Research on the Evaluation of Accounting Information Quality in Banking Industry——Take China's Listed Banks as an Example

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Abstract: *On the basis of summarizing the existing research on the quality of accounting information, this paper discusses the measurement standard of accounting information quality from the aspects of accounting information generation and disclosure, constructs the evaluation index of accounting information quality from the perspective of risk monitoring, and uses the quantitative model to deeply study the quality of accounting information in China's banking industry. The research results show that the quality of accounting information in China's banking industry is generally on the rise from 2010 to 2021, and reliability plays an important role in the comprehensive evaluation of accounting information quality; Second is the status of accounting information disclosure; The influence of relevance on the quality of accounting information is relatively weak. On this basis, the paper puts forward relevant policy recommendations to provide useful reference for improving the quality of accounting information.*

Keywords: *banking, accounting information, comprehensive evaluation*

1. Background and Significance

The Fourteenth Five Year Plan puts forward the goal of promoting high-quality economic development and puts development quality first. There is a close relationship between the quality of accounting information and high-quality economic development, which not only affects the decision-making of enterprise production and operation management, but also is an important evaluation basis for China's economic operation and development. Specifically, accounting information is the foundation of capital market resources allocation and national macro-control. From the micro level to make business investment decisions and prevent risks, to the macro level to build a macro prudential framework, high-quality accounting information is indispensable[1]. Finance is the lifeblood of the real economy, and the quality of accounting information in the financial industry is crucial to the high-quality development of the financial industry and the economy. Therefore, this paper discusses and clarifies the measurement standards of accounting information quality from the aspects of accounting information generation and disclosure, and studies the evaluation indicators of accounting information quality in the financial industry from the perspective of risk monitoring.

In view of the large proportion of China's listed commercial banks in the financial industry and the availability of data, this paper takes the quality of accounting information of listed commercial banks as the research object, represents the level of accounting information quality of China's financial industry, and uses the quantitative model to deeply study the quality of accounting information of the banking industry. On this basis, the paper puts forward relevant policy recommendations to provide useful reference for improving the quality of accounting information.

2. Review of Related Research

In 1966, the American Accounting Society first proposed the quality standard of accounting information based on accounting objectives, including four quality characteristics: relevance, verifiability, detachment and quantifiability. In 1980, the Financial Accounting Standards Board of the United States defined the quality reliability and relevance that accounting information should have. Reliability requires that accounting information properly reflect the actual value of events or transactions that have occurred. Relevance requires that accounting information not only reflect the

historical information that has occurred, but also further provide a forecast of the future development of the enterprise[2]. China put forward the definition of accounting information quality in 1992, and further improved it into the principles of reliability, relevance, understandability, comparability, substance over form, importance, prudence and timeliness in the Accounting Standards for Business Enterprises - Basic Standards issued in 2006, which basically borrowed from the definition of IASB.

Xia Bohui (2003), in combination with the relevant requirements of the Basel Committee on the quality characteristics of bank information, demonstrated the quality standards of bank accounting information from both qualitative and quantitative perspectives from the regulatory perspective, and believed that the information quality characteristics of China's banking industry should include authenticity, relevance and timeliness, comparability, comprehensiveness, prudence, fairness, importance, understandability, etc. Xia Bohui (2008), based on the analysis of the necessity of "high-quality" financial accounting information, proposed some regulatory approaches to high-quality financial accounting information[3].

At present, the commonly used methods include analytic hierarchy process, efficacy analysis (Li Lin, 2011), principal component analysis, etc. The analysis objects are generally listed companies, and the indicators mainly consider the quality of the content and disclosure of financial statements (Xu Hong et al., 2012)[4], as well as relevant indicators that have an impact on the main indicators, such as equity concentration (La Porta, Warfield, etc.)[5].

3. The Construction of Accounting Information Quality Evaluation Index System

This paper discusses and clarifies the measurement standards of accounting information quality from the aspects of accounting information generation and disclosure, and studies the evaluation indicators of accounting information quality from the perspective of risk monitoring[6].

In the generation of accounting information, according to the "double objective" model adopted by China, the reliability and relevance required by the concept of accountability and the concept of decision-making usefulness are taken as the core standard to measure the quality of accounting information. Reliability is mainly measured by earnings management. In addition, the implementation of accounting standards (two indicators are selected to measure whether there are changes in accounting policies or estimates, and changes in net profits after changes); Corporate governance structure (four indicators are selected to measure the number of external independent directors in the board of directors, the shareholding ratio of the top ten shareholders, the ratio between the total shareholding of the top two to the top ten shareholders and the shareholding ratio of the first shareholder, and the proportion of tradable shares); External supervision (three indicators are selected to measure whether the accounting firm has been punished by the CSRC in the last three years, whether the non-standard audit report has been issued, and whether the accounting firm that has been replaced in the last three years has raised objections or statements), which have an important impact on reliability. Relevance is mainly used to reflect whether the accounting information provided by the enterprise is related to the economic decision-making needs of investors and other users of financial reports, and whether it is helpful for investors and other users of financial reports to evaluate or predict the past, present or future situation of the enterprise. It is mainly measured by the information content of earnings in the annual report and the value relevance of earnings in the annual report.

In the disclosure of accounting information, timeliness and adequacy of disclosure are two main aspects of accounting information disclosure. The measurement of timeliness of disclosure is selected as the time interval between the actual disclosure and the scheduled disclosure of regular reports. The adequacy of disclosure mainly refers to the off-balance sheet disclosure, voluntary information disclosure and major omission punishment (measured by three indicators: "the amount of off-balance sheet information disclosure, the amount of voluntary information disclosure and major omission punishment").

Based on the above analysis, reliability and relevance are taken as the core standards to measure the quality of accounting information, and the disclosure of accounting information is taken into consideration, so as to build an evaluation index system for the quality of accounting information in China's banking industry.

4. Measurement of Accounting Information Quality in Banking Industry

4.1 Samples and data sources

In order to make the study representative and verifiable, the national data are selected as samples. Considering that Agricultural Bank of China and China Everbright Bank listed A-shares in July and August 2010 respectively, and most of the accounting information of listed commercial banks was disclosed in annual reports or semi annual reports, the data from 2010 to 2021 are selected. Relevant data are obtained from the China Statistical Yearbook 2011-2021, the website of the National Bureau of Statistics, the website of the People's Bank of China and other websites and experts' scores, or calculated according to relevant data.

Due to the large number of comprehensive evaluation indexes and the difficulty in distinguishing the importance of each index, the principal component analysis method is selected as the comprehensive evaluation method. According to the semi annual reports and annual reports of listed commercial banks, whether 16 listed commercial banks have changed their accounting policies or estimates during the sample period, the changes in net profits after the changes, whether they have been punished by the CSRC in the last three years, whether they have been issued with non-standard audit reports, whether the accounting firms that have been replaced in the last three years have raised objections or representations, and whether they have been punished for major omissions Whether the actual disclosure date is later than the scheduled disclosure date or not, the indicator values of the seven indicators have not changed. According to the principle of factor analysis, the indicator without change has lost its role in the comprehensive evaluation. Therefore, input the relevant data of the remaining indicators in the indicator system into the computer, and call the "Factor" process in the "Data Reduction" of SPSS for factor analysis[7].

4.2 Characteristic root and variance contribution rate of correlation coefficient

From the characteristic roots of the correlation coefficient matrix R output by SPSS and its variance contribution rate, it can be seen that the characteristic roots of the first three main factors are greater than 1, the variance contribution rates are 44%, 25.32% and 16.03% respectively, and the cumulative contribution rate has reached 85.355%, indicating that the first three main factors have extracted 85.355% of the information of the original nine variables, so these three main factors can be used to replace the original nine indicators to evaluate the level of accounting information quality.

From the factor load matrix after rotation, it can be seen that the first main factor has a large load on the reliability related indicators, which mainly represents the reliability information, and can be named as the reliability factor; The second main factor has a large load on the relevant indicators of information disclosure, which mainly represents the amount of information disclosed, and can be named as the information disclosure factor; The third main factor has a large load on the relevant indicators of the correlation, which mainly represents the information content of the correlation, and can be named as the correlation factor. According to the contribution rate of each factor, reliability plays an absolutely important role in the comprehensive evaluation of accounting information quality; Secondly, the situation of accounting information disclosure; The influence of relevance on the quality of accounting information is relatively weak.

4.3 Construct a comprehensive evaluation model

Take the variance contribution rate of the first three main factors, W_1, W_2, W_3 as the weight, to construct a comprehensive evaluation model:

$$F = 0.44 * W_1 + 0.25 * W_2 + 0.16 * W_3$$

Substitute F1, F2 and F3 calculated by SPSS into the equation to obtain the comprehensive evaluation index F of accounting information quality of China's listed banking industry from the second half of 2010 to the second half of 2017, that is, the comprehensive level of accounting information quality of listed banking industry, as shown in the following table:

Table 1: Comprehensive level of accounting information quality of listed banks

time	2010	2011	2012	2013	2014	2015	2016	2017
F	-0.8207	-0.4779	-0.4025	-0.3605	-0.0544	0.0093	0.0804	0.0830
time	2018	2019	2020	2021				
F	0.1844	1.0546	0.3923	0.3121				

It can be seen from the above table that the quality level of accounting information in China's banking industry showed an overall upward trend from 2010 to 2021. Among them, from 2010 to the first half of 2019, there was a unilateral upward trend, reaching the peak in 2019, and then showing a rapid downward trend, but still higher than the average level in recent years, and the downward trend was eased in 2021. It is generally believed that in a period of good economic situation, enterprises generally do not whitewash accounting information. On the contrary, when the economic situation is bad, enterprises are motivated to achieve the above goals by whitewashing accounting information in order to stabilize investors' confidence in the enterprise. The changes in the quality of accounting information in the financial industry reflect that the COVID-19 broke out in China at the end of 2019, which caused serious damage to the economy and turned the earlier economic situation to a downturn. At the same time, it also proves the rationality of the indicator system and measurement methods.

5. Conclusions and Policy Recommendations

5.1 Conclusion

From 2010 to 2021, the quality of accounting information in China's banking industry showed an overall upward trend. Affected by the severe macroeconomic downturn caused by the sudden COVID-19 at the end of 2019, it showed a rapid downward trend, but it was still higher than the average level in recent years, and the downward trend was eased in 2021. At the same time, the results of the econometric model show that the main influencing factors of the quality of accounting information in China's banking industry are: earnings management, corporate governance structure, the off-balance sheet disclosure part of the adequacy of information disclosure, the degree of voluntary information disclosure, the information content of the annual report earnings and the value of the annual report earnings.

5.2 Policy recommendations

It can be seen from the above conclusions that the quality of accounting information in China's banking industry is mainly affected by such factors as earnings management, corporate governance structure, off balance sheet disclosure, voluntary information disclosure, the information content of annual report earnings and the value of annual report earnings. In view of this, in order to further improve the quality of accounting information in China's business banking industry, the following policy recommendations are proposed.First, improve the internal governance structure. Perfect internal governance structure is the premise for financial industry to fully and truly disclose accounting information. The banking industry should first optimize the equity structure and explore the equity structure that is suitable for the characteristics of the institution. While large shareholders have a certain voice, small and medium-sized shareholders can also impose corresponding constraints on them. Second, we should improve the effectiveness of the board of directors and the supervisory ability of the board of supervisors to ensure that accounting information is true and reliable.

Second, standardize the audit behavior of certified public accountants. Certified public accountants shoulder the verification function of financial statements of listed financial institutions. But due to the impaired independence of certified public accountants, the fierce competition in the audit market and other influences weakened, and failed to give full play to the role of accounting information "gatekeeper". It is necessary to further improve the audit litigation system of certified public accountants, standardize the performance of duties of certified public accountants, and promote certified public accountants to scrupulously perform their duties and complete the audit objectives.

Third, implement the "penetrating" supervision of accounting information quality. On the basis of routine supervision, strengthen the supervision of all on and off balance sheet risks such as credit, investment, derivative transactions, acceptances and guarantees, and require financial institutions to replace vagueness with detailed accounting information in accordance with the regulatory path of risk

isolation, risk measurement and investors' tolerance.

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