Domestic and Foreign Earnings Quality Literature Review

Yixin Yuan

School of Management, Jinan University, Guangzhou, China
Email: 13250713649@163.com

Abstract

The quality of corporate earnings has always been a research hotspot in the academic and practical circles of economics and finance. The study of earnings quality can help investors adopt a more optimized investment strategy. From 1968, Ball and Brown began to study the earnings quality. Through years of hard work, the majority of scholars have made fruitful results in the study of earnings quality. This paper analyzes the connotation and quantification of earnings quality, the influencing factors of earnings quality, the economic consequences of earnings quality, and the international comparison of earnings quality. A review of the quality literature provides a basis for subsequent research.

Keywords

Earnings Quality, Literature Review

1. Introduction

This article is mainly divided into six parts. The first part is the introduction. The second part summarizes the connotation and quantitative literature on earnings quality. The third part summarizes the literature on the factors affecting earnings quality, which are described in terms of company characteristics, financial reporting practices, corporate governance and internal control, auditing, stock market motives and other external factors. The fourth section summarizes the literature on the economic consequences of earnings quality. The fifth part summarizes the literature on the international comparison of earnings quality. The sixth part analyzes the research trend of earnings quality.

The theoretical contribution of this paper is to sort out the research results of earnings quality of scholars at home and abroad in recent years, and on this basis, analyze the trend of earnings quality research, and lay a solid theoretical
foundation for scholars who are interested in the research direction of earnings quality, foundation and opportunities to provide extension.

The documents selected in this paper are from authoritative journals at home and abroad. The literature is downloaded from China Knowledge Network Database, Wanfang Database and Google Scholar.

2. The Connotation and Quantification of Earnings Quality

In fact, there are many discussions on the connotation and definition of earnings quality in normative research. FASB (American Financial Accounting Standards Board) and IASB (International Accounting Standards Board) discuss the quality of earnings and the system. Since our review is based on empirical research, the review will not involve much normative research.

Schipper and Vincent (2003) argue that earnings quality should consist of several aspects: 1) the temporal characteristics of the earnings; 2) the definition of the FASB conceptual framework (including earnings robustness, etc.); 3) the ability to reflect income, the relationship between cash and accruals; 4) better reflect the implementation decisions [1]. According to the conclusion of Dechow et al. (2010), the quantitative methods of earnings quality in empirical research are mainly divided into three aspects: 1) the attribute characteristics of earnings; 2) the response of investors to earnings; 3) financial misstatement. Among them, the abnormal accrual of the attribute characteristics belonging to the surplus is actually the content of earnings management; the asymmetric treatment of the loss (return) is actually the content of the earnings robustness [2].

It can be seen that in both reviews, earnings management and earnings robustness are important indicators of earnings quality. Therefore, the project uses earnings management and earnings robustness as indicators for quantifying earnings quality, which is based on theory.

Since there are many quantitative methods for earnings quality in empirical research, the following only describes the quantitative methods related to earnings management and earnings robustness.

The most classic model for quantitative earnings management should be Jones (1991). The basic idea of the model is to estimate the total accruals. The residual of the model is the indicator of quantitative earnings management, which is the discretionary accrual [3]. Since then, Dechow et al. (1995) have proposed a modified earnings management model [4]. Some domestic studies (Lu Jianqiao, 1999; Zhang Yongkui and Liu Feng, 2002) pointed out that on the basis of the revised Jones model, the total accruals should be estimated by increasing intangible assets [5] [6]. Kothari et al. (2005) further refined the Jones model by subtracting the subjective accruals of the paired sample companies with subjective accruals [7].

Dechow and Dichev (2002) used the DD model to measure earnings management. They believe that compared with the Jones model, the DD model has the following advantages: both intentional manipulation and unintentional estimation error [8]; DD model uses the accruals and cash ratio to measure the
quality of earnings, to a certain extent, avoid the assumption that cash flow is not manipulated in the Jones model; the DD model also reflects the time series characteristics of the surplus. Use this model to estimate any accruals:

\[ ACC_t = \alpha_0 + \alpha_1 CF_{t-1} + \alpha_2 CF_{t-2} + \alpha_3 DCF_{t-1} + \alpha_4 DCF_{t-2} + \alpha_5 CF_t + \epsilon_t \]

\( ACC \) indicates the total accruals, divided by the average total assets at \( t \); \( CF \) is the operating cash flow, divided by the average total assets at \( t \); \( DCF = 1 \) indicates that if the cash flow changes less than 0 at time \( t \), the other is 0; \( t \) represents time.

Ball and Shivakumar (2005) argue that traditional linear models fail to confirm the nonlinear properties of accounting accruals. Therefore [9], they proposed a modified DD model. They believe that the use of piecewise nonlinear arbitrary accrual estimation models can greatly improve the ability to interpret relative to traditional linear models. The model is as follows:

\[ ACC_t = \alpha_0 + \alpha_1 CF_{t-1} + \alpha_2 CF_{t-2} + \alpha_3 DCF_{t-1} + \alpha_4 DCF_{t-2} + \alpha_5 CF_t + \epsilon_t \]

In addition, other earnings management estimation models include: Francis et al. (2005), KS model, and so on. Some studies on China’s capital market use offline projects to estimate earnings management [10].

In recent years, a number of documents have emerged, beginning to focus on real earnings management (Cai Chun et al., 2011). As early as 1989, Schipper proposed the concept of real earnings management. The so-called real earnings management refers to the manipulation of real trading activities. The main models for quantifying real earnings management activities include the Roychowdhury (2006) model, according to which the real earnings management activities mainly include three parts: sales manipulation, production control, and cost control; Cohen et al. (2008) [11] [12] [13].

Watts (2003) argues that due to the moral hazard problem of management, earnings robustness emerges to avoid and control the opportunistic behavior of management [14]. The quantitative method for earnings robustness is mainly the model proposed by Basu (1997) [15]. Of course, the Basu model has also received some criticism (e.g., Dechow et al., 2010) [16]. This is mainly reflected in the measurement error. The Basu model uses returns to quantify good news and bad news. The premise is that the market is effective, and good news and bad news can be accurately reflected in the return.

3. Factors Affecting Earnings Quality

3.1. Company Characteristics

Company characteristics are naturally an important factor affecting the quality of earnings. For example, a series of studies (e.g., DeFond and Park, 1997; Doyle et al., 2007) found that the performance of the cakes, internal control defects will prompt enterprises to engage in earnings management behavior. Other studies have found that company growth, investment, company size, property rights, shareholding structure, governance structure, connected transactions,
corporate profitability, etc. all affect the quality of corporate earnings (e.g., Chen Songsheng and Lai Jiao, 2013, etc.) [17] [18] [19].

3.2. Financial Reporting Practice

Different financial reports in different countries and different accounting methods under different standards are naturally important factors affecting the quality of earnings. This field has also accumulated a large amount of literature. In a nutshell, allowing more accounting policy choices, on average, reduces the quality of earnings (Dechow et al., 2010). According to some domestic research findings, different standards and different accounting systems have affected earnings management and earnings quality (Lu Jianqiao et al., 1999; Tan Hongtao and Cai Chun, 2009), affecting the stability of earnings (Mao Xinshu and Dai Deming, 2008; Li Zengquan and Lu Wenbin, 2003) [20] [21] [22] [23].

3.3. Corporate Governance and Internal Control

There is a lot of literature on the impact of corporate governance and internal controls on earnings quality. Series of studies (e.g., Doyle et al., 2007; Su Dongwei and Lin Dapang, 2010) [24] found that perfect corporate governance and sound internal control can significantly reduce earnings management and improve earnings quality. Regarding the management compensation and the equity incentives, the quality of earnings is a consistent conclusion. Some studies believe that management holdings will have a ripple effect, resulting in lower earnings robustness (LaFond and Roychowdhury, 2008) [25]; another part of the study believes that management holdings will have incentive effects, resulting in smaller Subjective accruals and higher earnings response coefficients (Warfield et al., 1995) [26].

3.4. Audit

About auditing and earnings quality, research generally believes that high audit quality can improve the quality of earnings. The size of the firm is seen as an important proxy variable for audit quality (DeAngelo, 1981) [27]. Research has generally found that large firms can lead to better earnings quality. Other concerns have focused on the impact of auditor working hours (Caramanis and Lennox, 2008) [28], auditor industry experience (Krishnan, 2003) [29], and audit adjustments on earnings quality. However, as pointed out by Dechow et al. (2010), although the study provides a series of evidences that auditors’ efforts, professional standards, etc. are positively correlated with earnings attributes. But these studies generally ignore some issues, such as self-selection issues. In China, there are conclusions that support the university and the reputation of the firm can bring high earnings quality (Chen Huifa et al., 2012) [30], and some studies have reached the opposite conclusions, such as Liu Feng and Zhou Fuyuan (2007) [31]. Xin Qingquan and Wang Bing (2010) found that cross-listing and international four major influences on earnings quality [32].
3.5. Stock Market Motives

According to Dechow et al. (2010), the motivation of corporate finance and the motivation to achieve the underlying goal of earnings will affect the quality of earnings. Among them, in order to achieve IPO, raising more funds is an important motivation for affecting corporate earnings management behavior (e.g., Aharony et al., 1993; Morsfield and Tan, 2006). Some studies (Kasznik, 1999; Roychowdhury, 2006) provide some evidence that in order to achieve a surplus-based assessment goal, it will induce earnings management behavior [33] [34] [35]. Some researches on China’s capital market have found that for IPO, in order to meet the requirements of allotment and avoid continuous losses, the company will induce the earnings management behavior of enterprises (Liu Xing and Xu Teng, 2003; Lu Zhengfei and Wei Tao, 2006) [36] [37].

3.6. Other External Factors

Other external factors, including political factors (e.g., Jones, 1991; Huang Qiongyu et al., 2014), income tax factors (Ye Kangtao and Liu Xing, 2011), external financial environment, etc. (Zhang Min et al., 2015), information disclosure environment (Bai Yunxia and Wu Liansheng, 2008; Wang Xiongyuan et al., 2009), external supervision of the media (Yu Zhongbo et al., 2012) will affect the quality of earnings [38]-[43].

Recently, a hot topic of academic attention has been the promulgation of the Sarbanes-Oxley Act (SOX), which has also systematically affected the quality of earnings (e.g., Doyle et al., 2007; Ashbaugh-Skaife et al., 2008). With the promulgation of the “Basic Norms of Enterprise Internal Control”, China’s scholars have also raised concerns about the relationship between internal control and earnings quality (Fang Hongxing and Jin Yuna, 2011; Fan Jinghua et al., 2013) [44] [45] [46].

According to some domestic research findings, the macroeconomic environment will also have an impact on earnings quality indicators such as earnings stability and earnings management (Rao Pingui and Jiang Guohua, 2011; Wang Hongjian et al., 2015) [47] [48].

4. Economic Consequences of Earnings Quality

The quality of earnings has many economic consequences, including: 1) legal issues; 2) audit opinions; 3) market valuation; 4) business operations, information disclosure, etc.; 5) manager contracts and remuneration; 6) Labor productivity; 7) Equity financing costs; 8) Debt financing costs; 9) Analyst prediction accuracy.

Overall, low-quality earnings quality, especially financial restatement, can easily lead to legal disputes; high earnings quality and lower earnings management are more susceptible to standard audit opinions (Francis and Krishnan, 1999); low-quality earnings quality can significantly reduce labor productivity; with the reduction in earnings quality, equity financing costs and debt financing costs will be significant Earth rise (Lu Zhengfei et al., 2008); good earnings quality also
helps to improve the accuracy of analyst forecasts (Burgstahler and Eames, 2003); earnings quality also affects the sensitivity of managers’ contracts, compensation and performance (Chen Shenglan and Lu Rui, 2012). The existing research also shows that there is an alternative relationship between accounting conservatism and the use of mortgage clauses in China’s credit market, and this substitution relationship weakens with the decline of the credit level of borrowers and the decline of the proportion of tangible assets of enterprises (Wang Yanyan et al., 2014). In short, high-quality earnings quality has a series of positive economic consequences due to reduced information asymmetry. Conversely, low-quality earnings quality, such as earnings management and financial restatement, has brought a series of negative economic consequences [49] [50] [51] [52] [53].

5. International Comparison of Earnings Quality

The theoretical basis of transnational research is related to law and finance. Based on a series of LLSV methods and finance, it can be concluded that the level of rule of law in a country and the level of investor protection will affect the development of the country’s capital market and corporate governance. Since corporate earnings disclosure can be understood as an important component of corporate governance, the level of rule of law in a country and the system of standards affected by the level of the rule of law, capital market development will affect the overall quality of the country and the earnings of individual stocks (Dechow et al., 2010).

A series of studies by La Porta et al. (2006) and Leuz et al. (2003) found that investors have better legal protection, a more complete system of standards, and a more robust capital market. Countries usually have higher earnings quality and lower levels of earnings management.

In cross-research, the main way to quantify earnings quality is earnings management. Relevant literature includes: Leuz et al. (2003) and Burgstahler et al. 2006) and so on. Some studies have used earnings robustness and earnings response coefficient ERC (e.g., Alford et al., 1993) [54] [55] [56] [57].

6. Trend Analysis of Earnings Quality Research

First, with the rise of law and finance research, a large number of documents have emerged to pay attention to the impact of external governance environment on corporate governance. Since earnings quality is also a component of internal corporate governance, some studies have begun to focus on the impact of external governance on earnings quality. Based on this, cross-country comparative research on earnings quality is constantly emerging.

Second, after the Sarbanes-Oxley Act (SOX), because the Sarbanes-Oxley Act requires companies to provide information on internal control deficiencies, this is equivalent to providing a means of quantifying the quality of internal control for empirical research. Therefore, after the introduction of the program, a large number of empirical documents on internal control emerged. Both theoretically
and empirically, there is a clear relationship between internal control and earnings quality. Some scholars have begun to consider internal control defects as proxy variables with poor earnings quality (e.g., Dechow et al., 2010).

Third, because of the quality of earnings and other financial indicators, company characteristics indicators are prone to interfering endogenous problems. Moreover, since the measurement of the surplus quality inevitably has measurement errors, this also leads to endogeneity problems. How to solve endogenous problems has become a hot spot in recent research. Some recent studies often use endemic events to solve endogeneity problems with the help of two exogenous events.

Fourthly, from the above review, the research on the factors affecting the earnings quality of enterprises can be described as internal and external combination, and many aspects are obtained, and effective research results are obtained. With the deepening of research, research horizons will continue to be developed. For example, local government officials as an important factor affecting local economic and social development, and whether their personal characteristics will affect the quality of corporate earnings? These are subject to follow-up research.

Acknowledgements

When the paper is completed, I would like to thank my tutor for his careful guidance. In the process of writing a thesis, I encountered a lot of questions and questions, and the teacher will answer me seriously. Whether it is the direction and topic at the beginning of the paper, or the structure and framework of the paper, the instructors have given guidance and advice on the revision of the paper from the overall layout to the format. His profound academic literacy has helped me a lot in my thesis.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References


