

Article

# Exploring the Impact of Executive Team Background Characteristics on Corporate Earnings Management

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**Abstract:** This study uses the modified Jones model, supported by upper echelon theory, to measure two types of earnings management strategies: accrual-based and real earnings management. The study examines how the overall background characteristics of executive teams, such as age, gender, education level, and experience in the financial industry, influence the choice of earnings management strategies. The findings suggest that executive teams nearing retirement age or with a higher proportion of women tend to avoid earnings management, while teams with higher education levels are more likely to engage in real earnings management.

**Keywords:** executive team; background characteristics; earnings management; modified Jones model

## 1. Introduction

Kangmei Pharmaceuticals financial fraud has rocked the entire Chinese A-share market, with its independent director receiving sky-high fines that frequently trended on Weibo, drawing widespread attention from various investors. The CSRC has characterized this incident as a "typical case of systemic financial fraud." From 2016 to 2018, Kangmei Pharmaceuticals actual controller, chairman, and senior management team engaged in fraudulent activities such as issuing fake invoices, altering special invoices, and forging bank documents, cumulatively inflating monetary funds by 88.7 billion yuan, revenue by 27.5 billion yuan, and profit by 3.9 billion yuan, severely eroding public trust in the quality of listed companies financial information. Kangmei Pharmaceuticals financial fraud is far from an isolated incident in the A-share market; companies like Luckin Coffee, Kangde Xin, and Zhangzi Island scallops have also been involved in financial fraud. It is evident that cases where senior management teams leverage their professional backgrounds and use their positions to directly participate in or indirectly authorize financial fraud occur frequently.

The goal of financial fraud is to fabricate performance, making corporate financial reports appear more favorable, thereby boosting stock prices. In terms of purpose, the executive team has ample motivation to embellish the reports. Compared to profit manipulation, earnings management is favored by corporate executives more due to its legality.

Earnings management refers to the intentional control of financial information reported externally by management through discretionary choices such as selecting accounting policies and determining the timing of revenue recognition, driven by personal interests. In existing research, most scholars focus on the impact of individual backgrounds of the CEO, representing the executive team, on corporate performance, or the connection between the overall executive team and financial fraud. However, few scholars have paid attention to the influence of the entire executive team on corporate earnings management strategies. Earnings management can be divided into two types: accrued

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earnings management and true earnings management. The former involves profit adjustments through accounting estimates and changes in accounting policies, which can manipulate profits to measure [1,2]. The latter is more covert, making it difficult for auditors to detect. The main reason is that genuine earnings management is based on the company actual transactions, altering decisions related to these transactions (such as revenue recognition timing) to impact the income statement and affect the company's cash flow. This behavior has no significance for corporate performance; it is merely to meet the performance needs of management.

There are many factors that affect earnings management, such as company characteristics, audit quality, board of directors, audit committee structure, media exposure, securities analysis, etc., which will affect a company earnings management strategy. For example, David S. Jenkins showed that high-quality external audit can help prevent earnings management [3].

## 2. Theoretical Analysis and Hypothesis Deduction

This paper analyzes the earnings management of all listed companies in A-shares through the study of the overall background of the executive team. The impact of rational strategies. Since 1984, the theory of high-level teams has been widely recognized in academia that a senior executive background plays a crucial role in corporate performance. The theory of the senior echelon [4]. It shows that the cognitive level and values of senior management have a significant impact on business decisions and outcomes. Steven J. Kachelmeier shares a similar view, "Rather than saying the company is making decisions, its more accurate to say that a group of highly individualistic people are racking their brains for solutions" [5]. Due to the difficulty of obtaining data related to individual psychological tests, this paper adopts the views of Donald C. Hambrick and Donald C. Hambrick, and uses the personal background information that can be publicly found by the executive team as a proxy variable to measure cognitive bias in corporate decision-making [4,6].

In recent years, relevant studies have also been examining the impact of executives backgrounds on earnings management. However, most of these studies separate the decision-making of executive teams into individual components and focus solely on the individual backgrounds of the CEO or CFO on earnings management. Therefore, this research takes a holistic view of the executive team and explores the influence of the overall background characteristics (demographic features) of the executive team on corporate earnings management.

### 2.1. Age and Earnings Management

As one ages, on one hand, life experiences become richer; on the other hand, it means a reduced tolerance for risk, leading to a greater inclination towards stability and aversion to risk. Generally speaking, they have prominent social status, a favorable social environment, and substantial income, so they will do everything possible to avoid aggressive investments, aiming for stable performance indicators to ensure the smooth transition of the company. For this reason, the first hypothesis proposed in this article is that the more people nearing their statutory retirement age within the executive team, the less likely they are to engage in earnings management. According to current Chinese law, the statutory retirement age is 60 for men and 55 for women. This study sets a five-year limit, meaning male executives over 55 and female executives over 50 are considered to be approaching their statutory retirement age.

H1a: The proportion of senior management team members approaching the statutory retirement age is negatively correlated with the possibility of implementing accrual earnings management.

H1b: The proportion of senior management team members approaching the legal retirement age is negatively correlated with the possibility of implementing actual earnings management.

## 2.2. Gender and Earnings Management

Studies in both behavioral cognition and behavioral finance have shown that gender has a significant impact on risk tolerance. Most recent research has focused on the effect of the proportion of female executives on corporate value. Kevin Campbell further demonstrated a positive correlation between the proportion of female executives and corporate value [7]. Emilia Penis related research also confirmed that female CFOs can provide more accurate and reliable accounting information, and the quality of financial statements of their companies is higher than that of other CFOs in male companies [8]. In short, existing research has shown that women in executive teams are more concerned about the authenticity of financial statements than men. For this reason, the second hypothesis of this paper is as follows:

H2a: The proportion of women in the executive team is negatively correlated with the possibility of implementing accrued earnings management.

H2b: The proportion of women in the executive team is negatively correlated with the possibility of implementing actual earnings management.

## 2.3. Financial Experience and Earnings Management

Ulrike Malmendier found that executives with a composite work background who have worked in a variety of positions tend to be more confident, more action-oriented and more ambitious [9]. Managers with experience in finance and accounting are more familiar with financial regulations and accounting standards. They excel at implementing accrual surplus management through methods such as adjusting accounting policies and changing accounting estimates to meet their performance needs. Given their experience in finance and accounting, they understand that while actual surplus management is more covert and harder to detect, it also poses potential risks and hazards to the long-term development of the company. Therefore, this is the third hypothesis proposed in the article as follows:

H3a: The proportion of people with financial and financial related experience in the executive team is positively correlated with the possibility of implementing accrued earnings management.

H3b: The proportion of people with financial and financial related experience in the senior management team is negatively correlated with the possibility of implementing actual earnings management.

## 2.4. Educational Background and Earnings Management

Accrued earnings management is more challenging and complex compared to actual earnings management. Implementing accrued earnings management not only faces restrictions from accounting standards and laws but also external oversight such as audits and public opinion. Clearly, senior management teams with higher overall educational levels have the capability to better control the implementation of accrued earnings management. Therefore, this research posits that senior management teams with higher educational levels are more motivated and capable of implementing accrual earnings management. In contrast, senior management teams with lower overall educational levels tend to implement actual earnings management to achieve their performance targets. Hence, the fourth hypothesis proposed in this paper is as follows:

H4a: Senior management teams with higher overall educational level are more likely to implement accrued earnings management.

H4b: Senior management teams with lower overall educational level are more likely to implement actual earnings management.

### 3. Research Design

#### 3.1. Sample Selection and Data Source

This paper uses A-share listed companies in Shanghai and Shenzhen from 2011 to 2020 as samples. After excluding financial firms and those with incomplete data, it further excludes companies with negative book values and those already marked by the CSRC with ST or \*ST risk warning labels. All continuous variables were Winsorize truncated to the nearest 1% interval, and all relevant data come from the CSMAR database. The data processing software used in this study is Stata16 [10].

#### 3.2. Variable Selection and Definition

This paper adopts the modified Jones model to measure earnings management [11]. The total accumulated surplus is calculated by subtracting the net operating cash flow from the net profit before non-recurring items.  $TAC_{it}$  represents the total average cost,  $\Delta REV_{it}$  is the increase in operating revenue,  $PPE_{it}$  denotes fixed assets, and  $A_{it-1}$  indicates the total assets of the company in the previous period. All variables are adjusted by dividing by  $A_{it-1}$  to ensure comparability between companies.  $CFO_t$  represents the operating cash flow for each period,  $S_t$  is the sales revenue for year t, and  $\Delta S_t$  is the increase in sales revenue for year t compared to the previous year.  $COGS_t$  is the main business cost for year t,  $\Delta INV_t$  is the inventory change for year t.  $PROD_t = COGS_t + \Delta INV_t$  measures the production costs for the year, and  $DISEXP_t$  represents discretionary expenditures of the company for year t.

$$\frac{TAC_{it}}{A_{it-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{A_{it-1}}\right) + \alpha_2 \left(\frac{\Delta REV_{it}}{A_{it-1}}\right) + \alpha_3 \left(\frac{PPE_{it}}{A_{it-1}}\right) + \varepsilon_{it} \tag{1}$$

$$\frac{CFO_t}{A_{t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{A_{t-1}}\right) + \beta_1 \left(\frac{S_t}{A_{t-1}}\right) + \beta_2 \left(\frac{\Delta S_t}{A_{t-1}}\right) + \varepsilon_t \tag{2}$$

$$\frac{COGS_t}{A_{t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{A_{t-1}}\right) + \beta \left(\frac{S_t}{A_{t-1}}\right) + \varepsilon_t \tag{3}$$

$$\frac{\Delta INV_t}{A_{t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{A_{t-1}}\right) + \beta_1 \left(\frac{\Delta S_t}{A_{t-1}}\right) + \beta_2 \left(\frac{\Delta S_{t-1}}{A_{t-1}}\right) + \varepsilon_t \tag{4}$$

$$\frac{PROD_t}{A_{t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{A_{t-1}}\right) + \beta_1 \left(\frac{S_t}{A_{t-1}}\right) + \beta_2 \left(\frac{\Delta S_t}{A_{t-1}}\right) + \beta_3 \left(\frac{\Delta S_{t-1}}{A_{t-1}}\right) + \varepsilon_t \tag{5}$$

$$\frac{DISEXP_t}{A_{t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{A_{t-1}}\right) + \beta \left(\frac{S_{t-1}}{A_{t-1}}\right) + \varepsilon_t \tag{6}$$

Previous studies have shown that some of the financial characteristics of a company can also affect its profitability [12]. Therefore, these variables are also considered as control variables in this paper to avoid their potential impact on earnings management. See Table 1 for specific variables. At the same time, this paper adopts a two-way fixed effect model to control the two factors of time and industry, so as to avoid the impact of macroeconomic conditions and industry characteristics on earnings management strategies.

**Table 1.** Variable definition table.

Variable name	Variable Declaration
DA	Discretionary Accruals, calculated using the modified Jones model by formula (1)
PM_DA	Calculated using the Revenue-Matching Jones model.
RM_CFO	Abnormal Operating Cash Flow, used to measure the actual earnings management caused by sales manipulation, calculated by formula (2).

RM_PROD	Abnormal Production Costs, used to measure the actual earnings management caused by overproduction, measured by formula (5).
RM_DISEXP	Abnormal Discretionary Expenses, used to measure the actual earnings management caused by discretionary expenditures, measured by formula (6).
SIZE	Company Size, measured by the logarithm of total assets.
BM	Book-to-Market Ratio, calculated as the book value of the company divided by its market value.
LOSS	Dummy Variable, used to measure whether the company has a net loss for the year. A value of 1 is assigned if net profit is less than 0, otherwise, it is 0
ROE	Return on Equity.
LEV	Leverage Ratio, calculated as the company's asset-to-equity ratio.
SG	Sales Growth Rate.
Age	The proportion of executives (Vice General Manager and above) who are close to retirement (defined as within 5 years of the statutory retirement age) in the executive team.
Educa	The average education level of the executive team (1 for vocational school, 2 for associate degree, 3 for bachelor's degree, 4 for master's degree, 5 for doctoral degree, 6 for MBA or other qualifications, calculated as the average) [13]
Finb	The proportion of executives with a background in finance or accounting.
Gender	The proportion of women in the executive team.

$$EM_t = \alpha_0 + \alpha_1 AGE + \alpha_2 GENDER + \alpha_3 EDUCA + \alpha_4 FINB + \alpha_5 SIZE_t + \alpha_6 BM_t + \alpha_7 LOSS_t + \alpha_8 ROE_t + \alpha_9 LEV_t + \alpha_{10} SG_t + \sum_{i=1}^m \alpha_{11i} IND_i + \sum_{j=1}^n \alpha_{12j} YEAR_j + \varepsilon_t$$

### 3.3. Descriptive Statistics and Correlation Analysis

Table 2 shows the descriptive statistics of the main variables, highlighting the mean, standard deviation, and other key measures.

**Table 2.** Descriptive statistics of main variables.

variable	sample capacity	mean	standard deviation	least value	median	crest value
DA	16,841	0.003	0.251	0.762	0.002	1.181
PM_DA	16,841	0.004	0.203	0.715	0.002	1.106

RM_CFO	16,841	0.184	0.612	1.423	0.205	1.419
RM_PROD	16,841	0.108	0.823	0.254	0.112	1.630
RM_DISEXP	16,841	0.037	0.115	0.183	0.074	0.336
SIZE	16,841	21.49	1.153	12.457	21.320	28.418
BM	16,841	0.763	0.269	0.028	0.783	5.682
LOSS	16,841	0.151	0.357	0.000	0.000	1.000
ROE	16,841	0.076	0.988	1.069	0.071	0.392
LEV	16,841	0.602	0.594	0.084	0.587	4.858
SG	16,841	0.067	0.282	0.737	0.112	0.521
Num_TMT	40,857	7.359	2.262	3.000	7.000	19.000
AGE	16,841	0.352	0.635	0.000	0.313	1.000
GENDER	16,841	0.115	0.168	0.000	0.113	1.000
EDUCA	16,841	3.024	1.459	0.000	3.265	5.000
FINB	16,841	0.163	0.235	0.000	0.167	1.000

In the correlation analysis results presented in Table 3, the correlation coefficient between each pair of explanatory variables is less than 0.5, indicating that there is no serious multicollinearity problem between the variables. [14].

Table 3. Correlation analysis results.

	DA	PM_D	RM_C	RM_P	RM_DISE	AGE	GEN- DER	ED- UCA	FINB	SIZE	BM	LOSS	ROE	LEV	LOSS
DA	1.000	0.812	0.022	0.083	0.091	0.078	0.030	0.022	0.026	0.059	0.078	0.102	0.004	0.023	0.015
PM_D	0.796	1.000	0.023	0.090	0.086	0.072	0.028	0.022	0.034	0.060	0.079	0.097	0.004	0.022	0.014
RM_C	0.021	0.025	1.000	0.031	0.263	0.045	0.034	0.022	0.029	0.378	0.183	0.216	0.001	0.139	0.454
RM_P	0.092	0.099	0.073	1.000	0.132	0.162	0.025	0.027	0.041	0.229	0.175	0.068	0.008	0.171	0.328
RM_DISE	0.078	0.081	0.245	0.185	1.000	0.184	0.039	0.035	0.033	0.235	0.207	0.037	0.003	0.071	0.013
AGE	0.054	0.052	0.029	0.162	0.141	1.000	0.046	0.028	0.026	0.174	0.068	0.046	0.005	0.013	0.057
GEN- DER	0.026	0.023	0.038	0.027	0.045	0.062	1.000	0.009	0.057	0.009	0.017	0.001	0.001	0.022	0.010
ED- UCA	0.019	0.021	0.027	0.030	0.026	0.014	0.007	1.000	0.149	0.035	0.085	0.005	0.002	0.031	0.017
FINB	0.045	0.050	0.034	0.034	0.032	0.065	0.054	0.131	1.000	0.028	0.102	0.033	0.004	0.024	0.020
SIZE	0.060	0.064	0.251	0.451	0.041	0.103	0.031	0.036	0.025	1.000	0.221	0.085	0.002	0.295	0.051
BM	0.071	0.077	0.160	0.169	0.130	0.054	0.017	0.054	0.094	0.198	1.000	0.003	0.115	0.131	0.036
LOSS	0.084	0.080	0.194	0.066	0.039	0.048	0.008	0.008	0.058	0.084	0.005	1.000	0.090	0.042	0.305
ROE	0.004	0.004	0.001	0.004	0.002	0.003	0.001	0.001	0.003	0.132	0.080	0.194	1.000	0.035	0.078
LEV	0.016	0.018	0.074	0.114	0.020	0.013	0.024	0.003	0.032	0.230	0.093	0.067	0.049	1.000	0.023

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SG	0.03	0.035	0.538	0.242	0.045	0.003	0.026	0.025	0.015	0.079	0.05	0.34	0.085	0.012	1.000
	7										9	2			

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#### 4. Empirical Results and Analysis

Table 4 shows the regression results of this paper show the impact of the overall background characteristics of the executive team on earnings management implementation. At the same time, CEO and CFO are classified as subcategories to distinguish them from other members of the executive team for grouped regression, with the results presented in panel B. The entire regression process employs a two-way fixed effects model with time and individual (industry) variables [15].

**Table 4.** Regression results.

variable	mixed sample		panel data	
	(1) DA	(2)PM_DA	(3) DA	(4)PM_DA
AGE	-0.014*** (-2.82)	-0.016*** (-3.44)	-0.015*** (-2.98)	-0.013*** (-2.82)
GENDER	-0.010** (-2.43)	-0.009** (-2.47)	-0.009** (-2.38)	-0.008** (-2.27)
FINB	0.012** (2.05)	0.014** (2.25)	0.011** (2.09)	0.013** (2.20)
EDUCA	0.016** (2.41)	0.019*** (2.87)	0.015** (2.41)	0.017** (2.46)
SIZE	-0.009*** (-4.07)	-0.007*** (-3.62)	-0.008*** (-4.15)	-0.009*** (-3.97)
BM	-0.004** (-2.30)	-0.005** (-2.49)	-0.005** (-2.43)	-0.0054** (-2.31)
LOSS	0.004 (1.29)	0.004 (1.18)	0.003 (0.97)	0.003 (0.90)
ROE	0.012** (2.06)	0.013** (2.16)	0.011** (1.99)	0.012** (2.05)
LEV	0.003*** (2.87)	0.004*** (3.14)	0.002** (2.32)	0.003** (2.39)
SG	0.001 (0.34)	0.002 (0.51)	0.003 (0.69)	0.002 (0.61)

In order to test the robustness of the regression results, this paper adopts the modified Jones model [11], and the revenue matching Jones model [16]. For the mixed data, cross-sectional regression analysis is used, and for the panel data, two-way fixed effect model is used to analyze the impact of overall background characteristics of senior management team on earnings management.

Columns (1) and (2) of Panel A in Table 5 present the regression results using mixed samples to analyze the overall background characteristics of the executive team. The variable AGE is negatively correlated with accrual earnings management and is significant at the 1% level in both models, with t-statistics of -2.82 and -3.44, respectively. This indicates that as the average age of executives increases, their willingness to employ accrual earnings management strategies decreases, supporting Hypothesis H1a. Older executives, being closer to retirement, tend to be more conservative and risk-averse, unlike younger executives who may have greater motivation to adopt such strategies.

**Table 5.** Regression results.

variable	DA			PM DA		
	(1)	(2)	(3)	(4)	(5)	(6)
AGE_EF	-0.098** (-2.17)		-0.092** (-2.21)	-0.113** (-2.50)		-0.087*** (-2.92)
GENDER_EF	-0.025** (-2.02)		-0.023** (-1.96)	-0.014*** (-3.51)		-0.010** (-2.43)
FINB_EF	0.030** (2.24)		0.027** (2.15)	0.029*** (2.82)		0.026** (2.35)
EDUCA_EF	0.54*** (2.91)		0.048*** (2.75)	0.030*** (2.94)		0.021** (2.09)
AGE_OT		-0.080** (-2.35)	-0.076** (-2.07)		-0.065** (-2.08)	-0.061* (-1.82)
GENDER_OT		-0.028** (-2.26)	-0.025** (-2.09)		-0.006** (-2.14)	-0.005** (-2.01)
FINB_OT		0.030** (2.14)	0.028** (1.95)		0.022** (2.10)	0.018* (1.92)
EDUCA_OT		0.048*** (2.77)	0.043* (1.91)		0.016* (1.88)	0.015* (1.73)
SIZE	0.009*** (5.01)	0.010*** (5.22)	0.009*** (5.20)	0.011*** (6.46)	0.012*** (6.61)	0.010*** (6.02)
BM	0.023** (2.37)	0.024** (2.43)	0.021** (2.31)	0.022** (2.25)	0.023** (2.34)	0.020** (2.34)
LOSS	0.011 (1.04)	0.012 (1.09)	0.010 (0.94)	0.012 (1.08)	0.010 (0.91)	0.011 (0.98)
ROE	0.004 (0.35)	0.004 (0.37)	0.004 (0.31)	0.005 (0.39)	0.005 (0.35)	0.005 (0.32)
LEV	0.003** (2.16)	0.003** (2.13)	0.003** (2.08)	0.002* (1.86)	0.002* (1.80)	0.002* (1.80)
SG	0.001 (0.27)	0.001 (0.25)	0.001 (0.24)	0.002 (0.62)	0.002 (0.55)	0.002 (0.54)
industry fixed	Yes	Yes	Yes	Yes	Yes	Yes
individual fixed	Yes	Yes	Yes	Yes	Yes	Yes
time fixed	Yes	Yes	Yes	Yes	Yes	Yes
R2	0.404	0.384	0.427	0.443	0.419	0.458
N	16,841	16,841	16,841	16,841	16,841	16,841

GENDER is also negatively correlated with the likelihood of implementing accrual surplus management, significant at the 5% level, with t-statistics of -2.43 and -2.47, respectively. This supports Hypothesis H2a. As mentioned in the hypothesis section, female executives tend to be more conservative and responsible compared to their male counterparts. FINB is positively correlated with accrual surplus management strategies, also significant at the 5% level, with t-statistics of 2.05 and 2.25, respectively. This result indicates that managers with relevant financial work experience are more likely to implement accrual surplus management strategies, supporting Hypothesis H3a.

EDUCA is positively correlated with the likelihood of implementing accrual surplus management strategies, corresponding to DA and PM\_DA at significant levels of 5% and 1%, respectively, with t-statistics of 2.41 and 2.87. This result indicates that higher education levels lead executives to better understand how to achieve earnings management



through adjusting accounting estimates and policies. They are also more aware that such operations do not affect actual business activities or impact the company's operating cash flow. Thus, they are more willing to implement accrual surplus management. This conclusion aligns with Hypothesis H4a in this paper.

Based on the cross-sectional regression analysis, this paper also adopts the two-way fixed effect for panel regression. The relevant results are shown in Table 5 Columns (3) and (4) of panel A.

Table 6 shows the impact of the overall executive team background characteristics on real earnings management. It also separately groups the core members, namely the CEO and CFO, and conducts regressions for both the core group and other members group to discuss their effects on real earnings management.

**Table 6.** Regression results of the background characteristics of the overall management team on actual earnings management.

<b>Panel A:</b>						
	(1)	(2)	(3)	(4)	(5)	(6)
	RM	CFO	RM	DI- SEXP	RM	DI- SEXP
	RM	PROD	RM	PROD	RM	PROD
AGE	0.092* (1.86)	-0.096*** (-3.95)	0.125*** (9.66)	0.093* (1.92)	-0.098*** (-4.03)	0.129*** (9.85)
GENDER	0.129*** (4.53)	-0.128*** (-2.90)	0.009*** (4.48)	0.107*** (4.02)	-0.115*** (-2.79)	0.010*** (4.57)
FINB	-0.080*** (-3.47)	0.156*** (5.24)	-0.063*** (-6.92)	-0.054*** (-2.99)	0.124*** (4.78)	-0.039*** (-4.18)
EDUCA	0.012*** (2.81)	-0.021*** (-4.08)	0.005*** (3.46)	0.010*** (2.75)	-0.007*** (-3.51)	0.004*** (3.07)
SIZE	-0.125*** (-27.58)	0.342*** (48.93)	0.130*** (7.33)	-0.084*** (-21.05)	0.299*** (43.26)	0.102*** (5.94)
BM	-0.263*** (-12.07)	0.569*** (15.72)	0.035*** (2.84)	-0.112*** (-8.57)	0.127*** (2.98)	0.041*** (8.60)
LOSS	-0.025 (-1.63)	0.020 (0.94)	-0.060** (-2.41)	-0.029 (-1.52)	0.040 (1.49)	-0.042** (-2.03)
ROE	0.006 (1.45)	-0.008 (-1.40)	0.023* (1.89)	0.005 (1.31)	-0.005 (-1.02)	0.017* (1.68)
LEV	-0.019*** (-3.91)	-0.006 (-0.85)	0.001 (1.18)	-0.016*** (-3.26)	-0.005 (-0.81)	0.001 (1.04)
SG	-0.944*** (-28.32)	-0.794*** (-28.16)	0.019*** (4.68)	-0.902*** (-27.54)	-0.719*** (-22.69)	0.015*** (3.57)
industry	Yes	Yes	Yes	Yes	Yes	Yes
individuality	Yes	Yes	Yes	Yes	Yes	Yes
time	Yes	Yes	Yes	Yes	Yes	Yes
R2	0.354	0.262	0.154	0.342	0.251	0.144
n	16,841	16,841	16,841	16,841	16,841	16,841

The regression results in columns Panel A 1-3 show that AGE is positively correlated with RM\_CFO at the 10% significance level, preliminarily supporting Hypothesis H1b: the more senior executives approach their statutory retirement age, the more conservative they become, seeking stability and thus are less willing to engage in actual earnings management strategies. AGE is negatively correlated with RM\_PROD at the 1% significance level, further confirming that older executive teams do not use excessive production or

other means to embellish financial statements. This further supports Hypothesis H1b. Similarly, the significant relationship between AGE and RM\_DISEXP at the 1% level indicates that executive teams nearing retirement do not resort to increasing discretionary spending to boost corporate performance. Likewise, the regression results in the table also confirm the relevant hypotheses of Hypotheses H2b and H4b mentioned earlier. The panel regression results in columns 4-6 are largely consistent with the conclusions drawn from the mixed data cross-sectional regressions in columns 1-3.

In order to further explore the influence of CEO/CFO in the executive team, this paper conducts group regression test on CEO/CFO and other executives. As shown in Table 7. The results show that considering only the columns (1), (4), and (7) for the CEO/CFO, or only the columns (2), (5), and (8) for other senior executives, as well as ultimately viewing the executive team as a whole in columns (3), (6), and (9), all yield significant results. This further indicates that while the CEO/CFO is highly representative within the executive team, their ideas are not decisive. Other members of the team also play a significant role in the selection and implementation of earnings management strategies, which further explains the contradictions found in previous studies. Clearly, the various conflicting research findings resulting from focusing solely on the CEO/CFO no longer occur when the executive team is viewed as a whole.

**Table 7.** Regression results for CEO/CFO and other executives by group.

<b>Panel B:</b>									
	RM_CFO			RM_PROD			RM_DISEXP		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
AGE_EF	0.162*** (5.35)		0.102*** (3.14)	0.219*** (6.03)		0.181*** (5.32)	0.254*** (14.86)		0.205*** (11.64)
GEN- DER_EF	0.172*** (5.14)		0.104*** (4.32)	-0.212*** (-5.64)		0.159*** (3.83)	0.020*** (5.15)		0.014*** (2.62)
FINB_EF	-0.105*** (-3.53)		-0.087*** (-3.18)	0.238*** (7.73)		0.208*** (5.94)	0.083*** (7.16)		0.072*** (5.03)
ED- UCA_EF	0.012*** (3.69)		0.008*** (2.78)	-0.032*** (-4.89)		-0.026*** (-3.50)	0.007*** (2.99)		0.004** (2.41)
AGE_OT		0.115*** (3.47)	0.092*** (2.79)		0.141*** (3.45)	0.125*** (3.34)		0.180*** (9.83)	0.157*** (8.48)
GEN- DER_OT		0.134*** (3.52)	0.117*** (3.13)		0.163*** (3.29)	0.150*** (2.92)		0.015** (2.52)	0.008** (1.97)
FINB_O T		-0.089*** (-3.19)	0.060** (2.34)		0.175*** (2.70)	0.154** (2.37)		0.074*** (2.85)	0.062** (2.40)
EDUCA OT		0.0010*** (2.86)	0.007** (2.31)		0.026*** (2.76)	0.016** (2.20)		0.004** (2.49)	0.003** (2.24)
SIZE	-0.102*** (-21.37)	0.341*** (51.69)	0.108*** (7.24)	0.105*** (22.06)	0.347*** (52.53)	0.110*** (7.51)	0.103*** (21.69)	0.350*** (52.63)	0.113*** (7.76)
BM	-0.248*** (-9.64)	0.573*** (15.28)	0.039*** (3.27)	0.252*** (10.13)	0.576*** (15.84)	0.037*** (3.13)	0.250*** (10.02)	0.578*** (16.09)	0.040*** (3.42)

LOSS	-0.020 (-1.32)	0.018 (0.96)	0.057** (2.44)	0.023 (1.46)	0.018 (0.83)	0.056** (2.38)	0.024 (1.51)	0.016 (0.77)	0.059** (2.46)
ROE	0.009 (0.50)	0.020 (-0.57)	0.017 (0.35)	0.010 (0.59)	0.018 (0.32)	0.021 (0.74)	0.011 (0.68)	0.019 (0.38)	0.019 (0.35)
LEV	-0.019*** (-3.48)	-0.010 (-1.15)	0.001 (1.01)	0.020*** (3.67)	0.011 (1.34)	0.001 (1.15)	0.020*** (3.71)	0.010 (1.08)	0.001 (1.08)
SG	-1.162*** (-34.87)	-0.861*** (-33.54)	0.018*** (4.32)	1.178*** (36.24)	0.861*** (33.07)	0.017*** (4.20)	1.169*** (36.75)	0.864*** (34.82)	0.018*** (4.51)
industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
individ- uality	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
time	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R2	0.451	0.408	0.472	0.361	0.357	0.375	0.242	0.237	0.240
n	16,841	16,841	16,841	16,841	16,841	16,841	16,841	16,841	16,841

## 5. Conclusions and Value Implications

This paper uses A-share listed companies from 2011 to 2020 as research samples, examining the impact of the overall background (demographic characteristics) of executive teams on whether and how they adopt earnings management policies. The results show that: with changes in age, gender, work experience, and education level, there is a clear tendency for executive teams to favor certain earnings management strategies.

Specifically, as executives grow older and approach retirement age, they are less willing to engage in earnings management to increase risk. The higher the proportion of women in the executive team, the stronger the company's sense of social responsibility and accountability, leading to more genuine accounting information quality and making it harder to adopt earnings management strategies. The higher the proportion of executives who have worked in finance or related financial sectors, the more likely they are to adopt accrual earnings management strategies. Finally, differences in average educational levels also influence executives choices between accrual earnings management and actual earnings management strategies.

The research findings of this paper have the following practical value: First, it verifies the role of team will in corporate decision-making from the perspective of the "whole" executive team. This helps external audits and regulators conduct corresponding review activities based on the overall background characteristics of the executive team, reminding listed companies to be more stringent with themselves, to regulate their own business management activities more strictly, improve internal governance, and constrain and control opportunistic behaviors such as violations. Second, the conclusions of this study reconcile contradictions in previous research. By analyzing the entire executive team, it avoids focusing solely on core executives like CEOs/CFOs while neglecting other members of the executive team, making the research conclusions more reasonable and reliable.

## References

1. P. Dechow, W. Ge, and C. Schrand, "Understanding earnings quality: A review of the proxies, their determinants and their consequences," *Journal of Accounting and Economics*, vol. 50, no. 2, 2010, doi: 10.1016/j.jacceco.2010.09.001.
2. P. M. Healy and J. M. Wahlen, "A review of the earnings management literature and its implications for standard setting," *Accounting Horizons*, vol. 13, no. 4, 1999, doi: 10.2308/acch.1999.13.4.365.
3. D. S. Jenkins and U. Velury, "Does auditor tenure influence the reporting of conservative earnings?" *Journal of Accounting and Public Policy*, vol. 27, no. 2, 2008, doi: 10.1016/j.jaccpubpol.2008.01.005.

4. D. C. Hambrick and P. A. Mason, "Upper echelons: The organization as a reflection of its top managers," *The Academy of Management Review*, vol. 9, no. 2, 1984, doi: 10.5465/amr.1984.4277628.
5. S. J. Kachelmeier, "Introduction to a forum on individual differences in accounting behavior," *Accounting Review*, vol. 85, no. 4, 2010, doi: 10.2308/accr.2010.85.4.1127.
6. D. C. Hambrick, "Upper echelons theory: An update," *The Academy of Management Review*, vol. 32, no. 2, 2007, doi: 10.5465/amr.2007.24345254.
7. K. Campbell and A. Mínguez-Vera, "Gender diversity in the boardroom and firm financial performance," *Journal of Business Ethics*, vol. 83, no. 3, 2008, doi: 10.1007/s10551-007-9630-y.
8. E. Peni and S. Vähämaa, "Female executives and earnings management," *Managerial Finance*, vol. 36, no. 7, 2010, doi: 10.1108/03074351011050343.
9. U. Malmendier, G. Tate, and J. Yan, "Overconfidence and early-life experiences: The effect of managerial traits on corporate financial policies," *The Journal of Finance*, vol. 66, no. 5, 2011, doi: 10.1111/j.1540-6261.2011.01685.x.
10. B. H. Hall and J. Lerner, "The financing of R&D and innovation," *Handbook of the Economics of Innovation*, North Holland, vol. 1, pp. 609–639, 2010, doi: 10.1016/S0169-7218(10)01014-2.
11. S. P. Kothari, A. J. Leone, and C. E. Wasley, "Performance matched discretionary accrual measures," *Journal of Accounting and Economics*, vol. 39, no. 1, pp. 163–197, 2004, doi: 10.1016/j.jacceco.2004.11.002.
12. P. M. Dechow and I. D. Dichev, "The quality of accruals and earnings: The role of accrual estimation errors," *The Accounting Review*, vol. 77, 2002, doi: 10.2308/accr.2002.77.s-1.35.
13. H. Khalil, "Theoretical model on CEO overconfidence impact on corporate investments," *Quarterly Review of Economics and Finance*, pp. 545–552, 2021, doi: 10.1016/J.QREF.2021.04.005.
14. Y. Liu, "Study on the correlation between environmental information disclosure and corporate value of listed companies," *Accounting and Corporate Management*, vol. 4, 2024, doi: 10.23977/ACCCM.2024.060404.
15. Y. Shen, D. Wallace, K. Reddy, and V. Ramiah, "An investigation of CEO characteristics on firm performance," *Accounting & Finance*, vol. 3, pp. 3563–3607, 2021, doi: 10.1111/ACFI.12896.
16. S. P. Kothari, A. J. Leone, and C. E. Wasley, "Performance matched discretionary accrual measures," *Journal of Accounting and Economics*, vol. 39, no. 1, pp. 163–197, 2005, doi: 10.1016/j.jacceco.2004.11.002.

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