

The Impact of Ancient Traditional Culture on Earnings Quality: The Moderating Role of Marketization Index in China's A-Share Market

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Abstract

Our analysis, centered on A-share listed companies in China from 2007 to 2016, identified a negative correlation between China's marketization index and discretionary accruals. In regions characterized by strong traditional cultural influences, the presence of female directors and female top executives was found to be negatively associated with discretionary accruals. Further analysis revealed that China's marketization index could amplify this negative correlation, thereby enhancing corporate earnings quality. Conversely, the presence of female independent directors exhibited a positive correlation with discretionary accruals, a relationship that remained unaffected by the marketization index. In regions with weaker traditional cultural influence, the presence of female directors, female top executives, and female independent directors all demonstrated negative correlations with discretionary accruals. Notably, the marketization index influenced only the presence of female top executives in these regions, reinforcing the negative correlation and ultimately contributing to improved corporate earnings quality.

JEL classification numbers: D24, E58, G24.

Keywords: Chairperson or CEO, Ancient Traditional Culture, Marketization Index, Discretionary Accruals, Earning Quality.

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1. Introduction

The Marriage Law of the People's Republic of China, promulgated in 1950, established principles of gender equality, abolishing feudal marriage customs and promoting gender equality. International organizations have also promoted gender equality, and many countries have implemented laws to addition the representation of women in company roles. Norway mandated in 2003 that by 2008, women should constitute at least 40% of the boards of publicly listed companies. The European Union also established similar regulations in 2020, requiring that women represent 40% of the directors in listed companies and urging member states to increase the number of women directors (Brennan, 2006; Brennan and Solomon, 2008; Collier, 2008; Farrell and Hersch, 2005; Huse et al., 2009; Terjesen and Singh, 2008). Despite these efforts, the number of women holding senior positions in companies remains relatively low. To raise concerns among various stakeholders advocating for greater women's participation in key roles is a crucial issue.

Some research indicates that while companies prioritize revenue generation and customer retention, they also reward technical expertise and employee development, demonstrating that commercialism and professionalism can coexist. The proportion of women in senior management positions within companies is still limited, with women comprising only 10% of global company boards (Terjesen et al., 2015). Although gender quotas contribute to gender diversity and are a primary reason for promoting gender diversity on company boards (Sojo et al., 2016; Wang and Kelan, 2013), the slow promotion of women, especially into CEO positions, is attributed to gender discrimination and the influence of ancient traditional cultures (Altonji and Blank, 1999; Bertrand et al., 2010; Black and Strahan, 2001; Correll, 2001; Schein et al., 1996).

In 2022, only 44 companies (8.8%) in the Fortune 500 had women CEOs. In China, gender discrimination and career choices have led to gender inequality in senior positions. Claudia Goldin, a distinguished researcher at Harvard University, conducted groundbreaking research that revealed the existence of "marriage bars" and wage inequality affecting married women. Her work provided significant insights into gender disparities in the labor market, culminating in her being awarded the 2023 Nobel Prize in Economics.

Economic growth leads to social structure imbalances and ultimately causes institutional changes. (Acemoglu et al., 2005; North, 1971), influencing women's access to positions as company chairperson or CEOs. The ancient traditional culture is emphasized social hierarchy and male dominance, making it less likely for women to become chairperson or CEOs. Furthermore, influenced by ancient traditional culture, the main roles of a wife are typically viewed as raising children and caring for her husband, perpetuating deep-seated gender inequality. For example, there is a belief that "managers should be male," leading to discriminatory attitudes where women are not appointed as company directors or top executives (Koenig et al., 2011). Chinese women are constantly constrained by the invisible force of being "subordinate to men" in social status (Taylor and Choy, 2005).

2. The Research Background

In 2001, the rate of labor force involvement for Chinese women aged 15 to 64 was 75.97%, compared to 87% for men. By 2021, this rate had declined to 70.8% for women and 80.5% for males. The rate of labor force involvement of women in China is around 70%, and women's representation on company boards remains very low, which has drawn the attention of policymakers and scholars (Adams and Ferreira, 2009). To address gender imbalances, countries such as Norway, Brazil, France, Spain, and Australia have set quotas for women directors (Kirsch, 2018; Terjesen and Sealy, 2016). Low et al. (2015) indicate that a higher number of women directors enhances company performance. The company's performance has improved following the addition of women board members and top executives. (Bertrand et al., 2019; Carter et al., 2010; Nguyen et al., 2020; Zalata et al., 2019). However, rigid gender roles have resulted in a slow growth in the number of female top executives at senior management levels

Some institutional investors only invest in companies with gender diversity (Browder, 1995). Companies appoint women directors to meet social expectations, enhance competitiveness by bringing diverse perspectives, and fulfill societal demands for gender diversity (Hillman et al., 2007). Gavius et al. (2012) indicate that companies with women CEOs and CFOs are less prone to earnings manipulation. Women directors are more willing to adopt restrictive earnings management practices to improve earnings quality (Luo et al., 2017; Srinidhi et al., 2011). Companies in regions more significantly influenced by Confucian thought are less likely to choose women CEOs (Liu et al., 2022). Krishnan and Parsons (2008) show that companies with a higher proportion of women senior management tend to have high earning quality. The board of directors is composed of multiple individuals, and the separation of agency and management powers reduces the likelihood of collusion, which helps alleviate agency problems (Fama and Jensen, 1983). Due to their unique nature, independent directors contribute to improving supervisory quality, thereby enhancing the company's performance.

Our study focuses on understanding whether the marketization index in regions influenced by ancient traditional culture moderates the relationship between discretionary accruals with the presence of women directors and women top executives. Despite regulations promoting gender equality, women in China still have lower social status and fewer promotion opportunities. The Gender Gap Index published by the World Economic Forum indicates a deteriorating trend in gender equality in China. Ancient traditional culture continues to influence Chinese business practices and daily behaviors. Our research examines the relationship between the proportion of women top executives, women directors, and women independent directors - varying in their influence by traditional culture - and discretionary accruals. and investigate whether the marketization index in China moderates the strength of this relationship

3. Related Theory and Hypotheses

The concept of institutions encompasses legal regulations, social norms, culture, and customs. Institutional theory describes the norms of social behavior within a system, including plans, rules, and culture (Hofstede, 1980; Meyer and Rowan, 1977; Scott, 1987). A company's leadership structure can reflect the local social culture, and Hofstede's cultural dimensions theory can analyze this aspect. This theory identifies six cultural dimensions that explain cultural differences between countries. In countries with a higher power distance index, greater levels of hierarchy and gender inequality are also more common. Differences in domestic systems among countries can result in variations of over half in the proportion of women on boards. Cultural and legal factors are particularly important influences in this regard (Grosvold and Brammer, 2011). National culture and laws affect the status of women in senior positions (Aguilera and Jackson, 2003; Gao and Ma, 2016; Terjesen and Singh, 2008) and often reinforce traditional roles assigned to women in societal contexts (Carrasco et al., 2015). Countries that emphasize male roles or tolerate greater power inequality tend to have fewer women representatives on boards

According to social role theory, societal expectations for roles create behavioral standards for men and women, reinforcing gender stereotypes and creating role barriers for women (Altonji and Blank, 1999; Black and Strahan, 2001; Correll, 2001). In the workplace, the social division of labor positions women as primary caregivers and men as primary economic providers (Wood and Early, 2012). Men tend to associate male traits with male positions (Brenner et al., 1989). Additionally, some countries have identified gender role characteristics associated with management positions, such as Western European countries (Schein and Mueller, 1992), the United States (Schein et al., 1989), China, and Japan (Schein et al., 1996). According to social role theory and institutional theory, conservative cultural hierarchies and cultures with biases against women are expected to result in fewer women leaders in companies. Carli and Eagly (1999) indicate that the scarcity of women leaders is influenced by biased norms and traditional cultural expectations. Social role theory explains that rigid gender stereotypes primarily position women as caregivers, thereby perpetuating the "glass ceiling" in their professional careers (Ahrens et al., 2015). Social role theory suggests that rigid gender stereotypes primarily position women as caregivers, perpetuating the 'glass ceiling' in professional careers (Eagly, 1987).

Conservative cultures that promote male superiority influence the supply and demand of women's talent (Du, 2016). Women influenced by conservative cultures may avoid competing for senior positions (Correll, 2001). Discrimination against women leads to the loss of career development opportunities and a shortage of female talent. (Fernandez-Mateo and Fernandez, 2016). Ancient Confucian doctrines, which advocate core values such as loyalty and obedience, have deeply shaped ancient traditional culture (Gao, 2003; Kung and Ma, 2014). These cultures determine women's behavioral and moral standards

The China Provincial Marketization Index evaluates the level of marketization across various regions, serving as an institutional variable to illustrate how institutional changes can enhance economic performance. It examines the dynamics between government and market forces, the state of product and factor markets, the growth of private enterprises, the role of market intermediaries, and the development of legal frameworks. Higher index values signify a more market-oriented economy (Fan et al., 2010). Our study links marketization index values to the sample companies to assess whether these values moderate the relationship between women's leadership and discretionary accruals. Drawing on these theories. We examined the impact of ancient traditional culture on corporate discretionary accruals, specifically analyzing the relationship between the proportion of women top executives, women directors, and women independent directors with discretionary accruals. We propose the following hypotheses:

H1a: In areas where ancient traditional cultures have a significant impact, a high proportion of female directors is associated with a reduction in discretionary accruals, indicating a negative relationship between the presence of female directors and discretionary accruals.

H1b: In areas where ancient traditional cultures have a significant impact, a high proportion of female top executives is associated with a reduction in discretionary accruals, indicating a negative relationship between the presence of female top executives and discretionary accruals.

H1c: In areas where ancient traditional cultures have a significant impact, a high proportion of female independent directors is associated with an increase in discretionary accruals, indicating a positive relationship between the presence of female independent directors and discretionary accruals.

Chinese companies' appointments of female Chairpersons or CEOs are influenced by traditional culture (Liu et al., 2022). Economic development leads to changes in the social environment and fundamental institutions (North, 1971). Higher levels of economic development increase the likelihood of companies hiring women. The China Marketization Index, as an indicator of economic development, explains the role of institutional changes in improving economic performance. Our study links the company-year data of sample companies' operating locations with the marketization index values representing local economic development. In more economically developed regions, the influence of ancient traditional culture is weaker, leading to a higher number of women in management and better earnings quality, with lower discretionary accruals. Therefore, there is a negative relationship between economic development and discretionary accruals. Based on the above discussion, we propose the following hypotheses:

H2: In companies significantly influenced by ancient traditional culture, there exists a negative relationship between the China Marketization Index and discretionary accruals.

Research shows that gender differences among top executives arise from cross-cultural and gender characteristics. However, in companies strongly influenced by ancient traditional culture, the extent of employing women workers varies, and this influence may be weakened by economic development and market orientation, leading to a more effective allocation of human capital. As the economy grows, the China Marketization Index can moderate the strength of the relationship between the proportion of women directors, women top executives, and women independent directors with discretionary accruals. Based on the above discussion, we propose the following hypotheses:

H3a: In companies profoundly influenced by ancient traditional culture, the China Marketization Index moderates the negative relationship between the proportion of female directors and discretionary accruals, with this negative relationship intensifying as the marketization index increases.

H3b: In companies profoundly influenced by ancient traditional culture, the China Marketization Index moderates the negative relationship between the proportion of female top executives and discretionary accruals, with this negative relationship strengthening as the marketization index increases.

H3c: In companies profoundly influenced by ancient traditional culture, the China Marketization Index moderates the positive relationship between the proportion of female independent directors and discretionary accruals, with this positive relationship weakening as the marketization index increases.

4. Research Design

4.1 Sample Selection

Our research uses discretionary accruals (DA) as a proxy variable for earnings quality, the China Marketization Index as a proxy variable for the strength of economic development, and the presence of at least one male as the company's Chairperson or CEO as a proxy variable for regions more strongly influenced by traditional culture. The study investigates whether an increase in the proportion of female directors and female senior managers leads to a decrease in discretionary accruals, whether an increase in the proportion of female independent directors leads to an increase in discretionary accruals, and whether the China Marketization Index moderates these relationships.

The data is sourced from the CSMAR database. The sample includes 68,192 annual observations from 2,923 A-share listed companies in mainland China between 2007 and 2016. This includes 62,240 observations from 2,518 companies strongly

influenced by traditional culture and 5,952 observations from 405 companies weaker influenced by these traditions culture.

The dependent variable is discretionary accruals (DA). Discretionary accruals refer to the portion of accruals that company management can freely choose within the range allowed by generally accepted accounting principles. The total accruals are the sum of discretionary accruals (DA) and nondiscretionary accruals (NDA). Nondiscretionary accruals are expected and normal accruals cannot be manipulated. The value of discretionary accruals is obtained by subtracting nondiscretionary accruals from total accruals; this value represents unexpected or manipulated accruals, often used by company managers for earnings management.

We use the absolute value of discretionary accruals to measure earnings management, with a larger absolute value indicating greater earnings management following Dechow's (1995) study. Financial variables considered include BIG4, operating cash flow (CFO), the number of established committees (COMM), revenue growth rate (GROWTH), financial leverage (LEV), operating losses (LOSS), return on assets (ROA), and company size (SIZE). Definitions of the study variables as in table 1.

4.2 Companies Influenced by Ancient Traditional Culture

Extensive research suggests that companies deeply rooted in ancient traditional culture exhibit a lower likelihood of appointing women to top executive positions, such as CEO or Chairperson (Liu et al., 2022). This tendency reflects the enduring influence of cultural norms and values that historically have favored male leadership in such organizations. To operationalize the influence of traditional culture in this study, we use the presence of at least one male occupying the position of CEO or Chairperson as a proxy variable. This proxy is intended to capture the extent to which traditional cultural values are embedded within the leadership structure of these companies, assuming that the appointment of male leaders, particularly in these key roles, is indicative of a stronger adherence to traditional gender norms and resistance to more egalitarian or modern organizational practices.

4.3 Empirical Model

Our regression analysis employs the Ordinary Least Squares (OLS) method to examine whether higher China Marketization Index values are associated with a decrease in discretionary accruals, and whether, in companies strongly influenced by traditional culture, an increase in the proportion of women directors and women top executives leads to a reduction in discretionary accruals. Additionally, we explore whether an increase in the proportion of women independent directors leads to an increase in discretionary accruals. As for the variables and definitions, please see Table 1.

$$DA_{i,t}(\text{Gender}_{\text{led}} = 1) = \alpha_0 + \alpha_1 \text{MTB rate}_{i,t} + \alpha_2 \text{MTMT rate}_{i,t} + \alpha_3 \text{IDIR rate}_{i,t} + \text{controls} + \varepsilon_{it} \quad (1)$$

Furthermore, we aimed to understand whether the China Marketization Index moderates the strength of these relationships.

$$DA_{i,t}(\text{Gender}_{\text{led}} = 1) = \alpha_0 + \alpha_1 \text{MTB rate}_{i,t} + \alpha_2 \text{Index}_{i,t} + \alpha_3 \text{MTB rate}_{i,t} \times \text{Index}_{i,t} + \text{controls} + \varepsilon_{i,t} \quad (2)$$

$$DA_{i,t}(\text{Gender}_{\text{led}} = 1) = \alpha_0 + \alpha_1 \text{MTMT rate}_{i,t} + \alpha_2 \text{Index}_{i,t} + \alpha_3 \text{MTMT rate}_{i,t} \times \text{Index}_{i,t} + \text{controls} + \varepsilon_{i,t} \quad (3)$$

$$DA_{i,t}(\text{Gender}_{\text{led}} = 1) = \alpha_0 + \alpha_1 \text{IDIR rate}_{i,t} + \alpha_2 \text{Index}_{i,t} + \alpha_3 \text{IDIR rate}_{i,t} \times \text{Index}_{i,t} + \text{controls} + \varepsilon_{i,t} \quad (4)$$

Table 1: Variables and Definition

Variables	Definition
DA	Discretionary Accruals: The absolute value is used as a proxy for earnings management
MTB rate	The proportion of women on the board of directors (excluding independent directors).
MTMT rate	Proportion of women in high-rank management
IDIR rate	Proportion of women among independent directors.
BIG4	If the firm is audited by a Big Four international firm, the value is 1; otherwise, it is 0.
SIZE	Equal to the natural logarithm of total assets at year-end.
LEV	Year-end debt-to-equity ratio.
ROA	Return on assets is equal to net profit divided by total assets.
CFO	The year-end cash flow from operating activities as a percentage of total assets.
INDEX	China Marketization Index
LOSS	If the company's net profit <0, the value is 1, otherwise, it is 0
COMM	Number of established committees

5. Empirical results

5.1 Descriptive Statistics

Table 2 presents the descriptive statistics for the entire sample, providing an overview of the key variables examined in this study. On average, 91.3% of the companies in our sample had at least one male serving as the Chairperson or CEO during the study period, highlighting the predominance of male leadership in these organizations. The data also reveal that the mean proportion of women directors on the board is 0.11, the mean proportion of women top executives is 0.144, and the mean proportion of women independent directors is 0.152. These figures indicate that the representation of women in both board and senior management positions

within Chinese listed companies is relatively low, averaging just above 10%. This gender disparity underscores the significant underrepresentation of women in leadership roles compared to their male counterparts.

In terms of company characteristics, the mean return on assets (ROA) is reported at 0.042, reflecting the average profitability of the companies in the sample. Additionally, the mean proportion of companies audited by one of the Big Four accounting firms (BIG4) is approximately 0.0620, indicating that only 6.2% of the companies engaged the services of a BIG4 firm for their audits. This relatively low percentage may suggest varying levels of audit quality across the sample, with a small subset of companies opting for the perceived higher standards associated with BIG4 auditors.

Table 2: Statistics of Sample

Variable	N	Mean	Sd	Min	p25	p50	p75	Max
DA	68192	0.164	0.147	0	0.0520	0.121	0.235	1.060
BIG4	68192	0.0620	0.241	0	0	0	0	1
Firm size	68192	21.75	1.261	14.11	20.92	21.61	22.43	28.25
LEV	68192	0.415	1.022	-0.195	0.206	0.370	0.540	96.96
ROA	68192	0.042	0.788	-11.30	0.00800	0.0310	0.0620	108.4
CFO	68192	0.030	0.440	-10.22	-0.0100	0.0260	0.0720	63.62
LOSS	68192	0.153	0.360	0	0	0	0	1
COMM	68192	3.843	0.458	0	4	4	4	4
INDEX	68192	7.520	1.842	-0.230	6.240	7.760	9.180	10
Male leader	68192	0.913	0.282	0	0	0	0	1
MTB2_rate	68192	0.110	0.136	0	0	0	0.167	0.833
MTMT rate	68192	0.144	0.151	0	0	0.125	0.222	1
IDIR rate	68192	0.152	0.187	0	0	0	0.300	1

Overall, these descriptive statistics provide valuable insights into the gender composition of corporate leadership and the financial characteristics of the companies in the sample, setting the stage for further analysis of the relationships between these variables and the outcomes of interest in the study.

5.2 Regression Results: Female Leadership and Discretionary Accruals

According to the Table 3, for companies strongly influenced by ancient traditional cultures, the estimated coefficient for the proportion of women directors (MTB rate) is -0.034, and the estimated coefficient for the proportion of women top executives (MTMT rate) is -0.067, both statistically significant. This indicates that in companies a relatively larger impact by ancient traditional cultures, where at least one of the chairperson or CEO is male, an increase in the proportion of women directors and women top executives are associated with a decrease in discretionary accruals and better earnings quality, confirming hypotheses H1a and H1b. The estimated coefficient for the proportion of women independent directors (Iterate) is

0.016. When companies are significantly influenced by ancient traditional cultures, where at least one of the chairpersons or CEO is male, the social and cultural influence of women being subordinate to men means that women independent directors are unable to effectively perform their supervisory functions. When women independent directors (IDIR rate) increase, this does not prevent an increase in discretionary accruals and a decline in earnings quality, confirming hypothesis H1c.

Table 3: Regression Analysis of Women in Leadership and Discretionary Accruals (Panel A)

Independent variables	(1) DA		(2) DA		(3) DA	
	β .	t_value	β	t_value	β	t_value
<i>Independent variable</i>						
MTB rate	-0.034***	-7.250				
MTMT rate			-0.067***	-16.164	-	
IDIR rate					0.016***	5.176
<i>Control variables</i>						
BIG4	-0.007**	-2.699	-0.006*	-2.465	-0.007*	-2.492
SIZE	0.009***	17.195	0.008***	15.605	0.009***	18.519
LEV	0.009***	17.202	0.009***	16.761	0.010***	17.412
ROA	0.006***	8.035	0.006***	7.887	0.006***	8.173
CFO	0.009***	7.137	0.009***	7.061	0.009***	7.265
INDEX	-0.009***	-28.503	-0.009***	28.262	-0.009***	-29.603
LOSS	0.065***	40.177	0.065***	39.858	0.065***	40.282
COMM	-0.011***	-8.979	-0.011***	-8.493	-0.012***	-9.212
Intercept	0.076***	6.108	0.095***	7.688	0.060***	4.875
N	62,240		62,240		62,240	
F	401.365		425.880		398.338	
Adj R ²	0.055		0.058		0.054	

Note: N=62,240 records from 2,518 Chinese A-share listed companies strongly influenced by ancient traditional culture(H1a、H1b、H1c)

In companies with weaker influence from ancient traditional cultures (where at least one of the Chairperson or CEO is a woman), the regression results for the proportions of women directors (MTB rate), women top executives (MTMT rate), and women independent directors (IDIR rate) in relation to discretionary accruals are shown in table 4. The estimated coefficients are -0.082, -0.024, and -0.023. This indicates that in companies with weaker influence from traditional cultural practices, as the proportion of women directors, women top executives, and women independent directors increased, discretionary accruals decreased, and improved earnings quality.

Table 4: Regression Analysis of Women in Leadership and Discretionary Accruals (Panel B)

Variables	(4) DA		(5) DA		(6) DA	
	β .	t_value	β	t_value	β	t_value
<i>Independent variable</i>						
MTB rate	-0.082***	-6.531				
MTMT rate			-0.024**	-2.590		
IDIR rate					-0.023**	-2.638
<i>Control variables</i>						
BIG4	0.014	1.699	0.017*	2.084	0.015	1.834
SIZE	-0.007***	-5.006	-0.007***	-4.830	-.006***	-4.473
LEV	0.074***	18.722	0.074***	18.707	0.075***	18.720
ROA	0.021***	4.379	0.021***	4.246	0.021***	4.380
CFO	-0.021	-1.631	-0.023	-1.774	-0.022	-1.708
INDEX	-0.002*	-2.053	-0.002*	-2.526	-0.002**	-2.659
LOSS	0.052*	9.941	0.054***	10.317	0.054***	10.410
COMM	0.011**	2.972	0.012**	3.101	0.013***	3.338
Intercept	0.256***	7.308	0.238***	6.658	0.219***	6.328
N	5,952		5,952		5,952	
F	75.224		70.806		70.837	
Adj R ²	0.102		0.095		0.096	

Note: N=5,952 records from 405 Chinese A-share listed companies with a weaker influence from ancient traditional culture.

As for the Marketization Index and Discretionary Accruals in China, Tables 3,4 show that the relationship between the marketization index in China and discretionary accruals shows that for companies with high influence from ancient traditional cultures, the coefficient is -0.009, while for companies with low influence, the coefficient is -0.002. Both coefficients are negative. This indicates that regardless of the extent of influence from ancient traditional cultures, a higher marketization level in the company's operating location is associated with lower discretionary accruals, thus confirming hypothesis H2.

5.3 China Marketization Index as a Moderator between Women's Leadership and Discretionary Accruals

In companies strongly influenced by ancient traditional cultures (where the Chairperson or CEO is at least one male), the negative relationship between the proportion of women directors and discretionary accruals. This relationship is further strengthened by the moderating effect of the China Marketization Index, indicating improved earnings quality and supporting hypothesis H3a (Table 5).

Similarly, the China Marketization Index enhances the negative relationship between the proportion of women top executives and discretionary accruals,

confirming better earnings quality and hypothesis H3b. However, the Marketization Index does not significantly moderate the positive relationship between the proportion of female independent directors and discretionary accruals, leading to the rejection of hypothesis H3c.

Table 5: Regression Results of Marketization Index Moderating Traditional Culture's Impact on Discretionary Accruals (Panel A)

Variables	Model-1		Model-2		Model-3	
	β	t_valu	β	t_value	β	t_valu
MTB rate	-0.004***	-				
MTB*Index	0.001*	2.175		-		
MTMT rate			-0.010***	-16.270		
MTMT*Inde			0.002***	4.094		
IDIR rate					0.003**	5.198
IDIR*INDEX					0.000	-0.781
Control	yes		yes		yes	
Intercept	0.004	0.367	0.021	1.735	-0.008	0.676
R ²	0.102		0.097		0.097	
Adjusted R ²	0.101		0.095		0.095	
F	67.695**		63.715**		63.744*	

Note: N=62,240 data, 2,518 companies strongly influenced by ancient traditional culture (H3a · H3b · H3c)

Furthermore, in companies weaker influenced by ancient traditional culture (where the chairperson or CEO is at least one woman), the Marketization Index significantly strengthens the negative relationship between discretionary accruals and the proportion of women top executives (Table 6).

Table 6: Regression Results of Marketization Index Moderating Traditional Culture's Impact on Discretionary Accruals (Panel B)

	Model-1		Model-2		Model-3	
	β .	t_valu	β	t_valu	β	t_valu
MTB rate	-	-6.531				
MTB*INDEX	0.000	-0.187				
MTMT rate			-0.003*	-2.002		
MTMT*INDE			0.012***	7.098		
IDIR rate					-0.004**	-2.631
IDIR*INDEX					0.000	-0.079
Control	yes		yes		yes	
Intercept	0.221***	6.394	0.218***	6.253	0.198***	5.743
R ²	0.102		0.097		0.097	
Adjusted R ²	0.101		0.095		0.095	
F	67.695**		63.715**		63.744**	

Note: N=5,952 data points from 405 companies with a weaker influence from ancient traditional culture.

6. Conclusion

The study classifies companies into two categories based on the varying degrees of influence from ancient traditional culture. The aim is to examine whether the Marketization Index in China can moderate and strengthen the relationship between the proportion of women directors (MTB rate), women top executives (MTMT rate), and women independent directors (IDIR rate) with discretionary accruals, ultimately impacting the earnings quality of the company. The classification criteria are based on the extent of influence from ancient traditional culture, which is adjusted slightly from the findings of Liu et al. (2022). The proxy variable for the degree of influence is whether at least one of the company's chairman or CEO is male, determined by the location of the business. If the chairman or CEO is male, the company is categorized as being in a region more influenced by Confucian thought; otherwise, it is categorized as being in a region less influenced by Confucian thought.

The test results show that when a company's Chairperson or CEO is at least one male, there is a negative relationship between the proportion of female directors or female top executives with discretionary accruals, supporting Hypotheses H1a and H1b. However, due to the strongly influenced of ancient tradition cultural that beliefs women as subordinate to men, women independent directors are less effective in their supervisory roles, leading to a positive relationship between the proportion of women independent directors (IDIR rate) and discretionary accruals, thereby validating Hypothesis H1c.

Furthermore, the Marketization Index in China can moderate and strengthen the negative relationship between the proportion of female directors (MTB rate) or female top executives (MTMT rate) and discretionary accruals, leading to an improvement in the company's earnings quality. H3a and H3b are also validated. The regression coefficient for regions more influenced by ancient traditional culture is -0.009, while the coefficient for regions less influenced by such culture is -0.002, thereby validating H2.

When the company's Chairperson or CEO is at least one woman, the proportion of women directors (MTB rate), women top executives (MTMT rate), and women independent directors (IDIR rate) all show a negative relationship with discretionary accruals. The Chinese Marketization Index further strengthens this negative relationship, particularly between the proportion of women top executives (MTMT rate) and discretionary accruals, thereby enhancing the company's earnings quality.

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