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MEASUREMENT OF PROFIT QUALITY THROUGH EMPIRICAL STUDIES: A LITERATURE REVIEW

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ABSTRACT

This study was conducted to learn about the importance of studying the quality of profits in academia and practice, deepening and studying the views on the quality of profits of typical research works in the world through the perspective of approach. The study provides readers with a clear view of the criteria for measuring profit quality through the attributes of profit. From there, helping readers, other researchers have a multidimensional view of measuring profit quality in current studies.

KEYWORDS: Quality of profit, measure quality of profit, corporate profit.

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1. INTRODUCTION

The quality of accounting profit is an important factor to minimize information asymmetry. Leuz et al. (2003) argue that improving the quality of profits is an effective method to protect investors. Profit quality is not only affected by the process of collecting and processing data of the accounting department but also depends heavily on the impact of factors inside and outside the enterprise. It can be said that the quality of profits is an issue that many domestic and foreign researchers are interested in.

In the past, investors have been very concerned about the quality of announced profits from companies. These concerns stem from the fact that the financial statements have many material misstatements, especially the large difference between the accounting profits published before and after the audit process. In 2015, Toshiba, Japan's multinational conglomerate, admitted to having overstated profits by billions of dollars over the years (Pham, 2022). The company has made mistakes in accounting, including improper revenue recognition, increased profits and postponement of losses. The audit process uncovered these discrepancies, which resulted in a

restatement of the financial statements and caused significant financial loss to the company. The scandal led to executives resigning, litigating and losing confidence in Toshiba's corporate governance. Or Steinhoff, a South Africa-based multinational retail holding company, which faced a major accounting scandal in 2017. The company has admitted to accounting errors, including soaring profits and manipulation of financial statements (Huy & Hung, 2022). The audit process showed that there is a significant difference between the declared accounting profit and the actual financial position of the company. The scandal led to the resignation of top executives, a sharp fall in the company's share price, and investigations and legal proceedings. In addition, Carillion, a UK-based construction and facilities management company, collapsed in 2018 due to poor financial management and irregular accounting. The company overstated its profits and underestimated its liabilities, resulting in a significant discrepancy between its published accounting profits and its actual financial position (Van Hai et al., 2021). The audit process uncovered these discrepancies and revealed the extent of the company's financial difficulties. The collapse of Carillion has far-reaching consequences, including job losses, project disruptions, and corporate governance and auditing requirements.

In these cases, the cause of the discrepancy is often related to fraudulent accounting practices, such as increased revenue, capitalization of expenses, manipulation of financial statements, and concealment of liabilities (Hung, 2022). Factors such as strict financial goals, weak internal controls, inadequate oversight, and a culture that prioritizes short-term gains over long-term sustainability can contribute to such situations. The problem of pre- and post-audit discrepancies often goes on for many years and what is the actual profit of enterprises? Whether the data released after the audit has ensured a correct reflection of the situation of the business, is it really useful for investors when making economic decisions? The difference in profits of businesses has always been a matter of great interest to investors, the Securities Commission, banks, the Stock Exchange, and other interested parties.

From a research perspective, how to assess the current profit quality? Dechow et al., (2010) argue that the quality of profit is abstract, multidimensional and cannot be measured directly. There are many views offered based on the different perspectives of researchers. Many researchers evaluate the quality of profit through accrual quality such as using the model (Jones, 1991), the adjusted Jones model of Dechow et al., (1995). Many studies evaluate the stability of profits, the sustainability of profits, or the predictability of profits as Francis et al., (2004). The study of profit quality as well as the criteria for measuring profit quality has always attracted the attention of scholars and professional organizations around the world.

Therefore, this study was conducted to examine the perspectives on the quality of profits of typical research works in the world through different approaches.

2. Perspectives on profit quality

According to the conceptual framework of the Financial Accounting Standards Board (FASB), the qualitative characteristics of accounting information in general and information on accounting profit in particular should be available before publishing financial statements are: relevance, reliability, comparability, timeliness... Thus, from the perspective of the law promulgator, the

quality of profits is concerned based on the effectiveness of the standards promulgated. Therefore, the profit quality of enterprises is highly appreciated when meeting the general requirements when announcing accounting standards. In fact, in the study, it is also difficult to quantify these criteria in measuring profit quality.

According to Dechow et al., (2010), profit quality is an abstract, multidimensional concept and cannot be directly measured. This view is also basically consistent with the views of analysts, who are one of the users of important information and who also transmit information to investors, shareholders and creditors (Barker & Imam, 2008).

Ismail & Binti (2011) argue that income quality is based on the useful view of information about decision making; the concept of profit quality is determined differently by different users of financial statements.

Dechow & Schrand (2004) argue that analysts consider high quality profits when showing the company's current performance, which is a good indicator of future performance to assess the value of the business. The financial analyst also evaluates the performance of the company, evaluates the current profit showing the performance of the future, determines whether the market value of the stock reflects the intrinsic value, investors have similar goals. On the other hand, from the perspective of creditors, the compensation committee considers the quality of profit on the basis of income that can be easily converted into money and reflects the performance of managers (hung, 2023). Users of the financial statements consider the quality of profits to be the “absence of profit management”. According to Schipper & Vincent (2003) managers may tend to manage profits for a number of reasons such as market pressure, compensation, bonuses, loan or loan contracts... this will lead to low quality of profits. Dechow & Schrand (2004) argue that when incomes are in line with and adhere to widely accepted accounting principles, they are of high quality in the eyes of managers. Income will not be subject to fraud and show an honest and reasonable view of the financial situation of the business. Many studies focus on this research direction; they think that the quality of profits is high when the profit management trend criterion is underestimated.

The quality of profit according to Hicksian (2019) is also of interest to many researchers such as: Hodge, (2003), Schipper & Vincent (2003), researchers all argue that the level of reporting of the truthfulness of profit means the correspondence or agreement on how to measure or portray the reality it reflects. Profit quality is measured based on its correlation with “true earnings” without regard to the recognized accounting rules or the implementation of those rules. However, Hicksian's profit perspective is difficult to assess in practice because actual profit cannot be observed.

Yee (2006), on the other hand, argues that the quality of profit depends on “basic income” and “reported income”. The quality of profits is judged on the ability of reported earnings to disclose basic income quickly and accurately. The high quality of profits when earnings are accurately and promptly reported reflects the present value shocks of expected future dividends.

A wide range of views on the quality of profit can be seen in empirical studies. The author agrees with the view of Dechow et al. (2010) that: The quality of profits is higher when providing more

information about the characteristics of the financial situation and is more suitable for different economic decisions made by different actors.

3. Measurement of profit quality through criteria in empirical research

There are many studies in the world that use different criteria to measure the quality of profit. Depending on the research objectives and research methods, researchers follow different research directions. The three major perspectives on approaching and measuring profit quality used by many studies are as follows:

The views of Francis et al., (2004) and Francis (2008) provide 7 criteria for evaluating profit quality and divide the group of criteria into 2 groups based on accounting data and market basis. Criteria based on the basis of accounting include: the quality of accruals, the sustainability of profits, the predictability of profits, and the stability of profits. Criteria based on market basis include: appropriate value, timeliness and prudence. This division does not make a clear distinction between the usefulness of accounting profit and the truthfulness of profit.

From the perspective of Schipper & Vincent (2003), the authors divide the profit quality assessment criteria into 4 groups. Tier 1 are criteria built from the time series characteristics of profitability including profitability sustainability, predictability, and profitability variability. Group 2 is the criteria for evaluating the quality of profits through the relationship between profits, accruals and cash flow. Group 3 and the criteria developed from the qualitative characteristics of accounting information according to the FASB conceptual framework. Group 4 is the criteria for assessing the quality of profits developed from professional practice decisions; the group approaches through the level of judgment and forecast estimation of the preparer of the financial statements; through the irregularities of the information to consider the possibility of financial statements being manipulated.

Dechow (2010) inherited and developed from the above two views into two main groups: considering the characteristics of reported profit information and investors' reactions to profit information, he also added a third group of criteria on external indicators of false profit reporting.

Compiled from the above studies, the criteria for measuring profit quality include:

Sustainability of returns: Sustainability of returns is measured by the critical coefficient in the regression between future returns and current returns. When evaluating the quality of profits, sustainability is correlated with other criteria. A lot of research on the stock market, stock prices approach and evaluate on the sustainability of profitability.

Abnormal accruals (profit management): Researchers such as Dechow (2010) or Schipper & Vincent (2003) believe that accruals will reduce the quality of profits. Schipper & Vincent (2003) studied total accruals and abnormal accruals, and Dechow (2010) focused on abnormal accruals.

Profit stability: Dechow (2010) argues that the stability of profit needs to clarify stable profit due to its inherent stability and the stability that managers regulate. This criterion is negatively correlated with other criteria.

Timeliness: There is a positive association between countries whose common law is that there is a positive correlation between the protection of investors and the higher recognition of timely losses by Big Four audit firms. Studies use Basu (1997) reverse regression to measure recognition of timely losses. The asymmetry of the timeliness criterion is a profit quality measurement variable that depends on a strong assumption that all parties have the goal of creating a high quality of profit.

Adjustment of accounting profit to achieve certain objectives: The research direction focuses on the distribution of profits to find anomalies, which is a testament to the adjustment of profits to achieve certain objectives.

Criteria for measuring investor response to profit information: Measures the usefulness of profit information to investor decisions. The studies focus on measuring the relationship between stock prices and accounting returns, or returns from securities investments and accounting returns, and business performance. Studies have also shown that the quality of returns is higher when it can explain more investment decisions, especially through the volatility of stock prices in the market.

External indicators of false profit reporting: Dechow et al. (2010) refer to the re-disclosure of profit information, the results of the management agency's investigation, the audit report with the audit opinion "excepted opinion".

Summarize the methods of measuring profit quality according to the summary table below:

Table 1: Summary of profit quality measurement methods

Measurement variables measure the quality of profit	Model	Content
Sustainability of profitability	$Earnings_{t+1} = a + b Earnings_t + e_t$ B: measure sustainability	Companies with more persistent earnings have more sustainable cash flows, which are more useful inputs in equity valuation methods.
Total Accrual	Jones model (1991) $Acc_t = \alpha + \beta_1 \Delta Rev_t + \beta_2 PPE_t + \varepsilon_t$ Acc_t total accrual accounting variable	Total accruals considered to Sales growth (Rev) and asset depreciation calculation pPE production. All variables are pro rata of total assets.

<p>Modified Jones model (Dechow et al., 1995) $Acc = \alpha + \beta_1(\Delta Rev_t - \Delta Rec_t) + \beta_2 PPE_t + \varepsilon_t$</p>	<p>The adjusted Jones model excludes sales growth in the years identified as manipulation years.</p>
<p>Kothari et al. Model (2005) $DisAcc_t - \text{Matched firm's } DisAcc_t$</p>	<p>Consider the observations of firms (Firm) with the Company of the same industry, the same year has equivalent ROA. Section adjustable accrual $DisAcc_t$ is calculated according to Jones model 91.</p>
<p>Dechow & Dechow (2002) $\Delta WC = \alpha + \beta_1 CFO_{t-1} + \beta_2 CFO_t + \beta_3 CFO_{t+1} + \varepsilon_t$</p>	<p>Total accruals are modeled as a function of past, present and future cash, to measure cash identification in profits.</p>
<p>Francis et al., (2005) - Discretionary estimation errors $TCA_t = \alpha + \beta_1 CFO_{t-1} + \beta_2 CFO_t + \beta_3 CFO_{t+1} + \beta_4 \Delta Rev_t + \beta_5 PPE_t + \varepsilon_t$ $\sigma(\varepsilon_t) = \alpha + \lambda_1 Size + \lambda_2 \sigma(CFO)_t + \lambda_3 \sigma(Rev)_t + \lambda_4 \log(OperCycle)_t + \lambda_5 NegEarn_t + v_t$</p>	<p>Decomposing the standard deviation of the residuals from the accrual model into an inherent component that reveals the firm's operating environment and a discretionary residual (which reveals management choices).</p>

Stability of profitability	$\sigma (\text{Earnings})/\sigma (\text{Cash flows})$ A lower ratio indicates that the income stream is smoother than the cash flow.	A temporary smoothing of earnings could improve earnings sustainability and informativeness. However, when managers attempt to smooth out changes in cash flow equity, it will lead to a reduction in the timeliness of profit information and less information collected.
Measure investor reaction to favorable information Intercalation	$Ret_t = \alpha + \beta (\text{Earnings Surprise}_t) + \varepsilon_t$ profits will have a correlation relationship much with R^2	Affects the usefulness of profit quality. Timeliness is based on the measurement of profitability.
Timeliness	$Earnings_{t+1} = \alpha_0 + \alpha_1 D_t + \beta_0 Ret_t + \beta_1 D_t Ret_t + \varepsilon_t$ $D_t = 1$ if $Ret_t < 0$; β_1 is higher than implies recognition of the timeliness of the recognition of loss incurred in income	The model assumes that efficient markets will reveal losses back to Ret when these losses are actually loss incurred.
Adjust accounting profit according to certain objectives	Benchmark in income distribution, changes in income distribution, forecast error distribution, positive income chain increase	Abnormal clustering in the income distribution indicates income management around goals. Observations at or slightly above earnings targets poor
External indicators of false returns reporting ERCs	AAER (U.S. court judgment) discovered by sec- U.S. Securities and Exchange Commission Reproduction of Financial Statements SOx (Sarbanes Act - Oxley USA) Report on Internal Affairs	Companies with errors detected by the sec or having to reproduce the Financial Statements, errors in internal control all imply low quality of profits.

Compiled according to Dechow et al. (2010) and other studies

4. CONCLUSION

Profit quality is not a concept that can be easily quantified. In-depth study of the criteria to measure the attributes of profitability is very important in the research direction of future profit quality. This is also the basis for the great difference in the results of profit quality assessment in relation to other factors of many authors in the world with contradictory conclusions. It is the choice of profit quality evaluation criteria from many different angles that gives rise to the difference in the evaluation of researchers around the world.

Based on an overview of the criteria for measuring the attributes of profit quality, the author hopes that researchers, when delving into the study of profit quality, will choose the most appropriate evaluation criteria from the perspective of their research. Helps to understand the interrelated nature of the factors as well as provide the most effective practical solutions.

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