Does Sustainability Matters for Firm Value: Evidence From China

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Abstract

This study aims to examine the impact of environmental social and governance (ESG) on firm value using a sample of firms listed in China. Using fixed effect panel regression analysis on a sample of firms listed on the Shanghai stock exchange of China, we find that ESG has a positive impact on firm value consistent with shareholders theory. This approach highlights the value-enhancing potential of sustainability initiatives for all stakeholders, including shareholders. Future studies should examine the influence of ESG ratings on a broader scale, for as, by including small and medium-sized firms (SMEs) in the sample.Our findings provide implications for practitioner's regulators and policy makers. Our study contributes to the existing literature on sustainability by focusing more on ESG in concentrated ownership country like China. Overall our findings confirm that sustainability reports carry information that is helpful for firm valuation and firms benefit from disclosing ESG activities by receiving higher tax benefits and having the potential to increase their loan capacity.

Keywords: ESG, Firm value, Shareholders theory, China

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Introduction

corporate Good governance is significant for effective capital allocation as well as the preservation and expansion of capital, which are necessary for building sustainable businesses in the long run. The primary goal of corporate governance is to improve transparency and accountability within the existing systems(Abor, 2007; Agnese et al., 2022). Similarly, ESG governance standards ensures that accurate and transparent maintained by measures are companies. The governance standards encourage the investors to monitor if the companies are avoiding instances of conflict of interest, utilizing any political contributions to obtain a preferential treatment, or engaging in any illegal conduct. Moreover, another facet of corporate governance that the companies do not have a detrimental impact on the environment and society. ESG standards assists investors to ensure that the activities in which the companies engage do not further degrade the environment and an inclusive approach is adopted by the company in its decision making essentially ensuring good corporate governance.

Environmental, Social and Governance (ESG) refers to the three crucial elements that are deemed to be essential to evaluate sustainability and moral effect investments. Social criteria look at how relationships are managed with clients, partners, employees, and the communities in which the company operates(Al Ansari and Alanzarouti, 2020; Aouadi and Marsat, 2018a). Under the governance criteria, subjects such as leadership, executive compensation, audits, internal controls, and shareholders are addressed. Individual elements of **ESG** intertwined, for example, social criteria environmental intersect with governance criteria in instances when the businesses attempt to meet environment

regulations, as well as more general concerns about sustainability(Aydoğmuş et al., 2022).

Until 2010, investors paid little attention to environment, social and governance (ESG) data which includes information about a company's carbon footprint, labour policies, board composition and other aspects. However, in the recent era investors make extensive use of this data(Chang and Lee, 2022; Chouaibi and Chouaibi, 2021; Wong et al., 2021). Nowadays, an increasing number of investors examine these variables while evaluating whether to invest in or continue to interact with a certain company. Investors avoid companies with weak ESG records as they believe these variables will negatively impact financial performance. High ESG performance is deemed to be essential by some investors owing to their interest in investing solely in 'green funds' for moral grounds or their belief that the same would lead to superior financial results. Although ESG investing is ethical in its approach to address environmental and social consequences, its fundamental purpose is to analyze a company's long-term sustainability.

The UN Global Compact was the first to propose ESG issues in order to emphasise the importance of these factors in firm analysis financial (Yawika and Handayani, 2019). Organizations with high ESG performance have lower risks, higher returns, and are more resilient during times of crisis (Kumar et al., 2016). As a result, companies with high ESG performance are frequently perceived as less risky by equity and debt capital providers. Investors adjust their risk and return expectations accordingly, and they are often willing to accept lower returns and lending rates when providing capital to companies that demonstrate superior ESG performance (Kölbel and Busch 2017). As a result, it has been argued that improved performance on ESG-related issues can lower a firm and its costs.

Scientific research has increasingly focused organisations on environmental, social, and corporate governance practises (Galbreath, 2013). Despite being a growing trend, there is no scientific consensus on whether ESG practises reduce the cost of capital. Previous research on the relationship between ESG issues and the cost of capital has yielded conflicting results. Some attempted to establish a relationship between ESG issues and the cost of capital by focusing solely on the cost of equity (El Ghoul et al., 2011; Ng and Rezaee, 2015; Pellegrini, Caruso, and Mehmeti, 2019; Ahmed, Eliwa, and Power, 2019), others considered multiple while components of the cost of capital(Ge and Liu, 2015, Erragragui, 2017, Hasan et al., 2017). Due to rules and regulations, participation in sustainable practises is somewhat voluntary for the company in most developed economies around the world (Buhmann, 2005). In the context of developing countries. however. incorporating ESG-issues into business operations is still of lesser importance (Schroders, 2018). ESG awareness is relatively low, and the pressure on organisations to meet key stakeholders and their expectations is potentially weaker (Crisostomo et al., 2011; Baughn et al., 2007). Although developing countries are becoming more aware of sustainability issues, emerging markets are underrepresented in the existing empirical literature. Participating in ESG practices will become even more important and inevitable in the future, given their growing economic environmental importance (Bhatia and Makker, 2019). As a result, the motivation for this study is to investigate impact the of **ESG** performance organisations on developing countries. More specifically,

this study seeks to fill a critical gap in the literature on sustainability in the Asia-Pacific region.

Our study contributes to the existing literature on ESG in many ways: First, it allows us to establish a nexus between the theory stakeholder of corporate governance and ESG. The paper also delves deeper into how ESG has a beneficial influence on shareholder value and how it impacts the stock price of the company. The paper urges investors to consider the ESG standards set by the companies and advocates investing in companies that have embraced high ESG standards, as there are currently no guidelines mandating ESG.

2.Literature Review and Development of Hypothesis

2.1Background of the Study

Corporate Social Responsibility (CSR) is a self-policing business paradigm by which corporations make a concentrated effort to operate in ways that benefit society and environment rather than deteriorating them. This includes the environment, economy, and social fabric of a community. Companies that practice corporate social responsibility strive actively to improve the environment and society while also improving their accountability to the public, stakeholders, and themselves(Al-Dah et al., 2018; Fatima and Elbanna, 2022; Rodriguez-Gomez al., 2020). However, etenvironment, social and governance (ESG) evaluates sustainability policies inside a company by considering governance, social and environmental factors. Although, ESG and CSR are both concerned with the impact of the company on the society and environment, the key distinction between the two business modules is that CSR is a business strategy employed by the individual companies, whereas ESG is a criterion used by investors to evaluate whether it is

worthwhile to invest in the company. Further, CSR does not account for governance factor within the company and is a more qualitative measure, however, ESG is a quantitative factor as it makes use of quantifiable indicators to measure accountability. CSR is great for raising awareness of programmes, but ESG can provide reliable data to back them up. A company could employ both ESG and CSR simultaneously. CSR may give an internal structure through which the organization communicates with its whereas employees, **ESG** provides measure goals. ESG is widely popular among the stakeholders and is regarded as a modern facet of Corporate Social Responsibility (CSR)(Gillan et al., 2021; Sarkar *et al.*, 2021).

The Companies Act, 2013 mandates the companies to disclose the amount of money spent on corporate responsibility (CSR). Additionally, the Securities and Exchange Board of India (SEBI) announced new ESG regulations for the top 1,000 listed companies in 2020. The recent development in the regulatory framework enables the companies to follow the stakeholder approach of corporate governance. The environmental aspect of ESG includes corporate climate consumption, policy, energy pollution, conservation of natural resources, and animal care are examples of environmental challenges. These elements help analyze any risk a company encounters and mitigate and manage those risks. These factors also include direct and indirect greenhouse gas emissions, hazardous waste management, and adherence environmental to requirements. 1 The social dimensions of a ESG in a company examine the relationship between a firm and its

2.2 The Impact of ESG on Firm Value

Business fortunes are influenced by relationships with customers, suppliers, workers, and society at large in addition to shareholders and management. Rather than solely catering to the interest of the shareholders, the stakeholder theory encourages corporate managers to consider the interests of all the stakeholders in their governance process. As per the theory, the essence of business is developing relationships and adding value for the company's stakeholders. The stakeholder theory of corporate governance focuses on the impact of corporate activities on all stakeholders of the organization. A balance between different stakeholder groups is deemed essential for a company's long-term prosperity. This theory was extensively used by eBay in response to the covid outbreak around the world. The company

internal and external stakeholders.² This facet of ESG is highlighted by an investment approach known as socially responsible investing (SRI). SRI investors seek companies that promote moral and socially conscious objectives such as diversity, inclusivity, community focus, social justice, and corporate ethics. Adhering to ESG governance standards ensures that a company uses transparent accurate accounting principles, appoints executives with integrity and answerable diversity, and is shareholders. It refers to the governance aspects of decision making which vary from the formulation of policies by sovereigns to the allocation of duties and rights among various stakeholders in organizations, such as the board of directors, management, shareholders, and stakeholders.³

¹ S&P Global. "Understanding the 'E' in ESG", https://www.spglobal.com/en/research-insights/articles/understanding-the-e-in-esg

² Harvard Law School Forum on Corporate Governance. "Time to-Rethinkthe-S-inESG".

https://corpgov.law.harvard.edu/2020/06/28/time-to-rethink-the-s-in-esg/

 $^{^3}$ S&P Global. "Understanding the 'G' in ESG", https://www.spglobal.com/en/research-insights/articles/what-is-the-g-in-esg

took a number of steps to aid the thousands of sellers that use marketplace. The company delayed these sellers' fees, raised the quantity of free listings, and safeguarded the reputation of sellers. Although environment, social and governance (ESG) and stakeholder theory are distinct concepts, however there is a nexus between the two. The stakeholder theory emphasizes that companies should generate returns to stakeholders from ESG investments. The key connection is that both highlight the need to incorporate problems societal into business operations. They stress the responsibilities that a company has towards communities and societies(Ahmad et al., 2021; Feng and Wu, 2021).

A strong ESG proposal corresponds with stronger equities returns from both a tilt and momentum perspective.² Better ESG performance corresponds with lower downside risk, as evidenced by lower loan and credit default swap spreads and strong credit ratings.3 ESG has a lot of potential for value creation and links to cash flow in eight important ways: (i) Top line growth, (ii) Cost reductions, (iii) Boosts Productivity of the employees, (iv) Reduction in regulatory and legal intervention, (v) Investment and asset optimization, (vi) Increasing customer loyalty, (vii) Better financial performance, and (viii) Provides a competitive edge. ESG can significantly lower expenditure of a company. In addition to other benefits, properly adopting ESG assist companies to manage their rising operational costs, such as cost incurred for acquiring the raw materials etc. For example: 20% of FedEx's 35,000 vehicle fleet has been changed to electric vehicles that has reduced the fuel usage by

more than 50 million gallons essentially reducing its operating costs.4 compelling ESG enables the companies to exercise more strategic freedom, reducing regulatory pressure(Aouadi and Marsat, 2018b; Derrien et al., 2022; Tahmid et al., 2022). A compelling ESG reduces the probability of the company facing an unfavorable government action. It enables the company to earn the support of government and subsidies, whereas a company with weak ESG frequently faces restrictions by the government advertisement and point of sale. A strong ESG proposition may boost investment returns by diverting money to more attractive and sustainable alternatives. It aids companies in avoiding stranded investments that would be profitable owing to the environmental problems in the long run. ESG not only improves a company's standing with lenders, but it may also help the company perform financially better. Going paperless, or implementing energyrecycling. efficient improvements are just a few examples of how even tiny steps towards sustainability may boost a company's bottom line and return on investment. In 2020, Nestle declared that it will spend up to \$2.1 Billion by 2025 to replace plastic with food grade and recyclable polymers. This transformation is anticipated to decrease Nestle's carbon impact and lower compliance costs, particularly in with strengthened regulations against the use of plastic packaging. ESG participants receive a competitive edge for their companies. As per the survey conducted by Greenway, 64% Americans are ready to pay more for items from companies that support sustainable practices.⁵ ESG metrics are all significant

¹ Behl, A., Raghu Kumari, P. S., Makhija, H., and Sharma, D. (2021). Exploring the relationship of ESG score and firm value using cross-lagged panel analyses: Case of the Indian energy sector. Ann. Oper. Res. 313, 231–256. doi:10.1007/s10479-021-04180.8

² Global Sustainable Investment Review 2018, Global Sustainable Investment Alliance, 2018, gsi-alliance.org.

³ Mozaffar Khan, George Serafeim, and Aaron Yoon, "Corporate sustainability: First evidence on materiality," The Accounting Review, November 2016, Volume 91, Number 6, pp. 1697–724 ⁴ Witold J. Henisz, "The costs and benefits of calculating the net present value of corporate diplomacy," Field Actions Science Reports, 2016, Special Issue 14.

⁵ https://greenprint.eco/greenprint-sustainability-index/

to consumers, employees, lenders, and regulators. The brand image of the company is significantly strengthened by company executives who work to enhance working conditions, advance gender diversity, give back to the community, socioeconomic speak out on concerns. Various investment firms, such as E Fund Management Co., have incorporated the ESG factors into their investment research framework as the companies that performs well in these variables are likely to gain from the enhanced long-term competitive advantages, reduced downside risks and strengthened reputation. Companies that adhere to these sustainability principles and embrace higher environment and social standards are more likely to create a positive brand image and provide highquality products and services, resulting in client loyalty and employee motivation.

In 2018, E Fund Management conducted an analysis of two chemical companies in China. Based on their analysis of the environmental practices, Company A had lower environmental risks than Company B. The stock performance of the company A was better than Company B as the latter experienced backlash several times over the years owing to its poor environmental score. There is a negative impact on the stock price in the market on the news of a company's ESG incident.

| Perform | 18 | 19 | 19 | 19 | 19 | Tot |
|---------|-----|----|----|----|----|-----|
| ance | Q4 | Q1 | Q2 | Q3 | Q4 | al |
| (%) | | | | | | |
| Compan | -19 | 47 | -1 | -9 | 38 | 38 |
| y A | | | | | | |
| Compan | -15 | 42 | 5 | 2 | 2 | -45 |
| уВ | | | | | | |

1'E-Fund-Management-Case-Study,' file:///C:/Users/Manav/Downloads/INSIGHT_ESG_PRACTICE_CASE_STUDY%20(1).pdf

From the above table¹, it can be inferred that by employing the environmental variable, E Fund Management made a better investment decision. Similar processes could be used to social and governance considerations. The ESG analysis framework does not solely serve as a safeguard assessment tool for evaluating a company, however also as a safeguard for mitigating tail risk.

Hence, we hypothesize that:

H1: ESG Positively Impacts Firm Value in China

3.Data and Methodology

This study explores the relationship between ESG score and firm value for publicly traded companies in China. Blomberg is the primary data source for the various variables. The timeframe 2010-2020 is considered to examine the relationship between ESG score and firm value, and the sample includes 300 firms listed on the Shanghai Stock Exchange of China. Fixed effect panel regression is used to estimate the relationship.

$$TQ_{it} = \beta_0 + \beta_1 ESG Score + \beta_2 LEV + \beta_3 SIZE + \beta_4 DIVI + \beta_5 BS + \eta_i + \lambda_t + \epsilon_{it}$$

Where TQ refers to Tobin's Q, measured by using market value of equity plus book value of debt by total assets.LEV refers to the leverage as measured using debt to equity ratio, SIZE refers to the company size as measured using logarithm of sales, Dividend is the ratio of dividend paid to total assets and board size is the number of directors on the board.

4. Empirical Results

4.1 Descriptive Statistics and Correlation Matrix of China

Table 1 reports the descriptive statistics and correlation matrix of main variables used in this study. The mean value of our dependent variable TQ is 0.175 and the average value of our independent variable ESG disclosure is 21.1.

The correlation matrix shows that ESG disclosure is positively and significantly related to our dependent variable TQ.

Table1: Descriptive Statistics and correlation matrix

| Variable | Obs | Mean | Std.Dev | TQ | Size | Leve | Divi | BS | ESG Dis |
|----------|------|----------|---------|---------|---------|---------|---------|---------|---------|
| TQ | 3041 | 0.17545 | 0.27732 | 1 | | | | | |
| Size | 3041 | 10.0242 | 2.21366 | 0.2716* | 1.0000 | | | | |
| Leve | 3041 | 0.475 | 0.1689 | 0.2202* | 0.4199* | 1.0000 | | | |
| Divi | 3041 | 0.058482 | .00821 | 0.0345 | 0.0580 | 0.1445 | 1.0000 | | |
| BS | 3041 | 9.329063 | 3.482 | 0.0469 | 0.1915* | 0.1359* | 0.2621* | 1.0000 | |
| ESG Dis | 3041 | 21.04401 | 7.752 | 0.1743* | 0.5257* | 0.1813* | 0.0908 | 0.2274* | 1.0000 |

Note: The descriptive statistics table shows that the mean value of ESG is higher in China. Similarly, the mean value of dependent variable TQ is higher in South Africa followed by China. The correlation matrix shows that ESG scores is positively and significantly related to firm value in China.

4.2 Main Result:

China has participated actively in Sustainable Development developing Goals (SDGs). Being a developing economy with a population expansion, the vulnerability of scarce resources, limitless human desires, profit-driven short-term orientation, and the aftermath of the outbreak have increased the focus on sustainable development. The approach is a proxy for contribution to sustainable development, and the indicators included in the ESG approach are largely components of the SDGs. We find that ESG scores positively impacts firm value in China. ESGs are getting increasingly prominent in the Chinese market owing to societal and regulatory pressure, an increasing number of corporations are embracing this idea to draw in private equity. Better interest rates from banks and other financial institutions for the companies that adhere to these principles have an indirect influence on the value of the shareholders. Our findings confirm the stakeholder theory, which

states that ESG measures increase the value of enterprises. This is owing to the fact that ESG increases stakeholder trust in the firm, which enhances the firm's brand equity. Furthermore, our findings are consistent with those of Velte (2017) and Dahlberg and Wiklund (2018), who discovered a considerable positive relationship between ESG and TQ. Both Velte (2017) and Dahlberg and Wiklund (2018) used the ESG score provided by Thomson Reuters, whereas we used the ESG score provided by Bloomberg. The methodologies scoring are incomprehensible, making them potentially subjective and providerspecific. Also, the methodologies employed in previous literature may not be identical to those employed in our regression analysis. Among the control variables firm size and leverage has a positive impact on firm value.

Our findings provide an implications for managers, investors and shareholders.

ESG reporting is deemed essential for both the management and shareholders.

Through ESG, corporate managers seek to increase the future profitability and the value of the organization. This essentially results in increased share prices and dividends for the shareholders having a positive impact on their value. ESG aids organization's effort the gain credibility, satisfy stakeholders, and avert additional political expenses. All these elements are advantageous for investors and increase the company's profitability and shareholder value. Additionally, ESG investors are value-based investors who are more concerned with the next decade rather than the current quarter. These investors are more focused on creating long-term value over time than in selling the stock for a 'sugar high' in the immediate future. 1 ESG aids in bringing in investors, fostering customer loyalty, enhancing financial performance, and ensuring the sustainability of corporate operations. It is essential to align an ESG vision with an organization's present strategy and purpose to guarantee the acceptability and success of programme. By laying the groundwork and explaining it, the organization will be able to be transparent in its activities, prevent 'greenwashing,' and align the roadmap with fundamental business objectives.

Table 2: Impact of ESG on Firm value in China

| | China |
|-------------|-----------|
| Variables | TQ |
| Size | 0.0049*** |
| | (3.46) |
| Leve | 0.0000* |
| | (1.96) |
| Divi | 0.2460 |
| | (1.37) |
| BS | -0.0004 |
| | (-1.09) |
| ESG Dis | 0.0004* |
| | (1.80) |
| Constant | -0.0379** |
| | (-2.53) |
| No. of Obs. | 3041 |
| R-Squared | 0.52 |

Note: This table reports the impact of ESG on firm value. TQ is the dependent variable and ESG is the independent variable. t-statistics are in brackets. ***, **, * denote significance at the 1%, 5% and 10%

significance level, respectively.

4.3 Robustness Check

The results of the robustness study are shown in Table 3. We implemented Reeb and Upadhyay's (2010) three-stage least square regression model for robustness. To overcome the issue of reverse causality in the additional test, we used the 3SLS approach. Due to the small size of the sample, 3SLS is recommended rather than GMM and 2SLS. Endogenous variables and instruments must be correlated, but not with the error term. The metric should be related to ESG but not business value. Return on Assets (ROA) is the instrument variable used in this context. We find that our result are consistent with main results.

¹ 'Strong ESG Practices Can Benefit Companies and Investors,' https://www.nasdaq.com/articles/strong-esg-practices-canbenefit-companies-and-investors-2019-03-

 $^{13\#:\}sim: text=The \%\ 20 advantages \%\ 20 of \%\ 20 proactively \%\ 20 tackling, growth \%\ 20 benefiting \%\ 20 companies \%\ 20 and \%\ 20 investors.$

Table 3: Endogeneity Check

| Variables | ROA |
|-----------|----------|
| | |
| BS | -0.3837 |
| | (-0.43) |
| Size | 0.5422** |
| | (2.09) |
| Leve | 1.3849** |
| | (2.09) |
| DIVI | 0.0384 |
| | (0.95) |
| ESG | 2.5580* |
| | (1.69) |
| CONS | 0.3291** |
| | (2.49) |
| R-Squared | 0.32 |

Note: This Table reports the results of impact of ESG on firm value. All regression controls for the year and industry fixed effects. *, **, and *** indicate significance levels at 1%, 5%, and 10%, respectively.

5. Conclusion

This study examines the impact of ESG on firm value using a sample of firms listed on the Shanghai stock Exchange of China. We find that ESG has positively impacts of firm value. Investors are increasingly basing their decisions on a company's compliance with its ESG standards to create a safe and successful acquisition. This investment trend has been supported by the ESG investments market's explosive rise since the turn of the century. The firms that are adopting ESG elements in China had a positive influence on their company and increased productivity by reducing long-term sustainability concerns. Integrating ESG into a company may result in some shortterm expenses, however these investments will pay off in the long run with some permanent advantages. Governments worldwide have created legislation requiring ESG reporting and transparency from businesses. This requirement aids stakeholders in understanding the longterm business and investment plans of corporate houses. ESG investments in

green energy are increasingly receiving more attention in China, where policies are now centered on climate friendliness. The presence of strong shareholder focus and good cost efficiency would be implied by high ESG incident rates. Neglecting ESG practices may boost short-term earnings, however, it may diminish long-term value by raising the likelihood of reputational harm, diminished social capital and trust.

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