The Effect of Executives' Self-interested Selling on the Quality of Information Disclosure

From the Perspective of R&D Manipulation

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Abstract. Based on the annual data of Chinese listed companies from 2008 to 2021, this paper employs a panel regression model to empirically examine the impact of executives' opportunistic selling on the quality of information disclosure. The findings indicate that managers' opportunistic selling significantly diminishes the quality of information disclosure. Moreover, R&D manipulation partially mediates the relationship between managers' opportunistic selling and the quality of information disclosure, while enhancing internal control quality mitigates the adverse effects caused by managers' opportunistic selling on the quality of information disclosure.

Keywords: executives selling; opportunistic behaviors; information disclosure; R&D manipulation

1 Introduction

In recent years, the frequent occurrence of senior executives engaging in stock selling activities has had a detrimental impact on both small and medium investors as well as market stability within China's capital market. As implementers and controllers of corporate information disclosure, senior executives have discretion over the content of such disclosures. Consequently, when executives exploit self-interested information disclosure practices to sell their holdings, it may result in market fluctuations and introduce uncertainty for investors. In order to regulate shareholding reductions by executives, the China Securities Regulatory Commission (CSRC) revised and issued Several Provisions on Shareholding Reduction by Shareholders and Directors of Listed Companies in 2017 that imposed stricter requirements regarding reduction methods and information disclosure. Despite these regulations being in place, the practice of senior executives selling stocks remains prevalent—particularly within certain companies where improper sales occur—leading to inadequate information disclosure or public controversies that adversely affect both the company itself and the overall market environment. Therefore, studying executive selling behavior holds significant practical importance towards enhancing the quality of information disclosure while promoting high-quality development within the capital market. This paper empirically examines

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the impact of managers' opportunistic selling on the quality of information disclosure and its underlying mechanism by utilizing data from A-share listed companies between 2008 and 2021 as samples. This study contributes to existing literature by shedding light on executives' common occurrence of opportunistic selling in capital markets, thereby enriching relevant research on information disclosure quality. Furthermore, it elucidates the internal mechanisms from an R&D manipulation perspective, providing valuable theoretical insights for investors and regulatory authorities to make informed decisions.

2 Theoretical Analysis and Research Hypothesis

2.1 The Relationship Between Executives' Self-Interested Selling and the Quality Of Information Disclosure

Senior executives, who serve as both executors and controllers of information disclosure, possess discretionary power in this regard. Consequently, they may employ this discretion to manipulate information disclosure with the intention of reducing their stock holdings when prices are high, thereby facilitating the transfer of wealth[1]. Opportunistic selling often entails exploiting informational advantages and manipulating data with the aim of seeking excessive returns[2], whereas normal selling typically serves purposes such as portfolio adjustments or meeting liquidity needs without being driven by private information[3]. In this context, managers have the opportunity to engage in self-interested opportunistic behavior, such as manipulating information disclosure to conceal unfavorable information for personal gain. Building upon these observations, this paper proposes the following hypothesis:

H1: Executives' self-interested selling will diminish the quality of corporate information disclosure.

2.2 The Mediating Role of R&D Manipulation

R&D manipulation refers to a strategic behavior of corporate management that deviates from normal R&D activities in order to pursue personal interests. Given the specialized and intricate nature of R&D activities, it often proves challenging for ordinary shareholders and regulatory authorities to accurately assess the authenticity and effectiveness of R&D investment[4]. Exploiting this information asymmetry, management can manipulate financial statements and R&D performance indicators through misreporting or overstating R&D expenditure, thereby obtaining policy preferences and financial support. Additionally, they may capitalize on R&D expenditures to shift future costs onto shareholders while reducing current compensation expenses, thus maximizing personal financial gains. Such behavior distorts publicly disclosed information, diminishes the quality of information disclosure, and potentially misleads investors' decision-making process. Building upon these observations, this paper proposes the following hypotheses:

H2: R&D manipulation partially mediates the impact of managers' opportunistic shareholding selling on information disclosure.

H3: The capitalization of R&D expenditure plays a partial intermediary role in the impact of managers' opportunistic selling on information disclosure.

2.3 The Regulating Effect of Internal Control Quality

High-quality internal control plays a crucial role in corporate governance by ensuring compliance with regulations and norms, as well as safeguarding the accuracy and reliability of financial reports. An effective internal control system can effectively deter opportunistic behavior from management[5], thereby guaranteeing the reliability of corporate earnings information. Furthermore, high-quality internal control can also constrain and regulate management's conduct, reducing their inclination towards R&D manipulation and over-capitalization. Based on these points, this paper proposes the following hypothesis:

H4: High-quality internal control weakens the negative correlation between managers' opportunistic selling behavior and the quality of information disclosure.

3 The Samples Design and Variables Choice

3.1 Sample Selection and Data Source

In this paper, the annual data of China's A-share listed companies from 2008 to 2021 is selected as the research sample. The samples of financial listed companies are excluded; Remove ST and ST* companies. A total of 25,421 observations were obtained. This paper carries out Winsorize treatment of up or down 1%.

3.2 Variable Design

The explained variable, information disclosure quality (KV). SELLA represents the amount of reduction and SELLT represents the number of reductions. Internal control quality(IC) from Shenzhen Dibo Company's internal control index database serves as an adjustment variable. Control the variables at the micro level of enterprises.

3.3 Model Design

The benchmark regression tests the model:

$$KV_{it}=\beta_0+\beta_1 SELL_{it}+\eta X+\lambda_i+\upsilon_t+\varepsilon_{it} \tag{1}$$

The models are for intermediary effects which constructed in this paper:

$$ABnormal\_RD_{it}=\beta_0+\beta_1 SELL_{it}+\eta X+\lambda_i+\upsilon_t+\varepsilon_{it} \tag{2}$$

$$KV_{it}=\beta_0+\beta_1 SELL_{it}+\beta_2\ ABnormal\_RD\ it+\eta X+\lambda_i+\upsilon_t+\varepsilon_{it} \tag{3}$$

The model is for assessing the moderating effect which constructed as follows:

$$KV_{it}=\alpha_0+\alpha_1 SELL_{it}+\alpha_2 IC_{it}+\alpha_3 SELL_{it}\times IC_{it}+\eta X+\lambda_i+\upsilon_t+\varepsilon_{it} \quad (4)$$

4 The Empirical Findings

Table 1 presents the results of multiple regression analysis examining the relationship between opportunistic reduction of senior executives and the quality of accounting information disclosure. In column (1), we observe a significantly positive coefficient for the amount of senior executives' opportunistic reduction, which is statistically significant at the 1% level. In column (2), we find that the number of opportunistic reductions by senior executives has a coefficient of 0.011, also significant at the 1% level. This suggests that when senior executives engage in opportunistic reduction practices, it significantly diminishes the quality of information disclosure.

Table 1. Test results of the benchmark model and quality adjustment function of internal control

	(1)	(2)	（3）	（4）
	KV	KV	KV	KV
SELLA	0.001***		0.001***	
	(0.000)		(0.000)	
SELLT		0.011***		0.011***
		(0.002)		(0.002)
IC			0.000***	0.000***
			(0.000)	(0.000)
SELLAIC			-0.000**	
			(0.000)	
SELLTIC				-0.000***
				(0.000)
Control variable	control	control	control	control
Industry/Year	control	control	control	control
Adjust R2	0.305	0.305	0.306	0.306
Sample Size	25421	25421	25421	25421

Note: *, **, and *** are significant at 1%, 5%, and 10% levels, with t values in brackets. The same below.

The results of the intermediary channel test for R&D manipulation are presented in Table 2, with paragraphs (1) - (4) identified as the transmission path of "reduction in executive opportunism - R&D manipulation - quality of information disclosure". This indicates that R&D manipulation serves as an intermediary in the transmission path between reducing executive opportunism and improving information disclosure quality. Based on the disclosed data regarding capitalization of R&D expenditure, this study further investigates the intermediary channels associated with capitalization. The test results are shown in Table 3, where paragraphs (1) - (4) represent the transmission path of "reduction in senior executives' opportunism - capitalization of R&D expenditure - quality of information disclosure".

Table 2. Test results of mediating effect of R&D manipulation

	(1)	(2)	(3)	(4)
	ABnormal_RD	KV	ABnormal_RD	KV
SELLA	0.003***	0.001***		
	(0.001)	(0.000)		
SellT			0.033***	0.010***
			(0.006)	(0.002)
ABnormal_RD		0.008***		0.008***
		(0.002)		(0.002)
Control variable	control	control	control	control
Industry/Year	control	control	control	control
Adjust R2	0.106	0.305	0.106	0.306
Sample Size	25421	25421	25421	25421

Table 3. Test results of the mediating effect of capitalization of R&D expenditure

	(1)	(2)	(3)	(4)
	RDCap	KV	RDCap	KV
SELLA	-0.112**	0.002***		
	(0.048)	(0.000)		
SELLT			-1.291***	0.016***
			(0.463)	(0.004)
RDCap		0.000**		0.000**
		(0.000)		(0.000)
Control variable	control	control	control	control
Industry/Year	control	control	control	control
Adjust R2	0.081	0.229	0.081	0.229
Sample Size	4818	4818	4818	4818

The results of the regression analysis in columns (3) and (4) of Table 1 demonstrate a significant negative relationship between cross-multiplication terms, indicating that internal control quality plays a crucial role in regulating the association between opportunistic reduction of senior executives and information disclosure quality. This finding provides support for hypothesis H4 proposed in this study.

5 Conclusions

Using annual data from 2008 to 2021 for China's listed companies, this paper empirically examines the impact of managers' opportunistic shareholding sales on the quality of information disclosure and its underlying mechanism. R&D manipulation partially mediates the relationship between managers' opportunistic selling and the quality of information disclosure. Enhancing internal control quality mitigates the adverse effects of opportunistic selling on information disclosure. The implications of this study are as follows: firstly, it is imperative to enhance the information disclosure system and strengthen supervision and enforcement. Establish more stringent regulations on information disclosure to ensure timely, accurate, and transparent financial reporting and disclosure of significant matters by listed companies. Secondly, there should be constraints on senior executives' conduct, with strict monitoring and penalties for any abuse of informational advantages. Thirdly, in order to safeguard investors' interests and ensure the smooth functioning of the capital market, regulatory authorities need to intensify their supervision and evaluation of corporate R&D endeavors while enhancing review quality and transparency; simultaneously increasing penalties for violations so as to reduce instances of R&D manipulation.

References

1. MIGUEL A. FERREIRA, PAUL A. LAUX. (2007)Corporate Governance, Idiosyncratic Risk, and Information Flow.J.The Journal of Finance,62(2).951-989.DOI:10.1111/j.1540-6261.2007.01228.x
2. Luo,H.,Huang,W.(2020)Research on the Impact of Multiple Large Shareholders Coexistence on the Opportunistic Stock Selling Behaviors of Executives. J. Journal of Management World,36(08):163-178.DOI:10.19744/j.cnki.11-1235/f.2020.0125.
3. Chen,Z.H., Fang,H.X.(2019)Can Internal Control Fasten the Fence of Insiders' Opportunistic Sales?J. Accounting Research,07:82-89.DOI:10.3969/j.issn.1003-2886.2019.07.011
4. Yuan,Z.M.,Wang,P.L.,Fu,Y.Y.(2020)Has the Academic Experience of Executives Affected the R&D Manipulation of Enterprises?J.Foreign Economics & Management 42(08):109-122.DOI:10.16538/j.cnki.fem.20200409.202.
5. LTORID,ONARANO.(2018)The effects of financialization on investment: evidence from firm-level data for the UK.J.Cambridge journal of economics,42(5) :1393-1416.