

Experimental Research on Comprehensive Income Disclosure, Valuation Judgment of Appraiser and Earnings Management Recognition

Xiangrong (Gloria) Hao

Department of Accounting and Finance, Unitec Institute of Technology, New Zealand

Zhihong Zhang

Accounting School, Shandong University of Finance and Economics, China

Abstract

Purpose – the purpose of this paper is to investigate appraisers' practice ability and level at present in China, examine whether different comprehensive income disclosure models could lead to significant differences in the appraiser's estimate of share price and the appraiser's recognition ability of enterprise's surplus management.

Design/methodology/approach – Experimental method is the main methodology in this research. We design three disclosure modes of comprehensive income, with or without earnings management (two forms), forming 3 x 2 subject experiments to examine influences to the appraiser's valuation judgment, and at the same time, whether it is possible for the appraiser to identify the corporate earnings management through the information in the statement, and determine whether transparent disclosure could reduce the stock price judgment upward bias brought about by the observed earnings management.

Findings – The result shows that there is no significant difference between the effects of comprehensive income modes on valuation judgments. And detailed disclosure of comprehensive income and its components don't significantly improve the transparency of earnings management. Qualitative survey provides evidences for the experiment conclusion. Furthermore, the appraisers' competence has been assessed from the view of accounting information users and we have found the practice level of the appraiser in China has yet to be greatly improved.

Originality/value – To the best of our knowledge, this is the first paper to provide evidence of Chinese appraisers' recognition on comprehensive income and to examine different disclosure modes of comprehensive income on the judgments of professional appraisers.

Keywords Disclosure Modes of Comprehensive Income; Valuation Judgments of Appraisals; Earning Management; Experiment Design

Paper type Research paper

• Introduction

The *Interpretation No.3 of Accounting Standard for Business Enterprise* issued by the Ministry of Finance in 2009 means that the accounting standard system formally introduces Comprehensive Income Theory (CI) to keep with the international tendency. In 2011, the International Accounting Standards Board (IASB) revised the "No. 1 International Accounting Standards - Presentation of Financial Statements", and at the same year the US Financial Accounting Standards Board (FASB) released the No. 5 updated accounting standards - comprehensive income. The updating of FASB and IASB realized convergence on the presentation of comprehensive income (Tammy W., 2011; Harrington T. L., 2012; Ree L. L., Shane P. B., 2012). Information disclosure of comprehensive income has become an international trend, as the disclosure of comprehensive income is the intrinsic needs of the development of market economy, and recognition of the users of financial statements on decision making of information. In 1990s, the Britain and America began to develop the guidelines on disclosure of comprehensive income, but until today, the disclosure way of comprehensive income has not yet formed a unified form, which becomes an international research focus. It is fewer than six years since the guidelines were issued in our country, so both the practice and theory of CI are at the starting stage. CI has not been widely concerned and used in our country and the support role for decision-making is unclear. America's experiment research, however, suggested that the CI plays a decision-making related role for the financial report users (Li Shangrong, 2009). Accounting information quality directly affects the investor's decision and

judgment, and the accounting estimate not only improves the relevance of accounting information, but also provides space of earnings management for the company's management layer (Zhang Jixun, Zhang Lixia, 2012). When the necessary information for decision making and management requirements are in conflict, the differences between the permanent income included in comprehensive income and projects included in temporary income are very important to achieve the two goals (Dee c. C., 1999), which is verified by Zhou Wei, Lu Xingjie, Yang Dan (2011) in their studies, and they summarized the behavioral finance accounting under experimental study and concluded four research hot topics, two of which are related to disclosure mode of financial reporting, with one affecting the decision-making of investors and the other affecting the decision-making of analysts. Judgment and decision-making belong to a branch of psychology "behavioral decision theory", and judgment has become the premise of accounting recognition and formation of audit opinion. Therefore, the study on the influence of disclosure of accounting information on decision-making should belong to the category of behavioral economics.

As is known to all, evaluation is both science and art. It is called art because the evaluation process involves much subjective judgment of appraiser. Therefore, the study on this issue is a core and key for the appraisal industry. It is difficult to enhance the appraisal quality if the problem of professional judgment cannot be solved fundamentally. The CI information is closely related to the enterprise value, and from the angle of behavioral science and psychology, appraiser will be certainly affected by the degree of information disclosure when making judgment of enterprise value by using the CI information. Therefore, this study adopts the experimental design principle, with the appraiser as the subject and evaluation of financial statements of a certain enterprise and stock price estimates for experimental tasks, and designs the experiment on the influence of different CI disclosure model on appraiser with or without earnings management. The study, by making comparison with foreign related surveys, describes appraisers' practice ability and level at present in China on one hand, and focuses on analyzing whether different CI disclosure models may lead to significant differences in the appraiser's estimate of share price, providing policy basis for disclosure of CI and suggestions for decision of valuation and analyzing the appraiser's recognition ability of enterprise's surplus management.

- Literature review

The United States issued Statement No. 130 *Reporting Comprehensive Income* in 1997, which caused an upsurge of study on CI. It involves the role, forms and implementation in practice of disclosure of comprehensive income information (Maines L. A., 2000; Olga F., 2011).

From the point of view of value judgment, on the one hand, it analyzes the influence of different mode of disclosure on decision-making of investors, financial analysts and management layer from the angle of survey and experiment. For instance, Hirst D. E. and Hopkins P. E. (2000), by using experimental method from the angle of earnings management with financial analysts as subjects, found in disclosure of earnings management and the analyst's judgment of stock price, the disclosure of CI and its components in the statement of changes in equity is not as effective as the disclosure in the income statement. The financial analysts tend to track the trace of enterprise surplus management in a separate statement of comprehensive income, which is easier to obtain data of unrealized gains and losses and pays little attention to the information in the statement of changes in equity (Hirst D. E., 1998). Marlys G. L. (1998) has carried on analysis to the experimental results of this paper and pointed out that the knowledge and incentive mechanism of analyst result in not enough power for them to collect data, causing significant difference of disclosure in the income statement and out of income statement. At the same time, the difficulty

of the user of financial statement in information processing leads to difference of different disclosure models and in or out of earnings management. Maines L. A. (2000) and Scott W. R. (2006) also adopted experiment to study the influence of CI disclosure model on non-professional investors, and found in study that non-professional investors rely on CI in their decision-making, but when the CI information scatters in the financial statement, investors are unable to collect the information intentionally when making decisions. Therefore, the disclosure mode is very important for the users of financial report in judgment and decision-making. Hirst D. E., Hopkins P. E. and Wahlen J. M. (2012) found in their analysis that, in different comprehensive income disclosure mode, the analysts' judgment on bank risk level is different. Meanwhile, Hunton J. E., Libby R. and Mazza C. L. (2006) found in experiment that the higher the degree of disclosure is, the easier is identification of earnings management ; the lower is the transparency of the disclosure, the more difficult to identify the earnings management and make overestimate of valuation. That means different disclosure mode of CI will lead to different judgment of statement users.

On the other hand, it analyzes the relations between CI and the enterprise value from the empirical perspective, trying to provide the rationality of the disclosure of CI. For instance, Cahan S. F. (2000) pointed out that in the statement of changes in equity, the disclosure of positive IC will lead to investor's and analyst's overestimate of enterprise value (Biddle G., Choi J. H., 2006; Kanagaretnam K., 2009). There are also researches which reach the opposite conclusion. For instance, Dhaliwal D. (1999) found in study that except for the financial company, CI is not an indicator better than net income that can measure corporate performance (Dee C. C., 1999; Dehning P. B., 2004; Seref T., 2012). But Olga F. and Stefania V. (2012) comprehensively combed the value relevance of CI at early stage and other CI and pointed out that in the previous empirical studies, the limitations of the ordinary least squares regression (OLS) may be the root to the opposite conclusion. Chinese scholars also reached a similar point of view in study of value relevance of CI in different countries and regions, and pointed out that in the current environment in China, the value relevance of CI is lower than net profit, but the conclusions of empirical research are not entirely consistent (Li Shangrong, 2009; Zou Yan, 2010; Li Li, 2012; Gai Di, Gao Chao, 2012).

Practice and research both show that the disclosure of accounting information will exert important influence on investors and financial analysts. However, as the appraisal industry has existed for only 25 years in China, its industrial influence is far less than accounting and auditing, so the research from the angle of information disclosure focuses on accounting, auditing, and investment while ignoring the consulting service range which serves for the state-owned assets maintenance and appreciation from the very beginning. However, evaluation plays an irreplaceable role in merger and acquisition, major assets reorganization, enterprise value realization and so on, and becomes an integral part of China's economic development, and assessment is a business which cannot be split with accounting, auditing and finance, in both the measurement of fair value and audit of accounting assets valuation for both financial advisers in valuation business institutions and accepting the hiring of appraiser in audit procedures. Therefore, both the development of evaluation industry in China at present and the orderly development of China's market economy need pay attention to the influence of accounting information disclosure on evaluation and judgment. The study on evaluation and judgment, like the study on accounting audit judgment, will also become a hot research topic in the future.

The earliest study on evaluation judgment or valuation judgment abroad began in the early 1990s, when the Royal Institution of Chartered Surveyors (RICS) made a lot of researches in this area. Harvard T. (2000) discussed the relationship between the decision of appraiser and the valuation

results, and pointed out that the judgment of valuation process determines the valuation result, and then he stated that appraiser and appraisal companies have realized the potential effect of the appraiser's behavior, especially the effect of heuristic method on valuation decisions (Havard T., 2001). Hansz J. A. (2004) and Dodonova A. (2009) found in survey on appraiser of real estate in America that experienced appraiser shows anchoring effect from the client. Iroham C. O. and Oloyede S. A. (2012) pointed out that it is found in the United States, Britain, New Zealand and Nigeria that the client has anchoring effect on appraiser. Alfred R. Kim (2009) said the root cause for the same assets with different valuation conclusion for the same valuation purpose lies in that valuation needs professional judgment, and relatively speaking, the fair value of accounting contains too many rules and too little judgment. That means evaluation and judgment is more important than accounting audit for practice quality.

As can be seen from the British and American researches, CI disclosure and enterprise value are correlated, though there are some opposite conclusions which may be caused by methodological flaws. The higher the transparency of disclosure is, the easier it is for report users to find earnings management. The study on evaluation judgment is 30-odd years later than the accounting audit judgment, and it is a research direction with a great development space though it is relatively immature, which can be found in the research of judgment of accounting and auditing and related research in the field of economy. In the existing research, there is no analysis of the influence of CI disclosure mode on evaluation and judgment from the angle of experiment, therefore, this article puts forward the research content.

- Theoretical analysis and research hypothesis

From the perspective of human's cognitive ability, it is not realistic to have rational expectations for any judgment without any deviation, and we should realize the weakness of human nature and the incompleteness of information processing. And as the transparency of information is the cornerstone of the capital market, therefore, according to the research on relevance of information disclosure and value, we can believe that the analyst's judgment will be affected by the information disclosure degree related to value, which has become a widely accepted fact (Hirst D. E., Hopkins P. E., 2000). Though financial reporting standards compulsively require adequate disclosure of information and our country's accounting standards also constantly increase disclosure requirements, such as the international convergence of CI disclosure, yet as the CI disclosure in China has been implemented for only four years, whether the appraiser, one of external users of statements, can make full use of this information, and whether different modes of disclosure may cause different utilization efficiency of information need be investigated and analyzed. Based on this, we want to check whether CI in China also has the effect mentioned above, and thus we put forward H1.

H1: In the absence of earnings management, different transparency of CI disclosure leads to different stock price estimated by the appraiser, that is, the more transparent the disclosure is, if the earning is positive, the higher will be the estimated price (and vice versa). The disclosure of estimated stock price in the income statement is greater than the estimated stock price disclosed in the notes (i.e., not disclosed) in the statement of changes in equity. But when the CI fluctuates irregularly each year, making the appraiser unable to anticipate the change trend of the earnings information of statement, the disclosure mode will not result in differences in judgment of share price.

This information asymmetry caused by not completely effective market and cognitive deviation provide an opportunity for enterprises, that is to say, if the H1 takes effect, market stock portfolio

available for sale can be used to actively manage earnings^①. In Britain and the United States, to the provisions and research of the disclosure of CI have existed for more than 20 years, with the main point view that the more transparent the disclosure of CI is, the more easily the earnings management will be found, and the disclosure of CI in the income statement is more transparent than that in the statement of changes in equity (Hirst D. E., Hopkins P. E., 1998). For instance, investors, financial analysts, and other external statement users usually use financial accounting information to evaluate the company and make decisions accordingly (Alastair L., 2013), and company managers adjust some income projects with incentives, which affects the external statement users' judgment of the company (stock price) (Joshua R., Varda Y., 2008). Research shows that the improvement of information transparency can increase the possibility of earnings management to be identified, and, once identified, external statement users will consciously eliminate the possible impact of earnings management, and the most common situation is lower than the stock price estimated when the earnings management is not identified (Wright H. S., Christopher S., 2010; Yang J., Chi J., Young M., 2012; Tian Lulou, 2012). Therefore, this study assumes that the appraisers' awareness of earnings management will affect their judgment on the stock price, that is to say, earnings management will influence the appraisers' judgment and decision of accounting information. Accordingly, we put forward the hypothesis 2:

H2: When there is earnings management, compared with not disclosing CI, the disclosure of CI and its components in the income statement will probably enables the appraiser to identify this earning, and the estimated stock price will be consistent with that without earnings management. That is to say, higher disclosure transparency is more conducive to curbing earnings management so as to reduce the degree of information asymmetry between appraiser and management layer. In specific, the stock price estimated under earnings management without comprehensive disclosure is greater than the average value of share prices estimated in three disclosure modes without earnings management, and ultimately under the condition of earnings management, the estimated stock price disclosed in income statement equals no disclosure of CI without earnings management.

Only part of the information in the process of cognition receives attention and processing, but in the information acquisition stage, people tend to pay more attention to information which is easily to obtain and grasp rather than look for other relevant information. According to the psychological framework effect, when people's cognition forms, the background they are faced with, and the description and expression of things will affect people's understanding and judgment of things. If the information is present continuously, while the judgment or decision is made in a period of time, the primacy effect is the primary. We know that when the general users of financial statements analyze the statement they are using, these statements will continuously stimulate the users, so the income statement appearing at first with the most detailed information of CI will receive more attention and generate the primacy effect. As the relationship between CI and net income is not highlighted in the disclosure of the statement of changes in equity, but is reflected in the income statement, the CI information disclosed in the income statement may partly be ignored by users and make the disclosure mode of the statement of changes in equity be favored by many companies that want to reduce the disclosure degree of CI. Therefore, we put forward the hypothesis 3:

H3: When there is earnings management, the disclosure of CI and its components in the statement of changes in equity may enable the appraiser to identify the earning, but as the transparency of information is lower than that in the income statement, the estimated stock price is higher than that in the income statement and lower than that without disclosure of CI.

- Design of experiment

Using the experimental design principle, we design three disclosure modes of CI, with or without earnings management (two forms), forming 3 x 2 subject experiments to analyze the influence of CI disclosure mode on appraiser's valuation and judgment in different earnings management levels. We guarantee that in the process of experiment, the questionnaires will be distributed to the participants at random anonymously.

4.1 Background of participant and experimental materials

In order to make participants representative and typical and satisfy the randomness, we make investigation of appraisers in large appraisal companies in provinces of the country. As Beijing is the area with the most and strongest appraisal institutions across the country, half of questionnaires are distributed to appraisers in Beijing, half of whom have over 5 years' working experience, and half have less than 5 years' working experience. We received a total of 104 questionnaires, 67 of which were valid. It requires the participants to read a company's financial statements of four consecutive years in the experiment, yet the net income in the statement is adjusted according to earnings management, which makes the CI of the company present a significant growth of more than 30%^② in the four years compared with its net income, due to gains and losses (earnings management) of securities.

4.2 Experimental clues

The independent variables of experiment are CI disclosure mode and the level of earnings management, while the dependent variable is the appraiser's estimation of the company's stock price. According to relevant provisions and practice forms concerning the accounting standards at home and abroad, three CI disclosure modes are designed as follows:

- (1) The CI is disclosed in the notes to financial statements, namely, there is no relevant information of CI in the major financial statements, and the participants need to estimate according to note information, so it is called note disclosure mode for short;
- (2) The disclosure is disclosed in the statement of changes in owners' equity, which is referred to as owner's equity table disclosure mode;
- (3) The disclosure is disclosed separately and placed after the income statement, which is referred to as income statement disclosure mode.

The level of earnings management is decided by the decisions of management layer, mainly using the stock portfolio available for sale and adjusting financial assets subject available for sale and capital reserves to realize earnings management. The situation without this kind of sales is set as non-earnings management condition while the situation with this kind of sales is set as earnings management condition. In this financial statement, the amounts of CI are ensured to be the same with or without earnings management, and the forms of balance sheet are the same.

- ***Experiment combination and task requirements***

4.3.1 The combination of experiment. There are six groups of experimental conditions with three CI disclosure modes and two levels of earnings management. The three groups without earnings management are as follows:

- (1) The participants in the first group are provided with the note disclosure mode without earnings management;

(2) The participants in the second group are provided with income statement disclosure mode without earnings management;

(3) The participants in the third group are provided with statement of changes in equity disclosure mode without earnings management;

Under the condition of earnings management, as that under the condition without the earnings management, different financial statements are distributed to participants according to different forms of CI disclosure. The three groups with earning management are as follows:

The fourth group of participants receives the note disclosure mode. But if they check the details of cash flow statement, balance sheet or the statement of changes in owners' equity, they can be aware of the behavior of the securities account. This kind of situation is called note disclosure mode under the condition of earnings management;

The fifth group of participants is provided with income statement disclosure mode under the condition of earnings management;

The sixth group of participants is provided with statement of changes in equity disclosure mode under the condition of earnings management;

4.3.2 Task requirements. According to the designed "The influence of comprehensive income disclosure on evaluation and judgment", the participants are asked to answer the questions about "the cognitive ability of comprehensive income and earnings management", then each group of participants is asked to read the company's financial information (16 pieces of financial statements in total) and then mark the company's financial indicators to estimate the company's share price. On the back of the questionnaire, there are inquiries on the age, education background, experience, practice qualification and work unit of the participants to improve the effectiveness of the questionnaire.

- The experimental results

5.1 Estimate results of stock price

A total of 67 valid questionnaires were taken back in the experiment, and the stock price estimated by appraiser is as shown in table 1 and figure 1.

Table 1 Average value (standard deviation) of stock price estimated by appraisers

Earnings level	CI disclosure modes		
	Note disclosure mode	Statement of changes in equity disclosure mode	Income statement disclosure mode
<i>With earnings management</i>	10.38 (1.08) N=12	19.98 (6.29) N=12	13.18 (2.80) N=10
<i>Without earnings management</i>	17.13 (5.97) N=11	12.51 (1.43) N=12	14.67 (2.00) N=10

Figure 1 Average value of stock price estimated by appraiser

According to the above three hypotheses, the estimated stock price is supposed to be shown as in figure 2.

Statement of changes in equity disclosure mode
Income statement disclosure mode

Stock price

Note disclosure mode

Figure 2 Supposed stock price

It can be seen from the comparison between Figure 1 and Figure 2 that the difference between the estimated stock price and the supposed stock price is obvious and there is no rule to follow. The result of variance analysis of double factors factorial design on fixed effects model with stock price as the dependent variable, and disclosure mode and earnings management as the independent variables is shown as follows:

Table 2 Variance analysis of double factors factorial design

Source of variation	Quadratic sum	F	Sig.
Earnings management	94.323	1.148	.270
Disclosure mode	26.481	.160	.851
Interaction	84.324	.515	.611
Total	10121.334		

The results in Table 2 show that the main effect and interaction effect of earnings management and CI are not significant, indicating that different earnings management level and CI disclosure mode will not affect the stock price. It is found in the analysis of related question in the questionnaire of “Appraiser’s basic cognition of comprehensive income and earnings management” that in the current appraisal institutions in China, less than 1% of personnel are quite familiar with CI which is a relatively new concept, 61% do not understand this concept and less than 40% know some about it inadequately. This shows that appraisers lack understanding of the new financial indicator CI, so it is unrealistic to expect them to make judgment of CI with regularity.

The following is to explain the reasons for the difference between Figure 1 and Figure 2 through hypotheses H1- H3.

5.2 Test results of H1

In order to ensure that there is obvious difference between earnings management and non-earnings management, we choose the sample companies without obvious positive and negative trend in CI changes, that is to say, the CI is positive or negative in the four years and shows random fluctuations, which makes the appraisers be affected and unable to identify the information differentiation under different disclosure modes, thus the difference among the three disclosure modes cannot be reflected. This leads to that the difference of stock price judgment under the condition of earnings management stems from the earnings management, and the more transparent it is, the lower will be the stock price.

The test results of hypothesis 1 (excluding abnormal values) is not significant ($p = 0.437$), so the hypothesis 1 is tenable. At the same time, the statistical results of stock prices in the three disclosure modes under the condition of non-earnings management are not significantly different ($p = 0.378$, $p = 0.378$, $p = 0.303$). This suggests that the earnings management has nothing to do with the disclosure of comprehensive income.

At the same time in the analysis of the appraiser's understanding of disclosure mode in the questionnaire, we found that though from the subjective consciousness, the appraisers in our country do not understand the specific content of CI, yet they can realize that CI is the core of the financial information. Nearly 45% of the appraisers believe that the CI should be disclosed in the income statement and nearly 30% of them think it should be disclosed separately in a statement.

5.3 The test results of hypothesis 2

H2 prediction. The comprehensive income disclosure based on the income statement will make the appraisers to consciously reduce their judgment on the stock price; The average stock price estimated under the mode of note disclosure with earnings management is all higher than the stock price estimated by the note disclosure and income statement disclosure under the mode of non-earnings management as well as under mode of income statement disclosure in the condition of earning management; Eventually, the estimated value of the stock price disclosed under the income statement in the condition of earnings management is equal to the situation without comprehensive income disclosure under the condition of non-earnings management.

First of all, we tested the difference between the stock price with the CI disclosed in the income statement under the earnings management and the stock price with the CI disclosed in the note under the non-earnings management; according to the assumption, since the statement readers have a recognition of the earnings management in the clear income statement disclosure and thus would consciously lower the estimated value, until it is the same as that without earnings management, that is, the stock price estimated under the mode of income statement disclosure with earnings management is equal to that estimated under the mode of note disclosure without earnings management, and the test result thereof is not significant ($p = 0.518$), suggesting that the original hypothesis cannot be rejected, i.e. it is consistent with the original hypothesis. Secondly, we verified the relationship between the stock price estimated under the mode of the income statement disclosure with earnings management and the stock price estimated under the modes of note disclosure and income statement disclosure without earnings management as well as the stock price estimated under the mode of income statement disclosure in the condition of earning management, and the test results show that the stock price estimated by the appraisers do not have significant difference due to different disclosure modes ($p = 0.616$), suggesting if the hypothesis 2 is not established, the reason is not the difference among the three modes. As the hypothesis 2 is for the purpose to test a kind of ordinal relation, so the Jonckheere – Terpstra, a nonparametric test methods, is selected to verify this hypothesis relationship (Hirst D. E., Hopkins P. E., 1998), and the result is still not significant ($P = 2.281$), showing that there is no significant difference between every two of the aforementioned modes, and the original hypothesis is not supported, that is to say, the price estimated under the mode of note disclosure with earnings management is the same as that estimated under the condition of earnings management, showing that the appraisers have identified the earnings management, but are not sensitive to the impacts of the disclosure mode.

The result of the answer to this question in the questionnaire shows that nearly 60% of the

appraisers now think that the difference between comprehensive income disclosure modes will affect its stock price estimation, nearly 80% of the appraisers think earnings management level will affect the stock price, and nearly 90% of the respondents think that comprehensive income disclosure can help find the earnings management of the company. Viewing from the aforementioned ratios, the choice of appraisers based on their perceptual knowledge is consistent with the hypothesis; although the experimental results have confirmed the appraisers' intuitive judgment on the earnings management, but their intuitive judgment on the impact on disclosure mode is not supported, meaning that the appraiser's practice level needs to be improved.

5.4 The test results of hypothesis 3

H3 prediction. Under the condition of earnings management, different disclosure modes of comprehensive income disclosure will lead to differences in estimated price, that is, the stock price estimated under the note disclosure is greater than the stock prices under the mode of statement of changes in equity, and the stock price under the statement of changes in equity is greater than the estimated value under the income statement mode. For the sequential utility, J-T test is still adopted, and the results show that under the condition of earnings management, the stock price estimated under different disclosure modes does not shows significant difference ($p = 0.134$).

At the same time, according to the survey on problem of "where does the appraiser is easier to find comprehensive income" in the questionnaire shows that most (75%) of the appraisers think disclosure can be identified the most easily in the income statement, which is in accordance with objective laws; however, the proportion of appraisers (65%) who found the disclosure of comprehensive income in the notes is higher than the proportion (42%) of appraisers who found the disclosure of comprehensive income in the statement of changes in owners' equity, and it seems that finding disclosure in the notes is tried, but viewing from the angle of the psychological cognition, because our country's financial statements have been disclosed in the notes, the appraisers, in accordance with their prior knowledge, experience and thinking inertia, more tend to think that there is corresponding information in the notes

5.5 Analysis on the average annual growth estimates

The result of questionnaire shows that an appraiser's estimates on the average annual growth rate of a company are as shown in Table 3. And a comparison is conducted between the average stock prices under two kinds of conditions of earnings management and non-earnings management ($p = 0.000$), and the two prices are significantly different, suggesting that analysts have noticed that the net earnings growth levels associated with each earnings management condition is different, and the results of hypothesis 2 is confirmed. But in the process of experiment, the earnings management is based on to ensure that the net income growth rate of each year is bigger than 30%, but the net income growth rate perceived by the participants under the condition of earnings management is 23%, showing certain gap with the original setting, which means that the appraiser's recognition on earnings management is not enough, which shows certain coincidence with hypothesis 3.

Table 3 Average Annual Earnings Growth Rate (standard deviation)

Earnings management level	Annual Average Growth Rate (standard deviation)
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Earnings management	23% (0.020)
Non-earnings management	12% (0.012)

- Research conclusions and discussions

In this research, 3x2 type of experiments are designed for the purposes to survey whether the disclosure mode of comprehensive income will cause any influence to the appraiser's valuation judgment, and at the same time, whether it is possible for the appraiser to identify the corporate earnings management through the information in the statement, and then to further survey whether the definition of disclosure could reduce the stock price judgment upward bias brought about by the observed earnings management. As is expected by H1, when there is no earnings management, comprehensive income disclosure mode shows no effect on an appraiser's stock price judgment. Experimental results does not support H2 on that the definition of earnings management disclose would reduce the judgment of the appraisers on stock prices, but the fact that there is no significant difference between the stock prices disclosed in the income statement and under non-earnings management disclosure is as is expected by H2, suggesting that appraisers identified the earnings management, but were not sensitive to the impact from disclosure mode; anyway, clear disclosure included in a separate performance statement is effective. In contrast to the estimates by H3, under the condition of earnings management, the comprehensive income disclosure mode does not cause significant differences to the evaluation judgment of appraisers. The judgment results of the annual growth rate further confirm the results of the hypothesis 2 and hypothesis 3, and at the same time, the corresponding subjective survey and analysis are consistent with the experimental results, showing that although the hypotheses do not get through the experiment, but they are consistent with current situation of the practice of appraisers in China.

Hirst D. E. and Hopkins P. E. (1998) , after the issuance of the US Financial Accounting Standards Bulletin No. SFAS130, studied in 1998 the influence of the disclosure of comprehensive income on the valuation judgment of financial analyst on the buyer's side in the U.S., and their experimental results confirmed that if the unfulfillment and realization of market securities were incorporated into the main financial statements, it would be possible to potentially improve the transparency of earnings management; And the disclosure of comprehensive income and its constituent parts in the statement of changes in owners' equity is less effective than the income statement disclosure in revealing earnings management and reducing the analysts' judgment on stock price. But, similarly, in the absence of earnings management, its comprehensive income disclosure mode has no impact on the value judgment, and the clear disclosure would reduce the buyer's financial analysts' estimate of the stock price. By contrast, it is possible to find that there is still certain gap between the judgment of estimators in China and that of the U.S. financial analysts in the 1990s, and the main reason is that China's valuation judgment fails to reflect its due rules.

Viewing from the angle of an appraiser's practice, the practice level of the appraiser in China has yet to be greatly improved. Surveys show that the appraisers in China not only have very little knowledge of the concept of comprehensive income and its content, but also are lack of the ability required for interpretation of financial statements; we find that almost all of the appraisers with a practice experience less than 5 years fail to give a reasonable price estimate, who are therefore more difficult to have in-depth understanding of and make a reasonable judgment on such a non-traditional income index of the comprehensive income. This phenomenon does not match with the demand for the assets appraisal industry in China to become bigger and stronger

and go abroad, especially in the current central cultural enterprises and concerning major foreign assets restructuring matters, international evaluation talents are extremely scarce, and the core of the mergers and acquisitions financial advisory business of all international investment banks is actually evaluation business. Therefore, how to improve the practice level of the appraisers is a pressing subject to which high attention needs to be paid by the industry association, regulators and policy makers.

Viewing from the angle of cognitive psychology, evaluation judgment should be affected by the definition of the value relevant information disclosure (Russo J., 1977). The clearer the disclosure of comprehensive income, the lower the statement users' cognitive cost will be, and at the same time, the frame effect easily makes the statement users find useful information according to usual routine and familiar ways, which thus makes the appraiser more accept the disclosure in the notes and the disclosure in the income statement, and show no interest in the disclosure in the statement of shareholders' equity, and the results of the survey are in conformity with this. And in China, there are many problems in the comprehensive income disclosure of listed companies (Li Shangrong, 2009; Mao Zhihong, Wang Peng, Ji Feng, 2011; Mao Zhihong, Ran Dan, Ji Feng, 2012), which have all increased the difficulties in information acquisition by appraisers, and it is also one of the reasons leading to the inconsistency between the results of the experiment and the hypotheses. So, on the one hand, it is necessary to improve the cognitive level of comprehensive income in the accounting, audit, evaluation and other consultation service industries in China, and on the other hand, it is more necessary to standardize the information disclosure from the perspective of accounting principle in order to enhance the working environment.

From the experimental perspective, there is lack of necessary incentives in the experimental process (for example, each person completing the questionnaire will get CNY100 as the compensation for time cost), and the anonymous way could make an appraiser pay no attention to reading the statement, and thus fail to guarantee his experimental attitude, which will create certain deviation as to the result of the experiment.

In a word, the survey and analysis in this research have comprehensively evaluated current practice ability of appraisers in China from the perspective of financial statement analysis, and brought about a basis for the development policy in the industry. The experimental research results provide reference to the makers of China's Accounting Standards on how to disclose the comprehensive income, and are also a beneficial supplement to the research on the aspect of behavior financial accounting.

Notes

1. Available-for-sale financial assets are listed on the balance sheet at their fair value, unrealized gains and losses are presented in owners' equity. The gains and losses are reclassified into profit or loss when available-for-sale financial assets are sold. Companies can manage earnings by properly determining the time of selling the securities.
2. 30% is according to the company's actual earnings growth situation and it can circumvent capital reserves becoming negative under the condition of earnings management.

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