

# Impact of External Audit Quality on Earnings Management in Marine Enterprises

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## ABSTRACT

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With the rapid increase of marine resources and foreign trade, marine enterprises have shown a tendency to expand. Corporate management may whitewash its performance through earnings management, which is not conducive to the long-term development of marine enterprises. As third-party institutions, external audit can be used as an alternative to the internal control of marine enterprises to curb the earnings management of marine enterprises. Using marine enterprises as an example, this article aims to explore the effect of external audit quality on corporate earnings management. The results show that an external audit has an inhibitory effect on earnings management, which is mainly related to the quality of the external audit; the marine companies with high external audit quality have a stronger inhibitory effect on earnings management, and there is a more significant negative correlation between earnings management of high-quality audit teams and the fulfillment of social responsibility. The research findings provide a theoretical basis for exploring the relationship between external audit quality and earnings management.

**ADDITIONAL INDEX WORDS:** *Marine resources, marine enterprises, earnings management, external audit quality, social responsibility performance.*

## INTRODUCTION

China's capital market was established late, and the relevant systems have been promoted step by step. It is, however, still a market with imperfect development and unsound mechanisms, leaving more space for the enterprise to conduct earnings-management operations (Murray, D'Anna, and MacDonald, 2016). In practice, accrual earnings management is not the only way to manage earnings, and chaotic earnings management can cause enterprises to lose opportunities for long-term development (Arias-Cabarcos *et al.*, 2016). In recent years, market-information asymmetry has significantly increased the demand for external audits in the marketplace, and increasingly stringent industry supervision and severe industry competition have prompted accounting firms to improve their work quality (Biggs *et al.*, 2015). External audit quality of enterprises is influenced by external policies and economic factors. However, the quality of an external audit changes passively, and an increasing number of studies have found that the level of earnings management is directly proportional to external audit fees (Cho and Song, 2017).

With the development of China's marine economy and science and the innovations in science and technology, marine enterprises have had consistent developmental momentum, and its important role in national economic and social development has become increasingly prominent (Mat Zain, Zaman, and Mohamed, 2015). In the development of marine enterprises, external audits of earnings management are an

important means to restrain corporate earnings management. As far as listed marine enterprises are concerned, corporate financial problems and misconduct behaviours are related to corporate interests. Internal-only control systems are vulnerable to corporate management level, so high-quality external audits must be applied to increase the management of surplus assets (Shad *et al.*, 2018). This article, using marine enterprises as an example, aims to explore the effect of external audit quality on corporate earnings management. The research findings provide a theoretical basis for exploring the relationship between external audit quality and earnings management.

## THEORETICAL ANALYSIS AND RESEARCH HYPOTHESIS

In marine enterprises, company managers may use their methods of earnings management to whitewash their performance, capturing optimal short-term interests for the enterprise. In addition, the top management of enterprises will selectively transmit information for their own needs in daily management and shield society from information disadvantageous to the group, which would harm the long-term development of the business (McKinley and Fletcher, 2012). To reduce asymmetric information of corporate finance, that information is generally supervised by internal controls and external audits. In terms of external audits, the top management of an enterprise may collude with external auditors, which poses great challenges for the quality of the audit. Therefore, the quality of external audits is particularly important (Palazuelos, Crespo, and Corte, 2017).

If the managers of one marine enterprise have to ensure their earnings management behaviour under certain conditions of

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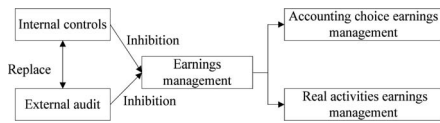


Figure 1. The relationship between external audits and earnings management.

pressure, they should perform their earnings management from the daily operation and management process of the enterprise, thereby reducing the risks from external auditing, *i.e.* under a low level of marine enterprise earnings management, external audits have a significant inhibitory effect on earnings management. Figure 1 shows the relationship between external audits and earnings management. External audits can be used as alternatives to internal control for inhibiting earnings management. Earnings management includes accounting choices and real activities. In this research, it was hypothesized that with lower overall risk to a marine enterprise, the quality of an external audit would be higher and the degree of accounting-accrued earnings management would be lower.

### THEORETICAL ANALYSIS ON THE EFFECT OF EXTERNAL AUDIT QUALITY ON EARNINGS MANAGEMENT

Earnings management is the most effective way for marine enterprise managers to control profits. High-quality external audits can guarantee high-quality financial reports, thus inhibiting opportunistic behaviour by top managers in marine enterprises and reducing the degree of earnings management. Figure 2 shows an external audit index system, including a strategic index, execution index, report index, compliance index, and asset safety index. The evaluation of the quality of an external audit is based on the degree of external audit implementation, using major defects that seriously deviate from control targets as a correction index for internal control. As an entrusting party of marine enterprises, an external

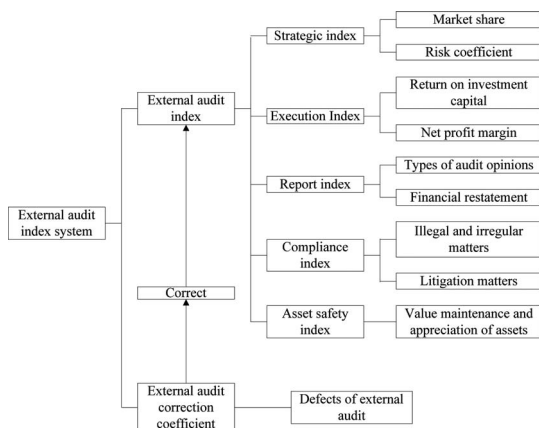


Figure 2. External audit index system.

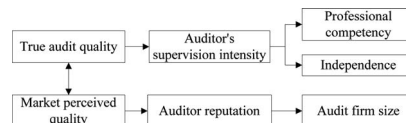


Figure 3. The relationship between external audit quality and firm scale.

auditor is at a disadvantage in terms of information acquisition compared with the managers of the marine enterprise. The external audit has had a good role in supervising earnings management, and it has also promoted authenticity and reliability about the information contained in financial statements for the marine enterprise.

External audit quality requires a dimension that is directly sensible. Most audit firms ensure audit quality by improving auditors' professional competence and independence. The quality of an external audit also has a great relationship with the firm scale (Figure 3). The true external audit quality is related to the auditor's supervisory strength. The perceived quality of an external audit in the marketplace directly affects the reputation of the designer and ultimately affects the reputation and scale of the firm.

### EMPIRICAL ANALYSIS FOR THE INHIBITORY EFFECT OF EXTERNAL AUDIT QUALITY ON EARNINGS MANAGEMENT

#### Empirical Research

An analysis of the relationship between the quality of an external audit and earnings management found that external audits have an inhibitory effect on earnings management, dependent upon the quality of the external audit. This study selected 16 marine enterprises in China as research samples and conducted descriptive statistics on the accrual-earnings management, real-earnings management, external audits, and enterprise-scale analysis. The specific descriptive statistics used in the samples are shown in Table 1. Statistically accrued

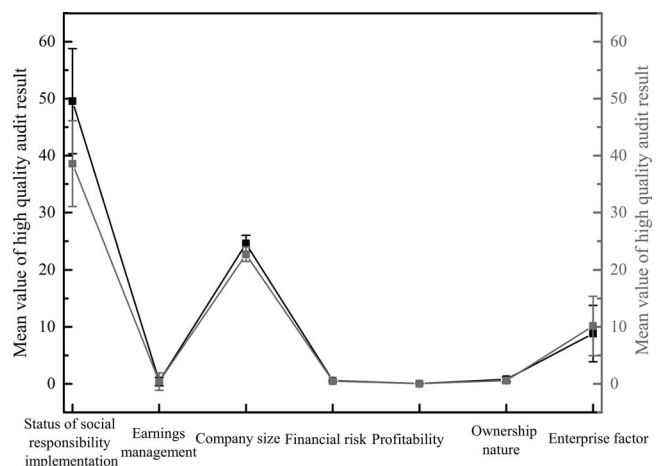


Figure 4. Results of statistics under high- and low-quality audit conditions.

Table 1. *Sample descriptive statistics.*

Audits	Minimum Value	Maximum Value	Average Value	Standard Deviation
Accrued earnings management (AEM)	0.0022	0.6052	0.0792	0.081
True earnings management (TEM)	-0.7371	0.6263	-0.0730	0.2184
External audit (EA)	16.86	996.47	682.66	72.54
Internal controls (IC)	0	1	0.3573	0.318
Corporate asset scale (CAS)	18.92	27.49	21.38	1.201
Return on assets (RA)	-0.507	2.648	0.426	0.0509
Asset-liability ratio (AR)	0.0082	1.409	0.616	0.0815

Table 2. *Relevance analysis for the high-quality audit group.*

	SSRI	EM	CS	FR	P	ON	EF
SSRI	1	0.023	0.557	0.308	-0.020	0.260	-0.042
EM	0.023	1	0.063	-0.002	-0.020	-0.046	0
CS	0.557	0.063	1	0.548	-0.102	0.332	-0.217
FR	0.308	-0.002	0.548	1	-0.380	0.108	-0.004
P	-0.020	-0.020	-0.102	-0.380	1	-0.100	0.228
ON	0.260	-0.046	0.332	0.108	-0.100	1	-0.046
EF	-0.042	0	-0.217	-0.004	0.228	-0.046	1

Table 3. *Relevance analysis of low quality audit group.*

	SSRI	EM	CS	FR	P	ON	EF
SSRI	1	0.057	0.406	0.097	0.027	0.235	-0.003
EM	0.057	1	0.003	0.033	-0.010	-0.003	0.042
CS	0.406	0.003	1	0.682	0	0.419	-0.127
FR	0.097	0.033	0.682	1	-0.333	0.343	-0.046
P	0.027	-0.010	0	-0.333	1	-0.072	0.235
ON	0.235	-0.003	0.419	0.343	-0.072	1	-0.048
EF	-0.003	0.042	-0.127	-0.046	0.235	-0.048	1

earnings management differed little from true earnings management, but there were large differences in the management of true earnings among various marine enterprises and also among external audits.

## Research Results

At present, most of China's marine enterprises are state owned or listed and have their own production standards and processes within the industry or enterprise. This characteristic ensures a large developmental space for earnings management in the marine enterprises. Furthermore, the quality of external audit in the state-owned enterprises and listed companies differed greatly. Figure 4 shows the statistical results of the high- and low-quality audits. Corporate social responsibility from enterprises with high-quality audit team was significantly better than that of with low-quality audit teams, and high-quality audit teams produced higher mean accrued profits in corporate earnings management and asset-liability ratios. This indicates that marine enterprises with high-quality external audits have a stronger inhibitory effect on earnings management. Tables 2 and 3 show the correlation analysis of high-quality and low-quality audit teams, respectively, indicating a more significant negative correlation between earnings management of high-quality audit teams and the fulfilment of social responsibility for the marine enterprises, but lower relevance on an enterprise scale in equity and corporate factors to the performance of social responsibility. Thus, factors such as enterprise size, corporate equity, and

corporate factors have little effect on the quality of an external audit.

## CONCLUSIONS

Taking the marine enterprises as an example, this article explores the effect of external audit quality on corporate earnings management. The specific conclusions found are as follows:

External audit can be used as an alternative to internal controls to inhibit earnings management. Earnings management includes the management of accounting choice and real activity.

An external audit has a good supervisory role on earnings management and promotes authenticity and reliability in accountant financial statement information for the marine enterprise; the true external audit quality is related to the auditor's intensity of supervision, and the perceived quality of external audit in the marketplace directly affects the designer's reputation and ultimately the firm's reputation and scale.

Marine enterprises with high-quality external audits have stronger inhibition on earnings management, and there is a more significant negative correlation between earnings management of high-quality audit teams and the fulfilment of social responsibility by the marine enterprises.

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