

## "National Team" Shareholding and ESG Performance: The Mediating Role of Financial Constraints

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Abstract. This study investigates how "National Team" shareholding affects corporate environmental, social, and governance (ESG) performance, with a focus on the roles of financing constraints as a mediating variable, and agency costs and state-owned enterprise as moderating variables. Using empirical data from Chinese listed companies, the findings reveal that "national team" shareholding significantly enhances ESG performance. Further analysis indicates that this improvement occurs indirectly through the alleviation of financing constraints. Additionally, agency costs negatively moderate this relationship, in other words, when agency costs are high, the positive impact of national team shareholding on ESG performance diminishes. Furthermore, the nature of state-owned enterprises positively moderates this relationship, amplifying the positive effects of national team shareholding on ESG performance, particularly within state-owned enterprises. This study not only contributes to the existing literature on the link between national team shareholding and corporate ESG performance but also offers valuable insights for enterprises and policymakers.

**Keywords:** "National team" shareholding; ESG performance; Financing constraints; State-owned enterprise; Agency costs.

#### 1 Introduction

With the rapid development of the global economy and continued population growth, energy demand is rising. At the same time, environmental problems are becoming increasingly serious, and challenges such as climate change and air pollution need to be addressed urgently. In 2019, China's energy-based CO<sub>2</sub> emissions reached 9.8 billion tonnes, accounting for 28.8% of global carbon emissions (Dale, 2021)<sup>1</sup>.

The concept of ESG was first introduced in 2004 when UN Secretary-General Kofi Annan initiated a discussion on how to promote ethical investment practices. Following this call to action, 18 financial institutions from nine countries collaborated in 2005 to produce the *Who Cares Wins report*<sup>2</sup>. The report emphasized that financial institutions should consider ESG factors in their investment decisions, marking the formalization of the ESG concept. ESG performance refers to a firm's ability to manage environmen-

tal responsibilities (such as reducing carbon footprints), social obligations and governance standards in a balanced and responsible manner (Kotsantonis et al., 2016)<sup>3</sup>. Firms that excel in ESG performance can lead to higher enterprise value (Tang et al., 2024)<sup>4</sup>, an enhanced external reputation, lower financing costs (Hou & Zhang, 2024)<sup>5</sup>, and reduced default risk (Bilyay-Erdoğan, 2024)<sup>6</sup>. Moreover, it can potentially improve market performance and innovation performance (Mo et al., 2023)<sup>7</sup>. Therefore, exploring the path to enhancing ESG performance is of great relevance.

The term "National Team" refers to government-backed institutional investors, which have been playing an increasingly important role in the capital markets. During the market crash in China in 2015, the government formed a "national team," led by China Securities Finance Corporation and Central Huijin Investment, comprising 21 institutional investors that injected massive funds into the stock market to stabilize it. After stabilizing the market turmoil, the China Securities Regulatory Commission (CSRC) allowed the "national team" to maintain a long-term presence in the stock market continue supporting market stability.

In China, the "National Team" has been active in the capital market for nearly a decade, and its continuous presence provides a unique research opportunity to explore its governance effect on corporate ESG performance. The purpose of this study is to systematically test whether "national team" shareholding can effectively improve firms' ESG performance and to provide new empirical evidence and theoretical perspectives for existing studies.

## 2 Literature Review

## 2.1 The Economic Consequences of "National Team" Shareholding

The existing literature mainly focuses on the effects of "national team" shareholding on market stability, liquidity support, price volatility, asset bubble risk and long-term market distortion, etc. First, the contribution of "national team" shareholding to market stability during the financial crisis cannot be ignored. Su et al. (2002)<sup>9</sup> showed that the HK government successfully reversed the market decline and significantly reduced market volatility through large-scale purchases of key stocks. Brunnermeier et al. (2022)<sup>10</sup>pointed out that through direct capital injection and purchase of financial assets, the national team can effectively alleviate the pressure of market liquidity and avoid liquidity exhaustion, to maintain the stability and functional operation of the financial system. Second, the "national team" intervention also significantly reduced the heterogeneous volatility of stock prices, the study showed. Su et al. 9 further showed that by concentrating ownership, "national teams" can reduce short-term price fluctuations in the market, thereby improving market stability. However, Barbon and Gianinazzi (2019)<sup>11</sup> found that while national team intervention increases stock prices and stimulates market demand, it can also lead to overvaluation and the formation of asset bubbles, which may adversely affect the healthy development of the market.

## 2.2 ESG Influencing Factors

As a key indicator of corporate sustainability, ESG performance is influenced by several factors. First, internal characteristics such as company size, state ownership, and governance structure significantly impact ESG outcomes. Larger firms with more resources generally outperform smaller ones in ESG (Lo & Sheu, 2007)<sup>12</sup>, and SOEs often excel in ESG due to government regulation and policy pressures (Chen et al., 2022)<sup>13</sup>. Second, industry characteristics play a crucial role. Firms in high-pollution, high-energy sectors face greater environmental and social pressures, leading to higher ESG investments (Clarkson et al., 2011)<sup>14</sup>. Firms in technology-intensive industries tend to perform better in ESG, likely due to technological innovations that yield environmental benefits (Delmas & Toffel, 2008)<sup>15</sup>. The external environment also significantly influences ESG performance, such as the institutional environment, market pressures, and stakeholder expectations. For instance, stronger legal systems correlate with better ESG outcomes (Liang & Renneboog, 2017)<sup>16</sup>, and increased investor focus on non-financial metrics links ESG performance to financing costs and market value (Dhaliwal et al., 2011)<sup>17</sup>. Finally, corporate culture and leadership are critical. A socially responsible culture helps integrate ESG into strategic decisions and daily operations (Bansal, 2005)<sup>18</sup>, while leaders with a long-term vision are more likely to prioritize and enhance ESG performance (Eccles et al., 2014)<sup>19</sup>.

## 3 Theoretical Analysis and Hypothesis Development

## 3.1 "National Team" Shareholding and ESG Performance

A firm's ESG performance is significantly influenced by its ability to access and manage external resources, as outlined by resource dependence theory (Pfeffer & Salancik, 1978)<sup>20</sup>. Effective ESG practices are closely tied to the availability of external resources like finance, technology, and human capital (Hillman et al., 2009)<sup>21</sup>. However, financing constraints can limit a firm's ability to secure these resources, thereby hindering its ESG investments (Borghesi et al., 2014)<sup>22</sup>.

In this context, "national team" shareholding can play a pivotal role in alleviating financing constraints. Such shareholding is often seen as a government endorsement, which enhances market trust and reduces firms' financing costs (Li et al., 2020)<sup>23</sup>. Research shows that firms with national team shareholding typically experience lower financing costs, enabling greater investment in ESG initiatives (Chen et al., 2015)<sup>24</sup>. Additionally, "national team" shareholding boosts social trust, improving firms' access to capital and mitigating the negative impact of financing constraints on ESG performance (Park et al., 2021)<sup>25</sup>. Moreover, firms with national team backing are more likely to attract long-term investors focused on sustainability, further driving ESG investment (Zhang & Luo, 2019)<sup>26</sup>.

H<sub>1</sub>: "National Team" shareholding can enhance firms' ESG performance.

H<sub>2</sub>: "National Team" shareholding can enhance firms' ESG performance by alleviating financing constraints.

# 3.2 "National Team" Shareholding, State-owned Enterprise and ESG Performance

Corporate Control Theory posits that a firm's ownership structure significantly influences its governance and decision-making (Jensen & Meckling, 1976)<sup>27</sup>. SOEs often outperform non-SOEs in ESG disclosure and performance, as the state's major shareholder role ensures alignment with government expectations (Weber, 2014)<sup>28</sup>. This state-controlled structure allows SOEs to lead in environmental protection, social responsibility, and corporate governance (Wang et al., 2021)<sup>29</sup>.

Double Endorsement Theory offers insight into the influence of institutional investor shareholding. It suggests that long-term and local institutional investors can enhance market trust and corporate social responsibility through their stable support (Connelly et al., 2011; Kim et al., 2019)<sup>30-31</sup>. Long-term investors are particularly effective in promoting sustained ESG compliance (Park et al., 2021)<sup>32</sup>. The "local preference hypothesis" further indicates that geographically proximate investors have a stronger impact on firms' ESG performance (Dhaliwal et al., 2011)<sup>33</sup>. SOEs, with inherent government control, are better positioned to leverage these advantages, thereby enhancing their ESG outcomes.

H<sub>3</sub>: The enhancement effect of "national team" shareholding on ESG performance is more significant in SOEs relative to non-SOEs.

#### 3.3 "National Team" Shareholding, Agency Cost and ESG Performance

According to principal-agent theory, conflicts of interest between shareholders (principals) and management (agents) create agency costs (Jensen & Meckling, 1976)<sup>34</sup>. "National team" shareholding can reduce these costs by increasing state control over the firm (Xu & Wang, 1999)<sup>35</sup>. In SOEs, the "national team" as a major shareholder has greater decision-making and supervisory power, allowing for more effective management oversight and alignment with public interest and social responsibility (Fan et al., 2007)<sup>36</sup>. This oversight helps management prioritize environmental protection, social responsibility, and corporate governance, thereby boosting ESG performance (Liang & Renneboog, 2017)<sup>37</sup>.

In a low agency cost environment, internal monitoring mechanisms are more effective, aligning management's actions with shareholders' long-term goals (Fama & Jensen, 1983)<sup>38</sup>. Here, "national team" shareholding can further enhance ESG performance by effectively promoting ESG strategies (Ding et al., 2020)<sup>39</sup>. Conversely, in high agency cost scenarios, management may prioritize personal interests, weakening the "national team" 's influence on ESG performance (Zhou, 2018)<sup>40</sup>.

H<sub>4</sub>: Relative to firms with high agency costs, the enhancement effect of "national team" shareholding on firms' ESG performance is more significant in the case of low agency costs.

## 4 Data and Methodology

#### 4.1 Empirical Model

Since China's "National Team" only entered the stock market in the fourth quarter of 2015, and China's stock market faced large fluctuations in 2015, considering the availability and robustness of the data, the sample time range of this study is 2016-2022, and screened: (1) companies whose positions were liquidated by the "national team" (i.e., companies that are not continuously held by the "national team") and IPO companies in 2015 and later; (2) ST, PT, and financial companies; (3) insolvent and debtor companies, as well as companies that are not continuously held by the "national team".

The model setting (1) are as follows:

$$ESG_{i,t} = \alpha_0 + \alpha_1 NAT_{i,t} + \alpha_2 Contronls_{i,t} + AGE + Ind + \varepsilon_{i,t}$$
 (1)

Among them, ESG indicates ESG performance, NAT indicates whether it is owned by the national team, i indicates the listed company, and t indicates the year.  $\alpha_1$  in the model is the core of this study. If the coefficient is significantly positive, the hypothesis above can be verified.

The explained variable in this study is ESG performance. By referring to existing literature, since China Securities has the widest coverage and the longest time span in China, and existing studies have shown that the ESG score of China Securities Index is more in line with the actual situation of Chinese enterprises (He et al., 2023)<sup>41</sup>, this research uses ESG score of China Securities Index for measurement.

The primary explanatory variable in this research is NAT. The mediator in this study is SA. SOE and agency costs are moderators.

This study refers to existing literature to control relevant variables in control variable set: ROA, LEV, SIZE, AGE, DUAL, TOP1, BIG4, Ind. The main variables are shown in Table 1.

Туре	Symbol	Name	Definition
Depend- ent varia- ble	ESG	ESG performance	China Securities Index ESG score
Explana-	NAT	Whether the shares are held by the national team	1 for the "national team" holds shares, 0 otherwise
tory vari- ables	NAP	National team shareholding ratio	The number of shares held by the "national team" / the total number of shares of the company
Mediator	SA	SA index	Financing constraints
Modera-	SOE	State-owned enterprise	1 for state-owned enterprises, 0 otherwise
tor	AGENCY	Agency cost	Costs arising from agency issues
Control	ROA	Return on total assets	Net profit / total assets
variables	LEV	Financial leverage	Total liabilities / total assets

Table 1. Definition and Description of Variables

Continued to	Continued table.1				
SIZE	Size of company	Total assets at the end of the year are expressed in natural logarithms			
AGE	Age of company	Years of establishment taken as natural logarithm			
Ind	Categories of Industry	Industry dummy variable			
DUAL	Merging of two functions	Chairman and general manager of the two positions in one for 1, otherwise 0			
TOP1	Shareholding concentration	Number of shares held by the largest shareholder/total number of shares			
BIG4	China's Big Four audit firms	Take 1 if audited by one of the big four audit firms in China, otherwise 0			

## 4.2 Descriptive Statistics

Table 2 presents the descriptive statistics for the variables. The average ESG score is 4.006, with a range from 0 to 8, and a standard deviation of 1.257, indicating significant variation in ESG performance among the firms. The mean "national team" shareholding (NAT) is 0.240, showing that 24% of the firms are state-owned. The average ROA is 0.035, reflecting diverse profitability levels. Additionally, 33.3% of firms have dual roles for the chairman and general manager, and 7% are audited by the Big Four accounting firms. Other variables align with previous research (Wen et al., 2023)<sup>42</sup>.

Variable	Obs.	Mean	SD	Min	p25	p50	p75	Max
ESG	16818	4.006	1.257	0	3.250	4	5	8
NAT	16818	0.240	0.427	0	0	0	0	1
SA	16818	3.885	0.258	2.883	3.721	3.881	4.056	4.500
SOE	16818	0.267	0.443	0	0	0	1	1
AGENCY	16818	13.75	6.526	0	11.74	16.56	18.35	20.52
ROA	16818	0.035	0.091	-2.834	0.015	0.039	0.070	0.786
LEV	16818	0.422	0.200	0.010	0.265	0.415	0.565	1.698
AGE	16818	2.105	0.919	0	1.609	2.303	2.890	3.497
SIZE	16818	22.44	1.336	17.81	21.51	22.26	23.17	28.61
DUAL	16818	0.333	0.471	0	0	0	1	1
TOP1	16818	0.327	0.147	0.021	0.215	0.302	0.419	0.900
BIG4	16818	0.070	0.254	0	0	0	0	1

Table 2. Descriptive Statistics

#### 4.3 Relevance Analysis

Table 3 presents the relevance analysis. It shows that the coefficient between NAT and ESG is 0.183, significant at the 0.01 level, providing initial support for the research

hypothesis. The positive correlation between ROA and ESG suggests that more profitable companies tend to invest more in ESG. The AGE-ESG correlation coefficient is 0.200, also significant at the 0.01 level, indicating that firms with a longer listing history are more conscious of ESG investments. The correlation between SIZE and ESG is 0.303, significant at the 0.01 level, implying that larger firms generally have better ESG performance. Additionally, firms where the chairman also serves as the general manager tend to invest less in ESG, while those audited by the Big Four accounting firms are more attentive to ESG investments.

	ESG	NAT	SA	SOE	MMS	ROA	LEV	AGE	SIZE	DUAL	TOP1	BIG4
ESG	1											
NAT	0.183***	1										
SA	0.00700	-0.085***	1									
SOE	0.150***	0.238***	0.132***	1								
MMS	0.046***	-0.083***	-0.102***	-0.452***	1							
ROA	0.120***	0.014*	-0.053***	-0.044***	0.060***	1						
LEV	0.030***	0.088***	0.063***	0.251***	-0.159***	-0.314***	1					
AGE	0.200***	0.265***	0.440***	0.422***	-0.268***	-0.170***	0.350***	1				
SIZE	0.303***	0.346***	-0.058***	0.390***	-0.122***	0.042***	0.485***	0.438***	1			
DUAL	-0.066***	-0.110***	-0.126***	-0.283***	0.175***	0.031***	-0.128***	-0.256***	-0.187***	1		
TOP1	0.078***	0.104***	-0.118***	0.177***	-0.248***	0.151***	0.022***	-0.106***	0.167***	-0.024***	1	
BIG4	0.107***	0.158***	-0.135***	0.121***	-0.119***	0.045***	0.089***	0.031***	0.333***	-0.045***	0.133***	1

Table 3. Relevance Analysis

#### 4.4 Main Regression Results

Table 4 shows the regression results. In Column (1), without any control variables, the regression coefficient of NAT is 0.538, significant at the 0.01 level. Column (2) adds firm-level control variables, yielding a NAT coefficient of 0.182, still significant at the 0.01 level. Column (3) adds governance-level controls, with the NAT coefficient slightly reduced to 0.175, remaining significant at the 0.01 level. Column (4) includes controls for year and industry effects, resulting in a NAT coefficient of 0.263, which is also significant at the 0.01 level, thus supporting hypothesis  $H_1$ .

t statistics in parentheses

<sup>\*</sup> p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Var	(1)	(2)	(3)	(4)
v ai	ESG	ESG	ESG	ESG
NAT	0.538***	0.182***	0.175***	0.263***
NAI	(24.105)	(7.905)	(7.575)	(12.197)
ROA		1.176***	1.135***	1.155***
KOA		(10.811)	(10.379)	(6.260)
LEV		-0.821***	-0.822***	-0.858***
LEV		(-14.492)	(-14.480)	(-13.962)
AGE		0.159***	0.170***	0.162***
AGE		(13.959)	(14.261)	(10.782)
SIZE		0.274***	0.267***	0.269***
SIZE		(30.827)	(28.176)	(28.479)
DUAL			0.017	-0.012
DUAL			(0.843)	(-0.607)
TOP1			0.238***	0.369***
1011			(3.682)	(5.507)
BIG4			0.018	-0.004
DIO4			(0.456)	(-0.109)
aans	3.8770***	-2.2091***	-2.164***	-2.850***
_cons	(354.5493)	(-12.2202)	(-11.274)	(-13.499)
Year FE	No	No	No	Yes
Industry FE	No	No	No	Yes
Obs.	16818	16818	16818	16818
Adj-R <sup>2</sup>	0.033	0.129	0.129	0.175

Table 4. Regression Result

t statistics in parentheses

#### 4.5 Mediator Validation

Table 5 presents the mediation test results. Column (1) shows that NAT has a significant negative effect on financing constraints (coefficient = -0.058, p < 0.01), indicating that "national team" shareholding reduces firms' financing constraints. Column (2) reveals that higher financing constraints negatively impact ESG performance (coefficient = -0.194, p < 0.01). These results support H<sub>2</sub>.

Var (1) (2)
SA ESG

SA (-0.194\*\*\*

(-4.510)

NAT (-13.967) (11.633)

Table 5. Mediator Verification

<sup>\*</sup> p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Continued table.5		
DOA	0.197***	1.193***
ROA	(10.094)	(6.451)
I EX	$0.018^{*}$	-0.854***
LEV	(1.662)	(-13.897)
ACE	0.159***	0.192***
AGE	(65.780)	(11.222)
CLZE	-0.057***	0.258***
SIZE	(-23.975)	(25.877)
DUAL	-0.027***	-0.017
DUAL	(-7.363)	(-0.866)
TOD1	0.001	0.369***
TOP1	(0.108)	(5.516)
BIG4	-0.052***	-0.014
BIG4	(-5.917)	(-0.386)
2000	4.725***	-1.932***
_cons	(90.914)	(-6.405)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Obs.	16818	16818
Adj-R <sup>2</sup>	0.334	0.176

t statistics in parentheses

#### 4.6 Moderator Validation

This study investigates the moderating effects of SOE and AGENCY on the relationship between NAT and ESG, which can be seen in table 6. Cascade regression analysis reveals that the interaction term NAT#SOE has a significant positive coefficient ( $\beta$  = 0.102, p < 0.05), indicating that SOE status strengthens the positive impact of NAT on ESG performance, supporting H<sub>3</sub>. Additionally, the interaction term NAT#AGENCY has a significant negative coefficient ( $\beta$ = -0.014, p<0.01), suggesting that lower agency costs enhance the positive effect of NAT on ESG performance, supporting H<sub>4</sub>.

(1)	(2)
ESG	ESG
0.220***	0.438***
(8.456)	(9.973)
$0.102^{**}$	
(2.512)	
	-0.014***
	(-4.763)
0.057**	
	ESG 0.220*** (8.456) 0.102** (2.512)

Table 6. Regulated Variable Verification

<sup>\*</sup> p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1.974)	
Continued table.6		
ROA	1.159***	1.150***
KUA	(6.231)	(6.299)
LEV	-0.861***	-0.800***
LEV	(-14.005)	(-13.093)
AGE	0.152***	0.205***
AGE	(9.389)	(13.132)
SIZE	0.263***	0.248***
SIZE	(27.361)	(25.859)
DUAL	-0.001	-0.036*
DUAL	(-0.037)	(-1.784)
TOP1	0.324***	0.583***
1011	(4.733)	(8.377)
BIG4	-0.009	0.051
DIO4	(-0.260)	(1.407)
MMS		0.023***
IVIIVIS		(12.342)
aans	-2.703***	-2.854***
_cons	(-12.490)	(-13.551)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Obs.	16818	16818
Adj-R <sup>2</sup>	0.175	0.183

t statistics in parentheses

#### 4.7 Robustness Test

To ensure the robustness of the research findings, first, the stability of the results was evaluated by substituting the dependent variables. Table 7 shows that both NAT and NAP remained statistically significant at the 0.01 level, with NAT's coefficient at 0.253 (t-value = 9.440) and NAP's at 3.606 (t-value = 6.114), affirming the robustness across different dependent variable specifications. Next, variations in the primary explanatory variables were tested. In Column (2), the core variable ESG retained its significance with a coefficient of 0.261 (t-value = 12.234), reinforcing the consistency and reliability of the findings. Additionally, more control variables were incorporated into the regression model to account for potential confounding factors. The results show that the significance of NAT and NAP remained robust, with NAT's coefficient at 0.343 (t-value = 10.381), maintaining its significance at the 0.01 level, further validating the findings.

Propensity Score Matching (PSM) was applied using a 1:1 match based on the control variables from model (1). The matched sample results in Column (4) confirm the original conclusions, with NAT's coefficient at 0.407 (t-value = 8.054), still significant at the 0.01 level, indicating that self-selection bias does not materially affect the research conclusions.

<sup>\*</sup> p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Finally, to tackle potential endogeneity, an instrumental variable approach was employed using the proportion of shares held by the national team in other firms within the same year and industry as the instrument. The 2SLS model results in Columns (5) and (6) of show that in the first stage, the instrument's coefficient was -24.591 (t-value = -3.201), significant at the 0.01 level, indicating its suitability. In the second stage, NAT remained significant, further reinforcing the robustness of the findings.

Table 7. Robustness Test

Var	(1)	(2)	(3)	(4)	(5)	(6)
Var	MESG	ESG	ESG	ESG	NAT	ESG
NAT	0.253***		0.261***	0.343***		0.407***
	(9.440)		(12.234)	(10.381)		(8.054)
NAP		3.606***				
		(6.114)				
IV					-24.591***	
ROA	1.162***	1.136***	1.125***	1.017**	-0.104***	1.174***
	(4.604)	(6.039)	(6.218)	(2.497)	(-3.201)	(6.456)
LEV	-0.866***	-0.910***	-0.853***	-1.011***	-0.246***	-0.814***
	(-12.335)	(-14.765)	(-13.890)	(-9.065)	(-14.091)	(-12.979)
AGE	-0.017	0.177***	0.188***	0.020	0.086***	0.149***
	(-1.223)	(11.785)	(12.408)	(0.658)	(28.963)	(9.679)
SIZE	0.278***	0.283***	0.269***	0.296***	0.085***	0.254***
	(24.670)	(29.727)	(28.393)	(17.734)	(27.787)	(24.045)
DUAL	-0.053**	-0.014	-0.027	-0.028	-0.008	-0.011
	(-2.410)	(-0.690)	(-1.359)	(-0.845)	(-1.339)	(-0.543)
TOP1	0.285***	0.408***	0.400***	0.252**	0.132***	0.345***
	(3.874)	(6.088)	(6.011)	(2.344)	(6.571)	(5.145)
BIG4	0.037	0.012	-0.008	0.015	0.111***	-0.020
	(0.872)	(0.323)	(-0.208)	(0.280)	(9.606)	(-0.547)
_cons	-5.993***	-3.105***	-2.834***	-3.127***	-1.680***	-2.558***
	(-23.956)	(-14.562)	(-13.379)	(-7.929)	(-25.504)	(-11.020)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	No	No	Yes	No	No	No
Obs	16818	16818	16818	5290	16818	16818
Continued tab	le.7					
Adj-R <sup>2</sup>	-	0.170	0.193	0.164	0.345	0.173
P-R <sup>2</sup>	0.069	-		_		

t statistics in parentheses

p < 0.1, p < 0.05, p < 0.01, p < 0.01

#### 5 Conclusions

This study contributes to the theoretical understanding of corporate governance and ESG performance in several ways:

- (1) State Ownership and Institutional Investor Governance. The findings highlight the unique role of state ownership as a governance mechanism, particularly in the context of emerging markets like China. "National Team" shareholding demonstrates how government-backed institutional investors can influence corporate behavior and promote sustainability. This challenges the traditional view of state ownership as solely driven by political motives, and instead, emphasizes its potential for positive corporate governance outcomes.
- (2) Resource Dependence Theory and ESG Performance. This study extends the application of resource dependence theory to the ESG domain. It demonstrates how "national team" shareholding, by alleviating financing constraints, can enhance a firm's ability to access and utilize critical resources for ESG initiatives. This enriches the understanding of the factors influencing ESG performance and the role of institutional investors in promoting sustainability.
- (3) Agency Theory and ESG Performance. The negative moderating effect of agency costs on the relationship between "national team" shareholding and ESG performance offers valuable insights into the complexities of corporate governance. It highlights the importance of aligning management interests with long-term sustainability goals and suggests potential mechanisms for mitigating agency costs to enhance ESG performance.
- (4) Ownership Structure and ESG Performance. This study reveals the differentiated effects of "national team" shareholding across different ownership structures. The amplified positive effect in SOEs underscores the role of government policy and control in shaping ESG performance. This finding contributes to the understanding of the interplay between ownership structure and corporate social responsibility.

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