

ESG and Corporate Performance: A Survey

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Abstract. Environment, social, and governance (ESG) is an increasing important topic that has attracted great attention in the fields of both academics and practitioners. By systematically reviewing the literature on ESG and corporate performance, this study primarily finds that a large number of researchers demonstrate positive relationship between ESG and corporate value, while some investigators indicate negative association. Furthermore, few researchers do not find significant evidence regarding this relationship. Aside from reviewing extant studies, this survey also displays the differences and connections of previous literature. The reasons why different investigators draw different conclusions may be due to different samples, research locus, proxies, methodology and research period. In particular, some researchers concentrate on ESG disclosure whereas others focus on ESG score or performance, which is inconsistent and can have different degrees of influence on corporate performance. Additionally, this literature review research paper uniquely integrates the effect of COVID-19 on the association between ESG and corporate performance. The majority of researchers indicated that the positive influence of ESG incline to be more highlighted during the COVID-19 crisis. However, an exceptional study concluded that ESG is not significantly related to corporate performance under the impact of COVID-19. As a consequence, not only does this survey complements the existing literature on ESG, but also it provides implications for practitioners and regulators.

Keywords: ESG; Corporate Performance; Sustainability; Socially Responsible Firm.

1. Introduction

Environmental problems such as climate change, pollution and resource shortage, tend to be more and more serious and continuously catch public attentions. ESG, which is on the basis of corporate social responsibility (CSR) and combine with environmental and governance problems, comprehensively integrate enterprises' non-financial factors and is gradually noticed by investors and corporate managers. Although these non-financial aspects are not compulsory to be displayed in companies' financial reports, more and more socially responsible firms endeavour to disclose their environmental, social and governance (ESG) activities, which can not only attract investors who concerns corporate ESG, but also may improve corporate reputation if company has outstanding ESG performance, according to the corporate reputation theory. Likewise, in the light of agency theory, ESG disclosure can alleviate information asymmetry. Additionally, resource dependence theory suggests that corporate ESG activities or disclosure may produce more resources to companies.

Given the importance of ESG, it is surprising that only few papers provide a synthetic review on the relationship between ESG and corporate performance. It thus provides an opportunity to conduct this research. Based on the three theories mentioned above, this article aims to reconcile previous literature regarding this association and primarily divides them into three aspects, including positive, negative and insignificant relationships. Moreover, this paper tries to find out the differences and connections of the extant literature on the topic of ESG and corporate performance. Interestingly, this research specifically pointed out the differences between the influences of ESG disclosure and ESG performance on corporate value. Additionally, the association between ESG and corporate performance during the COVID-19 pandemic is firstly concluded in this article.

This research mainly finds that, there is paucity of literature demonstrating a positive relationship between ESG and corporate value, while a small proportion of investigators indicate negative association. Meanwhile, few researchers prove that ESG does not have significant impact on corporate performance. Moreover, some literature is based on the relationship under the influence of

COVID-19 pandemic and shows that the effect of ESG tends to have more prominently positive influence on corporate performance during the crisis. Besides, this article also evaluates previous literature by ascertaining the differences and connections between them. The reasons why different researchers come to distinctive conclusions are because of their different samples, research locus and proxies in their models. In addition, it also has some connections in the preceding studies. For instance, the reasons of the negative relationship are almost identical.

The rest of this article is organized as follows: Section 2 includes the review of existing researches from three dimensions: positive, negative and insignificant associations between ESG and corporate performance. Likewise, the differences and connections of previous studies are also illustrated in Section 2. Lastly, Section 3 concludes the research.

2. Literature Review

2.1 Positive Influences of ESG Disclosure on Corporate Performance

According to the agency theory, information asymmetries between different groups such as shareholders and managers, always lead to conflicts of interest and more agency costs (Jensen & Meckling, 1976). The ESG disclosure of a firm reveals that the company distribute their responsibilities in the fields of environment, social and governance to the public, which can mitigate the information asymmetry for investors and helps them better evaluate the strengths and weaknesses of company's ESG activities (Fatemi et al., 2018; Li et al., 2018; Wong & Zhang, 2021). With respect to the corporate reputation theory, the reputation of a company is a type of intangible asset, which can positively affect the corporate value (Weigelt & Camerer, 1988). A socially responsible firm is likely to attract more investors and increase the corporate performance (Griffin et al., 2021; Nirino et al., 2021; Wong & Zhang, 2021). According to resource dependence theory, enterprises need more resources to develop themselves and benefit stakeholders. Not only can the company's ESG activities be conducive to corporate reputation, but also it may bring a large number of resources to the company, thereby improving the corporate value in the long term (Fatemi et al., 2018; Drempetic et al., 2019).

A large number of researchers argued that the ESG disclosure of a company could be conducive to enhancing the corporate value. Early as Crifo et al. (2015) documented that if company's executive was irresponsible for the ESG issues, the enterprise was likely to suffer from higher cost of capital, which might jeopardize shareholders' interests and destroy the value of the company. They also indicated that the individual effects of ESG disclosure was positively correlated with corporate performance based on 330 observations. Similar to the previous researchers, Aboud and Diab (2018) collected samples from the EGX ESG index and found that the higher the company's ranking in this index, the better the company performance. What's more, it was also revealed in Baker et al. (2021) and their literature that not only was the ESG index advantageous for provoking enterprises to pay more attention to ESG problems, but also it could upgrade the reporting standards by improving the transparency of ESG disclosure and reduce information asymmetry, which consequently draws investors' attentions to ESG issues and contributes to sustainability in Egypt. Apart from the positive impact of ESG index, the extent of ESG disclosure also had positive relationship with corporate value in the long term because once the company disclosed more transparent ESG information, the incentives to improve the internal control system would be enhanced and better investment decisions would be made by managers (Li et al., 2018). Consistent with Crifo et al. (2015), Buallay (2019) and Alareeni & Hamdan (2020) analysed the effects of the integrated and respective ESG disclosure on enterprise's performance. The former argued that ESG outcome was positively related to corporate performance while merely indicated positive association between environment disclosure and the financial and market performance within the European banking industry from 2007 to 2016. Similarly, Alareeni & Hamdan (2020) also proved that the ESG disclosure of an enterprise was closely related to three models including ROE, ROA and Tobin's Q, which respectively represent company's financial, operational and market performance. After splitting the ESG disclosure, they found that environment, social and governance results were positively correlated with firm's market

performance and governance disclosure also had positive influence on company's operational performance.

A proportion of researchers studied the association between ESG disclosure and other aspects, including corporate risks, stock prices, stock liquidity and cost of company, which would affect corporate performance. For instance, on the one hand, Sassen et al. (2016) empirically showed evidence that both of the social and environment disclosure could decrease firm risks, while the latter one primarily reduced idiosyncratic risks. Meanwhile, they also indicated that if the aggregated ESG score was higher, the socially responsible firm tended to have lower firm-specific risks, which contributes better performance of the company. On the other hand, Ng & Rezaee (2020) revealed that the better sustainability performance of ESG, the higher the stock price informativeness of the firm, implying that investors would have less asymmetric information about the stock and be aware of company's responsibilities on environment, social and governance, which finally may induce better corporate performance. Furthermore, Tang & Zhang (2020) also indicated positive influence of ESG disclosure by proving that the issuance of "green bonds" contributes to increasing stock prices, higher stock liquidity, which is instrumental in higher corporate value in the near future. Besides, it is suggested by Eliwa et al. (2021) that enterprises should not only have ESG disclosure which is considered as a symbolic approach, but also they ought to strive for better ESG performance, which helps the companies to form competitive advantages and earn lower cost of capital from lending agencies. Similar to the symbolic approach that mentioned by Eliwa et al. (2021), Nirino et al. (2021) also concluded that ESG disclosure was helpful to creating good corporate image thereby enhanced the reputation of firms. In particular, the corporate reputation which is sensitive to defective ESG media reports was proved to have significantly positive relationship with corporate value because appropriate ESG disclosure alleviated information asymmetry, decreased the uncertainty of the company, therefore stabilized the increasing expected cash flows and reduced the cost of contracts (Wong & Zhang, 2021). In addition, Alkaraan et al. (2022) added "corporate transformation toward Industry 4.0" (CTTI4.0) to their paper, and found that higher level of ESG performance could make the company more concentrated on Industry 4.0 and win better financial performance. Although governance performance is not analysed by Griffin et al. (2021), they also revealed analogous results with previous researchers that firms' environmental and social performance were beneficial for companies to improve their reputation and lessen the litigation costs related to ES, which finally could be result in decreasing risks and higher corporate value. In terms of the channels through which ESG affects corporate performance, Sassen et al. (2016) demonstrated that the integrated ESG performance reduced firms' idiosyncratic and total risks, implying lower stock volatility of companies. Meanwhile, corporate value would also be improved in that companies encounter less risks and lower cost of capital. What's more, Alkaraan et al. (2022) indicated that socially responsible firms with higher ESG score were more likely to improve the disclosure on CTTI4.0 and focus more on Industry 4.0, therefore enhancing the corporate value.

The influence of ESG disclosure or ESG performance during the current COVID-19 period are also studied by some researchers. Consistent with Griffin et al. (2021), companies with high-level ES performance were found to outperform others, proxied by higher stock prices and lower volatilities (Albuquerque et al., 2020). Moreover, they also indicated that socially responsible firms with higher ES scores were not vulnerable to the COVID-19 collapse. The findings of Broadstock et al. (2021) agreed the article by Albuquerque et al. (2020) in general but had slight differences in detail. For instance, they asserted that the performance of environment and governance rather than social were positively associated with the stock return. Apart from the main result in previous study, it was also stated by Broadstock et al. (2021) that the significance of ESG performance would be more prominent in times of crisis but more attenuated during normal times, thereby Chinese investors inclined to see ESG performance as risk attenuation and future stock trend. However, Bae et al. (2021) showed no relationship between ESG performance and stock return during the pandemic, which may be due to different research locus from Broadstock et al. (2021) and divergent research period from Albuquerque et al. (2020). Although COVID-19 crisis causes economic downturn and inconvenience

of daily lives, companies which perform well in ESG activities fortunately survive from the epidemics because investors who pay more attention to ESG, are loyal and confident about the socially responsible firms, acknowledging the importance and the positive influences of ESG.

2.2 Negative Influences of ESG Disclosure on Corporate Performance

A proportion of researchers hold the opposite viewpoint that ESG disclosure may destroy the value of companies. As is shown in the research by Fatemi et al. (2018) that the effect of ESG disclosure on corporate value was associated with investors' attitudes. Specifically, some investors only focused on the additional costs of environment, social and governance instead of the potential profitability in the long run and might consider ESG disclosure as "greenwashing" and "cheap talk". Hence, they could think such disclosure was useless and might even be detrimental to the corporate performance. Buallay(2019) and Alareeni & Hamdan(2020) analysed the impact of environmental, social and governance disclosure on corporate performance respectively. The former one indicated that social and governance disclosures were negatively correlated with companies' operational and financial performance, while the latter one differently summarized that environmental and social disclosures had negative impacts. This might be result from the extra costs of firms which devoted more into ESG. What's more, it is considered by Christensen et al. (2022) that higher ESG disclosure was accompanied by more discrepancies because the specific ESG-related information could be explained differently. Meanwhile, more ESG discrepancies were also found to be result in higher return volatility, which made it difficult for companies to get external financing and might injure corporate value. Narrowing the research scope to Latin America, Duque-Grisales & Aguilera-Caracuel (2021) stated that the corporate financial performance was likely to decrease since the enterprise might highly invest in ESG activities. Likewise, they separately analysed three scores - E, S, G and concluded the negative influence of social score were the most significant, implying that irresponsible managers regarded the investment in social issues did not necessarily enhance company's competitive advantage and even jeopardize corporate value.

Some researchers studied some factors that negatively influenced companies' ESG performance. Although Dremptetic et al. (2019) put forward a positive relationship between firm size and ESG score, they were also suspicious for the ESG scoring criteria which was based on the resource holdings and data availability. They also indicated that larger firms, in fact, might not have better ESG performance than smaller companies. Therefore, the association between ESG score and corporate value was equivocal. Furthermore, Nekhili et al. (2019) mainly discussed the negative effects of employees' board representation on the relationship between ESG performance and corporate value, which might be based on the possible reason that employee directors were in alliance with managers to balance shareholders' authorities. This could benefit managers but harm shareholders, which intensified the agency problem and was detrimental to corporate performance.

2.3 Insignificant Influences of ESG Disclosure on Corporate Performance

Unlike the conclusions drawn by previous researchers, a minority of researchers found that ESG did not impact corporate performance. Bae et al. (2021) collected data after the crash of COVID-19 and failed to prove that ESG had influence on the stock return of companies across industries. Gathering much less data than Bae et al. (2021), the research scope just included 100 companies in logistics sector ranging from 2011 to 2018 (Govindan et al., 2021). Although Govindan et al. (2021) proved that companies with "CSR committees" tended to have higher ESG performance, they found a weak association between ESG performance and corporate value. More unexpectedly, the individual effect of companies' social results even had significantly negative correlation with corporate performance.

2.4 Differences and Relations of Literature

The studies mentioned earlier focused on the relationship between ESG disclosure or ESG score on corporate performance. A vast array of researchers showed evidences for positive relationship,

while a few investigators indicated negative or insignificant associations. Some potential reasons for these three different outcomes are also presented in this article.

In terms of the negative correlation between ESG score and corporate value, the research by Nekhili et al. (2019) can be chosen to compare with the paper by Crifo et al. (2015), which also executed their study in France from 2008 to 2010. Possible explanations to these two opposite results can be the larger sample, longer research period and different methodology of the former research. Similarly, Drempetic et al. (2019) and Christensen et al. (2022) also indicated negative association between ESG performance and corporate value based on a research locus of many countries. However, Griffin et al. (2021) adversely proved a positive relationship based on sample firms from a large number of countries. The primary reason of these two conflicting outcomes is the different proxies of independent variables. In particular, Drempetic et al. (2019) concentrated on the effect of firm size and ESG data availability and Christensen et al. (2022) focused on the influence of ESG disclosure, while Griffin et al. (2021) set individualism which reflects national culture as independent variable. Besides, Duque-Grisales & Aguilera-Caracuel (2021) showed evidence for the negative impact of ESG performance on corporate value, which may be result from their unique study area – Latin America.

The insignificant relationship between ESG performance and corporate value were concluded by Bae et al. (2021) and Govindan et al. (2021). Although Albuquerque et al. (2020), Broadstock et al. (2021) and Bae et al. (2021) analysed the influence of ESG score on corporate performance during COVID-19 pandemic, the first two of them concluded a positive association. This difference can be attributed to the different research locus and research period. Specifically, Bae et al. (2021) extended their research period to June 2020, which is much longer than the other two. Likewise, the country of their sample also differed from Broadstock et al. (2021) who studied in China. Besides, the insignificant association drawn by Govindan et al. (2021) may be ascribable to the small number of observations within 100 companies in the identical sector – logistics.

Table 1. Summary of Literature

Journal	Year	Author	Sample	Main Contents
The British Accounting Review	2018	Li, Gong, Zhang and Koh	2415 observations in the UK from 2004 to 2013	Better ESG disclosure can financially benefit firm value in the long term
The International Journal of Human Resource Management	2019	Nekhili, Boukadhaba, Nagati and Chtioui	741 observations in France from 2007 to 2017	Negative relationship between ESG performance and market value if employees are represented on board
The Review of Corporate Finance Studies	2020	Albuquerque, Koskinen, Yang and Zhang	13689 observations in the US in the first quarter of 2020	Firms with better ES performance have higher stock price, lower stock volatility and suffer less from COVID-19
Journal of Corporate Finance	2020	Ng and Rezaee	6632 observations from 2005 to 2015	Positive relationship between ESG performance and stock price informativeness
Journal of Corporate Finance	2021	Bae, Ghoul, Gong and Guedhami	1750 firms in the US from February to June of 2020	Insignificant relationship between CSR performance measured by MSCI ESG Stats and stock return
Journal of Business Ethics	2021	Duque-Grisales and Aguilera-Caracuel	520 observations in Latin America from 2011 to 2015	Negative relationship between ESG performance and financial performance
Critical Perspectives on Accounting	2021	Eliwa, Aboud and Saleh	6018 non-financial firms in 15 EU countries	Lending agencies will charge lower cost of capital for firms with higher ESG performance

It can be seen from Table 1 that although previous researchers studied on ESG, they have slightly different focuses. In particular, some researchers like Li et al. (2018) focused more on the disclosure of company's ESG activities, while others like Nekhili et al. (2019) inclined to analyse the company's ESG score or performance. However, higher level of ESG disclosure does not necessarily represent better ESG performance. According to Fatemi et al. (2018), enterprises with better ESG performance might have a lower firm value if they did more efforts in ESG disclosure because it could be a possible explanation to company's overinvestment in ESG. It was also documented by Christensen et al. (2022) that high-level ESG disclosure led to more disagreement, which could make the company miss opportunity of acquiring external financing and the stock return unstable. In addition, Eliwa et al. (2021) also indicated that two main ESG databases, Thomson Reuters and Bloomberg ESG ratings, paid different attentions to ESG. The former one centred on the relative ESG performance based on 10 sub-dimensions of ESG activities, while the latter one concentrated on the available ESG information in company's annual report.

There are some connections in the extant literature mentioned above. Firstly, although arguments between ESG disclosure or ESG score on corporate performance are distinctive, a majority of researchers mentioned above hold positive view of ESG disclosure or performance. Secondly, some investigators studied the effect of ESG on other aspects, including stock price, corporate risk, cost of capital and corporate transformation to Industry 4.0 rather than corporate performance. These aspects are closely associated with the value of company, revealing a wide range of influences by ESG. Thirdly, a small number of investigators negatively evaluated ESG and the reasons they put forward were generally consistent. Particularly, these researchers indicated that some irresponsible managers considered ESG as the burden of companies because of its additional costs. Another potential reason of this negative relationship is that some investors saw company's ESG disclosure as "greenwashing" and "cheap talk".

3. Conclusion

This study provides a synthetic and evaluative monograph of academic papers that investigate the relationship between ESG and corporate performance. While some researchers argue that ESG disclosure or ESG performance is positively correlated with corporate value because they consider it can reduce corporate risk, stabilize the stock volatility and enhance the corporate reputation, others considered negative association in that the ESG activities may increase the extra cost of company or some companies' ESG disclosure is a type of "greenwashing". Companies show that they are eco-conscious and sustainable in ESG disclosure to attract more investors but behave in an opposite way. Besides, a minority of researchers do not find evidences about the influence of ESG on corporate performance. Furthermore, a proportion of researchers documented that the positive influence of ESG seemed to be more significant during COVID-19, while Bae et al. (2021) indicated an insignificant relationship under the influence of COVID-19. Apart from the collation of existing literature, the author also attempts to find out the differences and connections of the positive, negative and insignificant associations between ESG and corporate performance, respectively. What's more, the differences between ESG disclosure and ESG performance from previous literature are also clarified in this article.

Limitations also exist in this literature review research paper. Firstly, since ESG is a hot emerging topic in recent years, the number of the extant literature is relatively small, compared to CSR. Meanwhile, a majority of researchers analysed this popular topic within recent 3 years, implying a short literature period regarding ESG and corporate performance. Therefore, the author only focuses more on some pertinent literature in recent years, which contributes less to the changes of the relationship between ESG and corporate performance in the long term. Secondly, although this research combines the relationship between ESG and corporate value with COVID-19 pandemic, the number of relevant researches is small, which does not help to draw a general conclusion.

After reviewing the existing literature, the author noticed that there are small number of researches studied the impact of ESG during the COVID-19 pandemic. Thus, future research is suggested to discuss whether the effect of ESG is still obvious if adding the consideration of influence of COVID-19 crisis. Furthermore, a majority of researchers target their research in the US or Europe. Consequently, it creates an opportunity for future investigators to set their research locus in some Asian countries, which can raise the awareness of Asian companies and local investors to pay more attention to environmental, social and governance issues, thereby improve the sustainability in some developing countries. In addition, the type of literature review research regarding ESG is hardly seen in the extant studies. Therefore, the author recommends future researchers to systematically review the literature on determinants of corporate ESG activities, the solutions to the negative impact of ESG and so forth.

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