

# *The Relationship between Equity Incentive and Earnings Management in Big Data Era*

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**Keywords:** Equity incentive, Earnings management, Company performance, Big data.

**Abstract:** For the operation and development of an enterprise, its management methods and means need to be constantly improved with the development of the times, so as to improve the company management system. Equity incentive and earnings management have become the main means of corporate governance. In fact, equity incentive is to encourage the operators to manage and operate the company better by giving them some equity as rewards and sharing the risks of stocks. The operation and development of enterprises need to constantly improve the management mode and mode according to the development of the times, so as to improve the company's management system, promote the improvement of the company's economic benefits and the company's long-term development. Starting from the choice of incentive mode, this paper discusses the influence of listed companies choosing different incentive modes on earnings management and corporate performance in the era of big data, which not only deepens the current research on equity incentive, but also helps to put forward feasible suggestions for listed companies to choose which incentive mode.

## 1. Introduction

Modern enterprises generally operate in a mode of separation of the two rights, and shareholders and managers are usually in a principal-agent relationship. The equity incentive mechanism alleviates the conflict of interests arising from the separation of management rights and management rights under the modern enterprise system to a certain extent [1]. The development of equity incentive mode has also brought a series of problems for enterprises, and earnings management is an important aspect that cannot be ignored [2]. The operation and development of enterprises need to constantly improve the management mode and mode according to the development of the times, so as to improve the company's management system and promote the improvement of the company's economic benefits and the long-term development of the company. The separation of management right and ownership, and the dispersion of shareholders have led to serious principal-agent problems in existing enterprises [3]. Under the principal-agent problem, there is a conflict of interest between the manager and the owner, and there is obvious information asymmetry [4]. In the process of management, the ownership and management rights are separated,

which makes the relationship between shareholders and managers a principal-agent relationship. Because of the information asymmetry between the principal and the agent, there is a certain risk when shareholders buy stocks for investment [5]. For corporate governance, the development of equity incentive mechanism is still immature, and there are many problems, such as more false information in the stock market. In fact, equity incentive is to give operators some equity as rewards and share the risks of stocks, so as to encourage operators to better manage and operate the company [6].

Through equity incentives, business owners can not only trust the enterprise to managers, but also help managers get higher salaries from business owners [7]. The original intention of equity incentive is to unify the benefit function of the operator and the owner, so as to solve the principal-agent problem caused by the separation of the two rights in modern enterprises and reduce the agency cost [8]. If the equity incentive system is not perfect, it will cause the management to use earnings management for personal gain, which will affect the company's governance and development. Therefore, the analysis and research on equity incentive, earnings management and corporate governance is of great significance to the long-term development of enterprises [9]. If the agent only modifies the simple rules of the enterprise finance within a moderate adjustment range, it will generally not have a bad influence, but if the agent excessively intervenes in the financial report, it is likely to affect the normal development of the enterprise [10]. Starting from the choice of incentive mode, this paper discusses the influence of listed companies choosing different incentive modes on earnings management and corporate performance in the era of big data, which not only deepens the current research on equity incentive, but also helps to put forward feasible suggestions for listed companies to choose which incentive mode.

## **2. The Connotation of Equity Incentive and Earnings Management**

### **2.1. Equity Incentive**

Company equity incentive is a long-term incentive mechanism for the company's own management and core technical personnel, which belongs to the category of option incentive. The main purpose of the company's equity incentive mechanism is to encourage and retain the core talents and senior managers in the company, and then to ensure that the company's talents are not lost. The core idea of equity incentive is that the interests of companies and managers are consistent, and the fluctuation of stock price will directly affect the interests of clients, which is closely related to the performance of companies. Equity incentive is a management mechanism for the company to adopt equity incentive to the management and core technical backbone personnel, so as to motivate and retain the company's senior management personnel and technical backbone personnel, so as to ensure that the company's core talents are not lost, and thus protect the company's long-term interests and development [11]. The content of equity incentive is often decided by internal personnel, and the final system approval is not approved by the client, which makes the whole plan approval just a form, and there is no scientific and effective supervision when the whole equity incentive plan is implemented. This will not only fail to promote the sustainable development of the company, but also reduce the economic benefits of the whole company and make the company's share price drop.

### **2.2. Earnings Management**

Earnings management refers to the management mechanism of enterprises by adjusting and controlling accounting income according to accounting standards. Earnings management can be divided into accrued earnings management and real activity earnings management according to object classification. At present, earnings management clearly shows that it can increase personal

income. When an enterprise owner signs a management agreement with a manager, an incentive system is generally adopted, that is, the manager's salary is linked to the company's performance, so the manager will adopt earnings management in the company's financial report in order to get more rewards. Earnings management is realized through the selection and change of accounting policies or accounting estimates. Managers try to obtain private benefits by interfering with the reaction and distribution of accounting earnings in different accounting periods. But in the long run, the real profit of the company will not be affected. This method divides the accounting profit of an enterprise into two parts: accrued profit and cash flow from operating activities. Taking reasonable earnings management measures in the process of corporate governance is of great significance to the long-term development of enterprises.

### 3. The Relationship between Equity Management and Earnings Management

Earnings management is a neutral vocabulary, which is the behavior of enterprise management authorities to maximize their own interests by controlling or adjusting relevant accounting income information in enterprise financial reports on the premise of complying with accounting standards. Equity incentive mechanism is based on the management system of separation of the two rights, which solves the problems of interest contradiction in the process of separation of the two rights to a certain extent. The imperfection of equity incentive mechanism and the influence of various factors may damage the interests of clients in order to maximize their own interests in the process of managing the company. Equity incentive and earnings management within the company are all for the further development of the company and better economic benefits. Therefore, it can be said that the relationship between earnings management and equity incentive is complementary, not opposite. While the equity incentive system brings power to managers, it also requires managers to fulfill their due obligations in order to exercise their corresponding rights. To a certain extent, the equity incentive system is also an incentive for managers to produce earnings management behavior [12].

The accounting information after earnings management by the management shows the expected effect of the company's management. Its purpose is mainly to adjust the actual profitability of the enterprise by influencing some key profitability indicators of the enterprise, misleading other stakeholders within the company, and maximizing the management's own interests. For example, Table 1 shows the statistics of industries where incentive companies are located.

Table 1: Statistics of incentive companies' industries

Industry distribution	Sample size	Proportion of total sample	Proportion of the industry
Manufacturing industry	64	58.2%	6.1%
Information technology industry	17	15.5%	2.7%
Construction industry	5	4.5%	1.5%
Real estate	7	6.4%	3.9%
Wholesale and retail trade	8	7.3%	4.1%
Social services	4	3.6%	7.1%
Communication and culture	2	1.8%	4.9%
Comprehensive class	3	2.7%	2.3%
Total	108	100%	4.0%

There is a principal-agent relationship between earnings management and equity incentive. In the process of the company's operation, the management personnel will tend to earnings management more when the equity incentive mechanism is implemented, and the management personnel will get more earnings management when the higher equity incentive is given to the senior personnel. Equity incentive urges enterprises to implement earnings management, and also restricts agents' earnings management behavior to a certain extent, so that the interests of the owners and managers of the company are as consistent as possible. Only when the company implements the equity

incentive mechanism, can it stabilize the source of talents for the enterprise, reduce the loss of personnel, and make the company achieve a more stable development. On the basis of the company's development, it can ensure the enterprise to carry out earnings management and bring maximum economic benefits to the enterprise.

#### 4. Effective Measures to Strengthen Earnings Management in Corporate Governance

##### 4.1. Optimizing Ownership Structure

In order to ensure the effective development of equity incentive, it is necessary to constantly improve the company's management measures. First of all, it is necessary to constantly improve the shareholders' meeting and optimize the ownership structure. In order to optimize the company's ownership structure, it is extremely urgent to establish the ownership structure with multiple shareholders' checks and balances, so that the company's ownership structure can be diversified. Socio-economic resources can be divided into material resources and human resources. In economic development, material resources are of course essential, but if no one acts on them, material resources cannot realize value increment. Equity optimization means that enterprises at different stages of development optimize the ownership structure of the company by adjusting the shareholding ratio of original shareholders or attracting external investors, so as to improve the efficiency of corporate governance, enhance the competitiveness of enterprises and maximize the value of equity.

Because of the principal-agent relationship between the company owners and managers, there will be information asymmetry between them. Therefore, in order to avoid the behavior of earnings management, we should not only pay attention to managers' management ability, but also assess their comprehensive qualities in the selection and training of managers. For example, Table 2 shows the distribution of stock sources of equity incentive.

Table 2 Distribution of stocks for equity incentives

Incentive stock source	Quantity	Proportion
Private placement	100	90.1%
Open market repurchase	5	4.5%
Transfer of major shareholders	3	2.7%
Not involved	2	1.8%
Total	110	100%

The mismatch between the company's stock control right and the stock residual claim right also requires the company to take checks and balances on the internal stock power, so as to further solve the problem of "insider control" within the company. In order to realize the optimal management of the ownership structure, it is necessary to disperse the shareholding ratio of shareholders, establish the ownership management structure with checks and balances among multiple shareholders, and realize the diversification of the ownership management structure. In actual operation, the acquisition of control rights does not only depend on equity, but the actual controller can also control the company in other ways. Through equity optimization, we can attract talents, retain talents, share the benefits of enterprise development with employees, realize the enterprise's "lasting foundation", improve corporate flow governance and enhance enterprise value. According to the theory of human capital, with the development of economy, the role of human resources has surpassed material resources and become the most dynamic and critical factor in economic development. Human resources are allocated in the human resources market, and the effectiveness of the human resources market directly determines the exertion of human resources value.

## 4.2. Strengthen the System of Company Information Disclosure

Companies should improve the false information disclosure mechanism and strengthen the supervision of stock market information. In the process of constructing the information disclosure mechanism, we should make clear the negative impact and possible losses caused by false information to the company, and standardize the information management behavior of the company personnel. For the false information in the stock market, it is necessary to carry out strong supervision and strengthen the establishment and perfection of the company information disclosure system. In the process of the company's operation and management, managers can take advantage of the loopholes in the accounting system to seek personal interests, and managers' earnings management behavior also arises. Therefore, it is of great significance to improve the accounting system for the company's operation and management [13]. In order to strengthen the supervisory role of the board of supervisors, on the one hand, it is necessary for the company to strengthen the selection of members of the board of supervisors, carry out rigorous personnel screening, and try to eliminate corrupt elements. On the other hand, it is necessary to constantly train the members of the board of supervisors to improve their professional quality and moral level.

In the process of the company's management, the behavior of earnings management is generally induced by the external market economy environment, so it is necessary to improve the market management system. The progress of equity incentive is mainly divided into four stages: announcement of plan, adoption, implementation and completion. Table 3 shows the progress of equity incentive.

Table 3 Progress of equity incentives

Programme progress	Plan	Adopt	Implementation	Complete	Total
sample size	47	26	25	12	110
Proportion	42.7%	23.6%	22.7%	10.9%	100%

When selecting or training managers, we should not only pay attention to the actual management ability of managers, but also pay attention to the comprehensive quality of managers. In the process of corporate governance, we should strengthen the supervision of managers, effectively prevent earnings management, and make the management behavior legal and effective. Under the market economy system, in addition to taking profit as the main condition and index of the company's listing, it is also necessary to assess the company's qualifications and market evaluation, etc., and comprehensively assess various factors, standardize the conditions of the company's listing, and avoid earnings management behavior. The motivation of earnings management determines the type of earnings management, and the type of earnings management determines how to carry out earnings management. That is, the method of earnings management, mainly including the choice of accounting policies, management of business activities, accounting adjustment of related transactions, etc. To strengthen the information disclosure system, the most important thing for companies is to pay attention to the negative impact of information disclosure. Only when it is clear that information disclosure will bring losses to the company can the company pay more attention to strengthening the company information disclosure system. Only under the normative action of laws and regulations can the company implement the equity incentive system more effectively.

## 5. Conclusions

In the process of company management, equity incentive system and earnings management are two means to achieve effective governance. Equity incentive can solve the conflict of interests between principal and agent. Equity incentive system leads to earnings management behavior, and it also

restricts managers' earnings management behavior. As for the double-edged sword of equity incentive, we should see its incentive effect on management, but we can't ignore the earnings management behavior of management. At present, China is constantly revising and perfecting the relevant legal system of equity incentive, but the relevant provisions of equity incentive are still at a relatively vague stage. Therefore, we should fully consider the legal system environment of equity incentive in China and the effectiveness of capital market, and conduct in-depth research and analysis on the accounting behavior of the whole process of the implementation of equity incentive plan in combination with the actual situation. Although there are many problems to be solved urgently in China's current equity incentive, through the implementation of effective measures to improve the company's management means, it can be said that China's corporate management mode will become more mature, which will eventually bring a positive impact on the company's profits. In the process of earnings management, we can strengthen the management of the whole company and improve the economic benefits of the company by constantly optimizing the ownership structure, implementing the independent board system and establishing a perfect manager market.

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