitting and combining their ESG conditions, pharmaceutical companies to improve ESG to improve enterprise value can be broadly divided into three paths: high enterprise value under the protection of the environment and the benefit of society, high enterprise value under the protection of the environment and the interests of shareholders as the core, and high enterprise value under the protection of the community and the protection of shareholders' interests. Under the first path, improving the efficiency of resource utilization, reducing the emission of pollutants in the production and disposal of products is conducive to avoiding fines due to pollutant emissions, saving the cost of corporate capital, and obtaining opportunities for sustainable development; excellent social performance, i.e., healthy competition, compliant operation, and public welfare and charitable and employee benefits, while benefiting the society, improves the visibility as well as the reputation of the enterprise, and attracts more investors to This attracts more investors to invest, reduces financing costs, and increases internal cash flow.

In the second path, the combination of environmental protection and shareholders' interests (i.e., the enterprise's protection of shareholders' rights, shareholders' participation and the board of directors' relevant internal regulations) can drive the combination of shareholders' interests and the company's interests, and the construction of a green manufacturing system while taking shareholders' interests into account, which not only reduces the impact of negative environmental events on the enterprise, but also helps to reduce the agency costs of ESG practices and improves shareholders'

management of the company. It also helps to reduce the agency costs in ESG practice, increase shareholders' motivation to manage the company, and enhance the control level of the internal framework of the enterprise. At the same time, good shareholder performance can attract more investors and reduce financing costs. Under the third path, protecting shareholders' interests and benefiting society are at the core, accumulating corporate reputation by benefiting society, expanding visibility to increase market size and obtaining higher cash flow, and improving employees' welfare to create a sense of belonging to the company, which motivates employees to work efficiently and promotes the efficient operation of the company. At the same time, good shareholder performance can improve the company's relationship with investors in order to obtain more external investment.

At present, under the pharmaceutical industry, under the condition of ignoring environmental protection, the enterprise value can still be enhanced through the path of valuing the interests of society and shareholders, indicating that the present ESG behavior is dominated by the interests of shareholders, and there is still a certain gap between the interests of plurality and dominance.

2.2. Coal Industry

Coal industry is an industry that profits from mining coal resources. Because of its high energy consumption and high pollution in mining and transport, the introduction of ESG has the greatest impact on the transformation and constraints of the coal industry. According to empirical research, coal companies improve ESG performance can increase company value from internal and external perspectives respectively [7]. From the internal perspective, in order to fulfil corporate social responsibility, companies should not only consider the interests of shareholders, but also the demands of employees, suppliers, government and other stakeholders when setting strategic goals [8]. In this way, good social "S" management "G" practices can help enterprises to establish long-term cooperation with other partners in their operations, so as to improve operational efficiency and reduce operating costs. At the same time, the regular disclosure of ESG reports by enterprises can alleviate the information asymmetry between enterprises and creditors, and reduce the obstacles for investors to invest, thus lowering the cost of corporate financing. Ultimately, it increases the internal book value of the enterprise. From the external perspective of the enterprise, green energy saving and emission reduction in the coal industry not only requires the market, the efforts of enterprises, but also relies on the government's relevant regulations and supervision and regulation. Therefore, the excellent ESG score of the enterprise can obtain policy preferences (tax relief, financial subsidies, etc.) to ease the pressure of the enterprise's own cash flow turnover [9].

At the same time, based on signaling theory, excellent ESG performance can release a signal to investors about the enterprise's long-term considerable rate of return and efficient governance mode, so as to attract more investors to invest in the capital market, and thus increase the external market value of the enterprise. According to research findings, within the coal industry, superior ESG practices have a positive effect on both internal and external corporate value enhancement, with the most significant effect on internal corporate value enhancement [7]. One of the reasons is that coal enterprises, as a traditional manufacturing industry with high energy consumption, have a closer relationship between their operations and their stakeholders, and as a traditional manufacturing industry, their business practices are closely related to the government, especially during the period of green transformation, which requires strong support and regulation from the government. Therefore, the impact of improved ESG performance on the company is more sensitive to stakeholders, and the effect is more significant. Secondly, for investors in the capital market, the coal industry is less attractive than other high-tech industries, and the improvement of ESG does not attract widespread attention from investors in the case of a small improvement in corporate profitability, which is not as significant as the internal value of the enterprise.

2.3. Information Technology Industry

The information technology industry, as a new industry, is a new service industry with high-tech nature. Due to its own service characteristics, compared with other traditional manufacturing

industries, it produces less environmental pollution, so the "E" part of its ESG focuses more on the green development of enterprise science and technology. According to research, the improvement of ESG has a positive effect on enterprises in the information technology industry, especially in medium and large technology enterprises, the impact of ESG improvement on enterprise value is particularly obvious [10].

It is mainly through the two paths of green innovation development and social care to improve enterprise value. Green innovation is the development of green, low-carbon and sustainable technologies. The research and development of green innovation technology can increase the competitiveness of enterprises and raise the threshold of competition in the industry so as to expand the market share of enterprises to achieve the dimensional strike. Secondly, in the face of today's more stringent environmental policies and policies to encourage the green development of enterprises, effectively avoiding the policy risks faced by enterprises due to the huge fines or broken capital chain, through the demonstration effect to obtain more policy concessions and improve the reputation of enterprises to continue to encourage enterprises to carry out the research and development of green innovation technology [11]. At the same time, regular disclosure of corporate ESG information can help investors, i.e. local governments, to analyze and monitor corporate ESG performance from multiple dimensions, which can help company management to adjust corporate green innovation strategies according to relevant local policies while reducing internal and external information asymmetry. With regard to social care, enterprises can increase the attractiveness of talents by increasing employee welfare and social care, which can effectively attract more talents, and at the same time, the innovation of employees and the enhancement of work efficiency will have a positive effect on the efficiency of the enterprise's production and operation and the research and development of green technology.

3. Conclusion

In summary, this paper analyses the impact of ESG on its firm value and the path of its effect from pharmaceutical, coal and information technology industries. Generally speaking, improving ESG performance is beneficial to company value. Each industry focuses on ESG practices according to its own situation in terms of environmental protection, green innovation, employee welfare, social welfare and shareholder performance to maximize corporate value. However, the ESG concept, i.e. promoting corporate development from multi-dimensional interests, and the current ESG practice of companies focuses more on corporate value enhancement led by shareholders' interests, which is still a certain distance away from the implementation of the ESG concept. Based on this, the following suggestions are put forward: firstly, for enterprises, they should effectively formulate ESG strategies according to their own industry and their own characteristics in order to achieve the purpose of promoting the green and sustainable development of enterprises; for the government, it should give full play to the role of the visible hand, and provide policy preferences (tax breaks, lower loan interest rates, etc.) to enterprises with excellent ESG performance in the industry, and give warnings to enterprises with poor ESG performance. For the government, it should give full play to the role of the visible hand, giving policy incentives (tax cuts, lower lending rates, etc.) to enterprises with excellent ESG performance in the industry, and giving warnings or fines to those with poor ESG performance, so as to enhance supervision and ensure the compliance of enterprises' ESG practices while enterprises are moving towards the green development path under macro-control. Lastly, from the perspective of information disclosure, the government should work with large financial institutions to develop a set of local ESG indicators according to their own national conditions, so as to facilitate investors' evaluation and comparison of various enterprises and reduce the information asymmetry between investors and enterprises, and to make it easier for them to obtain investment.

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