

# Unpacking ESG in family firms: the moderating role of institutional investors in China

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## Abstract

**Purpose** – This study aims to examine how family control is associated with environmental, social and governance (ESG) performance in Chinese listed family firms (FFs) and whether institutional ownership moderates these associations. By disaggregating ESG, it clarifies where family-control logics align with, or diverge from, market-oriented ownership pressures in an emerging-market context.

**Design/methodology/approach** – Drawing on socioemotional wealth and institutional perspectives, the authors analyse panel data from 1,561 Chinese-listed FFs over 2009–2019. They estimate two-stage least squares (2SLS) models with firm and year fixed effects, using general manager family affiliation as a context-specific instrumental variable.

**Findings** – Family control is positively associated with environmental and governance performance, but not significantly associated with social performance. Institutional ownership weakens the positive associations between family control and environmental and governance outcomes, consistent with tensions between family-oriented long-term priorities and shorter-horizon market pressures. Results remain broadly consistent in the manufacturing subsample.

**Research limitations/implications** – The findings are based on listed Chinese FFs before COVID-19; future research could examine privately held firms and post-2019 ESG regulation.

**Practical implications** – The results suggest that family owners and institutional investors should use dimension-specific ESG governance rather than treating ESG as a uniform construct.

**Social implications** – Clearer social-performance standards may help reduce symbolic compliance and strengthen substantive ESG engagement in emerging economies.

**Originality/value** – The study demonstrates heterogeneous family-control associations across ESG dimensions and shows when institutional investors dampen family-driven environmental and governance engagement. It contributes by integrating socioemotional wealth and institutional perspectives and by using a context-grounded instrumental variable to address endogeneity concerns.

**Keywords** China, Institutional ownership, Family control, Family firms, ESG

**Paper type** Research paper

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## 1. Introduction

Corporate sustainability, commonly captured through environmental, social and governance (ESG) performance, has become an increasingly important concern for firms, regulators and investors (Gillan *et al.*, 2021; Lee *et al.*, 2022). These pressures are especially salient in China, where sustainability is strongly policy-driven but enforcement remains uneven. Such institutional conditions may encourage formal compliance without always generating substantive ESG improvement (Folqué *et al.*, 2021; Zhu *et al.*, 2025a).

Within this setting, family firms (FFs) are especially important because of their economic prominence and distinctive governance logic (Abeysekera and Fernando, 2020; De Massis *et al.*, 2018). Yet the literature offers mixed expectations regarding whether family control strengthens or weakens sustainability engagement. On the one hand, family owners may avoid costly environmental or social initiatives to protect family wealth and preserve control (Berrone *et al.*, 2012). On the other hand, socioemotional wealth (SEW) theory suggests that FFs often pursue non-financial goals – such as reputation, legacy preservation and continuity – that may align with stronger ESG engagement, particularly when stakeholder visibility is high.

SEW theory is especially useful for explaining why FFs may not respond uniformly across ESG domains. Family owners may regard some ESG initiatives as instruments for preserving legitimacy and continuity, while viewing others as costly, ambiguous or only symbolically valuable. In this sense, sustainability is not simply a financial burden or a universal family priority; rather, ESG engagement may vary according to how strongly a given domain connects to family identity, external scrutiny and long-term continuity. This makes the Chinese setting especially revealing, because policy mandates are strong, but implementation and enforcement differ across issue areas.

Institutional theory complements this perspective by highlighting how firms respond to external rules, norms and expectations (Leaptrott, 2005; Soleimanof *et al.*, 2018). In mature markets, institutional investors are often viewed as supporting stronger ESG performance through monitoring and pressure for better governance. In China, however, this relationship may be more complex. ESG standards remain uneven, enforcement varies and institutional investors may place relatively greater emphasis on short-term financial performance (Lamb and Butler, 2018; Zhang *et al.*, 2022). As a result, institutional ownership may not always reinforce FF's longer-term sustainability orientation and may instead create tension over costly or slow-return ESG initiatives.

Against this background, two interrelated questions remain insufficiently addressed. First, what is the association between family control and ESG performance across ESG dimensions in Chinese listed FFs? Second, how does institutional ownership moderate this association? To address these questions, we integrate SEW theory with institutional theory to examine whether, and how, family control is associated with differentiated ESG outcomes across the E, S and G dimensions.

This study makes three contributions. First, it highlights the importance of China's institutional context for understanding sustainability in FFs. China combines strong governmental sustainability mandates with weaker and uneven enforcement, providing a useful setting in which to examine whether ESG engagement is substantive or more symbolic in nature. Second, the study refines SEW and institutional arguments by showing that the association between family control and ESG is dimension-specific rather than uniform. Our findings suggest that institutional investors' market-oriented logic may be in tension with FFs' SEW-driven sustainability orientation, and that SEW-related priorities may be activated unevenly across ESG domains. Third, methodologically, we use the family membership status of General Managers (GMs) as an instrumental variable to mitigate endogeneity concerns in ownership structure research, while framing our findings as

associational evidence consistent with the correlational nature of the research design. These findings also carry practical implications: understanding when family control is associated with substantive ESG engagement can inform governance interventions and investment strategies in emerging markets.

## 2. Theoretical framework and hypotheses development

This study draws primarily on the SEW perspective, which suggests that FFs often prioritise non-financial goals – such as identity, reputation, control and dynastic continuity – alongside financial objectives (Gómez-Mejía *et al.*, 2007; Berrone *et al.*, 2012). SEW, therefore, provides a useful lens for understanding how family control may be associated with ESG engagement in Chinese FFs. At the same time, existing evidence remains mixed, indicating that family influence does not translate uniformly into stronger sustainability outcomes across settings or ESG dimensions (Liu *et al.*, 2023; Zhu *et al.*, 2025b).

We complement SEW with institutional and agency perspectives. Institutional theory emphasises that firm behaviour is shaped by external rules, norms and expectations (Soleimanof *et al.*, 2018), while agency-related tensions help explain how institutional investors may interact with FFs' sustainability priorities. This combination is particularly relevant in China, where sustainability is strongly policy-driven, but enforcement remains uneven across regions, time periods, and ESG domains. In such a setting, family control may be associated with differentiated ESG outcomes, and these associations may further depend on the presence of institutional investors.

### 2.1 Institutional environment and family control in China

Family control refers to a controlling family's ability to shape strategic decisions through substantial ownership and governance involvement. In FFs, such control may activate SEW-related priorities – identity preservation, reputation protection and transgenerational continuity – which often operate alongside, and sometimes in tension with, financial goals. Sustainability-related decisions may therefore be evaluated not only as economic investments, but also as actions that protect or threaten the family's socioemotional endowment (Zhu *et al.*, 2025b).

This logic is especially important in emerging markets. In contexts where regulatory enforcement is uneven and governance institutions are incomplete; FFs may respond selectively to ESG pressures. Some may view sustainability as relevant to legitimacy and long-term continuity, whereas others may become more cautious when ESG initiatives appear costly, uncertain or difficult to justify in the short run (Gomez-Mejia *et al.*, 2024; Xu *et al.*, 2015). China provides a particularly revealing context because sustainability is strongly encouraged at the policy level, yet implementation and enforcement vary. This creates the basis for differentiated predictions across ESG outcomes.

### 2.2 Environmental and social dimensions

Environmental issues in China – such as pollution control and resource efficiency – are highly visible and politically salient. Being identified as an environmental violator can generate regulatory penalties as well as reputational damage (Villalonga *et al.*, 2015). In this context, family control may activate SEW-related concerns such as reputation, legitimacy and legacy preservation, making environmental engagement especially relevant to families seeking continuity across generations (Sun *et al.*, 2024). Accordingly, family control may be positively associated with environmental performance. Therefore, we propose:

*H1a.* In China's institutional environment, family control is positively associated with environmental performance.

The social dimension is less straightforward. Compared with environmental issues, social initiatives are often more weakly standardised, less directly monitored, and more susceptible to symbolic compliance. In China, social responsibility disclosures may decouple from substantive practice when enforcement is weak, leading firms to prefer low-cost, image-enhancing gestures over deeper organisational reform (Ma *et al.*, 2022). FFs may engage in philanthropy or employee-oriented initiatives that align with family values, but such engagement may remain closer to minimum conformity than to substantive transformation (Du *et al.*, 2017; Tian and Lin, 2019). As a result, stronger family control may be less likely to translate into deeper social engagement. Therefore, we propose:

*H1b.* In China's institutional environment, family control is negatively associated with substantial social engagement.

Institutional ownership may further shape these two dimensions. In principle, some institutional investors may support ESG through monitoring and pressure for better disclosure. However, in China's evolving ESG environment, where standards remain uneven, and the returns to sustainability investments may be uncertain or delayed, institutional investors may also place greater emphasis on near-term financial performance (Wu *et al.*, 2023). This may reduce support for costly environmental and social initiatives, particularly in FFs where SEW-related priorities already interact with concerns about control and continuity (Du, 2015; Fernando *et al.*, 2014).

Accordingly, institutional ownership may be negatively associated with environmental and social performance in FFs. Then, we propose the following hypotheses:

*H2a.* Institutional ownership is negatively associated with environmental performance in FFs.

*H2b.* Institutional ownership is negatively associated with social engagement in FFs.

Moreover, if family control is associated with stronger environmental engagement through long-term reputation and continuity concerns, institutional investors may dilute this tendency by prioritising shorter-horizon financial outcomes. A similar logic applies to social engagement, where external investors may have limited incentives to support costly initiatives whose returns are difficult to observe or measure. Therefore, we propose:

*H3a.* Institutional ownership negatively moderates the association between family control and environmental performance.

*H3b.* Institutional ownership negatively moderates the association between family control and social engagement.

### 2.3 Governance dimension

The governance dimension differs from the environmental and social dimensions because it is more directly linked to control, monitoring and internal coordination. In emerging markets, FFs often rely on concentrated ownership and close managerial oversight to cope with institutional uncertainty and weak formal governance systems (Peng *et al.*, 2018). Family-centred governance does not necessarily imply weak governance performance. Under some conditions, concentrated family influence may support stronger decision coordination, faster responses and tighter internal monitoring, especially where formal institutions remain incomplete (Villalonga and Amit, 2006). Accordingly, we propose the following hypothesis:

*H1c.* In China’s institutional environment, family control is positively associated with governance performance.

Institutional ownership may complicate this pattern. Institutional investors typically favour more standardised governance arrangements, professionalisation and formal accountability, whereas FFs often prioritise structures that preserve autonomy, stability and family influence (Davis *et al.*, 2010; Neubaum *et al.*, 2017). These governance logics may coexist uneasily, particularly in settings where family-centred control is deeply embedded in business practice (Xu *et al.*, 2019; Gomez-Mejia *et al.*, 2019). As a result, institutional ownership may be negatively associated with governance performance in FFs and may weaken the positive association between family control and governance outcomes. Accordingly, we propose:

*H2c.* Institutional ownership is negatively associated with governance performance in FFs.

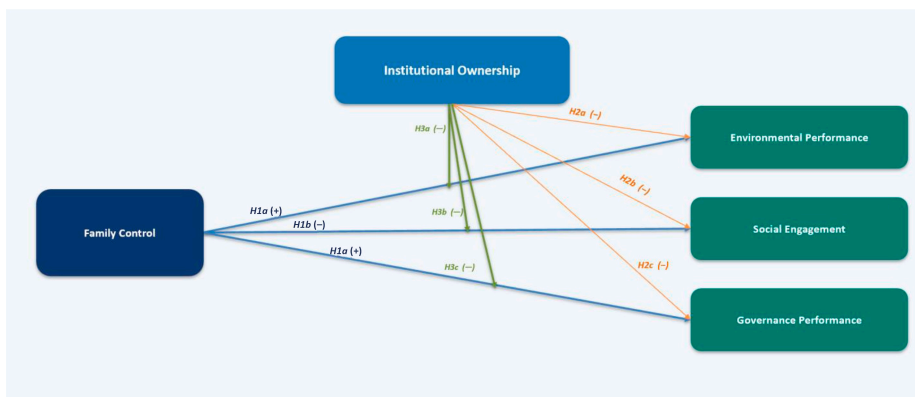
*H3c.* Institutional ownership negatively moderates the association between family control and governance performance.

Taken together, our framework suggests that family control is associated with ESG in a differentiated rather than uniform manner. Environmental and governance outcomes are more likely to align with family-centred priorities where visibility, legitimacy and continuity concerns are salient, whereas social outcomes may be more vulnerable to symbolic compliance and weaker substantive commitment. Figure 1 summarises the research model and hypotheses.

### 3. Methodology

#### 3.1 Research setting

China provides a suitable context for examining the interplay between family control, institutional ownership and ESG performance in an emerging-market setting. First, as the world’s largest emerging economy, China exemplifies the institutional characteristics common to developing markets: evolving regulatory frameworks, varying enforcement standards, and the coexistence of traditional and modern governance practices (Zhou *et al.*, 2021). Second,



**Figure 1.** Research model: Family control, institutional ownership and ESG performance

Source: Authors’ own work

Chinese FFs operate in a unique institutional environment where traditional values influence business practices while facing increasing pressure for modernisation and sustainability. Third, the substantial growth in institutional investment in Chinese markets during our sample period enabled a robust examination of how institutional ownership affects FFs' ESG engagement.

Our sample comprises Chinese listed companies from 2009 to 2019, a period that encompasses significant institutional developments in China's corporate governance and ESG landscape. This timeframe captures important economic transitions: the post-2008 financial crisis recovery period, the implementation of major environmental regulations, and the increasing institutionalisation of Chinese capital markets. We identify FFs using two criteria:

- (1) at least 20% family ownership, indicating meaningful control rights; and
- (2) a family member serving as board chairman, indicating substantial influence over strategic decision-making.

The continuous measure of family control used in the regression analysis is described below.

The initial sample includes all non-financial listed firms meeting these criteria. Firms with less than one year of listing history or incomplete data are excluded. To reduce the influence of extreme values while preserving underlying variation, all continuous variables are winsorised at the 2.5th and 97.5th percentiles. The final sample comprises 1,561 firms and 9,498 firm-year observations. We deliberately end the sample in 2019 to avoid the structural disruptions introduced by COVID-19, which would otherwise complicate the interpretation of ownership–ESG associations (Miroshnychenko *et al.*, 2024).

### 3.2 Description of variables

**3.2.1 Independent variable.** To measure family control, we calculate the proportion of voting rights held by family members in listed companies. Voting rights represent the power of control within a company (Nenova, 2003). To calculate the degree of control of family members over the company, we summed the family proportion of shares as family control power. Specifically, the chain of equity relationships between the effective controller and the listed company, or the aggregate of the weakest layer or layers of several chains of equity relationships, is required (Claessens *et al.*, 2000; La Porta *et al.*, 1999).

**3.2.2 Dependent variables.** Our ESG measures are drawn from the HuaZheng ESG database, one of the most widely used ESG rating systems for Chinese listed firms (e.g. Deng *et al.*, 2023; Khurram *et al.*, 2024). The database provides standardised scores ranging from 0 to 100 for the ESG dimensions, allowing consistent comparison across firms and over time. It is particularly suitable for this study because it is designed for the Chinese institutional context and incorporates local regulatory and governance characteristics. Table 1 reports the indicator structure.

**3.2.3 Moderator.** Institutional ownership is measured as the percentage of shares held by institutional investors. Prior research shows that institutional investors in China often exhibit relatively short holding periods, reflecting evaluation systems that reward shorter-term returns (Xiong and Wang, 2023). This context makes institutional ownership especially relevant for examining potential tensions between market-oriented and family-centred ESG priorities.

**3.2.4 Control variables.** We include three groups of controls. First, firm characteristics include firm age and firm size (the natural logarithm of total assets). Firm age captures organisational maturity, while firm size reflects resource endowment and public visibility, both of which may be associated with ESG performance (Abdi *et al.*, 2022).

**Table 1.** ESG Rating and scoring details (Huazheng Company)

| 3 Pillars       | 14 Themes               | 26 Key Indicators  | Underlying indicators |
|-----------------|-------------------------|--|-----------------------|
| Environment (E) | Management system       | Management system  | 100+                  |
|                 | Green operation goal    | Low carbon plan Goal green purchase plan   |                       |
|                 | Eco product             | Carbon footprint Economic product and service  |                       |
|                 | External identification | External identification  |                       |
| Social (S)      | Illegal event           | Illegal event  |                       |
|                 | Institution system      | CSR quality  |                       |
|                 | Health and safety       | Accident reduction plan accidents accidents tendency   |                       |
|                 | Social contribution     | donations Employee growth rate Poverty alleviation   |                       |
| Governance (G)  | External identification | External identification  |                       |
|                 | Institution system      | ESG self-supervision   |                       |
|                 | Governance structure    | Related transition board independence  |                       |
|                 | Operation activity      | Tax transparency   |                       |
|                 | Operation risk          | Asset quality Financial credibility Short debt risk Stake pledge risk Information disclosure quality |                       |
|                 | Punishment              | Company and its subsidiary punishment Executives' illegal events                                     |                       |

Second, we control for financial characteristics, including return on equity (ROE), leverage, book-to-market ratio (BM) and management fee ratio (Mfee). These variables capture profitability, financial pressure, valuation and administrative efficiency, all of which may affect firms' willingness or capacity to engage in ESG-related activities (Nirino *et al.*, 2021).

Third, we include governance-related controls. Audit opinion captures the presence of formal monitoring and reporting discipline, which may be associated with ESG performance (Pozzoli *et al.*, 2022). We also control for the Top 10 holdings, which captures ownership concentration among major shareholders. Table 2 reports the definitions of all variables used in the analysis.

### 3.3 Data analysis

To align the empirical design with the wording of our research questions, we interpret the estimates as associational rather than as definitive causal effects. Because family control and ESG performance may be jointly shaped by unobserved firm characteristics or reverse influence, we use a 2SLS specification with firm and year fixed effects to mitigate endogeneity concerns. In particular, firms with stronger sustainability profiles may be more likely to retain family influence, while omitted factors may affect both family control and ESG outcomes.

To account for the temporal nature of ESG implementation, the explanatory variables are measured at time  $t$ , while ESG outcomes are measured at  $t+1$ . This specification reduces contemporaneous overlap between ownership variables and ESG performance and is consistent with the view that changes in ownership-related incentives may take time to be reflected in ESG outcomes.

Our instrumental variable is a dummy indicating whether the GM is a family member. In Chinese listed firms, the GM is an important executive position, but the role is typically more

**Table 2.** Variable definition

| Variables                           | Acronym  | Variable measurement   |
|-------------------------------------|----------|--|
| <i>Dependent variables</i>          |          |  |
| Environment                         | E        | Hua Zheng environment rating for each company  |
| Social scores                       | S        | Hua Zheng social rating for each company   |
| Governance scores                   | G        | Hua Zheng governance rating for each company   |
| <i>Independent variable</i>         |          |  |
| Family control                      | Fam      | The proportion of control rights held by the controlling family  |
| <i>Moderator variable</i>           |          |  |
| Institutional ownership             | Investor | The percentage of outstanding shares held by institutional investors   |
| <i>Instrumental variables</i>       |          |  |
| General manager                     | GM       | A binary variable equal to 1 if the firm's general manager is a member of the controlling family, and 0 otherwise. |
| <i>Control variables</i>            |          |  |
| Firm size                           | Fsize    | The natural logarithm of total assets, scaled to billions of yuan  |
| Firm age                            | Firm age | The number of years since the firm's establishment   |
| Return on equity                    | ROE      | Net income / shareholders' equity  |
| Leverage rate                       | Leverage | The ratio of total debt to total assets  |
| Book-to-market ratio                | BM       | Book value / total market value  |
| Management fee                      | Mfee     | Management expenses/main business income   |
| Audit opinion                       | Opinion  | A binary variable equal to 1 if the firm receives a standard unqualified audit opinion, and 0 otherwise            |
| TOP10 holdings                      | Top 10   | The proportion of shares held by the ten largest shareholders  |
| <b>Source(s):</b> Authors' own work |          |  |

constrained than the CEO role in many Western firms, particularly because strategic authority often remains concentrated in the board chairman (Jiang and Kim, 2015). This institutional feature makes GM family membership relevant to family control while making it less directly tied to ESG outcomes than broader family ownership itself.

The empirical analysis proceeds in two stages. In the first stage, family control is estimated as a function of GM family membership, controls and fixed effects. In the second stage, ESG performance are regressed on family control, institutional ownership, their interaction term, and the full set of controls. To reduce multicollinearity in the moderation models, the interaction term is constructed using centred variables. Conservative robust inference is used throughout the analysis.

The empirical specification can be expressed as follows:

$$FAM_{i,t} = a_0 + a_1 \text{ General Manager}_{i,t} + a_2 X_{i,t} + u_i + \lambda_t + \mathcal{E}_{i,t} \quad (1)$$

Testing the moderating effect:

$$E, S, G_{i,t+1} = a_0 + a_1 FAM_{i,t} + a_2 \text{ Moderator}_{i,t} + a_3 \text{ Centralised\_interaction}_{i,t} + \sum \alpha_4 \text{ CONTROLS}_{i,t} + u_i + \lambda_t + \mathcal{E}_{i,t} \quad (2)$$

where  $i$  denotes firm,  $t$  denotes year,  $\mu_i$  captures firm fixed effects, and  $\lambda_t$  captures year fixed effects.

Prior to hypothesis testing, we conducted a series of diagnostic tests to assess the suitability of the empirical specification. Table 3, Panel A reports variance inflation factors (VIFs) for all independent and moderating variables. VIF values range from 1.07 to 2.03, with a mean VIF of 1.52, indicating that multicollinearity is unlikely to be a concern. Table 3, Panel B reports tests for heteroskedasticity and serial correlation. Both the Breusch–Pagan test ( $\chi^2 = 47.05$ ,  $p < 0.001$ ) and White's test ( $\chi^2 = 189.66$ ,  $p < 0.001$ ) reject the null hypothesis of homoskedasticity. The Wooldridge test for first-order autocorrelation in panel data likewise rejects the null of no serial correlation ( $F = 378.66$ ,  $p < 0.001$ ). These results indicate the presence of heteroskedasticity and within-firm serial correlation, motivating the use of conservative robust inference in the empirical analysis.

We also conducted Breusch–Pagan LM tests and Hausman specification tests for each ESG dimension. The model selection tests support a panel fixed-effects specification, and the corresponding results are reported in Table 4.

## 4. Empirical results

### 4.1 Descriptive statistics and correlations

To provide an overview of the data, we first report pairwise correlations among the main variables. Table 5 presents the Pearson correlation coefficients.

Table 6 reports the descriptive statistics for all variables used in the analysis. The ESG measures reveal notable variation across ESG dimensions. Environmental performance has the lowest mean score (59.73), whereas governance performance has the highest mean score (78.70), with social performance falling between the two. This pattern suggests that ESG engagement is not uniform across dimensions among Chinese-listed FFs.

### 4.2 Regression results

4.2.1 *Validity of instrumental variables.* To provide transparency on the first stage, Table 7 reports supplementary first-stage evidence for the relationship between the instrumental

**Table 3.** Diagnostic tests

| Variable   | VIF               |                 |
|--|-------------------|-----------------|
| <i>Panel A: Multicollinearity</i>                          |                   |                 |
| Top 10 holdings  |                   | 2.03            |
| Firm size  |                   | 1.98            |
| Book-to-market ratio                                       |                   | 1.94            |
| Family control   |                   | 1.93            |
| Leverage   |                   | 1.67            |
| Institutional ownership                                    |                   | 1.35            |
| Family control $\times$ institutional ownership (centered) |                   | 1.28            |
| Management fee   |                   | 1.22            |
| Return on equity   |                   | 1.2             |
| Firm age   |                   | 1.09            |
| Audit opinion  |                   | 1.07            |
| Mean VIF   |                   | 1.52            |
| <i>Panel B: Heteroscedasticity and serial correlation</i>  |                   |                 |
| Test   | Statistic         | <i>p</i> -value |
| Breusch–Pagan  | $\chi^2 = 47.05$  | < 0.001         |
| White  | $\chi^2 = 189.66$ | < 0.001         |
| Wooldridge autocorrelation                                 | $F = 378.66$      | < 0.001         |

**Source(s):** Authors' own work

**Table 4.** BP LM statistic and Hausman Test

| Test        | Null hypothesis (H0)           | Statistic                          | p-value | Decision/Implication                     |
|-------------|--------------------------------|------------------------------------|---------|--|
| BP LM (E)   | No random effects (Var(u) = 0) | chibar <sup>2</sup> (1) = 14868.39 | 0       | Reject H0 → RE preferred over pooled OLS |
| Hausman (E) | RE consistent and efficient    | chi <sup>2</sup> (16) = 25.83      | 0.0565  | Reject H0 → RE preferred over pooled OLS |
| BP LM (S)   | No random effects (Var(u) = 0) | chibar <sup>2</sup> (1) = 7611.98  | 0       | Reject H0 → RE preferred over pooled OLS |
| Hausman (S) | RE consistent and efficient    | chi <sup>2</sup> (16) = 47.76      | 0.0001  | Reject H0 → FE preferred                 |
| BP LM (G)   | No random effects (Var(u) = 0) | chibar <sup>2</sup> (1) = 3453.01  | 0       | Reject H0 → RE preferred over pooled OLS |
| Hausman (G) | RE consistent and efficient    | chi <sup>2</sup> (16) = 378.72     | 0       | Reject H0 → FE preferred                 |

**Source(s):** Authors' own work

variable and family control. The coefficient on GM family membership is positive and statistically significant ( $\beta = 0.013$ ,  $p < 0.01$ ), indicating that firms whose GM is a family member tend to exhibit higher levels of family control. This result provides additional support for instrument relevance.

Table 8 reports the formal under-identification and weak-identification diagnostics for the ESG models. The Kleibergen–Paap rk LM statistic is significant across all three dimensions, indicating that the instrument is relevant and that the models do not suffer from under-identification. In addition, the Cragg–Donald Wald  $F$  statistic exceeds the conventional Stock–Yogo critical values, suggesting that weak-instrument concerns are limited in our setting. Because the models are exactly identified, over-identification tests are not applicable.

Table 9 reports the 2SLS estimates with firm and year fixed effects for the ESG dimensions. Overall, the results reveal a differentiated pattern across ESG dimensions, with stronger associations for environmental and governance outcomes than for social performance.

**4.2.2 Environmental performance (E).** For environmental performance, family control shows a positive and statistically significant coefficient ( $\beta = 36.54$ ,  $p < 0.05$ ), consistent with  $H1a$ . Institutional ownership exhibits a negative association with environmental performance ( $\beta = -0.927$ ,  $p < 0.1$ ), providing marginal evidence consistent with  $H2a$ . The interaction between family control and institutional ownership is negative and statistically significant ( $\beta = -18.93$ ,  $p < 0.05$ ), consistent with  $H3a$ . Figure 2 visualises the moderating role of institutional ownership.

**4.2.3 Social engagement (S).** For social performance, neither family control nor institutional ownership shows a statistically significant association ( $p > 0.1$ ). The interaction term is likewise non-significant. Accordingly,  $HH1b$ ,  $HH2b$ , and  $HH3b$  are not supported.

**4.2.4 Governance performance (G).** For governance performance, family control exhibits a positive and highly significant coefficient ( $\beta = 92.04$ ,  $p < 0.01$ ), consistent with  $H1c$ . Institutional ownership is negatively associated with governance performance ( $\beta = -1.848$ ,  $p < 0.05$ ), consistent with  $H2c$ . The interaction term is negative and significant ( $\beta = -52.42$ ,  $p < 0.01$ ), consistent with the hypothesised negative moderating effect ( $H3c$ ). Figure 3 visualises the moderating role of institutional ownership.

**4.2.5 Control variables.** Among the control variables, firm size is positively associated with ESG performance across all three dimensions. The book-to-market ratio is negatively associated with ESG outcomes throughout the models. Profitability (ROE) shows mixed associations across dimensions, while audit opinion is positively associated with

**Table 5.** Pearson correlations

| Variables | E score   | S score   | G score   | Fam       | Investor  | Firm size | Firm age  | ROE       | Leverage  | BM        | Mfee      | TOP 10 |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| E score   | 1         |           |           |           |           |           |           |           |           |           |           |        |
| S score   | 0.299***  | 1         |           |           |           |           |           |           |           |           |           |        |
| G score   | 0.038***  | 0.00900   | 1         |           |           |           |           |           |           |           |           |        |
| Fam       | -0.031*** | 0.00900   | 0.190***  | 1         |           |           |           |           |           |           |           |        |
| Investor  | -0.048*** | -0.082*** | 0.024**   | 0.189***  | 1         |           |           |           |           |           |           |        |
| Firm size | 0.062***  | -0.022**  | -0.326*** | -0.315*** | 0.108***  | 1         |           |           |           |           |           |        |
| Firm age  | 0.167***  | 0.178***  | -0.162*** | 0.0110    | 0.205***  | 0.440***  | 1         |           |           |           |           |        |
| ROE       | 0.092***  | 0.089***  | -0.364*** | -0.101*** | 0.123***  | 0.395***  | 0.500***  | 1         |           |           |           |        |
| Leverage  | 0.024**   | 0.105***  | 0.306***  | 0.211***  | 0.115***  | -0.101*** | 0.101***  | -0.098*** | 1         |           |           |        |
| BM        | 0.094***  | 0.116***  | -0.217*** | -0.067*** | 0.029***  | 0.355***  | 0.609***  | 0.536***  | -0.135*** | 1         |           |        |
| Mfee      | -0.148*** | -0.128*** | -0.00100  | -0.093*** | -0.066*** | -0.0160   | -0.335*** | -0.239*** | -0.187*** | -0.264*** | 1         |        |
| TOP10     | -0.020**  | 0.037***  | 0.204***  | 0.666***  | 0.206***  | -0.521*** | -0.061*** | -0.207*** | 0.189***  | -0.181*** | -0.095*** | 1      |

**Note(s):** Pearson correlation coefficients are reported for continuous score, ratio and financial variables. The binary control variable Audit Opinion and the binary instrumental variable General Manager are included in the regression models reported in Table 9 but excluded from this table. Nominal unordered categorical variables, fixed-effect indicators and variables with zero variance are also excluded. \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

**Source(s):** Authors' own work

**Table 6.** Descriptive statistics

| Variable         | Type                     | <i>n</i> | Mean  | SD    | Min.  | 0.25  | Mdn   | 0.75  | Max.  |
|------------------|--------------------------|----------|-------|-------|-------|-------|-------|-------|-------|
| E score          | Continuous score (0–100) | 9,739    | 59.73 | 7.59  | 33.91 | 54.24 | 59.56 | 64.73 | 93.34 |
| S score          | Continuous score (0–100) | 9,739    | 73.78 | 10.24 | 0     | 67.52 | 74.05 | 80.38 | 100   |
| G score          | Continuous score (0–100) | 9,739    | 78.7  | 7.97  | 22.4  | 75.64 | 80.54 | 83.91 | 97.33 |
| Fam              | Continuous ratio         | 9,752    | 0.47  | 0.15  | 0.2   | 0.34  | 0.46  | 0.58  | 1     |
| Investor         | Continuous ratio         | 9,712    | 0.33  | 0.27  | 0     | 0.07  | 0.28  | 0.56  | 0.8   |
| Firm size        | Continuous               | 9,765    | 1.55  | 0.89  | 0     | 1.1   | 1.61  | 2.2   | 3.4   |
| Firm age         | Continuous               | 9,765    | 21.72 | 1.06  | 16.12 | 20.95 | 21.59 | 22.31 | 28.61 |
| Return on equity | Continuous ratio         | 9,734    | 0.37  | 0.2   | 0.04  | 0.21  | 0.35  | 0.5   | 0.89  |
| Leverage         | Continuous ratio         | 9,693    | 0.08  | 0.1   | -0.54 | 0.04  | 0.08  | 0.12  | 0.34  |
| BM               | Continuous ratio         | 9,765    | 0.69  | 0.62  | 0.07  | 0.31  | 0.51  | 0.84  | 3.98  |
| Mfee             | Continuous ratio         | 9,765    | 0.09  | 0.06  | 0.01  | 0.05  | 0.08  | 0.11  | 0.41  |
| Opinion          | Binary                   | 9,765    | 0.97  | 0.16  | 0     | 1     | 1     | 1     | 1     |
| TOP10            | Continuous ratio         | 9,765    | 0.63  | 0.13  | 0.21  | 0.55  | 0.66  | 0.74  | 0.96  |

**Note(s):** Descriptive statistics are based on the maximum available sample for each variable. The 2SLS regression sample reported in Table 9 comprises 9,498 firm-year observations after applying the *t* + 1 lead structure on dependent variables and listwise deletion of missing covariates. Variable types follow standard reporting conventions in leading management journals: continuous score variables refer to HuaZheng ESG ratings; continuous ratio variables are bounded proportional measures; binary variables are coded 0 / 1, with means representing sample proportions. Industry and year fixed-effect indicators are included in the regression models reported in Table 9 but omitted from this table, as they are categorical control variables without meaningful descriptive moments

**Source(s):** Authors' own work

**Table 7.** Supplementary First-Stage evidence for instrument relevance

| Dependent variable: Family control (fam) | coefficient | Std. Err. | <i>t</i> |
|--|-------------|-----------|----------|
| General manager (IV)                     | 0.013***    | 0.004     | 3.03     |
| Institutional ownership                  | 0.004       | 0.01      | 0.38     |
| Firm age                                 | 0.088***    | 0.012     | 7.07     |
| Firm size                                | 0.002       | 0.004     | 0.35     |
| Leverage                                 | 0.025*      | 0.015     | 1.65     |
| Return on equity                         | 0.086***    | 0.011     | 7.53     |
| Book-to-market ratio                     | 0.017***    | 0.003     | 5.19     |
| Management fee                           | 0.035       | 0.031     | 1.11     |
| Audit opinion                            | -0.014*     | 0.007     | -1.88    |
| Top 10 holdings                          | 0.329***    | 0.031     | 10.54    |
| Firm FE                                  | YES         |           |          |
| Year FE                                  | YES         |           |          |
| Observations                             | 9,615       |           |          |
| Number of firms                          | 1,678       |           |          |
| Within <i>R</i> <sup>2</sup>             | 0.387       |           |          |

**Note(s):** Robust standard errors clustered by firm. The first-stage sample is slightly larger than the final 2SLS estimation sample (9,498) due to additional sample restrictions in the second-stage estimation.

\*\*\* *p* < 0.01, \*\**p* < 0.05, \**p* < 0.1

**Source(s):** Authors' own work

**Table 8.** Instrumental-variable diagnostics

| ESG component           | Test type            | Statistic                           | Value  | P-value    | Critical values (Stock-Yogo)                | Conclusion   |
|-------------------------|----------------------|-------------------------------------|--------|------------|---|--|
| Environmental (E score) | Under identification | Kleibergen–Paap rk LM statistic     | 26.765 | $p < 0.01$ | –   | IV is relevant; model is correctly identified<br>IV is not weak; exceeds critical values<br>Confirms IV strength |
|                         | Weak identification  | Cragg–Donald Wald F statistic       | 37.993 | –          | 10%: 16.38, 15%: 8.96, 20%: 6.66, 25%: 5.53 |  |
| Social (S score)        | Under identification | Kleibergen–Paap rk Wald F statistic | 26.974 | –          | –   | IV is relevant; model is correctly identified<br>IV is not weak; exceeds critical values<br>Confirms IV strength |
|                         | Weak identification  | Kleibergen–Paap rk LM statistic     | 26.765 | $p < 0.01$ | –   |  |
| Governance (G score)    | Under identification | Cragg–Donald Wald F statistic       | 37.993 | –          | 10%: 16.38, 15%: 8.96, 20%: 6.66, 25%: 5.53 | IV is not weak; exceeds critical values<br>Confirms IV strength  |
|                         |                      | Kleibergen–Paap rk Wald F statistic | 26.974 | –          | –   |  |
|                         | Weak identification  | Kleibergen–Paap rk LM statistic     | 26.765 | $p < 0.01$ | –   | IV is relevant; model is correctly identified<br>IV is not weak; exceeds critical values<br>Confirms IV strength |
|                         |                      | Cragg–Donald Wald F statistic       | 37.993 | –          | 10%: 16.38, 15%: 8.96, 20%: 6.66, 25%: 5.53 |  |

**Note(s):** Because the same endogenous regressor and first-stage specification are used across the environmental, social and governance models, the IV diagnostic statistics are identical across the Three ESG dimensions

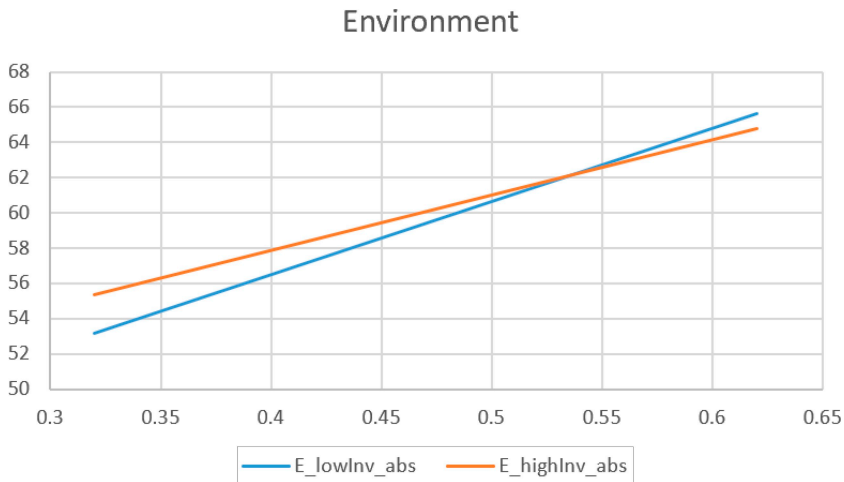
**Source(s):** Authors' own work

**Table 9.** 2SLS Panel regression (from 2009–2019)

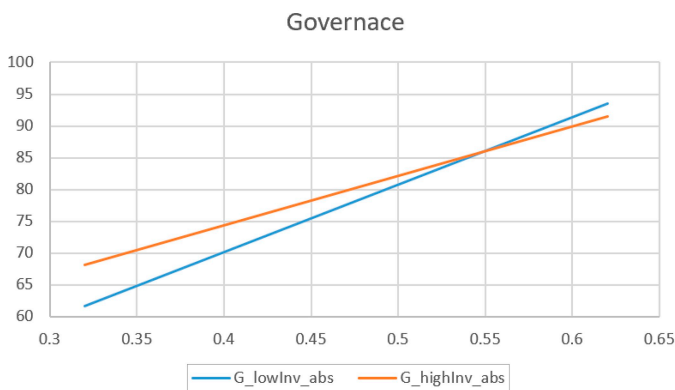
| Variables                 | 1<br>E            | 2<br>S            | 3<br>G              | 4<br>E            | 5<br>S            | 6<br>G             |
|---------------------------|-------------------|-------------------|---------------------|-------------------|-------------------|--------------------|
| Fam                       | 32.526** (2.24)   | 10.596 (0.45)     | 80.914*** (3.24)    | 36.543** (2.22)   | 14.082 (0.53)     | 92.040*** (3.20)   |
| Investor                  | -0.927* (-1.93)   | -0.473 (-0.68)    | -1.848** (-2.54)    | 1.191 (1.16)      | 1.365 (0.83)      | 4.020** (2.31)     |
| fam × investor (centered) |                   |                   |                     | -18.927** (-2.13) | -16.426 (-1.18)   | -52.418*** (-3.39) |
| Firm age                  | -0.969* (-1.83)   | -0.681 (-0.79)    | -3.821*** (-4.24)   | -1.224* (-1.90)   | -0.902 (-0.86)    | -4.527*** (-4.04)  |
| Firm size                 | 1.243*** (6.26)   | 1.564*** (5.72)   | 0.854*** (2.76)     | 1.183*** (5.96)   | 1.512*** (5.53)   | 0.688** (2.21)     |
| Leverage rate             | 0.168 (0.25)      | 2.894*** (2.82)   | -11.423*** (-10.39) | 0.227 (0.34)      | 2.946*** (2.87)   | -11.258*** (-9.79) |
| ROE                       | -3.219** (-2.23)  | 3.837* (1.72)     | 4.106 (1.63)        | -3.184** (-2.20)  | 3.868* (1.74)     | 4.204* (1.65)      |
| Book-to-market ratio      | -1.217*** (-3.24) | -1.552*** (-2.83) | -1.190* (-1.95)     | -1.160*** (-3.24) | -1.502*** (-2.88) | -1.031* (-1.76)    |
| Management fee            | -1.656 (-0.97)    | -4.857* (-1.90)   | -11.481*** (-3.75)  | -1.472 (-0.85)    | -4.698* (-1.86)   | -10.973*** (-3.50) |
| Opinion                   | 1.313** (2.53)    | 1.028 (1.36)      | 4.826*** (5.51)     | 1.287** (2.43)    | 1.004 (1.33)      | 4.751*** (5.23)    |
| TOP10 holdings            | -11.386** (-2.18) | -4.866 (-0.59)    | -28.889*** (-3.23)  | -14.293** (-2.17) | -7.389 (-0.72)    | -36.941*** (-3.21) |
| Observations              | 9,498             | 9,498             | 9,498               | 9,498             | 9,498             | 9,498              |
| R-squared                 | -0.045            | 0.066             | -0.11               | -0.074            | 0.062             | -0.189             |
| Number of firm            | 1,561             | 1,561             | 1,561               | 1,561             | 1,561             | 1,561              |
| Firm FE                   | YES               | YES               | YES                 | YES               | YES               | YES                |
| Year FE                   | YES               | YES               | YES                 | YES               | YES               | YES                |

**Note(s):** *t*-statistics based on robust standard errors are reported in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Source(s):** Authors' own work



**Figure 2.** Interaction effect of institutional ownership on environmental performance  
**Source:** Authors' own work



**Figure 3.** Interaction effect of institutional ownership on governance performance  
**Source:** Authors' own work

environmental and governance performance. Full coefficient estimates and significance levels are reported in [Table 9](#).

#### 4.3 Robustness tests

To assess the robustness of our findings, we conduct two additional analyses focusing on the manufacturing sector. First, we examine whether the main relationships differ systematically when ownership variables are interacted with a manufacturing-sector indicator in the full sample. Second, we re-estimate the models using the manufacturing subsample only. [Table 10](#) reports the robustness results.

**Table 10.** Robustness test – manufacturing sector

| Variables                 | (1) First test: E | (2) First test: S | (3) First test: G | (4) Second test: E | (5) Second test: S | (6) Second test: G |
|---------------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Fam                       | 123.916*(1.89)    | 61.311(0.70)      | 274.871**(2.25)   | 37.374**(2.27)     | 15.489(0.67)       | 84.715***(-3.10)   |
| Investor                  | 2.041(1.18)       | 1.875(0.82)       | 5.710*(1.82)      | 1.043(1.14)        | 1.497(1.22)        | 3.261***(2.20)     |
| Fam × investor (centered) | -27.143*(-1.82)   | -20.73(-1.05)     | -67.275**(-2.43)  | -18.003**(-2.22)   | -13.764(-1.26)     | -44.951***(-3.36)  |
| Manufacturing             | -2.907(-1.22)     | -0.604(-0.22)     | -7.412(-1.55)     |                    |                    |                    |
| Family × manufacturing    | -104.914*(-1.89)  | -56.925(-0.77)    | -228.023**(-2.21) |                    |                    |                    |
| Firm age                  | -1.212(-1.56)     | -0.898(-0.85)     | -4.302***(-2.98)  | -1.417**(-2.04)    | -1.138(-1.16)      | -4.435***(-3.88)   |
| Firm size                 | 1.160***(-4.41)   | 1.483***(-5.24)   | 0.785*(1.67)      | 1.077***(-4.71)    | 1.379***(-4.54)    | 0.606*(1.75)       |
| Leverage rate             | -1.255(-0.79)     | 2.226(1.57)       | -14.254***(-6.53) | 1.117(1.62)        | 3.632***(-3.59)    | -9.735***(-7.87)   |
| ROE                       | -3.758*(-1.86)    | 3.251(1.33)       | 3.522(0.93)       | -3.586**(-2.14)    | 4.953***(-2.17)    | 4.977(1.35)        |
| Book-to-market ratio      | -0.323(-1.08)     | -1.016**(-2.18)   | 0.989*(1.79)      | -1.599***(-3.53)   | -1.586**(-2.49)    | -1.847**(-2.55)    |
| Management fee            | -1.627(-0.73)     | -4.763*(-1.81)    | -9.542**(-2.19)   | -2.474(-1.23)      | -5.561*(-1.88)     | -13.405***(-3.75)  |
| Opinion                   | 0.434(0.64)       | 0.551(0.70)       | 2.670***(2.08)    | 2.122***(-3.38)    | 0.975(1.16)        | 5.420***(-5.33)    |
| Top10 holdings            | -17.270*(-1.85)   | -9.063(-0.73)     | -40.388**(-2.34)  | -13.738**(-2.27)   | -5.41(-0.65)       | -32.370***(-3.24)  |
| Observations              | 9,498             | 9,498             | 9,498             | 7,821              | 7,821              | 7,821              |
| R-squared                 | -0.568            | 0.001             | -1.143            | -0.066             | 0.081              | -0.111             |
| Number of firm            | 1,561             | 1,561             | 1,561             | 1,301              | 1,301              | 1,301              |
| Firm FE                   | YES               | YES               | YES               | YES                | YES                | YES                |
| Year FE                   | YES               | YES               | YES               | YES                | YES                | YES                |

**Note(s):** *t*-statistics based on robust standard errors are reported in parentheses. \*\*\**p* < 0.01, \*\**p* < 0.05, \**p* < 0.1  
**Source(s):** Authors' own work

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Across both tests, the overall pattern remains broadly consistent with the main analysis. Family control remains positively associated with environmental and governance performance, while the interaction between family control and institutional ownership remains negative for these two dimensions. Social performance continues to show no statistically significant association with family control, institutional ownership or their interaction. Taken together, these results provide additional support for the stability of the main findings in a sector where ESG-related pressures are particularly salient.

## 5. Discussion

Our study advances understanding of how family control is associated with ESG performance in emerging markets and how institutional ownership moderates this relationship in the Chinese context. Overall, the results reveal a differentiated pattern across ESG dimensions. Family control is positively associated with environmental and governance performance, whereas its association with the social dimension is weaker and statistically insignificant. At the same time, institutional ownership tends to weaken the positive association between family control and ESG, especially in the environmental and governance domains. This pattern suggests that family influence does not translate uniformly into sustainability outcomes and that ownership heterogeneity matters for how ESG priorities are enacted in practice.

A first important insight concerns the environmental dimension. The positive association between family control and environmental performance is consistent with the view that FFs' non-economic goals – especially reputation preservation, continuity and long-term legacy concerns – can align with visible environmental engagement when performance is observable and regulatory or reputational consequences are salient (Meng *et al.*, 2024; García-Sánchez *et al.*, 2021). In the Chinese context, environmental issues are often more publicly visible and more directly exposed to regulatory scrutiny than many social practices, making them particularly relevant to SEW preservation. Family owners may therefore be more likely to view environmental stewardship not merely as a cost, but also as a way to protect family identity, legitimacy and continuity. At the same time, this environmental pattern should be interpreted with caution rather than as an unconditional advantage of family control. Environmental initiatives often require substantial upfront investment, and China's uneven enforcement environment may create uncertainty regarding the timing and returns of such investments (Xiang *et al.*, 2021; Wang *et al.*, 2018; Du, 2015). Thus, family control appears to support environmental engagement, but this support remains conditioned by the institutional and economic costs of implementation.

A second key finding is the absence of a significant association in the social dimension. This result suggests that family control does not automatically translate into stronger social engagement in Chinese listed FFs. One plausible interpretation is that social initiatives are more prone to symbolic rather than substantive compliance in institutional environments where enforcement is uneven and performance standards are less precise (Banik and Lin, 2019; Arrive and Feng, 2018). In such settings, firms may adopt basic social practices or disclosures to signal conformity without embedding them deeply into organisational routines. This is particularly relevant in China, where some forms of social responsibility can be shaped by policy expectations, political incentives or access to state-controlled resources rather than by intrinsic stakeholder commitment alone (Du *et al.*, 2017; Wang *et al.*, 2018). As a result, social engagement may remain closer to minimum conformity than to substantive transformation, which helps explain why family control and institutional ownership do not produce clear statistical effects in this domain.

Taken together, the contrast between the environmental and social dimensions points to a more selective activation mechanism within SEW. Rather than treating SEW as a uniform driver of stakeholder-oriented behaviour, our findings suggest that SEW-related priorities are activated unevenly across ESG domains. Specifically, SEW appears more likely to shape firm behaviour where performance is highly visible, sanctions are more credible and reputational consequences are severe enough to threaten family identity. In the Chinese setting, the environmental dimension more closely satisfies these conditions than the social dimension, where metrics are often less standardised and enforcement is weaker. This helps reconcile mixed findings in prior family business research by showing that the behavioural consequences of family control depend not only on internal family motives, but also on the institutional profile of the specific ESG domain.

A third important finding concerns governance performance, which emerges as the strongest and most stable dimension in our analysis. The positive association between family control and governance performance suggests that concentrated family influence may support stronger governance practices in settings where control, coordination and rapid decision-making are especially valuable (Shyu, 2011; Peng *et al.*, 2018). In the Chinese context, FFs often rely on trusted internal relationships, concentrated authority, and direct oversight to manage institutional uncertainty. These features can reduce classical owner–manager agency problems and improve internal monitoring, particularly when formal external institutions remain incomplete. Family-centred governance can therefore function not only as a mechanism of control preservation, but also as an organisational response to institutional voids.

However, the governance results also show that institutional ownership weakens the positive role of family control. This suggests a tension between family-centred governance logics and the more standardised, performance-oriented expectations associated with external investors. Institutional investors may favour formal transparency, professionalisation and accountability mechanisms, whereas controlling families may prioritise autonomy, stability and control preservation (Neubaum *et al.*, 2017; Xu *et al.*, 2019). When these logics coexist, governance can become a site of contestation rather than alignment. In this sense, the negative moderating effect of institutional ownership reflects more than simple monitoring; it reflects a deeper clash between temporal orientations and governance preferences. Family owners may be willing to sustain governance structures that protect long-term continuity, whereas institutional investors often face shorter evaluation horizons and stronger pressure for near-term performance.

This temporal tension is also visible in the environmental domain. The weakening effect of institutional ownership on the family control–environmental performance relationship is consistent with the argument that external investors may discount ESG initiatives whose benefits materialise slowly or whose financial payoffs are uncertain in the short run (Jiang and Kim, 2015; Xiang *et al.*, 2021). Environmental investments often involve visible costs but delayed returns, making them especially vulnerable when firms face stronger market-oriented pressure. By contrast, the non-significant moderation in the social dimension suggests that where ESG engagement is already weakly institutionalised or more symbolic, institutional investors may have limited additional influence.

The robustness analysis in the manufacturing sector reinforces this interpretation. Manufacturing firms face more salient environmental regulation, higher operational exposure, and more visible ESG trade-offs than many other firms (Lu *et al.*, 2023). The fact that the main ownership pattern broadly persists in this sector suggests that our findings are not driven only by low-pressure industries. Instead, the tension between family control and

institutional ownership appears especially relevant in contexts where ESG implementation is costly, operationally embedded, and strategically consequential.

The control variables provide additional context for interpreting these findings. Firm size is positively associated with ESG performance across dimensions, consistent with the greater organisational resources and public scrutiny faced by larger firms. By contrast, the book-to-market ratio is negatively associated with ESG outcomes, while profitability shows mixed associations across dimensions. Audit opinion is positively associated with environmental and governance performance, highlighting the role of formal monitoring and reporting quality in shaping ESG outcomes.

### 5.1 *Theoretical implications*

Our study contributes to theory in three main ways. First, it refines SEW theory by showing that the behavioural implications of family control are not uniform across ESG domains. Rather than treating SEW as a general explanation for stakeholder orientation, our findings suggest that SEW-related priorities are more likely to translate into observable ESG engagement when performance is visible and reputational stakes are high. This provides a more conditional and domain-sensitive understanding of how SEW operates in emerging-market FFs.

Second, our findings enrich institutional theory by demonstrating that institutional pressures do not affect all ESG domains equally. The Chinese case shows that strong policy signals alone do not guarantee substantive ESG engagement. Instead, the behavioural consequences of institutional pressures depend on enforcement intensity, observability and the degree to which firms can decouple formal compliance from substantive practice. FFs may partially compensate for institutional weaknesses in some domains, especially where internal motives and external pressures align, but not in others.

Third, by bringing institutional investors into the analysis, we contribute to a more integrated understanding of ownership heterogeneity in ESG governance. Our results suggest that sustainability outcomes are shaped not only by whether family control is present, but also by whether other powerful owners introduce competing governance logics and time horizons. This highlights the importance of viewing ESG not simply as a firm-level strategy, but as an outcome of negotiations among owners with different objectives, risk preferences, and evaluative frameworks.

### 5.2 *Practical implications*

Our findings also offer practical implications for managers, investors, and policymakers. For FF leaders, the results suggest that ESG should not be approached as a uniform strategic domain. Environmental and governance outcomes appear more closely aligned with family-control logics than social outcomes, implying that firms may need dimension-specific governance and implementation strategies rather than broad symbolic ESG positioning.

For institutional investors, the findings indicate that ownership participation alone does not necessarily strengthen ESG in FFs. Where investor evaluation horizons remain short, institutional ownership may unintentionally weaken longer-term environmental and governance initiatives. This suggests the value of stewardship approaches that emphasise engagement, credibility and longer-term evaluation rather than narrow short-run financial discipline.

For policymakers in emerging markets, the results show that ownership structure matters for how ESG regulation works in practice. Social performance, in particular, appears less responsive to ownership incentives alone, suggesting that clearer standards, stronger

enforcement consistency, and more operationalised social metrics may be needed if firms are to move beyond symbolic compliance.

### 5.3 Limitations and future research

Despite these contributions, our study has several limitations.

First, the sample is restricted to medium-to-large publicly listed FFs in China, which may limit generalisability to smaller or privately held family enterprises where governance structures and SEW dynamics may differ.

Second, our ESG measures are based on rating data, which capture broad performance patterns but may not fully reflect the qualitative depth or internal implementation of sustainability practices. Future research could complement rating-based analyses with case studies, interviews or survey evidence to explore how ESG priorities are enacted inside FFs.

Third, because our evidence is associational, future work could build on our findings using designs that better identify causal pathways, especially regarding the mechanisms through which institutional investors shape ESG decisions in family-controlled firms. Fourth, institutional investor heterogeneity remains underexplored. Our analysis treats institutional ownership as a broad category, but future research could distinguish between investor types with different time horizons, monitoring styles or political affiliations. This would help clarify whether some institutional investors reinforce FFs' long-term sustainability orientation while others weaken it.

Fifth, we deliberately limit our sample to the 2009–2019 period to avoid the structural shocks introduced by COVID-19 (Miroshnychenko *et al.*, 2024). While this provides a relatively stable institutional setting for examining ownership–ESG associations, ESG standards and enforcement in China have evolved considerably since 2019. Future research using more recent data would help assess the generalisability of these patterns under the current regulatory regime.

Finally, examining governance mechanisms within FFs – such as the role of independent directors, generational leadership differences or next-generation internationally educated successors – could offer further insight into the conditions under which robust ESG commitments emerge.

## 6. Conclusion

Our study reveals the complex interplay between family control, institutional ownership and ESG performance in emerging markets. By showing that family control is associated more strongly with environmental and governance outcomes than with social outcomes, and that institutional ownership tends to weaken these positive associations, we contribute to understanding why and how FFs engage in ESG. These insights are particularly valuable as FFs increasingly face pressure to balance their traditional priorities with broader sustainability demands in an evolving global business landscape.

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