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EARNINGS QUALITY, FIRM LIFE CYCLE, AND OWNERSHIP STRUCTURE: EVIDENCE FROM AN EMERGING MARKET

Thy Le-Bao[♣]
Innovation and Sustainability Research Group, Faculty of Finance and Banking, Ton Duc Thang University, Ho Chi Minh City, Vietnam

Thao Tran-Thanh-Mai
Faculty of Finance and Banking, Ton Duc Thang University, Ho Chi Minh City, Vietnam.

Huyen Ho-Thi-My
Faculty of Finance and Banking, Ton Duc Thang University, Ho Chi Minh City, Vietnam.

Vy Nguyen-The-Hoang
Faculty of Finance and Banking, Ton Duc Thang University, Ho Chi Minh City, Vietnam.

ABSTRACT

Using a sample of 351 non-financial firms listed on the Ho Chi Minh Stock Exchange from 2010 to 2023, this study investigates the impact of firm life cycle stages and ownership structure on the reliability and quality of reported earnings. Feasible generalized least squares regression analysis was employed to test the proposed relationships. An inverted U-shaped association was found between a firm's life-cycle stage and earnings quality. Firms experience lower earnings quality in the introduction and decline stages due to lower profits, market fluctuation, and stakeholder pressure. In contrast, in the growth and maturity stages, firms witness earnings quality growth as a result of improved controlling and monitoring systems and higher revenue cash flows, which enhance the stability and reliability of profits. In terms of ownership structure, the empirical results indicated that state and foreign ownership positively and significantly influence earnings quality, whereas CEO ownership has no statistically significant impact. This study extends the existing earnings quality literature by providing empirical evidence on its key determinants in the Vietnamese market and offers practical implications for investors, policymakers, and financial managers seeking to mitigate earnings manipulation risks and improve investment decision-making.

Keywords: Earnings quality, Firm life cycle, Inverted U-shape, Ownership structure.

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♣ Corresponding author: Thy Le-Bao, Innovation and Sustainability Research Group, Faculty of Finance and Banking, Ton Duc Thang University, Ho Chi Minh City, Vietnam. Email: lebaothy@tdtu.edu.vn

1. INTRODUCTION

Net income, also known as earnings, is one of the most essential pieces of financial information that firms publish. Serving as a key metric for firm valuation, abnormal earnings can significantly impact stock prices. Occasionally, however, net income does not fully reflect a company's financial performance. If a company reports high net income but negative operational cash flow, for instance, it may not be as financially stable as it looks. Put simply, if a firm declares a positive net income but has low-quality earnings, investing in the firm may be riskier than the financial statements suggest. Therefore, understanding the concept of earnings quality is extremely important in the current complex financial landscape.

A significant body of previous research has focused on understanding earnings quality and its determinants, considering it to be the key measure of a company's long-term health. High earnings quality typically indicates that reported earnings are free from management manipulation, making them more reliable indicators of future performance. To guarantee that market participants have adequate knowledge for credit and investment decisions, corporations have been compelled to improve earnings quality and disclose more high-quality information. Higher earnings quality reduces information asymmetry between creditors and firms (Dang et al., 2021; Dang, Nguyen et al., 2020).

Although Vietnamese Accounting Standards (VAS) have existed since the early 2000s and are based on earlier iterations of International Accounting Standards, Vietnam has begun to implement International Financial Reporting Standards (IFRS). After a voluntary period from 2022 to 2025, the Ministry of Finance mandated the adoption of IFRS by state-owned businesses, listed firms, and large public entities beginning in 2025. By aligning with international best practices, this change seeks to improve comparability and transparency of financial disclosures as well as draw in foreign investment.

However, significant obstacles, such as technological modifications, intensive training, and overhauls to current accounting systems, are present during the changeover. As a result, the majority of Vietnamese businesses, especially small and medium-sized businesses, continue to use VAS, which causes irregularities in financial reporting. The coexistence of IFRS and VAS compromises transparency and comparability, complicates regulatory supervision, and raises the possibility of results manipulation, particularly for companies with weaker internal control systems. Research on earnings quality is a bright spot in this transitional period. In addition to reflecting a company's actual economic performance, high-quality earnings offer a solid basis for decision-making. By looking at earnings quality, researchers can evaluate the credibility of financial reporting and give policymakers evidence-based insights. Eventually, this study will help Vietnam's financial market become more open, stable, and transparent.

Using a sample of 351 firms listed on the Ho Chi Minh Stock Exchange (HOSE) from 2010 to 2023, this research explores the drivers of earnings quality in Vietnam, highlighting the critical roles played by corporate life cycle dynamics and ownership characteristics. The contribution of our study, relative to existing work, is threefold.

First, prior literature has documented that earnings quality is influenced by a wide array of firm fundamentals and external characteristics, including capital structure, investment opportunities, information asymmetries (Anam, 2023; Wahyuningtyas & Rahman, 2023), firm size (Etim et al., 2023; Rahersya & Daito, 2022), audit committee (Pujiati & Nita, 2022), auditor size, audit tenure (Sumiadji et al., 2019), leverage, managerial ownership (Etim et al., 2023), interest rates, foreign exchange rates, and profitability (Wibisono & Andesto, 2023). While these studies identify specific internal and external drivers of the earnings generation process, research focusing on the nexus between earnings quality and the firm life cycle remains scarce and inconclusive. While some scholars have found that life cycle stages play a significant role in earnings quality (Chen, 2016; Kurnia & Daito, 2022), others have concluded that no significant influence exists (Moshtagh et al., 2014).

In the context of Vietnam, this research gap is even more pronounced. Khuong et al. (2022) conducted one of the first attempts by examining the relationship between life cycle stages and earnings management from 2010 to 2019, discovering a U-shaped relationship moderated by state ownership. Our study extends this analysis to the period 2010–2023 using a sample of 351 non-financial, listed firms. Moving beyond the firm life cycle, we introduce a more comprehensive investigation into ownership structures—specifically foreign and state ownership—to further explain the dynamics of earnings quality in the emerging market of Vietnam.

Second, the adoption of IFRS plays a critical role in global economic integration and trade liberalization. Vietnamese firms must undertake substantial adjustments to comply with the increasingly stringent requirements of this standard. In addition, this transition may give rise to informational and monitoring gaps, as the greater flexibility and increased reliance on professional judgment can unintentionally create opportunities for more sophisticated forms of earnings management. In this context, the assessment of earnings quality is particularly important. As earnings quality is considered an unobservable variable, it must be measured using proxy indicators. The Jones (1991) and modified Jones (1995) models have been widely employed by prior studies to measure earnings quality through discretionary accruals, because of their well-established theoretical basis, transparency, and broad applicability across institutional settings. Compared with alternative specifications, the Jones and modified Jones models are straightforward to implement and provide credible estimates of discretionary accruals. The modified Jones (1995) model refines the original specification by excluding the portion of revenue changes attributable to changes in receivables, thereby mitigating any bias associated with discretionary revenue recognition. The modified Jones model offers a strong foundation for identifying earnings manipulation and ensuring financial transparency in the face of significant regulatory shifts, such as Vietnam's mandatory IFRS transition.

Third, ownership structure plays a vital role in shaping earnings quality by influencing distorting incentives, corporate governance, and financial transparency. Different ownership types create different managerial incentives and control mechanisms, which affect the consistency and transparency of earnings disclosures. A substantial body of empirical research has provided robust evidence that foreign ownership significantly enhances the quality of reported earnings (Al-Duais et al., 2022; Guo et al., 2015; Han et al., 2022; B. Le & Moore, 2023; Saleh & Mansour, 2024). Foreign investors are better able to constrain earnings manipulation through extensive global investment experience, sophisticated monitoring skills, and strong market discipline. Tran & Dang

(2021) conducted one of the few empirical investigations on this issue and reported findings that contradicted the prevailing evidence in the international literature, casting doubt on the role of foreign ownership in shaping earnings quality. As Vietnam continues to position itself as a top-tier destination for foreign direct investment, understanding the link between foreign ownership and financial reporting transparency is essential if policymakers are to foster a robust investment climate where high-quality earnings disclosures serve as a critical signal to attract and retain long-term international capital.

The impact of state ownership on earnings quality remains controversial in the academic literature. Some studies have argued that state-owned firms tend to exhibit higher earnings quality due to closer supervision by government agencies (Le & Nguyen, 2023). Such firms often possess extensive networks of relationships and privileged institutional positions, which enable them to more easily influence reported earnings through real activities, such as related-party transactions. As a result, these firms tend to exhibit higher earnings quality as measured using accrual-based indicators (Cheng et al., 2015). Conversely, other studies have suggested that state-owned firms engage in greater earnings management, partly because government protection allows them to engage in less conservative accounting practices (Gaio & Pinto, 2018). Moreover, managers in state-owned firms must balance the interests of multiple stakeholders, leading to complex governance structures that weaken earnings quality (Nguyen et al., 2021). In light of the conflicting findings in existing literature and the central role of state-owned enterprises in Vietnam's strategic industries, the current study clarifies how state ownership shapes the quality of financial reporting in this emerging market.

2. LITERATURE REVIEW

2.1. Agency Theory

Agency theory (Meckling & Jensen, 1976) highlights the conflict between managers (i.e., agents) and shareholders (i.e., principals). According to this theory, managers may prioritize personal interests, such as career stability or extra rewards, over maximizing shareholders' benefits, resulting in agency conflict. This conflict is manifested through behaviors such as earnings distortion, ineffective resource allocation, risk aversion, and excessive risk-taking. The key determinants of this phenomenon are differing agency costs and information asymmetry at each stage, which require investors and regulators to adapt their monitoring strategies (Putra et al., 2018; Ramadan, 2015).

The extent of agency problems and their impact on earnings quality fluctuate consistently throughout the firm life cycle. Previous empirical results have consistently shown that the unique operational and financial characteristics inherent in each stage of the firm life cycle have a significant impact on the quality of reported earnings (Durana et al., 2021; Jaggi et al., 2022; Khuong et al., 2022; Michalkova, 2021). In the introduction stage, for example, weak performance, negative operating cash flows, limited retained earnings, and strong reliance on external financing intensify agency conflicts. Managers are more likely to engage in upward earnings management through less conservative accruals in order to signal viability and attract capital, resulting in low

earnings quality. During the growth stage, improved performance, rising retained earnings, and declining dependence on financing reduce information asymmetry and agency conflicts. Discretionary accruals in this stage are close to zero with low variability, and earnings volatility mainly reflects real operations rather than manipulation, leading to relatively high earnings quality.

In the maturity stage, firms reach peak profitability and stable cash flows, further reducing agency conflicts. However, managers may continue to manage earnings primarily through accrual-based earnings management, motivated by tax considerations and earnings smoothing, weakening earnings persistence and reducing earnings quality compared to the growth stage. In the shake-out stage, growth slows, and competition intensifies, but operating performance and cash flows remain stable, and the risk of financial distress is low. Stronger monitoring and lower financing pressure constrain both accrual-based and real earnings management, allowing reported earnings to closely reflect economic fundamentals and supporting relatively high earnings quality. In contrast, the decline stage is characterized by deteriorating performance, weak cash flows, and a high risk of financial distress, which sharply intensify agency conflicts. Managers respond to these pressures by inflating earnings through positive discretionary accruals to conceal difficulties and delay failure, increasing accrual volatility and reducing earnings persistence. Consequently, earnings quality is lowest at this stage.

2.2. Firm Life Cycle Theory and Hypothesis Development

The life cycle theory of the firm—explaining the distinct stages of development a corporation goes through from start up to exiting the market—was developed by Adizes (1988), Greiner (1998) and Miller & Friesen (1984). The life cycle is typically divided into four stages: introduction, growth, maturity, and finally, decline. Each stage of the firm life cycle is defined by different financial, operational, and strategic behaviors, which affect the opportunities and challenges at each stage. Each stage of this process impacts the firm's financial reporting behavior, influencing the earnings quality in various ways (Can, 2020; Ngo et al., 2022).

Table 1: Cash flow patterns over firm life cycle

Cash flow type	Life Cycle Stages							
	Introduction	Growth	Mature	Shake-out			Decline	
Operating	−	+	+	−	+	+	−	−
Investing	−	−	−	−	+	+	+	+
Financing	−	+	−	−	+	−	+	−

2.2.1. The Impact of Life Cycle Stage on Earnings Quality

The firm life cycle is a theoretical framework that outlines the stages a company undergoes from creation to eventual decline or renewal. It provides investors with an organized approach to understanding a company's transformation, identifying significant milestones, and making strategic decisions. Each of the life stages—introduction, growth, shake-out, maturity, and decline—has a substantial impact on earnings quality based on a unique set of risks and

uncertainties, the adjustment of earnings management is adjusted, and the reporting of financial performance (Dickinson, 2011).

The introduction stage, also referred to as the start-up stage, marks a firm's initial entry into the market. During this phase, businesses encounter significant risks and uncertainties (Yoo et al., 2019). Previous studies have shown that earnings quality follows a downward trend in this stage. Krishnan et al. (2021), for example, analyzed a sample of 3,451 to 9,493 firms from 1988 to 2012, representing the introduction, growth, maturity, shake-out, and decline stages. Their findings revealed that firms in the introduction stage have stronger incentives to engage in earnings management strategies compared to other stages. Using panel data of 3,250 Chinese listed non-financial companies from 2009 to 2018, Hussain et al. (2020) similarly demonstrated that there is a high degree of earnings manipulation in the introduction stage, as managers use more earnings management techniques to cope with financial pressures and meet investor expectations, resulting in low earnings quality.

Hypothesis H_{1a}: Earnings quality decreases when firms are in the start-up phase.

Growth-stage firms are distinguished by their ability to acquire new resources, achieve success, and expand their business activities (Rautanen, 2013). Hussain et al. (2020) found that firms in the growth stage do not engage in significant earnings management practices due to their lower information asymmetry, greater analyst coverage, access to loans with lower interest rates, and higher accountability and transparency. Using a sample of 622 non-financial, Vietnamese listed firms from 2010 to 2019, Khuong et al. (2022) demonstrated that the differences between investors in developed and developing nations, as well as the Vietnamese legal system's incomplete framework, contribute to a decrease in earnings management in the growth stage, which can lead to improved earnings quality.

Hypothesis H_{1b}: Earnings quality increases when firms move to the growth stage.

At the *maturity stage,* companies have maximum knowledge of business operations and minimum operating costs. Durana et al. (2021) studied a sample of 3,650 tourism enterprises in the Czech Republic, Hungary, Poland, and Slovakia from 2018 to 2022, reporting that companies in the maturity stage have enough resources to develop operating activities; increasing profits and stable growth reduce earnings management behavior. Drake (2016) agreed that mature businesses engage in lower earnings management, due to less consistent earnings and a larger distinction between book and taxable income.

Hypothesis H_{1c}: Earnings quality increases when firms move to the mature stage.

The *shake-out stage* is characterized by a gradual decline in profit and stabilization or decline in the number of companies in the market. Khuong et al. (2022) found that the relationship between companies in the shake-out stage and earnings management is negative, thus improving the quality of earnings. Companies in the shake-out stage often face increased pressure to cut costs and meet short-term financial targets, which can lead to aggressive accounting practices, so they practice more earnings manipulation to improve the appearance of financial information. However, this

adversely affects long-term financial performance, so managers cannot change the company's actual financial situation.

Hypothesis H_{1d}: Earnings quality increases when firms move to the shake-out stage.

In the *decline stage*, companies have negative operating cash flow and falling financial characteristics, such as profit and sales. The findings of Hussain et al. (2020) illustrated the positive relationship between decline-stage firms and earnings management. In the decline stage, managers utilize earnings management techniques to obtain low-cost loans and demonstrate a steady financial situation to stakeholders.

Hypothesis H_{1e}: Earnings quality decreases when firms move to the decline stage.

2.2.2. The Impact of Ownership on Earnings Quality

2.2.2.1. State Ownership

State-owned firms are those for which the primary shareholder or owner is the government. The government may influence earnings quality in various ways through its motivations, monitoring capabilities, and governance procedures. Liu et al. (2014) analyzed Chinese firms over the transitional economy from 1998 to 2005 and found that state-owned enterprises were more likely to smooth their earnings, have more earnings-oriented control activities, have less timely recognition of losses, and have less value relevance than non-state enterprises. Nguyen et al. (2021) similarly demonstrated the adverse relationship between state-owned companies and earnings quality, using a sample from 489 Vietnamese non-financial companies. They concluded this relationship was due to the larger popularity of earnings management in state-owned firms.

Hypothesis H_2: Firms with a higher level of state ownership have a lower earnings quality.

2.2.2.2. Foreign Ownership

The positive association between foreign ownership and earnings quality has been confirmed in numerous previous studies. Han et al. (2022) analyzed data on foreign ownership of Chinese companies from 2003 to 2018 and found that foreign investors demonstrate strong market discipline and provide monitoring advantages by increasing business transparency, thus increasing earnings quality. Examining a dataset of 13,860 firms from 41 economies over 2000 to 2017, Gu et al. (2023) concluded that foreign institutional investors restrict real earnings management by strengthening monitoring, including the incentive and capability to monitor corporate activities abroad, leading to enhanced earnings quality.

Hypothesis H_3: Foreign ownership enhances earnings quality.

2.2.2.3. CEO Ownership

In an analysis of 400 firm-year observations from the Nigerian Stock Exchange spanning 2012–2016, Sani et al. (2020) confirmed that CEO ownership aligns the interests of executives with those

of shareholders, encouraging them to prioritize financial truthfulness and long-term profitability. CEO discretion constrains real earnings manipulation and boosts reporting quality. Nguyen et al. (2021) used a data set of 489 non-financial companies listed on the Vietnam stock market from 2009 to 2018 and similarly found that CEO ownership had a negative relationship with earnings management. Managers are both trustworthy and competent in handling the resources entrusted to them. They bear the responsibility and authority to effectively carry out challenging tasks, seeking recognition from stakeholders. Consequently, when a manager's ownership stake in the firm is significant, it helps limit profit manipulation within the business and improve reporting quality

Hypothesis H_4: Greater CEO ownership increases a firm's earnings quality.

3. METHODOLOGY

3.1 Data

To conduct our analysis, we collected data from 351 non-financial companies listed on the HOSE from publicly available audit financial statements and annual reports from 2010 to 2023. Financial firms were excluded from the study because they have distinct financial characteristics and higher leverage, which is often influenced by explicit or implicit investor protection mechanisms such as deposit insurance. Ultimately, we obtained a total of 4,833 firm-year observations. All data were winsorized at the 2nd and 98th percentiles.

3.2 Variables

One of the most widely adopted approaches for measuring earnings management behavior is the accrual-based model, most notably the model developed by Jones (1991). Under this model, a firm's total accruals are calculated using the following formula:

$$TA_{it} = \Delta CA_{it} - \Delta Cash_{it} - \Delta CL_{it} - DA_{it} \quad (1)$$

Where:
TA_{it} = Total accruals for firm *i* in year *t*;
ΔCA_{it} = Change in current assets for firm *i* in year *t*;
$\Delta Cash_{it}$ = Change in cash and cash equivalents for firm *i* in year *t*;
ΔCL_{it} = Change in current liabilities for firm *i* in year *t*;
DA_{it} = Depreciation and amortization expense for firm *i* in year *t*;

In the second step, the Jones Model is expressed through regression shown in Equation (2):

$$\frac{TA_{it}}{A_{i,t-1}} = \beta_0 \left(\frac{1}{A_{i,t-1}}\right) + \beta_1 \left(\frac{\Delta REV_{it}}{A_{i,t-1}}\right) + \beta_2 \left(\frac{PPE_{it}}{A_{i,t-1}}\right) + \varepsilon_{it} \quad (2)$$

Where:
ΔREV_{it} = Change in revenue for firm *i* between year *t* and *t*−1;
PPE_{it} = The gross value of property, plant, and equipment for firm *i* in year *t*;

A_{it-1} = Total assets for firm *i* at the end of year *t*−1;
ε_{it} = Error term, representing the level of earnings management. Specifically, the absolute value of the residuals from regression Equation (2) denotes the discretionary accruals (DA) for firm *i* in year *t*.

We employ the modified Jones model (MJM), a widely recognized approach for measuring earnings management behavior (Dechow et al., 1995). The core strength of the MJM lies in its refined measurement of discretionary accruals. While firms may manipulate revenue, this effect can be controlled by accounting for potential manipulation through credit sales. Under the MJM, total accruals are regressed against gross property, plant, and equipment (PPE) and revenue change (adjusted for changes in net receivables). A regression analysis is conducted on the changes in independent variables to estimate discretionary accruals (i.e., abnormal accruals). These fluctuations are assumed to arise from the discretionary decisions of management and non-routine actions that influence revenue shifts and PPE levels. The implementation of MJM is especially well-suited to the Vietnamese market's context because of these advantages. The MJM consists of two stages. In the first stage, total accruals, non-discretionary accruals, and discretionary accruals (DAC) are determined using Equations (1), (3), and (4), respectively.

$$NAC_{it} = \beta_0 + \beta_1\left(\frac{1}{A_{t-1}}\right) + \beta_2\left(\frac{\Delta REV - \Delta AR}{A_{t-1}}\right) + \beta_3\left(\frac{PPE_{it}}{A_{t-1}}\right) + \varepsilon_{it} \quad (3)$$

$$DAC_{it} = \frac{TA_{it}}{A_{it}} - NAC_{it} \quad (4)$$

The second stage of the MJM involves converting the residuals into standard deviations and absolute values. In this study, the absolute value of DAC (|DAC|) serves as an inverse proxy for earnings quality. A significantly positive |DAC| indicates that management has exercised professional judgment to shift earnings away from their underlying economic reality, engaging in earnings management behavior. A |DAC| of zero indicates that the firm does not engage in earnings management. The dependability and predictability of reported earnings decline with increasing |DAC|, indicating a systematic deterioration of earnings quality.

Table 2: Variable Definition

Variable	Notion	Measurement
Dependent variable		
EQ	Earnings Quality	As displayed in Section 3.2.1
Independent variables		
Firm life cycle		
INTRO	Introduction stage	As displayed in Table 1
GRO	Growth stage	
MA	Maturity stage	
SHA	Shake-out stage	

Variable	Notion	Measurement
DEC	Decline stage	
Ownership structure		
STATE	State Ownership	The percentage of shares held by state shareholders.
FOWN	Foreign Ownership	The percentage of shares held by foreign investors.
CEOown	Managerial Ownership	The percentage of shares held by the CEO.
SIZE	Firm size	Natural logarithm of the firm's total assets.
ROA	Return on assets	Operating income divided by total assets.
LEV	Leverage	Total liability divided by total assets.
LOSS	Firm loss	Dummy variable equal to one if net income is negative and zero otherwise.
SGRO	Sales growth	$(SALE_t - SALE_{t-1}) / SALE_{t-1}$

Table 3: Descriptive Statistics

Variable	Obs	Mean	Std. dev.	Min	Max
EQ	4,833	−0.146	0.332	−2.356	4.992
LOSS	4,833	0.048	0.214	0	1
SIZE	4,833	28.144	1.455	22.939	34.135
LEV	4,833	0.478	0.214	0.001	1.295
ROA	4,833	0.062	0.049	0.003	0.154
SGRO	4,833	0.106	0.275	−0.294	0.637
STATE	4,833	18.159	26.197	0	99.19
FOWN	4,833	11.384	15.914	0	97.95
CEOown	4,833	7.611	11.239	0	98
INTRO	4,833	0.019	0.135	0	1
GRO	4,833	0.188	0.391	0	1
MAT	4,833	0.317	0.465	0	1
DEC	4,833	0.101	0.301	0	1

Table 4: Pearson Correlation Matrix

No.	Variables	1	2	3	4	5	6	7	8	9	10	11	12	VIF
1	LOSS	1												1.11
2	SIZE	−0.019	1											1.25
3	LEV	0.114	0.334	1										1.5
4	ROA	−0.287	−0.126	−0.473	1									1.59
5	SGRO	−0.141	0.063	0.072	0.145	1								1.08
6	STATE	−0.065	0.006	−0.032	0.142	−0.051	1							1.11
7	FOWN	−0.022	0.222	−0.130	0.214	0.017	−0.110	1						1.18
8	CEOown	−0.016	−0.051	0.046	−0.016	−0.004	0.131	−0.075	1					1.03
9	INTRO	0.015	−0.046	−0.022	−0.011	−0.064	0.001	0.002	−0.023	1				1.05
10	GRO	−0.045	0.113	0.105	−0.031	0.099	−0.093	0.049	−0.020	−0.070	1			1.31
11	MAT	−0.060	−0.031	−0.136	0.254	−0.027	0.206	0.061	0.021	−0.105	−0.358	1		1.45
12	DEC	0.089	−0.027	0.011	−0.152	−0.055	−0.077	−0.057	−0.031	−0.051	−0.173	−0.261	1	1.21

3.3 Research Methodology

To test our hypotheses, we ran the following regression model to examine the association between the firm life cycle stage, ownership structure, and earnings quality:

$$EQ_{it} = \beta_0 + \beta_1 INTRO_{it} + \beta_2 GRO_{it} + \beta_3 MA_{it} + \beta_4 DEL_{it} + \beta_{5\text{-}7} OWNERSHIP_{it} + \beta_{8\text{-}12} Control_{it} + \varepsilon_{it} \quad (5)$$

Where *i* and *t* denote the firm and year, respectively; EQ refers to one of two measures of earnings quality, following Dechow et al. (1995) and Dechow and Dichev (2002). *INTRO, GRO, MA,* and *DEC* are indicator variables identifying firms in the introduction, growth, and decline life cycle stages, respectively. The shake-out stage is omitted from the regression to avoid perfect multicollinearity and serves as the benchmark for interpreting the coefficients of the other life cycle stages. *Control* is a suite of control variables defined in Table 2.

Three different panel data models exist: pooled ordinary least squares (OLS), fixed effects model (FEM), and random effects model (REM). The F-test and Hausman test were applied to determine the suitability of the FEM and REM. The Breusch and Pagan LM tests were used to test for random effects, and the Wald test was used to check whether our model was related to the variance change. The feasible generalized least squares (FGLS) model accounts for this problem. The results of all models and tests are presented in Table 5.

4. RESULTS AND DISCUSSION

Table 5: Regression Results

	FEM	**REM**	**FGLS**
Variables	Coefficient	Coefficient	Coefficient
	(Std.err)	**(Std.err)**	**(Std.err)**
INTRO	0.099***	0.101***	**0.091*** **
	(−0.027)	(−0.027)	**(−0.014)**
GRO	−0.001	−0.005	**−0.028*** **
	(−0.011)	(−0.011)	**(−0.006)**
MAT	−0.003	−0.013	**−0.016*** **
	(−0.010)	(−0.010)	**(−0.006)**
DEC	0.016	0.024*	**0.04*** **
	(−0.013)	(−0.0131)	**(−0.008)**
STATE	0.064	−0.186***	**−0.249*** **
	(−0.041**)**	(−0.030**)**	**(−0.015)**
FOWN	0.056	0.012	**−0.09*** **
	(−0.048**)**	(−0.043**)**	**(−0.019)**
CEOown	0.136***	0.076*	**0.006**
	(−0.048**)**	(−0.046**)**	**(−0.026)**

Variables	FEM Coefficient (Std.err)	REM Coefficient (Std.err)	FGLS Coefficient (Std.err)
LOSS	−0.072***	−0.076***	**−0.065*** **
	(−0.018)	(−0.018)	**(−0.011)**
SIZE	0.039***	0.021***	**0.018*** **
	(−0.008)	(−0.006)	**(−0.003)**
LEV	0.144***	0.142***	**0.051*** **
	(−0.039)	(−0.034)	**(−0.019)**
ROA	0.462***	0.204	**−0.003**
	(−0.131)	(−0.125)	**(−0.079)**
SGRO	0.108***	0.120***	**0.092*** **
	(−0.014)	(−0.014)	**(−0.009)**
Constant	−1.388***	−0.787***	**−0.613*** **
	(−0.225)	(−0.163)	**(−0.071)**
Number of observations	**3,795**	**3,795**	**3,795**
F-test		Prob > F = 0.000	
Hausman test		$chi^2(12) = 97.68$ Prob > F = 0.000	
Model selection		FEM	
Modified Wald test		$chi^2(349) = 7.3e+05$ Prob = 0.000	
Breusch and Pagan Lagrangian multiplier Test		$chi^2(01) = 4229.35$ Prob = 0.000	

***Note**:* This table shows fixed effects model (FEM), random effects model (REM), and feasible generalized least squares (FGLS) regressions estimating the impact of firm life cycle and ownership structure on the earnings quality. The numbers in parentheses are standard errors. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

The results suggest that an inverted U-shaped association exists between firm life cycle and earnings quality, significant at the 1% level. All life-cycle stages tested in the model (i.e., shake-out stage excluded) were proven to have a significant influence on earnings quality, albeit in different ways. Supporting H_{1a}, we found earnings quality to be poor in the introduction stage. These findings are in line with prior research in the field (Hussain et al., 2020; Krishnan et al., 2021). During this stage, executives may be more attentive to earnings management in order to generate positive reports and fulfill investor expectations.

In the growth stage, executives focus on rapid business expansion and prioritize building long-term value. Analysts and investors also enhance scrutiny, which prevents earnings manipulation. We find that earnings quality is favorable in this stage, supporting H_{1b} and aligning with the existing literature (Khuong et al., 2022; Rautanen, 2013). Consistent with H_{1c}, we also found a positive correlation between the maturity stage and earnings quality. Because mature companies have

steady revenue streams and operational stability, and put their credibility and investor confidence first, they are less likely to engage in earnings manipulation. Our findings reinforce the conclusions of previous research (Drake, 2016; Durana et al., 2021). Finally, consistent with our prediction in H_{1e}, we found that firms in the decline phase tend to have a lower quality of earnings. Companies in the decline stage often face declining revenues, reduced profitability, and greater pressure from investors, creditors, and management to display positive financial outcomes, which may result in manipulating or smoothing earnings.

In terms of ownership, we found a significant positive association between state ownership and earnings quality ($p < .01$), rejecting hypothesis H_2. Reported earnings are influenced by ownership structure, agency problems, and market pressure, especially when firms face strong financing or regulatory requirements. In the Vietnamese context, specifically, many private firms face financial constraints and must register a strong performance to obtain bank loans and attract investors. In contrast, state-owned firms usually have easier access to financing and weaker incentives to influence reported profits, which leads to better earnings quality. Our findings are in line with prior research (Ding et al., 2007; Tam et al., 2018)

Foreign ownership also had a significant positive relationship with earnings quality, supporting hypothesis H_3. Foreign ownership is associated with higher earnings quality through enhanced corporate governance, stronger external monitoring, and improved information transparency. Foreign investors impose stricter disclosure standards and exercise greater market discipline, constraining managerial opportunism and reducing accounting manipulation. Consequently, firms with higher foreign ownership tend to exhibit more reliable and higher-quality financial reporting (Ben-Nasr et al., 2015; Han et al., 2022).

We found firm loss to have a positive impact on earnings quality, where higher losses lead to an increase in earnings quality. Firms experiencing losses tend to adopt more conservative accounting practices and provide transparent disclosures of their financial situations. Our finding is inconsistent with the results by Wang et al. (2022), who showed that losses diminish the reliability of reported earnings.

There was a negative association between firm size and earnings quality, implying that earnings quality declines as firm size increases. One possible explanation for this relationship is that larger firm size is often associated with greater operational complexity, which may expand managerial discretion and create stronger incentives to engage in earnings management (Lobo & Zhou, 2006; Shen & Chih, 2007). Consequently, the reported earnings of larger firms may be less representative of their underlying economic performance. This finding is consistent with prior evidence documented by Ali and Zhang (2015) and Shen and Chih (2007), who demonstrated that larger firms are more susceptible to earnings management practices than smaller firms, leading to lower earnings quality.

We found an inverse relationship between leverage and earnings quality, likely explained by the heightened pressure faced by highly leveraged firms to meet debt-related obligations. When leverage is greater, managers have stronger incentives to engage in earnings manipulation to make firm performance look better and maintain creditors' confidence. While such behavior may temporarily increase reported earnings, it undermines their reliability and sustainability, ultimately

leading to lower earnings quality. This finding is consistent with the results of Tulcanaza-Prieto et al. (2020) and Yasa et al. (2020).

Finally, the regression results revealed a significant negative relationship between sales growth and earnings quality ($p < .01$). This may be because when sales increase more rapidly, managers may manipulate earnings either to reduce tax obligations or to sustain positive growth trends to secure bonuses, attract investors, and maintain profit and sales performance. This finding corroborates previous studies in the field (Nguyen et al., 2024; Tran & Dang, 2021).

5. CONCLUSIONS

Using a sample of 351 listed, non-financial firms on the HOSE from 2010 to 2023, this study provided comprehensive empirical evidence on the determinants of earnings quality. It also highlighted the role of the firm life cycle and ownership structure within the Vietnamese context. The findings revealed a significant inverted U-shaped relationship between the stages of the firm life cycle and earnings quality. Earnings quality is lower in the introduction and decline stages, but increases in the middle stages. This is due, in part, to the larger distorting incentives of managers in the introduction stage, when firms must deal with a mass of problems such as capital shortages, poor revenue, pressure to attract investors, and lower transparency due to a lack of historical data. Similarly, firms experience lower earnings quality in the decline stage due to lower profits, market fluctuation, and stakeholder pressure. In contrast, in the growth and maturity stages, earnings quality grows as a result of better controlling and monitoring systems and higher revenue cash flows, which enhance the stability and reliability of profits.

Our analysis indicated that state and foreign ownership play a crucial role in shaping reporting integrity. Contrary to common agency theory assumptions, in Vietnam, state ownership is positively associated with earnings quality, as state-owned firms often enjoy easier access to financing and face fewer incentives to manipulate profits compared to private firms. Foreign ownership also acts as a strong oversight mechanism, as global investors enforce more stringent disclosure requirements and greater market discipline, which improves the accuracy of financial reporting. These results underscore the importance of external oversight in mitigating managerial discretion. Additionally, several firm-specific characteristics were identified as key drivers of financial transparency. Firm loss was found to have a positive impact on earnings quality, suggesting a shift toward conservative accounting practices during periods of underperformance. In contrast, firm size and sales growth were linked to lower earnings quality, likely because of increased operational complexity and the pressure to sustain performance. High financial leverage is still a major risk concern since managers are frequently encouraged to manipulate earnings in order to meet debt covenants.

The findings of this study have practical implications for stakeholders evaluating corporations for an intended investment. It provides evidence of how earnings quality can be impacted by relevant factors and can help investors identify and prevent manipulation risks when making an investment decision exact. In addition, our research contributes to the literature by updating existing knowledge, creating a more comprehensive foundation for future investigations of the relationships around earnings quality. Still, we acknowledge several limitations, including the study's exclusive emphasis on the Vietnamese market and its dependence on quantitative proxies for earnings quality.

To provide a more comprehensive picture of the changing financial reporting landscape, future research could make cross-country comparisons or include qualitative governance aspects, such as board diversity and the impact of IFRS adoption. In the end, the study's findings directly support the United Nations Sustainable Development Goals (SDGs) by revealing the dynamics of corporate governance and financial transparency in an emerging economy. In particular, the focus on improving financial reporting integrity and reducing managerial discretion is consistent with SDG 16 (Peace, Justice, and Strong Institutions), which promotes the development of efficient, transparent, and accountable institutions at all levels. Additionally, this research supports SDG 8 (Decent Work and Economic Growth) by identifying the mechanisms of supervision that protect investors and prevent earnings manipulation. Long-term, inclusive economic resilience in developing nations depends on maintaining a transparent financial ecosystem, which boosts market discipline, encourages investor trust, and mobilises sustainable capital flows.

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REFERENCES

Adizes, I. (1988). *Corporate Lifecycles: how and why corporations grow and die and what to do about it./Adizes I*. Englewood Cliffs, NJ: Prentice Hall. https://doi.org/10.1016/0024-6301(92)90356-7

Al-Duais, S. D., Malek, M., Abdul Hamid, M. A., & Almasawa, A. M. (2022). Ownership structure and real earnings management: evidence from an emerging market. *Journal of Accounting in Emerging Economies*, *12*(2), 380–404. https://doi.org/10.1108/jaee-01-2021-0008

Ali, A., & Zhang, W. (2015). CEO tenure and earnings management. *Journal of Accounting and Economics*, *59*(1), 60–79. . https://doi.org/10.1016/j.jacceco.2014.11.004

Anam, H. (2023). Determinants of earnings quality: An empirical study in Indonesia. *Akuntansi Dan Teknologi Informasi*, *16*(1), 49–62. https://doi.org/10.24123/jati.v16i1.5258

Ben-Nasr, H., Boubakri, N., & Cosset, J.-C. (2015). Earnings quality in privatized firms: The role of state and foreign owners. *Journal of Accounting and Public Policy*, *34*(4), 392–416. https://doi.org/10.1016/j.jaccpubpol.2014.12.003

Can, G. (2020). Do life-cycles affect financial reporting quality? Evidence from emerging market. *Cogent Business & Management*, *7*(1), 1854147. https://doi.org/10.1080/23311975.2020.1854147

Chen, T. (2016). Internal control, life cycle and earnings quality—An empirical analysis from Chinese market. *Open Journal of Business and Management*, *4*(2), 301–311. https://doi.org/10.4236/ojbm.2016.42032

Cheng, C. S. A., Wang, J., & Wei, S. X. (2015). State ownership and earnings management around initial public offerings: Evidence from China. *Journal of International Accounting Research*, *14*(2), 89–116. https://doi.org/10.2308/jiar-51193

Dang, H. N., Hoang, K., Vu, V. T., & Nguyen, L. Van. (2021). Do socially responsible firms always disclose high-quality earnings? Evidence from an emerging socialist economy. *Asian Review of Accounting*, *29*(3), 291–306. https://doi.org/10.1108/ara-11-2020-0174

Dang, H. N., Nguyen, T. T. C., & Tran, D. M. (2020). The impact of earnings quality on firm value: The case of Vietnam. *The Journal of Asian Finance, Economics and Business*, *7*(3), 63–72. https://doi.org/10.13106/jafeb.2020.vol7.no3.63

Dang, H. N., Pham, C. D., Nguyen, T. X., & Nguyen, H. T. T. (2020). Effects of corporate governance and earning quality on listed Vietnamese firm value. *Journal of Asian Finance, Economics and Business*, *7*(4), 71–80. https://doi.org/10.13106/jafeb.2020.vol7.no4.71

Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. The Accounting Review, 77(s-1), 35–59. https://doi.org/10.2308/accr.2002.77.s-1.35

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting Earnings Management. *The Accounting Review*, *70*(2), 193–225. http://www.jstor.org/stable/248303.

Dickinson, V. (2011). Cash flow patterns as a proxy for firm life cycle. *The Accounting Review*, *86*(6), 1969–1994. https://doi.org/10.2308/accr-10130

Ding, Y., Zhang, H., & Zhang, J. (2007). Private vs state ownership and earnings management: Evidence from Chinese listed companies. *Corporate Governance: An International Review*, *15*(2), 223–238. https://doi.org/10.1111/j.1467-8683.2007.00556.x

Drake, K. D. (2016). *Does firm life cycle inform the relation between book-tax differences and earnings persistence?* SSRN. https://doi.org/10.2139/ssrn.2547778

Durana, P., Michalkova, L., Privara, A., Marousek, J., & Tumpach, M. (2021). Does the life cycle affect earnings management and bankruptcy? *Oeconomia Copernicana*, *12*(2), 425–461. https://doi.org/10.24136/oc.2021.015

Etim, E. O., Umoffong, N. J., Inyang, A. B., & Umanah, N. (2023). Determinants of Earnings Quality of Listed Consumer Goods Firms in Nigeria. *Asian Journal of Economics and Finance*, *5*(2), 231–248. https://DOI:10.47509/AJEF.2023.v05i02.08

Gaio, C., & Pinto, I. (2018). The role of state ownership on earnings quality: evidence across public and private European firms. *Journal of Applied Accounting Research*, *19*(2), 312–332. https://doi.org/10.1108/JAAR-07-2016-0067

Greiner, L. E. (1998). Evolution and revolution as organizations grow. *Harvard Business Review*, *76*(3), 55–64.

Gu, X., An, Z., Chen, C., & Li, D. (2023). Do foreign institutional investors monitor opportunistic managerial behaviour? Evidence from real earnings management. *Accounting & Finance*, *63*(1), 317–351. https://doi.org/10.1111/acfi.13015

Guo, J., Huang, P., Zhang, Y., & Zhou, N. (2015). Foreign ownership and real earnings management: Evidence from Japan. *Journal of International Accounting Research*, *14*(2), 185–213. https://doi.org/10.2308/jiar-51274

Han, M., Ding, A., & Zhang, H. (2022). Foreign ownership and earnings management. *International Review of Economics & Finance*, *80*, 114–133. https://doi.org/10.1016/j.iref.2022.02.074

Hieu, P. M., & Do Quyen, N. (2021). Earnings quality measurements and determinants: the case of listed firms in Vietnam. *Journal of International Economics and Management*, *21*(3), 22–46. https://doi.org/10.38203/jiem.021.3.0034

Hussain, A., Akbar, M., Kaleem Khan, M., Akbar, A., Panait, M., & Catalin Voica, M. (2020). When does earnings management matter? Evidence across the corporate life cycle for non-financial Chinese listed companies. *Journal of Risk and Financial Management*, *13*(12), 313.https://doi.org/10.3390/jrfm13120313

Jaggi, B., Allini, A., Casciello, R., & Meucci, F. (2022). Firm life cycle stages and earnings management. *Review of Quantitative Finance and Accounting*, *59*(3), 1019–1049. https://doi.org/10.1007/s11156-022-01069-5

Khuong, N. V., Anh, L. H. T., & Van, N. T. H. (2022). Firm life cycle and earnings management: The moderating role of state ownership. *Cogent Economics & Finance*, *10*(1), 2085260. https://doi.org/10.1002/bsd2.205

Krishnan, G. V, Myllymäki, E., & Nagar, N. (2021). Does financial reporting quality vary across firm life cycle? *Journal of Business Finance & Accounting*, *48*(5–6), 954–987. https://doi.org/10.1111/jbfa.12508

Kurnia, A., & Daito, A. (2022). Determinants of earnings quality with the company's life cycle, and related party transactions and the implications on firm value. *Dinasti International Journal of Economics, Finance & Accounting*, *3*(3), 253–261. https://doi.org/10.38035/dijefa.v3i3.1353

Le, B., & Moore, P. H. (2023). The impact of audit quality on earnings management and cost of equity capital: evidence from a developing market. *Journal of Financial Reporting and Accounting*, *21*(3), 695–728. https://doi.org/10.1108/jfra-09-2021-0284

Le, Q. L., & Nguyen, H. A. (2023). The impact of board characteristics and ownership structure on earnings management: Evidence from a frontier market. *Cogent Business & Management*, *10*(1), 2159748. https://doi.org/10.1080/23311975.2022.2159748

Liu, X., Saidi, R., & Bazaz, M. (2014). Institutional incentives and earnings quality: The influence of government ownership in China. *Journal of Contemporary Accounting & Economics*, *10*(3), 248–261. https://doi.org/10.1016/j.jcae.2014.10.003

Lobo, G. J., & Zhou, J. (2006). Did conservatism in financial reporting increase after the Sarbanes-Oxley Act? Initial evidence. *Accounting Horizons*, *20*(1), 57–73. https://doi.org/10.2308/acch.2006.20.1.57

Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm. *Managerial Behavior, Agency Costs and Ownership Structure*. https://doi.org/10.1007/978-94-009-9257-3_8

Michalkova, L. (2021). Earnings quality and accruals over company´ s life cycle. *SHS Web of Conferences*, *92*, 02043. https://doi.org/10.1051/shsconf/20219202043

Miller, D., & Friesen, P. H. (1984). A longitudinal study of the corporate life cycle. *Management Science*, *30*(10), 1161–1183. https://doi.org/10.1287/mnsc.30.10.1161

Moshtagh, F., Abbaszadeh, M. R., Nowghabi, M. H. V., & Nowghabi, M. J. (2014). An Investigation of the Effect of Firm's Life Cycle Stages on Earning Quality: Evidence from Iran. *Asian Journal of Research in Banking and Finance*, *4*(8), 109–122.

Ngo, N.-Q.-N., Ly, U.-N., Truong, Q.-M., & Ha, M.-T. (2022). The impact of firm life cycle on abnormal earnings in financial statement quality: evidence from Vietnam. *Journal for Global Business Advancement*, *15*(6), 686–713. https://doi.org/10.1504/jgba.2023.10057601

Nguyen, H. A., Lien Le, Q., & Anh Vu, T. K. (2021). Ownership structure and earnings management: Empirical evidence from Vietnam. *Cogent Business & Management*, *8*(1), 1908006. https://doi.org/10.1080/23311975.2021.1908006

Nguyen, Q., Kim, M. H., & Ali, S. (2024). Corporate governance and earnings management: Evidence from Vietnamese listed firms. *International Review of Economics & Finance*, *89*, 775–801. https://doi.org/10.1016/j.iref.2023.07.084

Pujiati, D., & Nita, R. A. (2022). Determinant of Earnings Quality: IFRS Convergence, Accounting Disclosure and Audit Committee in Indonesia. *International Journal of Finance & Banking Studies (2147-4486)*, *11*(1), 177–189. https://doi.org/10.20525/ijfbs.v11i1.1520

Putra, A. M., Pagalung, G., & Habbe, A. H. (2018). Level of agency cost driven by cultural and corruption and earnings management: Evidence of South East Asia countries. *Intangible Capital*, *14*(4), 499–517. https://doi.org/10.3926/ic.1289

Rahersya, R. A., & Daito, A. (2022). Determinant Earnings Quality, Size of Companies Registered In Indonesia, Malaysia, America and Singapore. *Devotion: Journal of Research and Community Service*, *3*(14), 2543–2549. https://doi.org/10.36418/dev.v3i14.304

Ramadan, I. Z. (2015). Earnings quality determinants of the Jordanian manufacturing listed companies. *International Journal of Economics and Finance*, *7*(5), 140–146. https://doi.org/10.5539/ijef.v7n5p140

Rautanen, J. (2013). *External financing during a company's life cycle*.

Saleh, M. W. A., & Mansour, M. (2024). Is audit committee busyness associated with earnings management? The moderating role of foreign ownership. *Accounting Research Journal*, *37*(1), 80–97. https://doi.org/10.1108/arj-04-2023-0106

Sani, A. A., Abdul Latif, R., & Al-Dhamari, R. A. (2020). CEO discretion, political connection and real earnings management in Nigeria. *Management Research Review*, *43*(8), 909–929. https://doi.org/10.1108/mrr-12-2018-0460

Shen, C., & Chih, H. (2007). Earnings management and corporate governance in Asia's emerging markets. *Corporate Governance: An International Review*, *15*(5), 999–1021. https://doi.org/10.1111/j.1467-8683.2007.00624.x

Sumiadji, S., Chandrarin, G., & Subiyantoro, E. (2019). Effect of audit quality on earnings quality: Evidence from Indonesia stock exchange. *International Journal of Financial Research.*, *10*(1), 86–97. https://doi.org/10.5430/ijfr.v10n1p86

Tam, T. M., Minh, L. Q., Khuyen, L. T., & Thanh, N. P. (2018). Earnings quality: Does state ownership matter? Evidence from Vietnam. *International Econometric Conference of Vietnam*, 477–496. https://doi.org/10.1007/978-3-030-04200-4_35

Tran, M. D., & Dang, N. H. (2021). The impact of ownership structure on earnings management: The case of Vietnam. *Sage Open*, *11*(3), 21582440211047250. https://doi.org/10.1177/21582440211047248

Tulcanaza-Prieto, A., Lee, Y. H., & Koo, J.-H. (2020). Leverage, corporate governance and real earnings management: Evidence from Korean market. *Global Business & Finance Review (GBFR)*, *25*(4), 51–72. https://doi.org/10.17549/gbfr.2020.25.4.51

Van Khanh, V. T., & Hung, D. N. (2020). Impact of earnings quality on the debt maturity: The case of Vietnam. *Asian Economic and Financial Review*, *10*(1), 1–12. https://doi.org/10.18488/journal.aefr.2020.101.1.12

Vorst, P., & Yohn, T. L. (2018). Life cycle models and forecasting growth and profitability. *The Accounting Review*, *93*(6), 357–381. https://doi.org/10.2308/accr-52091

Wang, Y., Yu, M., & Gao, S. (2022). Gender diversity and financial statement fraud. *Journal of Accounting and Public Policy*, *41*(2), 106903. https://doi.org/10.1016/j.jaccpubpol.2021.106903

Wibisono, M. G., & Andesto, R. (2023). Determinant Earnings Quality and Its Impact on Firm Value. *Devotion: Journal of Research and Community Service*, *4*(12), 2321–2329. https://doi.org/10.59188/devotion.v4i12.637

Yasa, G. S. W., Wirakusuma, M. G., & Suaryana, I. G. N. A. (2020). Effect of leverage, free cash flow, corporate governance, growth and risk management on earnings quality. *International Research Journal of Management, IT and Social Sciences*, *7*(1), 177–184. https://doi.org/10.21744/irjmis.v7n1.835