

The Influence of Environmental, Social and Governance Performance on Firm

Jiixin Yuan*

School of Business, Central South University, Changsha, 410000, China

* Corresponding Author Email: 8102211016@csu.edu.cn

Abstract. As environmental concerns become more widespread worldwide, nations are concentrating on sustainable development, which has prompted the idea of environmental, social, and governance (ESG). The concept of ESG has developed over the past 20 years since it was introduced in 2004. During this time, the ESG performance of firms has gradually been valued by more and more investors, and has even become an important indicator of corporate selection. This study examines and thoroughly reviews the research advances in the field of ESG performance, taking the literature as the foundation and concentrating on the effect of ESG performance on firms. This study further split ESG performance into ESG disclosure, ESG rating, and ESG investment depending on the structural overview. It then discussed their impacts on firms and forming an integrated framework. The paper finally concludes that firm ESG performance is positively correlated with corporate value, but also points out that the current ESG evaluation system is still flawed and gives corresponding suggestions in the end.

Keywords: ESG, sustainability, firm value, literature review

1. Introduction

A rising number of people are concerned about global concerns including carbon emissions, environmental degradation, and climate change as a result of the recent acceleration of global industrialization and urbanization. Faced with these challenges, in 2004, the UN Environment Programme first introduced the concept of ESG, which promotes a focus on addressing climate change, environmental issues and achieving the goal of sustainable development. In order to adapt to the country's green development, many firms have implemented sustainable development strategies and started to improve their ESG performance, which has led to a drastic change in the company's business model. At the same time, ESG has become an investment concept for evaluating corporate sustainability, with all three of its fundamental factors being key to consider in the investment and decision-making process. Consequently, investors now utilize ESG to evaluate firms' business behavior and projected financial success [1].

The ESG performance system is split into three sections in this study: ESG disclosure, ESG rating and ESG investment. The idea behind this categorization is to follow the chronological order of ESG related events. A firm should first refer to a certain system of criteria and indicators to proactively disclose its ESG performance, then the rating agencies can rate the company's ESG performance, and finally, investors use the rating agencies' data to select their investment targets. Therefore ESG disclosure is the basic stone of this system. A large body of scholarship has accumulated in the field of ESG, demonstrating the complex and multidimensional implications of ESG performance, but there lacks a comprehensive review and summary of the key literature about ESG impact in the field. Therefore, the purpose of this article is to offer a logical classification scheme that directs how corporate or investor behavior is impacted by ESG performance and how it affects firms. To this end, this paper provides a focused review of research articles on the transmission mechanism from ESG to firm value.

2. Influence of ESG Disclosure on Firms

2.1. Institutional Investors and ESG Disclosure

Institutional investors' holdings of a corporation may be impacted by its ESG disclosure, based on research on China A-share listed companies. According to Liu, there is a favorable correlation between institutional investors' inclination to hold shares and ESG performance [2]. ESG disclosure can help to reduce information discrepancies between firms and institutional investors, which is a way to mitigate the risk of investors holding the firm's shares [2]. Institutional investors often prefer to hold shares of firms with better ESG performance due to their risk aversion.

There are two main ways to divide institutional investors that are currently representative: The first is to categorize institutional investors into pressure-sensitive and pressure-resistant institutional investors, depending on whether they have a contract or a commercial connection with the company they are investing in [3]. The second is to divide institutional investors into transient, quasi-indexed and focused institutional investors based on their concentration of holdings and portfolio turnover [4]. Additionally, Kon (2007) further divided institutional investors into two types, short-run and long-run institutional investors. Short-run institutional investors correspond to transient institutional investors, and long-run institutional investors correspond to quasi-indexed and focused institutional investors [5].

Due to differences in risk preference, investment objectives, and investment strategies among institutional investors, there is significant heterogeneity among them that can influence their shareholdings. According to Zhou F, Pan W, and Fu H, there is a piece of evidence that pressure-sensitive institutional investors tend to prefer ESG responsibility holdings compared to pressure-resistant institutional investors, and that long-run institutional investors also tend to prefer ESG responsibility holdings compared to short-run institutional investors [6]. Institutional investors who are sensitive to pressure tend to avoid business relationships with firms. Instead, they are more inclined to exercise their shareholders' rights and take a long-term view [6]. Long-term institutional investors prefer to hold the same stock for an extended period and make shareholding decisions after thoroughly examining the firm to predict its long-term development. Because the level of ESG disclosure is a good indicator of a firm's long-term growth which will be discussed later, both pressure-sensitive and long-run institutional investors place a high priority on ESG responsibility performance.

Additionally, the performance of ESG responsibilities is positively impacted by institutional investor holdings [7]. While it is true that ESG disclosure may increase a firm's operating costs in the short term, good ESG performance can lead to increased investor holdings and stock value in the long term, ultimately increasing the value of the firm [2]. Pressure-sensitive and long-run institutional investors can deliver more such gains. This is because ESG performance is more important to them, and thus they are able to promote the firm to improve their ESG management regime, which serves to promote the long-term development of the firm [7].

2.2. ESG Disclosure and Firm Sustainable Growth

Many nations are concentrating on accomplishing their aim of a sustainable and environmentally friendly transition in the aftermath of the UN's 2030 Sustainable Development Goals. Sustainable corporate growth without damaging the environment is a crucial aspect of achieving this goal [8]. Therefore, evaluating a firm's ESG disclosure can reflect its sustainable growth ability and influence investor behaviour. Additionally, a number of studies have investigated into the connection between ESG disclosure and businesses' ability to expand sustainably.

There exists a positive correlation between a firm's ESG disclosure and its level of sustainable growth [7]. This is because ESG disclosure can potentially reduce the difficulty of firm financing and enhance employee performance in the firm [8]. The government has a preference for providing financial support to firms with better ESG disclosure. This is because such firms are less likely to cause significant harm to the environment and their development aligns with the goal of national

green growth. Additionally, good ESG disclosure can bring a good reputation to the firm and attract more talented human resources. These good employees will make more constructive suggestions and valuable contributions to the firm's development. Additionally, for sustained growth, a high degree of corporate decision-making is required [8].

The effect of ESG disclosure on sustainable development varies between various kinds of businesses. The correlation between environmentally unaffected enterprises and sustainable company growth is stronger for those with significant operating uncertainty and low environmental sensitivity [8]. For firms that are environmentally sensitive, greater government regulation often results in better ESG disclosures, which can make it challenging to showcase their distinctive ESG features and attract more investment. However, non-environmentally sensitive firms' ESG disclosures demonstrate their commitment to the long-term growth of their businesses. Additionally, firms with high operational uncertainty may carry a higher level of risk compared to others. ESG disclosure can enhance their business performance and reduce investors' risk expectations about their future development, thus attracting more investment to promote sustainable development.

According to Deng X and Cheng X, it has been argued that ESG disclosure affects non-state-owned firms and secondary sector firms more than state-owned and tertiary sector firms [9]. Investors are more inclined to invest in state-owned companies due to the popular perception that they are more stable and have better reputations than non-state-owned companies, regardless of their ESG disclosure [9]. ESG disclosure by non-state-owned firms can help to reduce information discrepancies between firms and investors, potentially lowering the risk and attracting investment. This is comparable to non-environmentally sensitive firms. Firms operating in the secondary sector tend to generate more pollution than those in the tertiary sector. As a result, when these firms aim to improve their ESG performance by adopting better technology to reduce pollution, they are more likely to enhance their reputation and achieve positive outcomes [9].

3. Influence of ESG Rating on Firms

3.1. Divergence of ESG Rating Agencies

According to Zhu Y, Yang H, and Zhong M, there appears to be a divergence between different ESG rating agencies due to differences in metric systems, information sources, and operating processes. It has been observed that the firms at the top of each ESG rating system are widely different, and each system is done independently without communicating with the others [10]. The differences in metric systems are mainly reflected in the fact that different rating systems have varying metrics, with a significant difference in the number and focus of metrics. The differences in information sources appear to stem from the varying sources of information and the lack of detailed explanations regarding the weighting of information in each rating system. While the rating steps are essentially the same, different rating systems differ in the details of the operating process [10]. Therefore, it can be concluded that the individual rating systems vary widely.

In reality, it is difficult for investors to pay attention to a single agency's ESG rating system, but rather they are influenced by the different ratings of several agencies, which show a high degree of divergence. This discrepancy will cause some problems that will affect investment and firm growth.

The first problem is that although this diversity brings a lot of references to the market, it can create confusion for investors [11]. It has been mentioned that there is little overlap between the best performing firms in each rating system, making it difficult for investors to select firms based on the ESG rating indicator. As many firms with long-term growth advantages are overlooked by investors because of the confusing ESG rating system, this is detrimental to the future growth of these firms. The ensuing problem is that the incentives for firms to improve their ESG performance may be reduced [12]: if investors are not attracted by superior ESG ratings, the act of improving ESG performance becomes a financial burden rather than an economic benefit for the firm. As a result, investors have to learn the true causes of rating discrepancies, utilize and comprehend ESG rating data from a more comprehensive angle, and choose and implement it carefully.

3.2. Individual ESG Rating and Firm Financial Performance

When concentrating on certain rating systems, a corporation might benefit from having a high ESG rating score: The findings of the experiment indicate that a company's financial performance improves with a higher ESG rating [13]. Disclosing more ESG information means that the firm is paying more attention to corporate social responsibility, which may lead to improved business performance, a competitive advantage among industry peers and an enhanced reputation, similar to that which drives firm sustainable growth. When introducing the single E-scores, S-scores or G-scores, the correlation with firms' investment performance is complex but predominantly positive. Even if two companies have the same total ESG rating score in the same rating systems, their firms' investment performance which includes the returns and volatility of firms' investment portfolios may be different [14]. According to the research, although S-scores do not have a strong positive impact on portfolio volatility, G-scores and E-scores have a predominantly positive impact on portfolio returns and are more sensitive to the positive impact of volatility [14]. As a result, investors can achieve better returns by referring to individual ESG rating scores when making investments, which in turn can further promote the financial development of the firm, so that individual ESG rating scores and the development level of the firm show a positive correlation.

While ESG ratings have less of an impact in the short term than traditional factors affecting a firm's financial level, ESG ratings can have an impact over much longer periods, so ESG ratings can be used as an important indicator for long-term investment [15]. For firms, ESG ratings can have a longer-term impact. For investors, rather than investing based on a single factor, a better way to invest is to consider both traditional and ESG rating factors, taking advantage of both the short-term improvement in a firm's finances and the long-term reduction in a firm's investment risk [15].

4. Influence of ESG Investment on Firms

4.1. Green Investment and Green Innovation

Considering the economy and the environment, green investment is required to enhance the status of the environment without significantly affecting the production and consumption of products [16]. Furthermore, there is a possible connection between green investment and other investment strategies such sustainable long-term investing, environmental, social, and governance (ESG) investing, and socially responsible investing (SRI) [17]. Thus green investment can be analyzed from an ESG perspective and then derive the impact of green investment on the firm.

Green innovation is a key aspect of green investment, as it is more technologically advanced and requires more technological innovation than traditional investment. Besides, green R&D and green innovation are supported by green innovation through expanding the channels of funding sources in addition to traditional funding channels. In this way, ESG performance can then influence the value of a firm by reflecting and promoting the level of green innovation.

First, better ESG performance significantly promotes green innovation. The research demonstrates that enhancing green innovation performance is facilitated by the three segments of environmental, social, and governance performance, and company governance performance having the most influence [18]. ESG performance helps promote green innovation mostly by lowering financial barriers and building human resources, a process that is comparable to how ESG disclosure affects corporate sustainability. Businesses that perform well in terms of ESG are more likely to have the upper hand over investors, the government, and staff. This will result in greater financial support and better-informed business choices. The fact that enhancing corporate governance uses comparatively fewer material resources and lessens the demand on resources for environmentally friendly innovations, with higher benefits per resource unit, may be one of the factors contributing to its biggest effect [18].

In addition, this positive correlation between ESG performance and green innovation will increase with the integrity of the institutional environment and the richness of organizational resources [19].

Enterprises may increase their incentives for green innovation by implementing stronger regulation regimes, protecting their green innovation successes, and providing the appropriate protection of property rights under a supportive institutional context [20]. And more disposable resources not only help to improve the operational capacity of organizations but also provide resources to support green innovation. The growth of green innovation within businesses will stimulate the growth of green investment, raising the enterprise's investment value.

4.2. Green Bond

Sustainable finance provides an incentive for firms to seek ESG investments to address the lack of development of the green economy. Green bonds are a fundamental element of green financing and have a significant impact on the advancement of a low-carbon economy [21].

Green bond issuance is a statement that a company is environmentally conscious, encourages the growth of an economy with low carbon emissions, and satisfies ESG assessment requirements. Thus, when investors measure a company's green bond issuance, they will link it to the company's ESG performance. Several studies have shown a mutually reinforcing relationship between green bond issuance and ESG performance.

First, green bond issuance can positively improve corporate ESG performance through internal attention and external monitoring effects. Through internal attention, green bonds have the potential to improve corporate environmental awareness by raising managers' awareness of environmental issues [22]. The better a company's ESG performance, the higher the return on green bonds, this can ultimately lead to an improvement in ESG performance. On the other hand, one of the most important forms of external supervision is through media coverage. The media may help improve a company's ESG performance by not only covering the issuing of green bonds to draw in investors [23], but also by promptly exposing the operational behavior of corporations to oversee them and lower the danger of green-washing [22]. Therefore, the issuance of green bonds can enhance the investment value of enterprises by both increasing investment returns and reducing investment risks.

In addition, ESG performance can inversely contribute to green bond issuance. Wang S, Wang D argued that good ESG practices not only increase the willingness of listed companies to issue green bonds but also motivate them to issue more green bonds [24]. Good sustainable performance reduces environmental risk, which reduces a company's risk of default in the debt market, and the market rewards lower risk with lower required interest rates and lower cost of debt [25]. As a powerful tool for corporate sustainability, ESG can make green bonds cheaper to issue. Companies who haven't released green bonds before will be more inclined to become environmental-friendly because it means they can provide cheaper green bonds. For companies that have already issued green bonds, good ESG performance will also increase the return of their green bonds and encourage them to issue more.

5. Conclusion

This study summarizes the impact of ESG performance on firms in terms of ESG disclosure, ESG scoring and ESG investment, concluding that firms' ESG performance is positively correlated with firm value. From the ESG disclosure perspective, good ESG disclosure can not only increase firm value by attracting institutional investors, but also promote sustainable corporate development. However, both institutional investors and firms are heterogeneous: pressure-sensitive institutional investors and long-term institutional investors prefer ESG responsible investments. Environmentally sensitive, non-state owned and secondary sector firms are more sensitive to the level of ESG disclosure. When considering a single agency's ESG rating, the higher the score, especially when looking over the long term, the better the firm's financial success. When separate E, S and G scores are introduced, the E and G scores have a greater impact on firms' investment returns. From the ESG investment perspective, green investment and green bonds are the main subjects. ESG performance and both of them are positively correlated and will reinforce each other to reduce costs and increase returns for the firm.

However, due mostly to the complexity of the ESG grading system, today's ESG systems are still far from ideal. The rating methodologies used by various rating agencies vary greatly from one another, which can cause investor uncertainty and eventually a lack of faith in ESG ratings. This ultimately keeps companies that perform well in ESG from realizing the expected profits.

Summarizing the above advantages and disadvantages, this paper makes the following recommendations: For rating agencies, firstly, the rating rules should be open and transparent. Furthermore, agencies should strengthen communication with each other, discuss and minimize differences, develop towards unity. For firms, firstly, they should implement a sustainable development strategy and invest resources in green innovation to improve their ESG performance level. And secondly, they should actively disclose their ESG performance to the market to attract investors. For investors, firstly, they should learn more about firms' ESG information and make rational judgement. And secondly, they should combine ESG factors and traditional factors in the investment process to achieve higher investment returns.

References

- [1] Li T T, Wang K, Sueyoshi T, et al. ESG: Research progress and future prospects. *Sustainability*, 2021, 13(21): 11663.
- [2] Liu L. Research on the impact of ESG performance of listed companies on institutional shareholding preference. Shanghai: Shanghai University of Finance and Economics, 2022.
- [3] Brickley J A, Lease R C, Smith Jr C W. Ownership structure and voting on antitakeover amendments. *Journal of financial economics*, 1988, 20: 267-291.
- [4] Bushee B J. Do institutional investors prefer near-term earnings over long-run value?. *Contemporary accounting research*, 2001, 18(2): 207-246.
- [5] Tang S. Research on the economic effects of institutional investors' stock selection ability and their stock holding behaviour. Shanghai: Shanghai Jiao Tong University, 2011.
- [6] Zhou F, Pan W, Fu H. ESG Responsibility Performance of Listed Companies and Institutional Investors' Shareholding Preference. *Scientific Decision-Making*, 2020, (11): 15-41.
- [7] Xia L. Institutional investor holdings and ESG performance. *Advances In International Finance*, 2022, 4(1): 68-72.
- [8] Wang N, Li D, Cui D, et al. Environmental, social, governance disclosure and corporate sustainable growth: Evidence from China. *Frontiers in Environmental Science*, 2022, 10: 1015764.
- [9] Deng X, Cheng X. Can ESG indices improve the enterprises' stock market performance?—An empirical study from China. *Sustainability*, 2019, 11(17): 4765.
- [10] Zhu Y, Yang H, Zhong M. Do ESG Ratings of Chinese Firms Converge or Diverge? A Comparative Analysis Based on Multiple Domestic and International Ratings. *Sustainability*, 2023, 15(16): 12573.
- [11] Liu M. Quantitative ESG disclosure and divergence of ESG ratings. *Frontiers in psychology*, 2022, 13: 936798.
- [12] Berg F, Koelbel J F, Rigobon R. Aggregate confusion: The divergence of ESG ratings. *Review of Finance*, 2022, 26(6): 1315-1344.
- [13] Sandberg H, Alnoor A, Tiberius V. Environmental, social, and governance ratings and financial performance: Evidence from the European food industry. *Business Strategy and the Environment*, 2023, 32(4): 2471-2489.
- [14] Bermejo Climent R, Garrigues I F F, Paraskevopoulos I, et al. ESG disclosure and portfolio performance. *Risks*, 2021, 9(10): 172.
- [15] Giese G, Lee L E, Melas D, et al. Foundations of ESG investing: How ESG affects equity valuation, risk, and performance. *The Journal of Portfolio Management*, 2019, 45(5): 69-83.
- [16] Tran T, Do H, Vu T, et al. The factors affecting green investment for sustainable development. *Decision Science Letters*, 2020, 9(3): 365-386.
- [17] Inderst G, Kaminker C, Stewart F. Defining and Measuring Green Investments. *OECD Working Papers on Finance, Insurance and Private Pensions*, 2012, No. 24

- [18] Zhang J, Liu Z. Study on the Impact of Corporate ESG Performance on Green Innovation Performance—Evidence from Listed Companies in China A-Shares. *Sustainability*, 2023, 15(20): 14750.
- [19] Liu H, Lyu C. Can ESG ratings stimulate corporate green innovation? Evidence from China. *Sustainability*, 2022, 14(19): 12516.
- [20] Tan Y, Zhu Z. The effect of ESG rating events on corporate green innovation in China: The mediating role of financial constraints and managers' environmental awareness. *Technology in Society*, 2022, 68: 101906.
- [21] Jian J, Fan X, Zhao S. The green incentives and green bonds financing under the belt and road initiative. *Emerging Markets Finance and Trade*, 2022, 58(5): 1430-1440.
- [22] Chen J, Yang Y, Liu R, et al. Green bond issuance and corporate ESG performance: the perspective of internal attention and external supervision. *Humanities and Social Sciences Communications*, 2023, 10(1): 1-12.
- [23] Tang D Y, Zhang Y. Do shareholders benefit from green bonds?. *Journal of Corporate Finance*, 2020, 61: 101427.
- [24] Wang S, Wang D. Exploring the relationship between ESG performance and green bond issuance. *Frontiers in public health*, 2022, 10: 897577.
- [25] Sharfman M P, Fernando C S. Environmental risk management and the cost of capital. *Strategic management journal*, 2008, 29(6): 569-592.