

# Analyst Concerns, Property Rights and Audit Opinion Buying

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**Abstract:** This paper selects the data of A-share listed companies in Shanghai and Shenzhen from 2016 to 2020 to empirically study the influence of analyst attention on corporate audit opinion purchasing behavior. It is found that analyst attention can effectively inhibit the motivation of enterprise management to purchase audit opinions. Further research shows that due to the different nature of property rights, enterprise management has different market sensitivity, which leads to the significant inhibitory effect of analyst attention on the purchase of audit opinions only in non-state-owned enterprises.

Keywords: Analyst Attention; Purchase of Audit Opinion; Nature of Property Right

#### 1. Introduction

As a third-party institution independent of the enterprise, the firm authenticates the financial information disclosed by the listed company, which is an important part of China's market economy supervision system. However, in recent years, financial fraud scandals emerge in endless succession in domestic and foreign markets. At the same time, the audit field has repeatedly exposed that the firm was warned and punished by the China Securities Regulatory Commission for issuing false audit reports. It has attracted wide attention from scholars at home and abroad. Audit opinion purchase is an important means used by listed companies to commit financial fraud and audit collusion, and is also a common phenomenon in the current capital market (Simunic, 1980). This behavior not only seriously affects the development of enterprises, but also undermines the confidence and participation of external investors, and hinders the healthy development of the capital market. In the early academic circles, most of the research on the purchase of audit opinion focused on its economic consequences and existence to enterprises. In recent years, more and more scholars have paid attention to the study of external governance. On this basis, this paper, from the perspective of analysts, studies whether the process of analysts' attention to enterprises will affect the purchase behavior of audit opinions. As an emerging industry in the economic market, analysts make use of their own information advantages and professional knowledge to sort out and analyze the information of listed companies and other aspects and release reports, making it easier for ordinary investors to understand the intrinsic value of enterprises, effectively reducing the degree of information asymmetry, and attracting more and more attention from investors and management. In view of this, this paper uses the A-share listed companies in Shanghai and Shenzhen during 2016-2020 as research samples to discuss what choices enterprises will make under the external role of analysts, and studies whether different property rights will affect the purchase behavior of audit opinions of listed companies.

# 2. Literature review and hypothesis

## 2.1 Analysts are concerned about the impact on the purchase of audit opinions

Analysts not only play a role as information providers and transmitters between listed companies and the public, but also as an important mechanism for external supervision and governance of enterprises (Huang Zhihong et al., 2022). At present, there are two theories in the academic circle about the external supervision formed by analysts on enterprises. The first is the "supervision

hypothesis", which means that analysts can effectively alleviate the information asymmetry in the capital market and make more external supervision play a role. For listed companies, the more attention they receive from analysts, the more likely they are to be disclosed. Out of fear of being discovered, companies will naturally stop violations in time. Therefore, under the role of analysts' supervision, the opportunism motivation of management should be restrained to a certain extent, and the probability of enterprises obtaining clean audit opinions should be enhanced by improving the overall performance of enterprises. In addition, analysts have a strong ability to perceive risks. When audit collusion is found in enterprises, analysts will ignore such enterprises in order to avoid negative effects. When this news is transmitted to market investors, investors may panic and sell stocks, or even face delisting. In view of this, under the influence of external supervision of analysts, enterprise management's consideration based on risk and cost will reduce the motivation of purchasing audit opinions.

However, there is another possibility for analysts to influence the purchasing behavior of audit opinions. Based on the "market pressure hypothesis", numerous studies have shown that the market influence and attention of analysts make the management of enterprises face great pressure. When there is a big gap with the market expectation, On the contrary, the "amplification effect" of analyst tracking stimulates the management to adopt opportunistic behaviors and purchase audit opinions to deliver "favorable news" to the market (Han Yanjin et al., 2021); At this point, the incentive for firms to conduct audit purchases to obtain clean audit opinions is stronger. To sum up, this paper puts forward the following two opposing hypotheses:

H1a: Analyst concern will weaken the purchase of audit opinions by listed companies

H1b: Analysts' attention will strengthen the purchase of audit opinions by listed companies.

### 2.2 The influence of analysts' concerns on the purchase of audit opinions based on

### different property rights

From the perspective of property rights theory, for state-owned enterprises, the "parent-child relationship" between state-owned enterprises and the government makes state-owned enterprises obtain more support from the state and the government, and there is also a form of financial resources and commercial credit leaning to state-owned listed companies in our capital market (Lin Yifu et al., 2004). Therefore, state-owned listed enterprises, due to their natural advantages, can quickly resolve the risks brought by financial distress and have lower market sensitivity than non-state-owned enterprises. On the other hand, senior executives in state-owned enterprises are under much less pressure in terms of performance than those in non-state-owned enterprises, and they pursue more promotion in their posts. Due to the lack of government guarantee background and credit discrimination, non-state-owned enterprises face greater financial pressure, so they pay attention to maintaining their image in the market. Some scholars have concluded that analysts have a greater influence on the supervision of the management of non-state-owned enterprises, which makes it more likely that the purchase of audit opinions will be identified. Based on the above analysis, this paper proposes the following hypotheses:

H2: Compared with state-owned enterprises, analysts pay more attention to the inhibitory effect of purchasing audit opinions on non-state-owned listed enterprises.

#### 3. Research design

#### 3.1 Data source and sample selection

In this paper, A-share listed companies in Shanghai and Shenzhen from 2016 to 2020 are selected as research samples, and the selected data are screened as follows: 1. Eliminate listed financial companies. 2. Remove ST and \*ST listed companies. 3. Eliminate listed companies with missing relevant data. After the above processing, a total of 11150 sample data were obtained. The above data is from the CSMAR database.

## 3.2 Definition of key variables

## 3.2.1 Audit opinion purchase

This paper uses the model proposed by Lennox (2000) for reference to measure the purchase behavior of audit opinions. The formula is as follows:

$$Q_{i,t}^{qs} = \alpha_0 + \alpha_1 Switch_{i,t} + \alpha_2 X_{i,t} + \alpha_3 Switch_{i,t} X_{i,t} + \alpha_4 Q_{i,t-1} + \alpha_5 Q_{i,t-1} Switch_{i,t} + V_{i,t}$$

In the above model  $Switch_{i,t}$  Indicates whether audit changes have occurred at the company;  $Q_{i,t}^{qs}$  An audit opinion issued by an enterprise;  $X_{i,t}$  is Control variables, including asset-liability ratio, capital profit rate, etc. And on that basis, according to the formula  $OP_{i,t} = Pr(Q_{i,t}^{q1} = 1) - Pr(Q_{i,t}^{q0} = 1)$ Obtain the difference between the probability of audit changes and the probability of receiving a dirty audit opinion by continuing to employ the current auditor.

### 3.2.2 Analyst focus

The number of analyst teams followed by the company during the year is analyzed, and the number of analyst teams plus 1 is logarithmic.

#### 3.2.3 Control variable

In order to make the research results of this paper more accurate, the proportion of independent directors(IDR), company size (SIZE), cash asset ratio (CF), combination of two positions (DUA), firm type (BIG4), asset-liability ratio (LEV), development ability (GROWTH), loss or not (LOSS) and internal equity (DIRS) are selected as the control variables of this paper.

### 3.3 Model setting

$$S_{i,t} = \beta_0 + \beta_1 OP_{i,t} + \beta_2 ANA + \beta_3 OP_{i,t} * ANA + \beta_4 IDR + \beta_5 SIZE + \beta_6 CF + \beta_7 DUA + \beta_8 BIG4 + \beta_9 LEV + \beta_{10} GROWTH + \beta_{11} LOSS + \beta_{12} DIRS + \sum IN + \sum YEAR + \varepsilon_{i,t}$$

## 4. Empirical results and analysis

#### 4.1 Descriptive statistics

Descriptive statistics are carried out on the main variables in this paper. The results show that the maximum value of analysts' attention is 4.331 and the minimum value is 0, indicating that the number of analysts' attention to different enterprises varies greatly, which is because of the selectivity and herding effect of analysts' attention to listed companies. The mean value of auditor changes is 0.097, indicating that the frequency of auditor changes in listed companies is not high.

# 4.2 Analysts focus on regression analysis of the effect of audit opinion buying

#### behavior

It can be seen from Table 1 that the coefficient of  $OP_{i,t}$  is negative and significant at 5%, indicating that the enterprise has purchased audit opinions. The  $OP_{i,t} * ANA$  cross multiplication item is added into column (2), and it can be seen that its coefficient is 0.241, which is significantly positive at the level of 10%, indicating that the supervision effect of analysts can effectively and significantly inhibit the purchase behavior of audit opinions of listed enterprises. H1a is assumed to be verified.

Table 1 Regression results of analyst attention and audit opinion buying

variable	SWITCH			
$OP_{i,t}$	-0.405** (-2.48)	-0.605*** (-2.99)		

$OP_{i,t} * ANA$		0.241* (1.82)
ANA		-0.007** (-2.47)
CONTROLS	YES	YES
YEAR/IN	YES	YES
R – square	0.023	0.024
Sample size	11150	11150

# 4.3 Analysis of regression results after grouping by property rights

After grouping the samples, it can be seen from Table 2 that in the samples of state-owned enterprises, the coefficient is not significant after the cross-multiplication term is added. For non-state-owned enterprises, the coefficient of  $OP_{i,t} * ANA$  is significantly positively correlated at the level of 10%, indicating the external role that analysts pay attention to and confirming hypothesis H2.

Table 2 Regression results of analyst attention and audit opinion buying based on property rights grouping

variable -	SWITCH				
	Non-state-owned enterprise		State-owned enterprise		
$OP_{i,t}$	-0.330* (-1.72)	-0.593** (-2.49)	-0.599* (-1.94)	-0.748** (-1.96)	
$OP_{i,t} * ANA$		0.294* (1.93)		0.156 (0.60)	
ANA		-0.010*** (-3.15)		0.002 (0.40)	
CONTROLS	YES	YES	YES	YES	
YEAR/IN	YES	YES	YES	YES	
R—square	0.026	0.027	0.019	0.019	
Samplesize	7586.000	7586.000	3564.00 0	3564.000	

#### I. Robustness test

# 4.4 Replace analysts with metrics

In order to ensure the reliability of the conclusions of this paper, this paper replaced the analyst concern index and measured the regression with the concern of enterprises studied and reported within one year. The results were consistent with the previous results.

# 4.5 Replacement control variable

This paper refers to Li Chunling's method, replaces the control variables, and adds the shareholding ratio of the largest shareholder (*TOP*1) and the ratio of inventory to total assets (*IVTRY*) to replace the dual occupation and company size. The regression results can still verify the hypothesis in this paper.

# 5. Enlightenment

According to the conclusion of this paper, the following suggestions are put forward: Firstly, the regulator should increase the punishment for the purchase of audit opinions. Secondly, our country should enlarge the support to the analyst industry. Finally, the enterprise management should be deeply aware that once the audit purchase behavior is exposed, the damage brought to the enterprise is irreversible. They should take the long-term development of the enterprise as the focus and standardize the enterprise operation.

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