Study on Cash Flow Manipulation and Earnings Management-*Based on Empirical Evidence of China Listed Companies' SEO*

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Abstract

In order to obtain SEO (Secondary Equity Offering) qualification, china listed companies would do different levels of earnings management centering on accounting earnings indicators. While previous researches on earnings management are mainly focused on enterprise management authorities' accruals manipulation. In fact, in order to avoid losses, the user of statements would pay more attention to enterprise's cash flow when they are concerned with enterprises earnings quantity. With cash flow gradually being taken seriously, various contractual provisions will cover information about cash flow. In this paper, Jones model is used to make analysis according to industry years; the sample companies' cash flow is divided into normal cash flow (expected cash flows) and abnormal cash flow (unexpected cash flows); existence of earnings management behavior and management level of enterprises under China major shareholders' control is studied by univariate analysis method, and two models' research results are confirmed for each other; cross-section factors affecting cash flow earnings management are analyzed with multivariate regression approach.

Keywords: cash flow manipulation; earnings management; SEO

1. Introduction

In order obtain SEO qualification or for other purpose, listed companies would do different levels of earnings management centering on accounting earnings indicators, which would lead to subsequent declining performance (Teoh etal, 1998; Rangan, 1998; Shivakumar, 2000; Daniel, 2008). Enterprises' accounting earnings consist of accrual and net cash flow. Cash flow statement is prepared with cash basis as the principle, and does not subject to affect the accrual basis accounting's accruals, deferral, and amortization and allocation procedures. Compared to accrual basis accounting accruals, net cash flow is considered less likely to be manipulated, and is regarded as relatively reliable "hard" figures (Zhang, 2007).

Therefore, the previous research about earnings management is mainly focused on how enterprise management authorities manipulate accruals to achieve their purposes. Lu (2012) and other studies have found that listed companies do earnings management through manipulating accruals. Thus, in order to avoid losses, the user of statements would pay more attention to enterprises' cash flow when they are concerned with enterprises earnings quantity. Here implies such assumption: Cash flow is reliable and able to reflect the true value of the enterprise. With cash flow gradually being taken seriously, various contractual provisions (such as financing contract, compensation plan, performance evaluation, tax contract, and regulatory provisions) will cover information about cash flow. China regulators also recognize the limitations of single accounting earnings indicator. Diversified indicators begin to be used in the actual work and the cash flow and related indicators have been explicitly written into some regulatory documents.

Zhang (2007) thought that different from past understandings-"cash is king," "cash flow cannot be manipulated," operating cash flow of companies report like reported earnings is under the company's management control and manipulation. Burgstahler and Dichevresearched thresholds zeros of net profit, and found that companies with small losses before the report will use the method of improving cash flow to achieve profit.

Roychowdhury (2006) studied the earnings management of real performance conducted by the company to achieve a certain purpose, and found that the management behavior of the real performance has a positive impact on reporting operating cash flow report. This proves that do earning management by accruals is only one way of earnings management. China's listed companies may also achieve earnings targets through the manipulation of cash flow. Research with discretionary accruals method may not grasp the whole picture of China's listed company's earnings management. However, previous researches on manipulation of financial statements are mainly focused on income statements (Zhang, 2006). Cash flow manipulations a relatively subtle method of earnings management, and at present, there are not much more researches on it.

There are articles which already did preliminary studies on the existence of China's listed company's cash flow manipulation. Zhang (2007) did research respectively on companies avoiding negative cash flow, and companies avoiding demonization of difference with the previous phase 'performance, and found that there is cash flow manipulation. However, they did not examine whether the listed companies do earnings management through manipulating the cash flow. Compared with accruals earnings management, the biggest advantages of implementing cash flow manipulation to do earnings management (hereinafter referred to as cash flow earnings management) are that: firstly, it's relatively difficult to cause suspicion of statement users, but it will probably be misinterpreted as improving earnings quality; secondly, it is relatively difficult to cause auditors' and regulatory department 'attention, and thus is less likely to be found and to be punished; thirdly, accruals operating earnings must be managed when the fiscal year is ended, and when financial statements in under preparation.

Meanwhile, accruals manipulating ability is subject to enterprise assets, sales volume, prior year's adjustments, and other factors. If gaps are too large to be filled, it may not successfully reach the target, but this does not affect connected transactions. In addition, different from highly fragmented stock right structure of American enterprises, China's listed companies have the phenomenon that stork rights are highly centralized and one share has the dominance. This leads that major shareholders have absolute control over the enterprise. The behavior of managers reflects the will of major shareholders (Li, 2013). Therefore, in China, earnings management behavior of enterprises is undoubtedly closely related to the interests of major shareholders. Therefore, major shareholders have an incentive to assist listed companies to achieve the target. In terms of cash flow manipulation, they have the ability to make full use of connected transaction to transfer benefits. Existing empirical evidence also shows that major shareholders not only to empty (tunneling) through a variety of ways, but also to support listed companies through connected transactions and assets reorganization in certain "critical" moments.

The main contributions of this paper are reflected in the following aspects: Firstly, through the measure of cash flow earnings management, system analysis is made to whether China's listed companies use cash flow manipulation to do earnings management, which makes up for the deficiency of existing researches that only measure earnings management behavior with accruals and other methods, and contributes to a more comprehensive grasp of China's listed companies earnings management behavior; secondly, through study on cross-sectional factors affecting cash flow earnings management, this paper finds that major shareholder take advantage of related party transaction's "support" to listed company's cash flow, and further reveals the tunneling behavior between China listed companies and major shareholders; thirdly, this paper studies cash flow manipulation as one means of earnings management. Different from previous documents which take cash flow manipulation as direct purposes of management authorities, this paper study enterprise's cash flow manipulation behavior from the perspective of earnings management; fourthly, this paper may add research documents on cash flow manipulation. In china circle, certain researches were made on cash flow manipulation phenomenon of China's listed companies, but in general, the documents in this area is less, and is lack of empirical tests that have multi-angles and confirm for each other. This study is also beneficial for regulatory authorities to adjust the relevant regulatory policies.

2. Literature Review

2.1 Earnings Management

Healy and Whalen (1999) thought that earnings management refers that the "management authorities use personal judgment, and change the timing of business investment and planning transactions to change the figures on financial reporting in the process of preparing financial reports and planning transaction, for the purpose of misleading stakeholders' decisions based on company's economic performance or affecting contract's outcomes based on the figures of accounting reports."

China scholars' definition of earnings management is the closest to Healy and Whalen's (1999). It's the processing that enterprise management authorities make decisions and accounting choices when preparing financial reports and "form "transactions to change financial reports for the purposes of misleading other accounting information users' understanding of business performance or affecting outcomes of those contracts based on accounting data (Wei, 2000). It is also the point of view adapted in this paper.

The essence of equity financing is the process of selling existing shareholders' ownership, so the existing shareholders as controlling subject of SEO decision making will try to achieve the maximization of SEO stock issue price. In order to achieve this goal, they will not hesitate to use the method of earnings management to change investors' expectations about the future earnings potential of the company, so to give a higher stock price of the shares issued by the company and to improve financing efficiency (Teoh et al, 1998;. Frankel, 1995; Chaney and Lewis, 1995). As Rangan (1998) and Teoh et al. (1998) all found that companies have great impetus for implementing earnings management during the period of re-issuing shares. The existing shareholders affect investors' estimation of enterprise's value by increasing reported earnings, and acquire additional revenue from shares issuance. Earnings management can to a large extent explain the declining performance after shares re-issuing, investors have not been able to timely see through the earnings management behavior when companies issue new shares and are temporarily deceived, so they buy shares with high prices. Du Charme et al. (2004) believes that the company has the tendency of inflating reported earnings in the process of issuing new shares to add financing advantages, and found that companies have relatively high abnormal accruals during stock issuance. And the abnormal accruals reverse after the stock issuance. The abnormal accruals during shares issuance have a negative correlation with the performance after the issuance.

2.2 Listed company's cash flow manipulation

The flaw that accounting earnings is vulnerable to manipulation could let people extremely distrust accounting earnings quality, while cash flow is flattered by the entire market due to praise of financial scholars and security analysts. However, cash flow is also difficult to avoid the danger of manipulation. The study of Fang (2004) shows that, in order to cater to the views of the stock market, in 2001, listed company's management authorities may have the motives and behavior of adjusting cash flow to improve the quality of earnings. Zhang (2006) thinks that the operating cash flow of companies reports like reported earnings are under the control and manipulation of company's management authorities, thereby; he put forward the concept of "cash flow management" corresponding to "earnings management." However, the current previous research of earnings management focus on the income statement Zhang (2006), Cash flow manipulations is a relatively subtle method of earnings management, and at present, there are not many foreign or domestic researches on it.

Foreign studies, when doing research on net profit's thresholds zero, Burgstahler and Dichev (1997) found that the companies with small losses before the report will achieve profits by improving cash flow, which from one side reflects that the cash flow may be under the manipulation of management authorities; and Roychowdhury (2006) studied the company's earnings management behaviors of real performance for certain purposes, and established industry expected cash flow regression model on the basis of DKW model , and calculated the abnormal cash flow and found that the management behaviors of real business have an impact on reported operating cash flow . Based on Jones model, Ye and Darrough (2006) created Ye model, since the model adds more variables, it is possible to use the model to more accurately divide the cash flows into normal and abnormal cash flow, which provides a useful tool for our study on cash flow manipulation. Meanwhile, Ye and Darrough (2006) found that the normal cash flow and abnormal cash flow have different continuity, and that abnormal cash flow is not relevant to the company's performance.

3. Hypotheses

Most previous studies only examined the method of using discretionary accruals to do earnings management. In fact, cash flow manipulation as another means of earnings management does not get attention. In addition, existing performances can easily be regarded as the minimum goal of enterprise earnings by many related aspects (such as shareholders and other market participants). If reported earnings can't reach this goal, the company's market valuation and management performance evaluation are likely to have negative impacts. In order to maintain the existing performance, reported profit has to reach at least last year's earnings (Wei, 2005).

Therefore, this paper believes that when China's listed companies have motivation for right issuing, in addition to use accruals to manipulate earnings, they are likely to manipulating enterprise's net cash flow by related transactions, so that the net profit and cash flow indicators can reach the required standards. Compared with the accruals earnings management, the biggest advantages of implementing cash flow manipulation to do earnings management are that: firstly, it's relatively difficult to cause suspicion of statement users, but it will probably be misinterpreted as improving earnings quality; secondly, it is relatively difficult to cause auditors' and regulatory department' attention, and thus is less likely to be found and to be punished; thirdly, accruals operating earnings must be managed when the fiscal year is ended, and when financial statements in under preparation. Meanwhile, accruals manipulating ability is subject to enterprise assets, sales volume, prior year's adjustments, and other factors. If gaps are too large to be filled, it may not successfully reach the target, but this does not affect connected transactions.

H1: Companies with motivation of SEO have cash flow earnings management behavior

Enterprises may implement cash flow manipulation in order to achieve certain purposes, but not all companies with motivation would manipulate cash flow, for example: the study of Lei and Liu (2006) on SEO enterprises found that controlling shareholders' share proportion, controlling stake's nature, the expected size of raised funds, capital reserving pressure are all factors affecting earnings management behavior. Zhang (2007) believed that companies choosing whether to manipulate cash flow may be affected by the accounting treatment, operating conditions, financial characteristics and other factors. China Listed Companies "shell" resource's guarantee, rights offering behavior being able to bring private interests to controlling shareholders are the financial guarantee to perform tunneling behavior. Therefore, major shareholders pay great attention to whether listed companies can keep the "shell" resources, and obtain qualification of rights offering and to rights offering amount, and they are motivated to assist listed companies to achieve the goals, and the main means of operation is connected transactions. Previous documents has confirmed that when stock rights are highly concentrated, the more control over the enterprise controlling shareholders get, the more private profits of control would be obtained by rights offering, and it's more likely to assist enterprises to do earnings management. Thus, the second hypothesis is proposed:

H2: Cash flow earnings management level of companies with SEO motivation is positively correlated to the number of companies' connected transaction.

4. Empirical Study Design

4.1 Data sources and sample selection

This paper selects samples and corresponding financial data from Xenophon database. Because China's listed companies began to disclose cash flow statements from 1998, the new accounting standards began to be implemented in 2007. Considering the impacts on the data and considering that cash flow data used in the model was lagged one phase, the sample annual range selected in this paper is 1999-2006. In this paper, industries are classified according to first level standard of CRSC's classification. Due to the large number of manufacturing enterprises, they are classified according to the secondary subjects. Due to special business of financial companies, the paper excluded financial companies to comply with research conventions. Because it needs sub-sectors and annual return, industries that have less than 15 listed companies is excluded. 8529 listed companies are left after necessary exclusion. Then select companies whose operating profit is slightly positive, or whose profits have a slight increase or which have refinance motivation as samples of study. For companies whose operating profits are slightly positive, companies whose return on equity (ROE) is greater than 0 but less than 0.02 are selected as samples ; for companies whose profits have slight increase, companies whose return on equity (ROE) is greater than 0 but less than 0.01 are selected as samples.

4.2 Measure of the level of earnings management

In order to measure the level of earnings management, this article will use Ye model and Jones model to decompose sample companies' cash, which would result abnormal cash flow, and then examine features of abnormal cash flow to understand the existence and level. of companies cash flow and earnings management.

Cash Flow Indicators (CFO)

Cash flow studied in this paper refers to cash flow from operating activities of listed companies.

Accruals (ACR)

Enterprises' operating profits (EARN) minus the net cash flow from operating activities equal accruals.

The dependent variable

Later, this paper will examine whether SEO companies have cash flow earnings management behaviors. Specific measuring indicators are each company's abnormal cash flow (cash flow earning management), and here it is named as ablagseo.

Test model of cash flow earnings management's existence

(1) Jones accrual model

$$ACR_t = \pi_0 + \pi_1/A_{t-1} + \pi_2(\Delta REV_t - \Delta REC_t) + \pi_3 PPE_t + \xi_t$$

Among them, ACR_t is the actual accruals of company i after the total assets adjustment at the end of the last phase; ΔREV is the gap between current period's main business income and main business income of the last phase after the total assets adjustment at the end of the last phase; ΔREC, t is the gap between balance of accounts receivable at the end of the phase of current year and balance of accounts receivable at the end of the last phase after the total assets adjustment at the end of the last phase; PPE is the company i's fixed assets value of the current phase after the total assets adjustment at the end of the last phase; A_{t-1} is the company i' total assets at the end of the last phase. Use the estimated overall characteristic parameter $\pi_0, \pi_1, \pi_2, \pi_3$ are plugged into the modified Jones model:

$$NACR_t = \pi_0 + \pi_1/A_{t-1} + \pi_2(\Delta REV_t - \Delta REC_t) + \pi_3 PPE_t$$

Among them, $NACR_t$ is expected accruals.

Thus, company iis manipulative accruals (unexpected part)are obtained:

$$AACR_{i,t} = ACR_{i,t} - NACR_{i,t}$$

(2) Jones model

On the basis of Jones model and DWK model, Roychowdhury (2006) established and used this model, and found the existence of cash flow manipulation. Same with principle of accruals cross-sectional Jones model, it separates normal cash flow (expected cash flow) and abnormal cash flow according to industry years.

$$CFO_t = v_{00} + v_1/A_{t-1} + v_2 REV_t + V_3 \Delta REV_t + \psi_t$$
$$NCFO_t = v_{00} + v_1/A_{t-1} + v_2 REV_t + V_3 \Delta REV$$
$$ACFO_{i,t} = NCFO_{i,t} - CFO_{i,t}$$

Among them, CFO_t is the actual operating cash flow of company i after the total assets adjustment at the end of the last phase; REV_i is current phase's main business income after the total assets adjustment at the end of the last phase; ΔREV_i is the gap between current phase's main business income and main business income of the last phase after the total assets adjustment at the end of the last phase; PPE is the company i's fixed assets value of the current phase after the total assets adjustment at the end of the last phase; A_{t-1} is the company i's total assets at the end of the last phase. Overall characteristic parameter V_0, V_1, V_2, V_3 estimated by using formula (4)are plugged into the model(5) to get the normal cash flow(expected cash flow) company i in the year of t, then get the company's abnormal cash flow by using formula(6), and use this indicator to evaluate the existence and level of enterprise's cash flow earnings management.

(3) Ye model

Ye (2006) improved operating cash flow model on the basis of Jones model and DWK model, and added net working capital, depreciation rate and operating profits of last year and other variables in the model estimation, and established Ye model.

(1) Ye cash flow model

$$NCFO_t = b_{00} + b_0 \frac{1}{A_{t-1}} + b_1REV_t + b_2DREV_t + b_3CFO_{t-1} + b_4EARN_{t-1} + b_5ncwc_{t-1}*DREV_t$$

$$+ b_6PPE_t + b_7DPPE_t + b_8dep_{t-1} + b_9dep_{t-1}*PPE_t$$

$$ACFO_{i,t} = NCFO_{i,t} - CFO_{i,t}$$

Among them, b_{00} is the intercept; $EARN_{t-1}$ is operating profit after total assets adjustment at the beginning of the year; $ncwc_{t-1}$ is non-cash operating capital after total assets adjustment at the beginning of the phase, PPE_t is net value of fixed assets after total assets adjustment at the beginning of the phase. $DPPE_t$ is the change of net value of fixed assets after total assets adjustment at the beginning of the phase; dep is depreciation rate. Same with Jones model, use the formula (6)to estimate overall characteristic parameters, and plug them into the model (7), to get the normal cash flow (expected cash flows) of i-th company in the years of t, obtain the company's abnormal cash flow by using formula (8) , and use this indicator to evaluate the existence and level of the cash flow earnings management.

$$ACFO_t = \alpha_0 + \alpha_1FIRST_t + \alpha_2RPT_t + \alpha_3REV_t + \alpha_4AACR_t + \alpha_5ACR_t$$

$$+ \alpha_6LEV_t + \alpha_7PB + \alpha_8SIZE_t + \varepsilon_t$$

Among them, FIRST is the shareholding ratio of the largest shareholder; RPT is connected transaction amount after total assets adjustment at the end of last phase; REV is sales revenue after the total assets adjustment of current phase. PB is the natural logarithm of; LEV is asset-liability ratio; SIZE is the natural logarithm of the current total assets. Since this paper studies the daily business activities' support to online program by connected transactions, buying and selling of goods and services transactions between related parties and listed companies are mainly researched in this paper, excluding the impact of other types of connected transactions. The connected transactions (RPT) measured in this paper refers that the amount of buying and selling of goods and services total transactions divide the total assets of the last phase.

In addition, in order to eliminate the influence of this paper for not fully desperate the expected and unexpected parts in earnings management accounting model, we controlled business revenue (REV), asset-liability ratio (LEV), book value (PB) and the natural logarithm of total assets (SIZE).

5. Empirical Analysis

5.1 Univariate analysis

In order to study whether China listed companies do cash flow earnings management, this paper respectively calculates the SEO company's cash flow items and abnormal value of accruals (earnings management's measurement value)by using Ye model and Jones model , and does sign test and dummy variable test . The results are shown in Table 1 and Table 2:

Table 1: Mean sign test results

Ye model				Jones model			
acfo		aacr		acfo		aacr	
mean	t value	mean	t value	mean	t value	mean	t value
0.028***	(6.120)	0.018***	(4.146)	0.028***	(5.811)	0.0388***	(8.751)

*indicates the results is significant at the level of 10% ; ** indicates the results is significant at the level of 5%; ***indicates the results is significant at the level of 1%

Table 2: Dummy variable regression analysis results

	Ye model		Jones model	
	Coefficient	P value	Coefficient	P value
dumlagzr	0.0156***	0.001	0.0178	0.000
dumroe	-0.015***	0.000	-0.021	0.000
dumchroe	0.010**	0.024	0.0103	0.031
dep_{t-1}	0.208***	0.000		
ppe_t	0.174***	0.000		
$dep_{t-1}*ppe_t$	-0.156***	0.000		
Δppe_t	-0.155***	0.000		
rev_t	-0.006**	0.021	-0.006	0.029
Δrev_t	-0.026***	0.000	-0.062	0.000
$ncwc*rev_t$	0.419***	0.000		
$earn_{t-1}$	0.069***	0.000		
cfo_{t-1}	0.086***	0.000		
_cons	-0.110***	0.000	0.028	0.000
F	451.22		67.04	
adj.R^2	0.4005		0.368	
N	8762		8762	

*indicates the results is significant at the level of 10%; ** indicates the results is significant at the level of 5%;

***indicates the results is significant at the level of 1%

It can be seen from Table 1 that SEO companies' manipulative accruals (aacr) in the previous year before SEO (the year with finance motive and the most important year for SEO qualification examination) in two models were 0.018 and 0.0388, significantly greater than zero, and the significance level is higher than 1%, indicating that the SEO companies have significant behavior of increasing profits through accruals, which is consistent with most previous studies. According to the change of cash flow manipulation measurement and abnormal cash flow, the cash flow (acfo) of abnormal operating activities in the previous year of SEO (the most important year for SEO qualification examination) in two models are same, both of them are 0.028, and significantly (significance level is 1%) is greater than zero. According to dummy variable regression results, the coefficient is 0.0156, and significance level is 1%, which is consistent with the results of the sign test. This indicates that some listed companies with SEO motivation manipulate earnings through accruals, at the same time; they would as take earnings management method of cash flow. It supports the hypothesis H1.

5.2 Analysis on Cross-sectional Factors Affecting Earnings Management

Dependent variable in regression model and descriptive statistics results of each variable are shown in Table 3.

Table 3: Descriptive statistics results of regress or variable

Model	Variables	Mean	Median	Standard Deviation	Minimum	Maximum	Z value
Ye	ablagseo	0.08	0.033	0.113	-0.803	0.500	8.556
Jones	ablagseo	0.08	0.0347	0.119	-1.006	0.512	9.545
	first	0.46	0.398	0.172	0	0.886	
	rpt	0.27	0.007	7.340	-0.019	682.44	
	rev	0.60	0.520	0.642	0	15.991	
	aacr	-0.05	0.007	0.320	-5.142	18.659	
	acr	-0.04	-0.024	0.123	-4.448	1.959	
	lev	0.69	0.492	9.394	0.0002	877.256	
	pb	4.44	2.749	36.083	-572.653	2915	
	a	21.4	21.022	0.984	12.314	27.111	

As can be seen from Table 3, the gaps of connected transactions' proportion in the total assets of the end of last phase is very obvious, reflecting amount gaps of different enterprises' connected transactions. According to stock holding ratio of the largest shareholder, the minimum is 0, the highest is up to 88.6%, mean is 41.6%, median is 39.80%, higher than 35%, indicating that there is the widespread phenomenon of the dominance of one share in China's listed companies. Meanwhile, in the Ye model, the median of ablagseo, abroe and abchroe were 0.033,0.0006 and 0.0217, Z values are 8.556,8.858 and 5.103, while in the Jones model, the median of ablagseo, abroe and abchroe were 0.0347,0.002 and 0.024, Z values are 9.545,9.686 and 5.030. The existence of cash flow earnings management is further illustrated. In addition, it is defective that China documents only replace earnings management level with manipulative accruals when studying earnings management.

Through the above analysis, it was found that the abnormal cash flow of companies with SEO motive is significantly positive, thus we believe they have cash flow earnings management behavior. In addition, we cannot determine whether companies' cash flow is under manipulation. Through the following, multiple regression analysis we can learn more about the listed company's earnings management behaviors and analyze the influencing factors. Under the background that major shareholders have the control, major shareholders would support listed companies by connected transaction and other methods at crucial moments. Then whether listed company's cash flow management is related with connected transactions is the focus of our attention. In this paper, based on above data, excluding related party transactions and outliers of cash flow earnings management variables, 590 SEO companies are included in this paper. The multiple regression analysis variables affecting earnings management level with Ye Jones model and model, the results are shown in Table 4, Table 5:

Table4: Ye model

| | SEO | |
	Coefficient	Pvalue
first	0. 022*	0.072
rpt	0. 029***	0.005
rev	-0.019***	0.000
aacr	-0.204***	0.000
acr	-0.578***	0.000
lev	-0.034***	0.001
pb	0.0005	0.157
at	-0.018***	0.000
_cons	0.423***	0.000
F	165.65	
adj.R^2	0.6863	
N	590	

Table 5: Jones model

| | SEO | |
	Coefficient	Pvalue
first	0.023**	0.037
rpt	0.031***	0.001
rev	-0.027***	0.000
aacr	0.076	0.557
acr	-0.963***	0.000
lev	-0.062***	0.000
pb	0.0005	0.101
at	-0.013***	0.000
_cons	0.348***	0.000
F	232.36	
adj.R^2	0.7546	
N	592	

As can be seen from the multiple regression results of Ye model, under the condition of controlling firm size, book value, asset-liability ratio, accruals, main business income and accruals earnings management, regression coefficient of cash flow earnings management level and major shareholders (first) and connected transactions (rpt)t were 0.022 and 0.029, and are respectively significant at the level of 10% and 1%. It indicates that the larger the shareholding ratio is, the greater amount of connected transactions will be, and major shareholders are more likely to support listed companies. That major shareholders "support" listed companies by connected transaction is further confirmed. It supports the H2.

As can be seen from the multiple regression results of Jones model, under the condition of controlling firm size, book value, asset-liability ratio, accruals, main business income and accruals earnings management, regression coefficient of cash flow earnings management level and major shareholders (first) and connected transactions (rpt)t were 0.022 and 0.029, and are respectively significant at the level of 5% and 1%. It indicates that the larger the shareholding ratio is, the greater the amount of connected transactions will be, and major shareholders are more likely to support listed companies. And they will be more competent to assist listed companies to gain SEO qualification. It supports the H2.

6. Conclusion

Through empirical analysis of 1999--20015 SEO companies, it can be found that China's listed companies have cash flow earnings management behavior in the SEO process; through multiple regression analysis on affecting factors of cash flow earnings management cross-section, it can be found that under the condition of controlling company size , price-to-book ratio, asset-liability ratio, accruals, main business income and accruals earnings management   stock holding ratio of major shareholders and cash flow earnings management level have significantly positive correlation, connected transactions and cash flow earnings management level have significant positive correlation.

In future studies, models and methods used to measure cash flow earnings management level should be further optimized, in order to more accurately capture the China's listed companies cash flow earnings management behavior; meanwhile, the existence and affecting factors of cash flow earnings management can be studies by combining other motives of earnings management, such as IPO.

References

Burgstahler D., J. Jiambalvo, and T. Shevlin. 2002. Do stock prices fully reflect the implications of special items for future earnings? Journal of Accounting Research 40 (3): 585-612.

Chen, Dai, "Research on Earnings Management Behavior and Methods of Companies with A share Loss" [J] China Accounting Review, 2005, 2: 299-310.

Chen, "Empirical Study on Listed Companies' Operational Cash Manipulation" [J] Finance and Science, 2006, 4.

Daniel A. Cohen and Paul Zarowin，2008，"Accrual-Based and Real Earnings Management Activities around Seasoned Equity Offerings", working paper.

Dechow Kothari,Watts JAE. The Relation Between Earnings and Cash Flows[J].Journal of Accounting and Economics,1998,(25)

Healy，P.M.，and J.M.Wahlen.，1999, "A Review of the Earnings Management Literature and Its Implications for Standard Setting", Accounting Horizons12: 365-384.

Lu, "Empirical Research on Earnings Management of China's Lost Listed Companies" Accounting Research.1999, 9: 25-31.

Li, Yu, Wang, "Emptying, Support, Acquisition and Reorganization - Evidence from China's Listed Companies". Economic Research, 2005,1.

Li, Song, "Analysis on Factors Affecting China's Listed Companies Allotment   Decision Making" [J]. Economic Science, 2003, 3

Rangan, S., 1998'Earnings before seasoned equity offerings: are they overstated? Journal of Financial Economics 50: 101-122.

Ren Chunyan, "Review on Earnings Management" [J]. Economic Management. New Management, 2005, 24: 20-25.

Shivakumar，L，2000,' Do Firms Mislead Investors by Overstating Earnings before Seasoned Equity Offerings? 'Journal of Accounting and Economics 29:339-371.

Sugata Roychowdhury, 2006, Earnings Management through Real Activities Manipulation' Journal of Accounting and Economics

Teoh,S. H.,Welch, I., Wong, T. J.,1998, "Earnings management and the underperformance of seasoned equity offerings", Journal of Financial Economics 50, 63-99.

Wang, "Analysis on China's Listed Companies' Cash Flow Manipulation Phenomenon" [N] Securities Market Herald, 2004, 5: 34-42.

Wu, Bo, Wang "To What Extent Cash Flow Is Managed- Evidence from China's Listed Companies" [J] Financial Research, 2007, 3.

Wang, Wang, "Executive Control, Payment and Earnings Management - Empirical Study Based on China's Listed Companies" [J] Management World, 2007.7

Xia, "Review on Foreign Earnings Management Measurement Methods" [J]. Foreign Economics and Management, 2002, 10.

Ye, J. and M. Darrough. 2006. "Abnormal operating cash flows: Implications for financial forecasting, predicting earnings restatements, and stock returns,

Zhang. R. Cash flow management. Incentive and market pricing, 2006 Bruns, W., and K. Merchant, 1990, The dangerous morality of managing earnings, Management Accounting 72, 22-25.

Zhang, Guo, "Earnings Management and Controlling Shareholders' "Tunneling Behavior" - Evidence from Companies of Right Issue" [J]. Nankai Economic Studies, 2007,6: 72-84

Zhang, "Research on China's Listed Companies Cash Flow Manipulation Behavior" [Z]. Papers of China's Fifth International Symposium on Positive Accounting, 2006.