

Article

Effect of Environmental, Social, and Governance Performance on Corporate Financialization: Evidence from China

Shuxia Zhang ^{1,*}, Xiangyang Yin ¹, Liping Xu ², Ziyu Li ³ and Deyue Kong ¹

¹ Business School, Hunan University of Science and Technology, Xiangtan 411201, China

² Business School, Hunan University, Changsha 410079, China

³ Foreign Studies College, Hunan Normal University, Changsha 410012, China

* Correspondence: b1514s0378@hnu.edu.cn

Abstract: Many nonfinancial firms in China invest increasingly in financial assets. To understand the driving factors behind this phenomenon, this paper examines the effect of environmental, social, and governance (ESG) performance on corporate financialization. The empirical results show that ESG performance has a positive effect on corporate financialization, suggesting that ESG activities are a tool for firms to seek financial arbitrage. Further examination confirms that corporate financialization of Chinese nonfinancial listed firms is motivated mainly by maximizing short-term financial returns, rather than reserving funds for long-term development. Heterogeneity analysis shows that the positive effect is more significant in non-state-owned firms and in firms located in regions with a low degree of marketization. This study enriches the existing literature on the economic consequences of ESG performance and the influential factors of corporate financialization and provides practical guidance for government regulators to strengthen stricter regulation on ESG activities and financial asset investment to ensure sustainable and healthy economic development.

Keywords: ESG performance; corporate financialization; financial constraints; corporate ownership; marketization degree



Citation: Zhang, S.; Yin, X.; Xu, L.; Li, Z.; Kong, D. Effect of Environmental, Social, and Governance Performance on Corporate Financialization: Evidence from China. *Sustainability* **2022**, *14*, 10712. <https://doi.org/10.3390/su141710712>

Academic Editors: Yaowen Shan, Quanxi Liang and Meiting Lu

Received: 3 August 2022

Accepted: 24 August 2022

Published: 28 August 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

In recent years, the tightening financial environment has exerted growing downward pressure on the real economy in China. The rate of return on physical investment continues to decline, while the rate of return on financial investment remains high, making more and more nonfinancial firms invest heavily in financial assets rather than physical assets [1,2]. This phenomenon is referred to as corporate financialization, which is the main driver that transforms the economy from real to virtual [3]. Although corporate financialization can create significant short-term improvements in corporate financial position, it will inevitably crowd out the resources for primary business, thus hindering the construction of core competitiveness and long-term development of the firms [4]. Perhaps of greater concern, as financial assets have the characteristics of excess volatility and high riskiness, corporate financialization of nonfinancial firms may hinder financial market stability and healthy economic development in China [5]. Therefore, it is of great significance to explore the factors affecting corporate financialization of nonfinancial firms, to accordingly provide practical guidance for the government to lead corporate investment back to primary business, and, thus, prevent systemic financial risks and promote the sustainable development of China's economy.

ESG describes a set of indicators used to systematically evaluate a firm concerning its environmental (E), social (S), and governance (G) activities [6], reflecting a specific projection of the implementation of sustainable development strategy at the micro-firm level [7,8]. The United Nations Environment Programme proposed the concept of responsible investment as early as 2004 and advocated that firms pay attention to ESG issues in

their investment activities. The Chinese government has paid considerable attention to ESG activities at the firm level since 2015 [9]. ESG provides a systematic and quantifiable operational framework for sustainable and green development, which is highly compatible with China's approach to economic, political, cultural, social, and ecological progress, and also aligns well with China's new development concepts emphasizing innovation, coordination, green development, opening up, and sharing. In recent years, with the continuous promotion of sustainable development strategy in China, government regulators and industry associations have launched a series of policies aimed at guiding firms to practice the concept of ESG. As a result, the ESG performance of a growing number of firms has been continuously improved in China.

The drastic growth in ESG development in China has brought many economic benefits to the firms, but it also comes with possible drawbacks. The existing literature on ESG mainly focus on the effect of ESG performance on firm value or corporate financial performance, and forms two opposing views: the efficiency view and the agency view [10]. The efficiency view mainly holds that ESG activities are a rational tool for improving firm value or corporate financial performance [11–13]. The agency view regards ESG activities as a form of agency conflict in which managers pursue private interests that damage firm value or corporate financial performance [14–16]. Accordingly, it can be inferred that ESG may be used either as a governance tool to reduce corporate financialization or as a self-interested tool for managers to seek short-term financial returns by investing heavily in financial assets. Specifically, based on the efficiency view, good ESG performance can significantly improve information disclosure quality between the firm and stakeholders and mitigate agency conflict within the firm. As a result, it can reduce corporate financialization for short-term profit-seeking at the expense of long-term development. In contrast, according to the agency view, managers who are inclined to seek private interests will make instrumental use of the resources obtained from good ESG performance for financial asset investment in pursuit of short-term financial returns. Additionally, the reputation insurance effect generated by good ESG performance can mask the irrational overinvestment in financial assets. Under the circumstances of the economy transforming from real to virtual and the drastic growth in ESG development in China, it is important to explore whether and how ESG performance affects corporate financialization. The exploration of this question is conducive to reveal the driving factors of corporate financialization, to provide policy implications for government regulators to restrain firms' overinvestment in financial assets, and, therefore, to reduce systemic financial risks that adversely affect healthy economic development in China.

Adopting the perspectives of stakeholder theory, resource constraint theory, agency theory, and resource dependence theory, this study investigates the effect of ESG performance on corporate financialization using a sample of Chinese listed firms during the period from 2011 to 2020. The findings show that ESG comprehensive performance and its three specific subdimensions are positively associated with corporate financialization; that is, ESG performance has a positive effect on corporate financialization. Further examination of the motivations of corporate financialization confirms that the financialization of Chinese listed firms is motivated mainly by maximizing short-term financial returns at the expense of primary business, rather than reserving funds for long-term value creation. Heterogeneity analysis shows that the positive effect is more significant in non-state-owned firms and in firms located in regions with a low degree of marketization.

This study makes two significant contributions. First, this study contributes to the literature on corporate financialization by examining the factors driving corporate financialization from the perspective of ESG performance. The existing literature on corporate financialization mainly focuses on its economic consequences [17–23] and influential factors under an economic or financial framework [5,24–28], but the effect of nonfinancial factors on corporate financialization has not been discussed thoroughly. This study breaks through the limitations of the existing literature by introducing ESG performance, which is an important nonfinancial factor, to explore the influential factors of corporate financialization.

This is a new and far-reaching addition to the existing perspectives of driving factors behind corporate financialization and provides empirical support for curbing the phenomenon of transforming the economy from real to virtual.

Second, this study enriches the existing research on the economic consequences of ESG performance from a new perspective of corporate financialization. Although ESG issues have aroused wide concerns around academia, studies on the economic consequences of ESG performance mainly focus on firm value [7,12,13], financial performance [10,14,29], investment efficiency [30,31], innovation [8,9,32], and stock price crash risk [33,34]. Few studies have explored the economic consequences of ESG performance from the perspective of financial asset investment. This study provides strong evidence that ESG performance has a positive effect on corporate financialization, indicating that the rapid growth in ESG development of Chinese listed firms also comes with possible drawbacks, which hold great significance for government regulators to strengthen the supervision and governance of ESG activities and, thus, to promote sustainable development of firms.

2. Literature Review and Hypotheses Development

2.1. Behavioral Motivation and Economic Consequences of Corporate Financialization

Corporate financialization refers to nonfinancial firms invest heavily in financial assets rather than physical assets, which drives the proportion of financial assets in total assets and the proportion of profits from financial asset investment in total profits to grow unceasingly [35]. As an essential branch of the economy's financialization, corporate financialization is regarded as the main driver that transforms the economy from real to virtual [4]. Many studies have focused on the motivations of corporate financialization and have concluded that corporate financialization is motivated mainly by "precautionary saving" for capital reserve that serves the real economy or "investment substitution" for capital arbitrage that hinders the real economy development [36–39].

According to the precautionary savings theory, the liquidity of financial assets makes corporate financialization serve as a "reservoir" that can provide sufficient funds reserves for production, market development, and other business activities [38,39]. Specifically, when firms encounter a shortage of funds because of unexpected market shocks in the process of business operation, they can quickly obtain funds from highly liquid financial assets to cope with the pressure of funding shortages, thereby alleviating the negative effect of financial constraints and insufficient funds on primary business activities [39]. Conversely, as financial asset investment is also characterized by excess volatility and high riskiness, corporate financialization is also regarded as a short-sighted and speculative profit-seeking behavior to some extent [40]. Against the backdrop that returns on physical investment continue to decline and that returns on financial asset investment remain high, an increasing number of firms heavily allocate funds to high-return and short-cycle investments in financial assets to pursue short-term financial returns [17]. Although overinvestment in financial assets can bring short-term profits to firms, it inevitably leads to a lack of resources for physical asset investment and innovation investment [18,19,22,23], which is essentially an opportunistic behavior of short-term profit-seeking under the motivation of "investment substitution".

Corporate financialization motivated by "precautionary saving" for capital reserve or by "investment substitution" for capital arbitrage may lead to completely different economic consequences. Previous studies have found that corporate financialization of Chinese listed firms has not alleviated the problem of insufficient investment through its role of precautionary saving, but instead has crowded out the resources necessary for physical asset investment, suggesting that the crowding-out effect of corporate financialization on primary business activities currently occupies a dominant position [20]. Many studies have also concluded that corporate financialization substantially reduces innovation investment and fixed asset investment, and adversely affects investment efficiency, stock price stability and corporate future performance [19,22,23]. Obviously, the existing research has confirmed that corporate financialization of most firms in China is a speculative

profit-seeking behavior with an underlying motivation of “investment substitution” [20,21]. Based on the existing literature, it can be concluded that corporate financialization of Chinese listed firms adversely affects the construction of core competitiveness and long-term value creation, which may even hinder healthy economic development in China. Therefore, understanding how to solve the problem of overinvestment in financial assets of nonfinancial firms has gained significant attention from government regulators, academia, and market practitioners.

2.2. Dual Effects of ESG Performance on Corporate Financialization

ESG is a new concept of sustainable development that considers how to coordinate the development of environment, society, and corporate governance at the firm level [41]. According to the efficiency view and the agency view concluded by the existing literature on the effect of ESG performance on firm value or corporate financial performance, ESG performance may also have oppositional effects on corporate financialization. Specifically, ESG performance may be either a governance tool to reduce corporate financialization or a self-interested tool for managers to pursue financial returns by promoting corporate financialization.

2.2.1. ESG Performance Reduces Corporate Financialization

Stakeholder theory and resource constraint theory provide the theoretical basis for ESG performance being a governance tool to reduce corporate financialization. According to stakeholder theory and resource constraint theory, ESG performance can reduce corporate financialization mainly through the following two aspects. First, ESG performance can reduce corporate financialization by alleviating information asymmetry and agency conflicts. As one of the most important kinds of nonfinancial information, ESG performance reflects financial situation, risk management, and other aspects of a firm, which can make up for defects in incomplete information that is reflected in financial reports, and, thus, reduce information asymmetry between different stakeholders such as investors, creditors, and the government [42–44]. Therefore, firms with good ESG performance tend to exhibit characteristics associated with rich information environments [45], which is conducive to stakeholders in strengthening the supervision on managers’ inefficient investment behavior [30], and, thus, restrain their speculations in financial asset investment for short-term returns. In addition, ESG activities may be an effective way to reduce agency conflict that exists between stakeholders and managers due to the existence of asymmetric information [32]. As a result, good ESG performance can reduce instances of misconduct, such as inefficient investment, financial irregularities, earnings management, and tax avoidance [30,42,46–48], and similarly may reduce the opportunistic behavior of managers seeking short-term returns through corporate financialization. Second, ESG performance can reduce corporate financialization by limiting resources available to managers and enhancing their long-term strategic awareness. According to resource constraint theory, for any firm, available resources are limited. Both ESG and financial asset investment activities show great dependence on available resources and, therefore, inevitably engender competition for resource allocation within the firms [49]. The availability of free cash flow under management control will induce them to invest in non-value-maximizing projects, while the implementation of CSR activities limits the amount of free cash flow available to self-interested managers, thus reducing the overinvestment problem [50]. Good ESG performance means that firms spend a lot of resources on environmental protection, social responsibility, and corporate governance [14,16]. Therefore, ESG performance may mitigate the problem of overinvestment in financial assets by reducing the available resources of firms. In addition, managers of firms with good ESG performance often have strong professional integrity and moral awareness, and always focus on trust building with stakeholders and long-term strategic development objectives of the firms [33]. As a result, they may make investment decisions from the perspective of maximization of firm value and reduce their irrational pursuit of short-term profits through heavy investment in financial assets.

From the foregoing discussion, we propose the following hypothesis:

Hypothesis 1. *ESG performance is negatively associated with corporate financialization.*

2.2.2. ESG Performance Promotes Corporate Financialization

Agency theory and resource dependence theory provide the theoretical basis for ESG performance being a self-interested tool to promote corporate financialization. According to agency theory and resource dependence theory, ESG performance can promote corporate financialization mainly through the following two aspects. First, ESG performance can promote corporate financialization through its reputation insurance effect. Good ESG performance can help firms accumulate moral and reputation capital, which can help firms cope with external adverse shocks and reduce losses resulting from the misconduct of firms or managers [51–53]. Firms or managers can take advantage of the reputation effect formed by good ESG performance to cover up or divert public attention from misconducts such as inferior products and earning manipulation, so as to mitigate or offset the negative effects caused by their misconduct [54–56]. Therefore, under the cover of good ESG performance, managers may give up physical asset investment that could be conducive to the firm's long-term value creation and instead may invest heavily in financial assets that fit their own private interests, which could increase the degree of corporate financialization. Second, good ESG performance can promote corporate financialization by alleviating financial constraints. Good ESG performance meets the implicit needs of key stakeholders, making it easy for firms to obtain external resource support, such as government subsidies and bank loans, which can alleviate financial constraints faced by the firms [9,32,57]. Therefore, good ESG performance can provide a source of external sources for financial asset investment activities, leading to an aggravation of corporate financialization.

Based on the above analysis, we propose the following hypothesis:

Hypothesis 2. *ESG performance is positively associated with corporate financialization.*

3. Research Design and Sample Selection

3.1. Data Source and Sample Selection

In this study, we select Chinese A-share firms listed on the Shanghai and Shenzhen Stock Exchanges from 2011 to 2020 as the initial sample. Our sample period began in 2011 because the global financial crisis of 2008 made the financial reports of listed firms in 2009 and 2010 unstable. To ensure the accuracy and reliability of our empirical results, we process the sample firms as follows: (1) Firms in the financial industry and real estate industry are excluded because they are subject to different accounting rules and regulatory systems. (2) Firms with missing values for the selected variables are excluded. (3) Firms in special status (ST*, ST) are excluded. (4) Firms with anomalies on key variables are excluded. After the selection procedures, we obtain a sample size of 8294 firm-year observations. All of the continuous variables are winsorized at their 1% and 99% quantiles to reduce the effect of extreme outliers on the empirical results. We obtained ESG data from the Bloomberg and Wind databases. The data on corporate financialization and other selected variables were from the China Security Market and Accounting Research (CSMAR) database.

3.2. Empirical Model and Variable Definitions

To examine the effect of ESG performance on corporate financialization, we construct the regression model as shown in Equation (1). If the regression coefficient of ESG (β_1) is significantly negative, it can be confirmed that ESG performance has a reducing effect on corporate financialization, supporting Hypothesis 1. If the regression coefficient of ESG (β_1) is significantly positive, it can be confirmed that ESG performance has a positive effect on corporate financialization, supporting Hypothesis 2.

$$FA_{i,t} = \beta_0 + \beta_1 ESG_{i,t} + \beta_2 Size_{i,t} + \beta_3 TobinQ_{i,t} + \beta_4 Cash_{i,t} + \beta_5 ROA_{i,t} + \beta_6 Salegrowth_{i,t} + \beta_7 Lev_{i,t} + \beta_8 Board_{i,t} + \beta_9 Idr_{i,t} + \beta_{10} Top_{i,t} + \sum Year + \sum Ind + \varepsilon_{i,t} \quad (1)$$

where $FA_{i,t}$ is the dependent variable representing the degree of corporate financialization of firm i in year t . The existing literature mainly measures the degree of corporate financialization from the perspectives of the amount of financial asset holdings and the returns on financial asset investment. Specifically, from the perspective of the amount of financial asset holdings, corporate financialization is measured mainly by the natural logarithm of financial asset holdings or the proportion of financial assets in total assets. From the perspective of returns on financial asset investment, corporate financialization is measured mainly by financial channel yield or the difference between returns on financial assets and operating assets. Compared with returns on financial asset investment, however, the amount of financial asset holdings is a relatively static indicator, which may be more suitable for evaluating the degree of corporate financialization. Following Meng and Hou [58], we use the natural logarithm of financial asset holdings to measure corporate financialization. In academia, it is generally believed that financial assets include held-for-trading financial assets, available-for-sale financial assets, derivative financial assets, financial assets purchased under resale agreements, loans and advances granted, held-to-maturity investments, investment properties, and long-term equity investments [28,40].

$ESG_{i,t}$ is the independent variable representing ESG performance of firm i in year t , which reflects the performance of firms in protecting the environment, fulfilling social responsibility, and corporate governance. The existing literature mainly constructs a multidimensional index evaluation system or uses the evaluation scores of third-party institutions to measure ESG performance. Following Wang and Sun [8], we use ESG comprehensive score and its three specific subdimensions regarding environment, social responsibility, and corporate governance provided by the Bloomberg database to measure ESG performance. The higher the ESG scores, the better the ESG performance of the firm.

To control other factors that may affect corporate financialization, with reference to the existing literature [5,24–28,59,60], this study chooses firm size (*Size*), firm value (*TobinQ*), cash flow (*Cash*), profitability (*ROA*), growth ability (*Sales growth*), financial leverage (*Lev*), board size (*Board*), proportion of independent directors (*Idr*), and ownership concentration (*Top*) as the control variables. We also control year and industry effects by including year dummies (*Year*) and industry dummies (*Ind*). Table 1 presents the detailed definitions and measurements of the variables in Equation (1).

Table 1. Variable definitions.

Variable Name	Variable Symbol	Variable Definition
Corporate financialization	<i>FA</i>	Natural logarithm of the sum of held-for-trading financial assets, derivative financial assets, net financial assets purchased under resale agreements, net loans and advances granted, net available-for-sale financial assets, net held-to-maturity investments, net long-term equity investments, and investment properties of a firm
ESG performance	<i>ESG</i>	ESG comprehensive scores provided by the Bloomberg database
	<i>E</i>	Environmental responsibility scores provided by the Bloomberg database
	<i>S</i>	Social responsibility scores provided by the Bloomberg database
	<i>G</i>	Governance scores provided by the Bloomberg database
Firm size	<i>Size</i>	Natural logarithm of total assets
Firm value	<i>TobinQ</i>	Ratio of a firm's market value to total assets
Cash flow	<i>Cash</i>	Ratio of a firm's operating cash flow to total assets

Table 1. Cont.

Variable Name	Variable Symbol	Variable Definition
Profitability	<i>ROA</i>	Net income divided by total assets
Growth ability	<i>Sales growth</i>	Operating revenue of the current year minus operating revenue of the previous year divided by operating revenue of the previous year
Financial leverage	<i>Lev</i>	Total liabilities divided by total assets
Board size	<i>Board</i>	Natural logarithm of the number of board directors
Proportion of independent directors	<i>Idr</i>	Number of independent directors divided by the total number of directors
Ownership concentration	<i>Top</i>	Number of shares held by the largest shareholder divided by total share capital
Year effect	<i>Year</i>	Year dummies, equaling one for the current year and zero otherwise
Industry effect	<i>Industry</i>	Industry dummies, set according to China Securities Regulatory Commission (CSRC) guidance on industry classification of listed firms

4. Empirical Results and Analysis

4.1. Descriptive Statistics

Table 2 presents descriptive statistics of the main variables. The minimum value of corporate financialization (*FA*) is 13.800 and the maximum value is 24.070, indicating that the sample firms have great differences in corporate financialization. The mean value of ESG is 20.850, and the minimum value and maximum value are 9.091 and 45.040, respectively, indicating that the sample firms have good ESG performance in general, but it differs significantly between different firms. The three specific subdimensions of ESG performance (*E*, *S*, *G*) have large standard deviations, indicating that the sample firms have significant differences in environmental responsibility, social responsibility, and corporate governance. The descriptive statistical results of other variables are consistent with the existing literature.

Table 2. Descriptive statistics of variables.

Variables	Observation	Mean	S.D.	Min	Median	Max
<i>FA</i>	8294	19.700	2.041	13.800	19.810	24.070
<i>ESG</i>	8294	20.850	6.875	9.091	20.250	45.040
<i>E</i>	8294	9.598	8.398	0	8.527	42.640
<i>S</i>	8294	23.090	9.994	0	22.810	56.140
<i>G</i>	8294	44.950	5.076	33.930	44.640	58.930
<i>TobinQ</i>	8294	1.938	1.267	0.817	1.506	8.002
<i>Size</i>	8294	23.080	1.238	20.570	22.980	26.430
<i>Cash</i>	8294	0.061	0.065	−0.116	0.058	0.249
<i>ROA</i>	8294	0.044	0.059	−0.191	0.038	0.213
<i>Sales growth</i>	8294	0.148	0.355	−0.487	0.093	2.213
<i>Lev</i>	8294	0.293	0.188	0.002	0.264	0.803
<i>Board</i>	8294	2.184	0.207	1.099	2.197	2.890
<i>Idr</i>	8294	0.375	0.057	0.200	0.364	0.800
<i>Top</i>	8294	0.367	0.162	0.030	0.354	0.891

4.2. Regression Result Analysis

4.2.1. ESG Performance and Corporate Financialization

Table 3 presents the regression results regarding the effect of ESG comprehensive performance (*ESG*) and its three specific subdimensions (*E*, *S*, *G*) on corporate financialization. Column (1) provides the regression result of ESG comprehensive performance (*ESG*)

on corporate financialization. The regression coefficient of *ESG* is significantly positive at the 1% level ($\beta_1 = 0.015$, $t = 5.22$), suggesting that the better the *ESG* comprehensive performance, the higher the degree of corporate financialization. Columns (2)–(4) are the regression results of the three specific subdimensions of *ESG* performance (*E*, *S*, *G*) on corporate financialization, respectively. The regression coefficients of *E*, *S*, and *G* are all significantly positive at the 1% level, suggesting that the better the performance of environmental responsibility, social responsibility, and corporate governance, the higher the degree of corporate financialization. These regression results verify that *ESG* performance has a significant positive effect on corporate financialization, thus supporting Hypothesis 2. The results also indicate that *ESG* is a self-interested tool for managers to seek short-term financial returns by investing heavily in financial assets. That is, the listed firms undertaking *ESG* activities may not pursue the maximization of long-term value creation but rather may make use of them to alleviate financial constraints or to form a reputation insurance effect to pursue short-term financial arbitrage.

Table 3. The effect of *ESG* performance on corporate financialization.

Variables	(1)	(2)	(3)	(4)
<i>ESG</i>	0.015 *** (5.22)			
<i>E</i>		0.008 *** (3.73)		
<i>S</i>			0.009 *** (4.96)	
<i>G</i>				0.015 *** (4.31)
<i>TobinQ</i>	−0.003 (−0.16)	−0.003 (−0.16)	−0.001 (−0.08)	−0.002 (−0.14)
<i>Size</i>	1.012 *** (57.58)	1.023 *** (58.64)	1.024 *** (60.54)	1.025 *** (60.25)
<i>Cash</i>	−1.788 *** (−5.99)	−1.771 *** (−5.92)	−1.763 *** (−5.91)	−1.730 *** (−5.79)
<i>ROA</i>	1.541 *** (4.22)	1.555 *** (4.25)	1.526 *** (4.18)	1.573 *** (4.30)
<i>Sales growth</i>	−0.382 *** (−8.08)	−0.388 *** (−8.21)	−0.386 *** (−8.18)	−0.387 *** (−8.19)
<i>Lev</i>	−0.553 *** (−5.81)	−0.559 *** (−5.87)	−0.538 *** (−5.65)	−0.561 *** (−5.89)
<i>Board</i>	−0.359 *** (−3.79)	−0.348 *** (−3.67)	−0.357 *** (−3.76)	−0.354 *** (−3.73)
<i>Idr</i>	−0.605 * (−1.85)	−0.601 * (−1.83)	−0.583 * (−1.78)	−0.594 * (−1.81)
<i>Top</i>	−0.792 *** (−7.20)	−0.789 *** (−7.16)	−0.781 *** (−7.10)	−0.804 *** (−7.30)
<i>Year</i>	Yes	Yes	Yes	Yes
<i>Industry</i>	Yes	Yes	Yes	Yes
Constant	−2.667 *** (−6.05)	−2.738 *** (−6.11)	−2.852 *** (−6.57)	−3.407 *** (−7.94)
Observations	8294	8294	8294	8294
Adj-R ²	0.470	0.469	0.470	0.470

Note: The *t*-statistics in parentheses are calculated based on standard errors. *** and * represent significance at 1% and 10% level, respectively.

4.2.2. Further Analysis on the Motivation of Corporate Financialization

According to the theoretical analysis, corporate financialization is motivated mainly by “precautionary savings” for capital reserve that serves the development of the firms’ primary business or “investment substitution” for financial arbitrage at the expense of the firms’ primary business. Under different motivations, the economic consequences of corporate financialization vary significantly. Therefore, to formulate targeted reform

policies to prevent the economy transforming from real to virtual, it is necessary to establish a mechanism to accurately identify the motivations of corporate financialization of nonfinancial firms. With reference to the relevant research [58], we explore the motivations of corporate financialization from the unique perspective of financial constraints. If corporate financialization is motivated by “precautionary savings” in theory, then firms faced with high financial constraints will tend to reduce financial asset investment in exchange for cash reserves to support the development of their primary business, showing that the positive effect of ESG performance on corporate financialization is weakened. If, however, corporate financialization is motivated by “investment substitution” for short-term financial arbitrage, even if the firms face high financial constraints, their profit-seeking behavior through overinvestment in financial assets will not be weakened; that is, the positive effect of ESG performance on corporate financialization will not be affected.

Based on this analysis, we divide the sample firms into a high-financial-constraints group and a low-financial-constraints group according to the degree of financial constraints, and we regress the two groups separately. Following Kaplan and Zingales [61], we construct the Kaplan–Zingales (KZ) index to measure financial constraints according to the operating net cash flow, dividends, cash holdings, asset-liability ratio, Tobin’s Q, and other financial indicators of the firms. Specifically, the specific calculation formula for KZ index is $-12.3103 \times CF_{it}/TA_{it} - 25.9919 \times DIV_{it}/TA_{it} - 4.6063 \times CASH_{it}/TA_{it} + 6.6481 \times Lev_{it} + 0.5181 \times TobinQ_{it}$, where CF_{it}/TA_{it} is the ratio of operating net cash flow to total assets; DIV_{it}/TA_{it} is the ratio of cash dividends to total assets; $CASH_{it}/TA_{it}$ is the ratio of cash holdings to total assets; Lev_{it} is the ratio of total liabilities to total assets; $TobinQ_{it}$ is the ratio of market value to total assets. The larger the KZ index, the higher the degree of financial constraints. Specifically, the sample firms are placed into the high-financial-constraints group when the KZ index is equal to or greater than the 75th percentile of all sample firms in the current year, and the sample firms are placed into the low-financial-constraints group when the KZ index is equal to or lower than the 25th percentile of all sample firms in the current year. Table 4 presents the results of subgroup testing regarding financial constraints. Columns (1)–(4) provide the regression results of the sample firms with high financial constraints, and columns (5)–(8) provide the regression results of the sample firms with low financial constraints. The results show that the regression coefficients of ESG comprehensive performance (ESG) and its three specific subdimensions (E, S, G) are not significant in the low-financial-constraints group, but they are significantly positive at the 1% level in the high-financial-constraints group. This finding is consistent with the financial asset allocation mode of financing distressed firms under the motivation of “investment substitution” for short-term profit-seeking. These empirical results show that at the current stage, corporate financialization of Chinese nonfinancial listed firms is motivated more by “investment substitution” for short-term financial returns rather than long-term development. Therefore, government regulators must take effective measures to restrict firms from investing heavily in financial assets and to guide financial investment to better serve the real economy.

4.3. Heterogeneity Analysis

4.3.1. The Moderating Effect of Corporate Ownership

Under the current arrangement of China’s property rights system, state-owned enterprises (SOEs), because of their “political genes”, shoulder certain government functions and bear significant ESG responsibilities [62]. Therefore, SOEs may bear too heavy a policy burden in fulfilling a social responsibility mission and having better ESG performance. In 2020, State-owned Assets Supervision and Administration Commission of the State Council proposed that SOEs should optimize the layout and structure of state-owned capital and focus on primary business to speed up the development of the real economy. Against the policy backdrop that emphasizes the leading role of SOEs in the process of transforming the economy from virtual to real, it can be inferred that the government functions shouldered by SOEs will weaken their preference for short-term financial returns by making use of

good ESG performance. In addition, because of the pressure of maintaining and increasing the value of state-owned assets, the risk-bearing capacity of SOEs is significantly lower than that of non-SOEs [63]. Thus, SOEs also will reduce their heavy investment in financial assets with excess volatility and high riskiness. According to the theoretical analysis, it can be expected that compared with non-SOEs, the investment decision-making of SOEs will focus more on long-term development and value creation rather than short-term profit-seeking. Therefore, we expect that compared with non-SOEs, the positive effect of ESG performance on corporate financialization will be weaker in SOEs; that is, the type of corporate ownership will have a negative moderating effect on the relationship between ESG performance and corporate financialization.

Table 4. Further analysis on the motivation of corporate financialization.

Variables	High-Financial-Constraints Group				Low-Financial-Constraints Group			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ESG	0.038 *** (6.57)				0.002 (0.42)			
E		0.025 *** (5.27)				−0.001 (−0.25)		
S			0.021 *** (5.49)				0.006 (1.57)	
G				0.026 *** (3.61)				0.008 (0.96)
TobinQ	0.065 * (1.76)	0.064 * (1.72)	0.074 ** (2.00)	0.072 * (1.94)	−0.022 (−0.72)	−0.021 (−0.72)	−0.021 (−0.72)	−0.022 (−0.75)
Size	0.897 *** (24.22)	0.916 *** (24.73)	0.932 *** (25.94)	0.956 *** (26.79)	1.022 *** (27.09)	1.031 *** (27.46)	1.015 *** (27.95)	1.016 *** (27.27)
Cash	−1.700 ** (−2.47)	−1.628 ** (−2.36)	−1.677 ** (−2.43)	−1.452 ** (−2.10)	−2.346 *** (−3.34)	−2.344 *** (−3.34)	−2.313 *** (−3.30)	−2.359 *** (−3.36)
ROA	0.173 (0.26)	0.305 (0.46)	0.120 (0.18)	0.293 (0.44)	1.205 (1.32)	1.191 (1.31)	1.195 (1.31)	1.247 (1.37)
Sales growth	−0.185 * (−1.94)	−0.209 ** (−2.19)	−0.200 ** (−2.09)	−0.221 ** (−2.31)	−0.538 *** (−5.55)	−0.543 *** (−5.60)	−0.532 *** (−5.50)	−0.538 *** (−5.57)
Lev	−0.117 (−0.72)	−0.147 (−0.90)	−0.080 (−0.49)	−0.113 (−0.69)	0.109 (0.40)	0.107 (0.40)	0.108 (0.40)	0.098 (0.37)
Board	0.063 (0.34)	0.106 (0.57)	0.031 (0.17)	0.030 (0.16)	−0.557 *** (−2.69)	−0.546 *** (−2.64)	−0.573 *** (−2.77)	−0.557 *** (−2.70)
Idr	0.133 (0.21)	0.067 (0.10)	0.256 (0.39)	0.067 (0.10)	−1.054 (−1.47)	−1.035 (−1.44)	−1.077 (−1.50)	−1.034 (−1.44)
Top	−0.281 (−1.22)	−0.262 (−1.13)	−0.216 (−0.94)	−0.242 (−1.04)	−0.861 *** (−3.85)	−0.855 *** (−3.82)	−0.862 *** (−3.86)	−0.878 *** (−3.91)
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	−1.983 ** (−2.16)	−1.972 ** (−2.11)	−2.509 *** (−2.76)	−3.710 *** (−4.09)	−2.368 ** (−2.50)	−2.534 *** (−2.63)	−2.232 ** (−2.40)	−2.529 *** (−2.74)
Observations	2070	2070	2070	2070	2070	2070	2070	2070
Adj-R ²	0.459	0.455	0.456	0.451	0.442	0.442	0.442	0.442

Note: The *t*-statistics in parentheses are calculated based on standard errors. ***, **, and * represent significance at 1%, 5%, and 10% level, respectively.

We construct a dummy variable (SOE) based on the type of corporate ownership. SOE equals one if the firm is a state-owned enterprise and zero otherwise. To examine whether the association between ESG performance and corporate financialization is conditional on the type of corporate ownership, based on Equation (1), we add corporate ownership (SOE) and the interaction term of ESG performance and corporate ownership ($ESG \times SOE$) to Equation (2):

$$FA_{i,t} = \beta_0 + \beta_1 ESG_{i,t} + \beta_2 SOE_{i,t} + \beta_3 ESG_{i,t} \times SOE_{i,t} + \beta_4 Size_{i,t} + \beta_5 TobinQ_{i,t} + \beta_6 Cash_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Salesgrowth_{i,t} + \beta_9 Lev_{i,t} + \beta_{10} Board_{i,t} + \beta_{11} Idr_{i,t} + \beta_{12} Top_{i,t} + \sum Year + \sum Ind + \varepsilon_{i,t} \quad (2)$$

The regression results are shown in Table 5, column (1). The regression coefficient of the interaction term of ESG performance and corporate ownership ($ESG \times SOE$) is significantly negative at the 5% level, suggesting that corporate ownership has a negative moderating effect on the relationship between ESG performance and corporate financialization. That is, the positive effect of ESG performance on corporate financialization in SOEs is weaker than that in non-SOEs, confirming that the natural government functions of SOEs stimulate their role in preventing and resolving financial risks, thus serving the development of the real economy.

Table 5. Moderating effect of corporate ownership and marketization degree.

Variables	(1)	(2)
<i>ESG</i>	0.022 *** (5.59)	0.031 *** (2.61)
<i>SOE</i>	−0.069 (−0.64)	
<i>ESG × SOE</i>	−0.012 ** (−2.33)	
<i>Market</i>		−0.168 *** (−5.55)
<i>ESG × Market</i>		−0.002 * (−1.66)
<i>TobinQ</i>	−0.003 (−0.19)	−0.005 (−0.32)
<i>Size</i>	1.022 *** (57.85)	1.017 *** (58.39)
<i>Cash</i>	−1.850 *** (−6.19)	−1.733 *** (−5.86)
<i>ROA</i>	1.388 *** (3.77)	1.214 *** (3.34)
<i>Sales growth</i>	−0.409 *** (−8.41)	−0.396 *** (−8.22)
<i>Lev</i>	−0.556 *** (−5.84)	−0.481 *** (−5.08)
<i>Board</i>	−0.276 *** (−2.86)	−0.235 ** (−2.48)
<i>Idr</i>	−0.507 (−1.55)	−0.267 (−0.82)
<i>Top</i>	−0.667 *** (−5.90)	−0.828 *** (−7.60)
<i>Year</i>	Yes	Yes
<i>Industry</i>	Yes	Yes
Constant	−3.234 *** (−7.10)	−4.204 *** (−8.34)
Observations	8,294	8,269
Adj-R ²	0.472	0.481

Note: The *t*-statistics in parentheses are calculated based on standard errors. ***, **, and * represent significance at 1%, 5%, and 10% level, respectively.

4.3.2. The Moderating Effect of Marketization Degree

The marketization degree includes the level of economic development, the perfection of legal system construction, and even the public awareness of environmental protection [64], which is regarded as a more basic governance mechanism than either internal or external corporate governance mechanisms. The development of the institutional environment is uneven across Chinese provinces, and there is large gap in market development across regions, in terms of investor protection level, law enforcement, and government intervention [65]. It is generally believed that regions with a higher degree of marketization have lower government intervention, perfect legal systems, and strong supervision. Firms located in the regions with a high degree of marketization are more motivated to decrease

agency costs and reduce inefficient investment to strengthen investors' confidence and to ensure sustainable development [66]. In addition, compared with the regions that have a low degree of marketization, regions with a high degree of marketization have a stronger market recognition ability of accounting information disclosure [67]. Therefore, firms located in regions with a high degree of marketization always weaken managers' tendency to make use of good ESG performance for short-term financial returns. From this discussion, we hold that the effect of ESG performance on corporate financialization varies across firms located in regions with a high or a low degree of marketization. Specifically, it can be expected that compared with firms located in regions with a low degree of marketization, the positive effect of ESG performance on corporate financialization is weaker in firms located in regions with a high degree of marketization.

We use the marketization index obtained from the Marketization Index in China: 2021 Report for the Relative Marketization Degree in Various Regions to measure the degree of marketization of the region where the firm is located (*Market*). To examine whether the association between ESG performance and corporate financialization is conditional on marketization degree, based on Equation (1), we add marketization degree (*Market*) and the interaction term of ESG performance and marketization degree (*ESG*Market*) to Equation (3):

$$FA_{i,t} = \beta_0 + \beta_1 ESG_{i,t} + \beta_2 Market_{i,t} + \beta_3 ESG_{i,t} \times Market_{i,t} + \beta_4 Size_{i,t} + \beta_5 TobinQ_{i,t} + \beta_6 Cash_{i,t} + \beta_7 ROA_{i,t} + \beta_8 Salegrowth_{i,t} + \beta_9 Lev_{i,t} + \beta_{10} Board_{i,t} + \beta_{11} Idr_{i,t} + \beta_{12} Top_{i,t} + \sum Year + \sum Ind + \varepsilon_{i,t} \quad (3)$$

The regression results are shown in Table 5, column (2). The regression coefficient of the interaction term of ESG performance and marketization degree (*ESG × Market*) is significantly negative at the 10% level, suggesting that marketization degree has a negative moderating effect on the relationship between ESG performance and corporate financialization. That is, the positive effect of ESG performance on corporate financialization in firms located in regions with a high degree of marketization is weaker than in firms located in regions with a low degree of marketization.

4.4. Robustness Tests

4.4.1. Instrumental Variable Regression

As the firms' operating conditions and other unobservable factors may affect both ESG performance and corporate financialization, the regression result of ESG performance on corporate financialization may be affected by an endogeneity problem. To ensure the robustness and validity of the effect of ESG performance on corporate financialization, we use the two-stage least square (2SLS) method for instrumental variable regression to alleviate the possible endogeneity problem between ESG performance and corporate financialization. Following Benlemlih et al. [68], we select ESG comprehensive performance (*ESG*) and its three specific subdimensions (*E*, *S*, *G*) of all listed firms in the province where the firm is registered in the same year as the instrumental variable of ESG performance. The selected instrument variables meet the requirements of relevance and exogeneity: although ESG performance of firms can be affected by the ESG performance of other firms in the same region, we do not find a direct correlation between a firm's financial asset investment and the ESG performance of other firms. We construct the following 2SLS model shown in Equations (4) and (5):

$$ESG_{i,t} = \alpha_0 + \alpha_1 ESG_IV_{i,t} + \alpha_2 Control_{i,t} + \varepsilon_{i,t} \quad (4)$$

$$FA_{i,t} = \beta_0 + \beta_1 ESG_hat_{i,t} + \beta_2 Control_{i,t} + \varepsilon_{i,t} \quad (5)$$

In Equation (4), *ESG_{i,t}* represents ESG performance including ESG comprehensive performance (*ESG*) and its three specific subdimensions (*E*, *S*, *G*), and *ESG_IV_{i,t}* represents the instrumental variable of ESG performance. In Equation (5), *ESG_hat_{i,t}* is the fitted value of ESG performance obtained from Equation (4). *Control_{i,t}* represents the control variables. The regression results of the 2SLS model are shown in Table 6. Columns (1), (3), (5), and (7)

provide the regression results of the first stage of the 2SLS model, and the coefficients of the instrumental variables (*ESG_IV*, *E_IV*, *S_IV*, and *G_IV*) are all significantly positive at the 1% level, suggesting that ESG performance of the firm is positively associated with that of other firms located in the same region. Columns (2), (4), (6), and (8) provide the regression results of the second stage of the 2SLS model, and the coefficients of ESG performance (*ESG*, *E*, *S*, and *G*) are all significantly positive at the 1% level. These regression results show that after controlling the endogeneity problem between ESG performance and corporate financialization, the conclusion that ESG performance has a positive effect on corporate financialization is still valid.

Table 6. Robustness test of instrumental variable regression.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>ESG</i>	<i>FA</i>	<i>E</i>	<i>FA</i>	<i>S</i>	<i>FA</i>	<i>G</i>	<i>FA</i>
<i>ESG_IV</i>	0.811 *** (31.79)							
<i>ESG</i>		0.073 *** (8.24)						
<i>E_IV</i>			0.811 *** (28.41)					
<i>E</i>				0.051 *** (6.45)				
<i>S_IV</i>					0.910 *** (35.89)			
<i>S</i>						0.046 *** (9.06)		
<i>G_IV</i>							0.845 *** (29.62)	
<i>G</i>								0.077 *** (6.39)
<i>TobinQ</i>	0.052 (0.85)	−0.009 (−0.51)	0.110 (1.44)	−0.010 (−0.56)	−0.055 (−0.59)	−0.002 (−0.13)	0.015 (0.31)	−0.007 (−0.39)
<i>Size</i>	1.947 *** (31.46)	0.875 *** (33.35)	2.295 *** (29.84)	0.907 *** (33.73)	1.984 *** (21.04)	0.933 *** (45.34)	1.099 *** (22.71)	0.943 *** (41.58)
<i>Cash</i>	5.247 *** (4.73)	−2.070 *** (−6.48)	6.476 *** (4.69)	−2.039 *** (−6.37)	5.618 *** (3.29)	−1.950 *** (−6.17)	1.107 (1.27)	−1.779 *** (−5.62)
<i>ROA</i>	1.065 (0.78)	1.493 *** (3.85)	0.522 (0.31)	1.553 *** (4.03)	2.988 (1.43)	1.413 *** (3.65)	0.222 (0.21)	1.651 *** (4.23)
<i>Sales growth</i>	−0.911 *** (−5.05)	−0.332 *** (−6.12)	−0.994 *** (−4.43)	−0.354 *** (−6.58)	−0.981 *** (−3.54)	−0.354 *** (−6.55)	−0.566 *** (−3.99)	−0.358 *** (−6.61)
<i>Lev</i>	0.100 (0.28)	−0.517 *** (−5.09)	0.430 (0.98)	−0.550 *** (−5.43)	−1.172 ** (−2.15)	−0.443 *** (−4.36)	0.448 (1.61)	−0.558 *** (−5.49)
<i>Board</i>	1.710 *** (4.86)	−0.439 *** (−4.48)	1.560 *** (3.56)	−0.393 *** (−4.03)	2.827 *** (5.22)	−0.429 *** (−4.39)	0.629 ** (2.27)	−0.412 *** (−4.24)
<i>Idr</i>	2.572 ** (2.11)	−0.712 ** (−2.08)	3.824 ** (2.52)	−0.716 ** (−2.10)	1.576 (0.84)	−0.599 * (−1.76)	0.283 (0.30)	−0.655 * (−1.92)
<i>Top</i>	0.539 (1.32)	−0.831 *** (−6.76)	0.756 (1.49)	−0.821 *** (−6.72)	−0.137 (−0.22)	−0.778 *** (−6.44)	0.741 ** (2.30)	−0.891 *** (−7.41)
<i>Year</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Industry</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	−47.139 *** (−29.33)	−0.388 (−0.70)	−57.596 *** (−29.12)	−0.243 (−0.38)	−53.736 *** (−21.86)	−1.291 *** (−2.65)	−19.301 *** (−11.96)	−4.115 *** (−8.89)
Observations	8294	8294	8294	8294	8294	8294	8294	8294
Adj-R ²	0.356	0.442	0.331	0.447	0.280	0.443	0.270	0.451

Note: The *t*-statistics in parentheses are calculated based on standard errors. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

4.4.2. Replacing the Measurement of Corporate Financialization

The key to this study is the effective measurement of corporate financialization, and, thus, we adopt the method of replacing the measurement of corporate financialization

for robustness test. Referring to the existing literature [28,40], we split the composition of financial assets to form two indicators of short-term corporate financialization (*SFA*) and long-term corporate financialization (*LFA*) to replace the measurement of corporate financialization. Specifically, we classify held-for-trading financial assets, derivative financial assets, and net financial assets purchased under resale agreements as short-term financial assets, and classify net loans and advances granted, net available-for-sale financial assets, net held-to-maturity investments, net long-term equity investments, and investment properties as long-term financial assets. We take the natural logarithm of short-term financial assets and long-term financial assets, respectively, to measure *SFA* and *LFA*, and then substitute *SFA* and *LFA* into Equation (1) for regression. The regression results are shown in Table 7. The regression coefficients of ESG comprehensive performance (*ESG*) and its three specific subdimensions (*E*, *S*, *G*) on short-term financialization (*SFA*) and long-term financialization (*LFA*) are all significantly positive at the 1% level, which is consistent with the results in the main regression. These empirical results show that after replacing the measurement of corporate financialization, the conclusion that ESG performance has a positive effect on corporate financialization remains robust.

Table 7. Robustness test of replacing the measurement of corporate financialization.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>SFA</i>	<i>SFA</i>	<i>SFA</i>	<i>SFA</i>	<i>LFA</i>	<i>LFA</i>	<i>LFA</i>	<i>LFA</i>
ESG	0.079 *** (6.01)				0.018 *** (6.33)			
E		0.067 *** (6.27)				0.010 *** (4.46)		
S			0.024 *** (2.84)				0.011 *** (6.05)	
G				0.081 *** (4.86)				0.021 *** (5.73)
TobinQ	−0.033 (−0.43)	−0.034 (−0.45)	−0.028 (−0.37)	−0.032 (−0.42)	−0.036 ** (−2.13)	−0.036 ** (−2.12)	−0.034 ** (−2.01)	−0.035 ** (−2.07)
Size	1.587 *** (19.59)	1.592 *** (19.81)	1.707 *** (21.80)	1.659 *** (21.09)	0.997 *** (55.41)	1.011 *** (56.57)	1.012 *** (58.45)	1.011 *** (58.16)
Cash	−0.056 (−0.04)	−0.119 (−0.09)	0.184 (0.13)	0.266 (0.19)	−1.940 *** (−6.35)	−1.918 *** (−6.27)	−1.909 *** (−6.25)	−1.873 *** (−6.13)
ROA	6.564 *** (3.87)	6.616 *** (3.90)	6.555 *** (3.86)	6.717 *** (3.96)	0.700 * (1.87)	0.719 * (1.92)	0.678 * (1.81)	0.746 ** (1.99)
Sales growth	−0.489 ** (−2.26)	−0.499 ** (−2.31)	−0.539 ** (−2.49)	−0.519 ** (−2.40)	−0.346 *** (−7.16)	−0.354 *** (−7.31)	−0.351 *** (−7.27)	−0.352 *** (−7.27)
Lev	−1.153 *** (−2.60)	−1.187 *** (−2.67)	−1.144 ** (−2.57)	−1.201 *** (−2.70)	−0.468 *** (−4.80)	−0.477 *** (−4.88)	−0.450 *** (−4.61)	−0.478 *** (−4.90)
Board	−3.206 *** (−7.20)	−3.171 *** (−7.13)	−3.147 *** (−7.06)	−3.189 *** (−7.16)	−0.263 *** (−2.71)	−0.250 ** (−2.58)	−0.260 *** (−2.68)	−0.259 *** (−2.67)
Idr	−2.532 * (−1.65)	−2.560 * (−1.67)	−2.409 (−1.57)	−2.498 (−1.63)	−0.377 (−1.13)	−0.373 (−1.11)	−0.343 (−1.02)	−0.365 (−1.09)
Top	−3.009 *** (−5.85)	−3.010 *** (−5.85)	−2.948 *** (−5.72)	−3.080 *** (−5.98)	−0.787 *** (−6.99)	−0.785 *** (−6.96)	−0.777 *** (−6.89)	−0.808 *** (−7.16)
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	−22.609 *** (−11.10)	−21.777 *** (−10.54)	−24.516 *** (−12.18)	−26.450 *** (−13.29)	−2.623 *** (−5.82)	−2.719 *** (−5.93)	−2.856 *** (−6.43)	−3.569 *** (−8.13)
Observations	8743	8743	8743	8743	8191	8191	8191	8191
Adj-R ²	0.199	0.200	0.197	0.198	0.462	0.460	0.462	0.461

Note: The *t*-statistics in parentheses are calculated based on standard errors. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

4.4.3. Time Lag Effect

There may be a time lag on the effect of ESG performance on corporate financialization. Therefore, to eliminate the possible lag effect, we sample corporate financialization (FA) in $t + 1$ period (FA_{t+1}) and in $t + 2$ period (FA_{t+2}), and then substitute FA_{t+1} and FA_{t+2} into Equation (1) for regression. The regression results are shown in Table 8. The regression coefficients of ESG comprehensive performance (ESG) and its three specific subdimensions (E , S , G) on corporate financialization in $t + 1$ period (FA_{t+1}) and in $t + 2$ period (FA_{t+2}) are all significantly positive at the 1% level and 5% level. These empirical results show that after considering the time lag on the effect of ESG performance on corporate financialization, the conclusion that ESG performance has a positive effect on corporate financialization remains robust.

Table 8. Robustness test of time lag effect.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	FA_{t+1}	FA_{t+1}	FA_{t+1}	FA_{t+1}	FA_{t+2}	FA_{t+2}	FA_{t+2}	FA_{t+2}
<i>ESG</i>	0.013 *** (4.29)				0.013 *** (3.79)			
<i>E</i>		0.007 *** (2.72)				0.006 ** (2.04)		
<i>S</i>			0.008 *** (4.26)				0.008 *** (3.79)	
<i>G</i>				0.012 *** (3.22)				0.009 ** (2.19)
<i>TobinQ</i>	0.020 (1.09)	0.020 (1.08)	0.022 (1.16)	0.020 (1.10)	0.044 ** (2.14)	0.044 ** (2.13)	0.045 ** (2.20)	0.044 ** (2.15)
<i>Size</i>	1.020 *** (54.04)	1.032 *** (55.07)	1.029 *** (56.54)	1.033 *** (56.33)	1.015 *** (49.45)	1.028 *** (50.46)	1.023 *** (51.55)	1.030 *** (51.43)
<i>Cash</i>	−1.650 *** (−5.23)	−1.631 *** (−5.17)	−1.625 *** (−5.15)	−1.601 *** (−5.08)	−1.774 *** (−5.23)	−1.753 *** (−5.16)	−1.744 *** (−5.14)	−1.728 *** (−5.09)
<i>ROA</i>	2.130 *** (5.33)	2.143 *** (5.36)	2.109 *** (5.28)	2.152 *** (5.39)	2.788 *** (6.24)	2.796 *** (6.25)	2.756 *** (6.17)	2.800 *** (6.26)
<i>Sales growth</i>	−0.290 *** (−5.66)	−0.297 *** (−5.80)	−0.294 *** (−5.74)	−0.296 *** (−5.78)	−0.159 *** (−2.95)	−0.168 *** (−3.10)	−0.164 *** (−3.04)	−0.169 *** (−3.12)
<i>Lev</i>	−0.655 *** (−6.46)	−0.660 *** (−6.50)	−0.643 *** (−6.34)	−0.661 *** (−6.51)	−0.676 *** (−6.15)	−0.680 *** (−6.18)	−0.667 *** (−6.06)	−0.681 *** (−6.18)
<i>Board</i>	−0.396 *** (−3.95)	−0.387 *** (−3.86)	−0.395 *** (−3.94)	−0.392 *** (−3.91)	−0.410 *** (−3.80)	−0.401 *** (−3.72)	−0.410 *** (−3.80)	−0.405 *** (−3.76)
<i>Idr</i>	−0.705 ** (−2.02)	−0.702 ** (−2.01)	−0.685 ** (−1.96)	−0.695 ** (−1.99)	−0.943 ** (−2.49)	−0.942 ** (−2.49)	−0.927 ** (−2.45)	−0.936 ** (−2.47)
<i>Top</i>	−0.801 *** (−6.90)	−0.802 *** (−6.90)	−0.791 *** (−6.81)	−0.810 *** (−6.97)	−0.779 *** (−6.27)	−0.783 *** (−6.31)	−0.767 *** (−6.17)	−0.787 *** (−6.33)
<i>Year</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Industry</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Constant</i>	−2.636 *** (−5.60)	−2.734 *** (−5.72)	−2.778 *** (−5.98)	−3.250 *** (−7.05)	−2.369 *** (−4.67)	−2.496 *** (−4.84)	−2.487 *** (−4.95)	−2.895 *** (−5.79)
<i>Observations</i>	7033	7033	7033	7033	5834	5834	5834	5834
<i>Adj-R²</i>	0.466	0.465	0.466	0.465	0.457	0.456	0.457	0.456

Note: The t -statistics in parentheses are calculated based on standard errors. *** and ** indicate significance at the 1% and 5%, levels, respectively.

5. Conclusions and Discussion

5.1. Conclusions

In this study, we selected Chinese nonfinancial listed firms from 2011 to 2020 as samples to examine the effect of ESG performance on corporate financialization. The empirical findings and conclusions are as follows.

Firstly, ESG comprehensive performance (ESG) and its three specific subdimensions (E , S , G) are positively associated with corporate financialization. That is, ESG performance has a positive effect on corporate financialization, suggesting that Chinese nonfinancial

listed firms undertaking ESG activities may not pursue the maximization of long-term value creation, but rather make use of them to pursue short-term financial arbitrage.

Secondly, the regression coefficients of ESG comprehensive performance (ESG) and its three specific subdimensions (E, S, G) are not significant in firms with low financial constraints, but they are significantly positive at the 1% level in firms with high financial constraints, which are consistent with the financial asset allocation mode of financing distressed firms under the motivation of “investment substitution” for short-term profit-seeking. The finding shows that at the current stage, corporate financialization of Chinese nonfinancial listed firms is motivated mainly by “investment substitution” for short-term financial returns rather than “precautionary savings” for funds reserve that serves long-term value creation.

Thirdly, further analysis of the internal and external conditions on which ESG performance affects corporate financialization shows that corporate ownership and marketization degree have negative moderating effects on the relationship between ESG performance and corporate financialization. That is, the positive effect of ESG performance on corporate financialization is more significant in non-state-owned firms and in firms located in regions with a low degree of marketization.

5.2. Discussion

In China’s new normal economy, an increasing number of nonfinancial firms have recently invested heavily in financial assets, adversely affecting financial market stability and healthy economic development. Based on the empirical findings and conclusions described above, this study can provide important theoretical and policy implications in the following aspects.

This study has two theoretical implications. First, this study uniquely introduces ESG performance, which is an important nonfinancial factor, to explore its effect on corporate financialization, which can break through the limitations of the existing literature that mostly explores the influential factors of corporate financialization under an economic or financial framework, and, thus, expand the theoretical framework for analyzing the factors affecting corporate financialization. Second, this study provides strong evidence that ESG performance has a positive effect on corporate financialization, indicating that the rapid growth in ESG development of Chinese listed firms also comes with possible drawbacks, which can expand the existing research on the negative economic consequences of ESG performance and hold great significance for future research on ESG economic consequences.

This study can also provide important policy implications in the following three aspects. First, the government regulators should implement targeted policies to restrain nonfinancial firms from investing heavily in financial assets and motivate them to engage in primary businesses. From the perspective of ESG performance, we provide a new analytical framework for the influential factors of corporate financialization, which can provide a theoretical basis and empirical support for government regulators to strengthen financial supervision to reduce the systematic financial risk triggered by corporate financialization of nonfinancial firms and redirect finance to its fundamental purpose of practically and effectively serving the development of the real economy.

Second, the government should reinforce the supervision and governance of ESG activities and strengthen an appropriate match between ESG investment and long-term value creation of firms. China is a latecomer to ESG investment, which is still in its initial stages. As ESG has aroused significant concern from government regulators, academia, and market practitioners throughout China, firms have increasingly standardized and improved ESG information disclosure. Our findings, however, suggest that Chinese nonfinancial listed firms make instrumental use of ESG activities to pursue short-term financial returns, indicating that the rapid growth in ESG development of firms also comes with possible drawbacks. Therefore, the government should guide nonfinancial firms to make full use of the strategic role of ESG activities to drive long-term sustainable development.

Third, the policymakers and regulators should formulate relatively unified ESG disclosure guidelines with complete indicators for listed firms and should strengthen the guidance over ESG information disclosure, thus continuously improving the scope and quality of ESG information disclosure. China is in a critical period of constructing and standardizing its ESG related system. In addition to disclosing relevant nonfinancial information, it is also necessary to combine and disclose important financial information, such as investment in physical assets and financial assets. Strict supervision should be conducted on ESG activities and investment decisions to provide a reference for stakeholders to identify the real motivation of a firm's ESG activities.

We also identify some directions that can be expanded in the future research. Currently, a unified evaluation system for ESG performance is lacking in the existing literature. In view of the authority and availability of ESG performance data, we use ESG comprehensive score and its three specific subdimensions regarding environment, social responsibility, and corporate governance provided by the Bloomberg database to measure ESG performance. With the development and improvement of an ESG evaluation system, future research can adopt an evaluation system that is better aligned with China's national conditions to measure ESG performance. Moreover, changes in the legal environment of ESG activities and firm characteristics may affect the validity of the effect of ESG performance on corporate financialization. Future research can explore the differential impact of firm heterogeneity on the relationship between ESG performance and corporate financialization under different influencing mechanisms.

Author Contributions: Conceptualization, S.Z., X.Y. and L.X.; formal analysis, S.Z., X.Y. and L.X.; methodology, S.Z., X.Y., Z.L. and D.K.; validation, S.Z., X.Y., L.X., Z.L. and D.K. All authors have read and agreed to the published version of the manuscript.

Funding: This study was funded by the National Natural Science Foundation of China (grant No. 72004061, 71774050 and 72174057); Major projects of National Social Science Foundation of China (grant No. 21ZDA038); Natural Science Foundation of Hunan Province (grant No. 2022JJ30178).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: ESG data in this study is obtained from Bloomberg Database, and other firm-specific data set is obtained from China Stock Market and Accounting Research Database and the Wind Database.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Tang, H.; Zhang, C. Investment Risk, Return Gap, and Financialization of Non-listed Non-financial Firms in China. *Pac.-Basin Financ. J.* **2019**, *58*, 101213. [\[CrossRef\]](#)
2. Xie, Z.; Du, J.; Wu, Y. Does Financialization of Non-financial Corporations Promote the Persistence of Innovation: Evidence from A-share listed Manufacturing Corporations in China. *Eurasian Bus. Rev.* **2022**, *12*, 229–250. [\[CrossRef\]](#)
3. Xu, S.; Guo, L. Financialization and Corporate Performance in China: Promotion or Inhibition? *Abacus* **2021**. [\[CrossRef\]](#)
4. Xu, X.; Xuan, C. A Study on the Motivation of Financialization in Emerging Markets: The Case of Chinese Non-financial Corporations. *Int. Rev. Econ. Financ.* **2021**, *72*, 606–623. [\[CrossRef\]](#)
5. Zhao, Y.; Su, K. Economic Policy Uncertainty and Corporate Financialization: Evidence from China. *Int. Rev. Financ. Anal.* **2022**, *82*, 102182. [\[CrossRef\]](#)
6. Gillan, S.L.; Koch, A.; Starks, L.T. Firms and Social Responsibility: A Review of ESG and CSR Research in Corporate Finance. *J. Corp. Financ.* **2021**, *66*, 101889. [\[CrossRef\]](#)
7. Nekhili, M.; Boukadhba, A.; Nagati, H.; Chtioui, T. ESG Performance and Market Value: The Moderating Role of Employee Board Representation. *Int. J. Hum. Resour. Manag.* **2021**, *32*, 3061–3087. [\[CrossRef\]](#)
8. Wang, F.; Sun, Z. Does the Environmental Regulation Intensity and ESG Performance Have a Substitution Effect on the Impact of Enterprise Green Innovation: Evidence from China? *Int. J. Environ. Res. Public Health* **2022**, *19*, 8558. [\[CrossRef\]](#)

9. Tan, Y.; Zhu, Z. The Effect of ESG Performance on Corporate Innovation in China: The Mediating Role of Financial Constraints and Agency Cost of ESG Rating Events on Corporate Green Innovation in China: The Mediating Role of Financial Constraints and Managers' Environmental Awareness. *Technol. Soc.* **2022**, *68*, 101906. [\[CrossRef\]](#)
10. Friede, G.; Busch, T.; Bassen, A. ESG and Financial Performance: Aggregated Evidence from More Than 2000 Empirical Studies. *J. Sustain. Financ. Inv.* **2015**, *5*, 210–233. [\[CrossRef\]](#)
11. Abdi, Y.; Li, X.; Càmarà-Turull, X. Exploring the Impact of Sustainability (ESG) Disclosure on Firm Value and Financial Performance (FP) in Airline Industry: The Moderating Role of Size and Age. *Environ. Dev. Sustain.* **2022**, *24*, 5052–5079. [\[CrossRef\]](#)
12. Wong, W.C.; Batten, J.A.; Mohamed-Arshad, S.B.; Nordin, S.; Adzis, A.A. Does ESG Certification Add Firm Value? *Financ. Res. Lett.* **2021**, *39*, 101593. [\[CrossRef\]](#)
13. Fatemi, A.; Glaum, M.; Kaiser, S. ESG Performance and Firm Value: The Moderating Role of Disclosure. *Glob. Financ. J.* **2018**, *38*, 45–64. [\[CrossRef\]](#)
14. Duque-Grisales, E.; Aguilera-Caracuel, J. Environmental, Social and Governance (ESG) Scores and Financial Performance of Multilatinas: Moderating Effects of Geographic International Diversification and Financial Slack. *J. Bus. Ethics* **2021**, *168*, 315–334. [\[CrossRef\]](#)
15. Lee, D.D.; Faff, R.W.; Langfield-Smith, K. Revisiting the Vexing Question: Does Superior Corporate Social Performance Lead to Improved Financial Performance? *Aust. J. Manag.* **2009**, *34*, 21–49. [\[CrossRef\]](#)
16. Ruan, L.; Liu, H. Environmental, Social, Governance Activities and Firm Performance: Evidence from China. *Sustainability* **2021**, *13*, 767. [\[CrossRef\]](#)
17. Zhu, G.; Hu, W.; Peng, T.; Xue, C. The Influence of Corporate Financialization on Asymmetric Cost Behavior: Weakening or Worsening. *J. Bus. Econ. Manag.* **2021**, *22*, 21–41. [\[CrossRef\]](#)
18. Tori, D.; Onaran, Ö. The Effects of Financialization on Investment: Evidence from Firm-level Data for the UK. *Cambr. J. Econ.* **2018**, *42*, 1393–1416. [\[CrossRef\]](#)
19. Seo, H.J.; Kim, H.S.; Kim, Y.C. Financialization and the Slow Down in Korean Firms' R&D Investment. *Asian Econ. Pap.* **2012**, *11*, 35–49. [\[CrossRef\]](#)
20. Du, Y.; Zhang, H.; Chen, J.Y. The Impact of Financialization on the Future Development of the Main Business of Real Enterprises: Promote or Inhibit. *China Ind. Econ.* **2017**, *12*, 113–131. [\[CrossRef\]](#)
21. Wang, H.J.; Cao, Y.Q.; Yang, Q.; Yang, Z. Does the Financialization of Non-financial Enterprises Promote or Inhibit Corporate Innovation. *Nankai Bus. Rev.* **2017**, *20*, 155–166. (In Chinese) [\[CrossRef\]](#)
22. Jin, X.M.; Mai, Y.; Cheung, A. Corporate Financialization and Fixed Investment Rate: Evidence from China. *Financ. Res. Lett.* **2022**, *48*, 102898. [\[CrossRef\]](#)
23. Shu, J.; Zhang, C.; Zheng, N. Financialization and Sluggish Fixed Investment in Chinese Real Sector Firms. *Int. Rev. Econ. Financ.* **2020**, *69*, 1106–1116. [\[CrossRef\]](#)
24. Hou, Q.; Tang, X.; Teng, M. Labor Costs and Financialization of Real Sectors in Emerging Markets. *Pac. -Basin Financ. J.* **2021**, *67*, 101547. [\[CrossRef\]](#)
25. Karwowski, E.; Shabani, M.; Stockhammer, E. Dimensions and Determinants of Financialisation: Comparing OECD Countries since 1997. *New Polit. Econ.* **2020**, *25*, 957–977. [\[CrossRef\]](#)
26. Shi, X.; Bu, D.; Wen, C.; Lan, Z. Financial Background of Controlling Shareholder and Corporate Financialization. *China J. Account. Stud.* **2021**, *9*, 383–407. [\[CrossRef\]](#)
27. Feng, Y.; Yao, S.; Wang, C.; Liao, J.; Cheng, F. Diversification and Financialization of Non-financial Corporations: Evidence from China. *Emerg. Mark. Rev.* **2022**, *50*, 100834. [\[CrossRef\]](#)
28. Peng, Y.C.; Han, X.; Li, J.J. Economic Policy Uncertainty and Corporate Financialization. *China Ind. Econ.* **2018**, *1*, 137–155. (In Chinese) [\[CrossRef\]](#)
29. Velte, P. Does ESG Performance have an Impact on Financial Performance? Evidence from Germany. *J. Glob. Resp.* **2017**, *8*, 169–178. [\[CrossRef\]](#)
30. Ellili, N. Impact of ESG Disclosure and Financial Reporting Quality on Investment Efficiency. *Corp. Gov. Int. J. Bus. Soc.* **2022**, *22*, 1094–1111. [\[CrossRef\]](#)
31. Hammami, A.; Zadeh, M.H. Audit Quality, Media Coverage, Environmental, Social, and Governance Disclosure and Firm Investment Efficiency: Evidence from Canada. *Int. J. Account. Inform. Manag.* **2019**, *28*, 45–72. [\[CrossRef\]](#)
32. Tang, H. The Effect of ESG Performance on Corporate Innovation in China: The Mediating Role of Financial Constraints and Agency Cost. *Sustainability* **2022**, *14*, 3769. [\[CrossRef\]](#)
33. Feng, J.; Goodell, J.W.; Shen, D. ESG Rating and Stock Price Crash Risk: Evidence from China. *Financ. Res. Lett.* **2022**, *46*, 102476. [\[CrossRef\]](#)
34. Bae, J.C.; Yang, X.; Kim, M.I. ESG and Stock Price Crash Risk: Role of Financial Constraints. *Asia-Pac. J. Financ. Stud.* **2021**, *50*, 556–581. [\[CrossRef\]](#)
35. Davis, L.E. Financialization and the Non-financial Corporation: An Investigation of Firm-level Investment Behavior in the United States. *Metroeconomica* **2018**, *69*, 270–307. [\[CrossRef\]](#)
36. Wang, C. A Literature Review on Corporate Financialization. *Am. J. Ind. Bus. Manag.* **2019**, *9*, 647–657. [\[CrossRef\]](#)
37. Huang, B.; Cui, Y.; Chan, K.C. Firm-level Financialization: Contributing Factors, Sources, and Economic Consequences. *Int. Rev. Econ. Financ.* **2022**, *80*, 1153–1162. [\[CrossRef\]](#)

38. Yang, Z.; Liu, F.; Wang, H.J. Are Corporate Financial Assets Allocated for Capital Reserve or Speculative Purpose? *Manag. Rev.* **2017**, *29*, 13–25. (In Chinese) [[CrossRef](#)]
39. Hu, Y.; Wang, X.; Zhang, J. The Motivation for Financial Asset Allocation: Reservoir or Substitution? *Econ. Res. J.* **2017**, *1*, 181–194. (In Chinese)
40. Demir, F. Financial Liberalization, Private Investment and Portfolio Choice: Financialization of Real Sectors in Emerging Markets. *J. Dev. Econ.* **2009**, *88*, 314–324. [[CrossRef](#)]
41. Zhang, Q.; Loh, L.; Wu, W. How Do Environmental, Social and Governance Initiatives Affect Innovative Performance for Corporate Sustainability? *Sustainability* **2020**, *12*, 3380. [[CrossRef](#)]
42. Yuan, X.; Li, Z.; Xu, J.; Shang, L. ESG Disclosure and Corporate Financial Irregularities-Evidence from Chinese Listed Firms. *J. Clean Prod.* **2022**, *332*, 129992. [[CrossRef](#)]
43. Chen, H.Y.; Yang, S.S. Do Investors Exaggerate Corporate ESG Information? Evidence of the ESG Momentum Effect in the Taiwanese Market. *Pac.-Basin Financ. J.* **2020**, *63*, 101407. [[CrossRef](#)]
44. Lei, L.; Zheng, D.; Chen, X.D. Corporate Social Responsibility and Corporate Financialization—Based on Information Effect and Reputation Insurance Effect. *PLoS ONE* **2022**, *17*, e0271552. [[CrossRef](#)] [[PubMed](#)]
45. Naqvi, S.K.; Shahzad, F.; Rehman, I.U.; Qureshi, F.; Laique, U. Corporate Social Responsibility Performance and Information Asymmetry: The Moderating Role of Analyst Coverage. *Corp. Soc. Responsib. Environ. Manag.* **2021**, *28*, 1549–1563. [[CrossRef](#)]
46. Velte, P. The Bidirectional Relationship between ESG Performance and Earnings Management- Empirical Evidence from Germany. *J. Glob. Responsib.* **2019**, *10*, 322–338. [[CrossRef](#)]
47. Yoon, B.; Lee, J.H.; Cho, J.H. The Effect of ESG Performance on Tax Avoidance-Evidence from Korea. *Sustainability* **2021**, *13*, 6729. [[CrossRef](#)]
48. He, F.; Du, H.; Yu, B. Corporate ESG Performance and Manager Misconduct: Evidence from China. *Int. Rev. Financ. Anal.* **2022**, *82*, 102201. [[CrossRef](#)]
49. Zhang, S.; Xu, L.; Liu, N. Crowding-in and Crowding-out Effects of Corporate Philanthropy on R&D Investment. *Manag. Decis. Econ.* **2022**, *43*, 1835–1849. [[CrossRef](#)]
50. Samet, M.; Jarboui, A. How Does Corporate Social Responsibility Contribute to Investment Efficiency? *J. Multinat. Financ. Manag.* **2017**, *40*, 33–46. [[CrossRef](#)]
51. Murè, P.; Spallone, M.; Mango, F.; Marzioni, S.; Bittucci, L. ESG and Reputation: The Case of Sanctioned Italian Banks. *Corp. Soc. Responsib. Environ. Manag.* **2021**, *28*, 265–277. [[CrossRef](#)]
52. Shiu, Y.M.; Yang, S.L. Does Engagement in Corporate Social Responsibility Provide Strategic Insurance-like Effects? *Strateg. Manag. J.* **2017**, *38*, 455–470. [[CrossRef](#)]
53. Nguyen, V.H.; Agbola, F.W.; Choi, B. Does Corporate Social Responsibility Enhance Financial Performance? Evidence from Australia. *Aust. Account. Rev.* **2022**, *32*, 5–18. [[CrossRef](#)]
54. Kotchen, M.; Moon, J.J. Corporate Social Responsibility for Irresponsibility. *BE J. Econ. Anal. Policy* **2012**, *12*, 1–23. [[CrossRef](#)]
55. Reber, B.; Gold, A.; Gold, S. ESG Disclosure and Idiosyncratic Risk in Initial Public Offerings. *J. Bus. Ethics* **2021**, *179*, 867–886. [[CrossRef](#)]
56. Kao, E.H.; Yeh, C.C.; Wang, L.H.; Fung, H.-G. The Relationship between CSR and Performance: Evidence in China. *Pac-Basin Financ. J.* **2018**, *51*, 155–170. [[CrossRef](#)]
57. Zhang, D.; Lucey, B.M. Sustainable Behaviors and Firm Performance: The Role of Financial Constraints' Alleviation. *Econ. Anal. Policy* **2022**, *74*, 220–233. [[CrossRef](#)]
58. Meng, Q.; Hou, C. Social Responsibility Performance and Corporate Financialization—Information Supervision or Reputation Insurance. *Econ. Perspect.* **2020**, *2*, 45–58. (In Chinese)
59. Feng, Y.; Yu, Q.; Nan, X.; Cai, Y. Can Employee Stock Ownership Plans Reduce Corporate Financialization? Evidence from China. *Econ. Anal. Policy* **2022**, *73*, 140–151. [[CrossRef](#)]
60. Jiang, F.; Shen, Y.; Cai, X. Can Multiple Blockholders Restrain Corporate Financialization? *Pac-Basin Financ. J.* **2022**, 101827. [[CrossRef](#)]
61. Kaplan, S.N.; Zingales, L. Do Investment-cash Flow Sensitivities Provide Useful Measures of Financing Constraints? *Q. J. Econ.* **1997**, *112*, 169–215. [[CrossRef](#)]
62. Khalid, F.; Sun, J.; Huang, G.; Su, C.Y. Environmental, Social and Governance Performance of Chinese Multinationals: A Comparison of State-and Non-state-owned Enterprises. *Sustainability* **2021**, *13*, 4020. [[CrossRef](#)]
63. Chen, H.; Li, R.; Tillmann, P. Pushing on A String: State-owned Enterprises and Monetary Policy Transmission in China. *China Econ. Rev.* **2019**, *54*, 26–40. [[CrossRef](#)]
64. Li, L.; Liu, Q.; Wang, J.; Hong, X. Carbon Information Disclosure, Marketization, and Cost of Equity Financing. *Int. J. Environ. Res. Public Health* **2019**, *16*, 150. [[CrossRef](#)] [[PubMed](#)]
65. Lin, K.Z.; Cheng, S.; Zhang, F. Corporate Social Responsibility, Institutional Environments, and Tax Avoidance: Evidence from a Subnational Comparison in China. *Int. J. Account.* **2017**, *52*, 303–318. [[CrossRef](#)]
66. Hou, F.; Tang, W.; Wang, H.; Xiong, H. Economic Policy Uncertainty, Marketization Level and Firm-level Inefficient Investment: Evidence from Chinese Listed Firms in Energy and Power Industries. *Energy Econ.* **2021**, *100*, 105353. [[CrossRef](#)]

-
67. Lam, K.C.; Sami, H.; Zhou, H. Changes in the Value Relevance of Accounting Information Over Time: Evidence from the Emerging Market of China. *Journal of Contemp. Account. Econ.* **2013**, *9*, 123–135. [[CrossRef](#)]
 68. Benlemlih, M.; Bitar, M. Corporate Social Responsibility and Investment Efficiency. *J. Bus. Ethics* **2018**, *148*, 647–671. [[CrossRef](#)]