# The Impact of Earnings Quality on Information Asymmetry and Capital Markets: A Systematic Literature Review

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Financial market participants are paying close attention to the quality of reported earnings, and scholars, practitioners and regulators are accordingly expressing heightened interest in understanding recent reports. This systematic literature review endeavours to synthesise and critically evaluate existing literature regarding the relationship between earnings quality, information asymmetry and capital market outcomes. Using various conceptual frameworks and measurement methods used to assess earnings quality, the review analyses empirical evidence on the impact of earnings quality on information asymmetry and market efficiency and examines how different institutional and market factors can moderate these relationships. Results suggest a complicated and nuanced relationship between earnings quality and capital markets such that higher earnings quality lessens information asymmetry and cost of capital. Gaps in current knowledge on earnings quality are identified, along with promising avenues for future research, and the relevance of this aspect in ensuring market stability and investor confidence is stressed.

## 1. Introduction

## 1.1 Background and Context

A significant amount of attention has been spent by scholars, practitioners and regulators on the quality of reported earnings in financial markets. Given that financial reporting is the main avenue for communicating with stakeholders in firms, the integrity and reliability of earnings information are critical to the functioning of markets and the investment decisions of stakeholders in firms. Earnings quality, that is, the quality of the reporting system in capturing the fundamental economic performance of firms, is becoming ever more important in modern capital markets that are increasingly less transparent and are fraught with more information asymmetry. The increasing interest in earnings quality arises from several high-profile accounting scandals and financial crises, which raise the issue of the importance of reliable financial reporting to market stability and investor confidence. Evidence of adverse consequences from poor quality earnings, such as higher cost of capital, lower market

liquidity, and greater information asymmetry between market parties are documented in Francis et al. (2004) and Dechow and Dichev (2002). These implications argue for a greater need to understand how earnings quality affects other aspects in the capital markets and the behaviour of investors.

# 1.2 Research Problem and Significance

While numerous studies in this area have been carried out, there is still substantial controversy regarding how to measure earnings quality, what drives it and ultimately what economic consequences it has. Literature on earnings quality includes conceptually and measurement attempts such as accruals quality and earnings persistence on accounting-based measures and value relevance and timeliness in market-based measures. However, these various kinds of measurement approaches provide different rich insights and complicate the synthesis and interpretation of research findings. Second, earnings quality and information asymmetry possess a complex dynamic that should be investigated systematically. As Bhattacharya, et al (2013) suggests, superior earnings quality may help to solve information asymmetry by providing market participants more reliable and transparent financial information. Academic discourse still exists, however, about how this occurs, and under what conditions these effects are most pronounced.

# 1.3 Research Objectives and Scope

The purpose of this systematic literature review is to synthesise and critically evaluate current research exploring the relationship between earnings quality and information asymmetry and their capital market outcomes. Specifically, we seek to:

- 1. Analyse the various conceptual frameworks and measurement approaches used to assess earnings quality
- 2. Examine the empirical evidence regarding the impact of earnings quality on information asymmetry and market efficiency
- 3. Investigate how different institutional and market factors moderate the relationship between earnings quality and capital market outcomes
- 4. Identify gaps in current understanding and propose directions for future research

#### 1.4 Theoretical Framework

Our investigation is rooted in a number of theoretical perspectives which assist in explaining the function of earnings quality in capital markets. Agency theory makes sense of how the information asymmetry between managers and investors puts in demand for high quality financial reports. Earnings quality is used as a signalling tool by proponents of signalling theory to suggest that it is a mechanism for communicating private information to market participants. Moreover, the market microstructure theories also explain earnings quality impacts on trading behaviour and market liquidity.

#### 1.5 Contribution

Several important contributions to the literature are made by this systematic review. First, it offers a comprehensive synthesis of the research in earnings quality as it strives to reconcile apparently conflicting findings and pinpoint areas of agreement. Second, it develops a unified *Nanotechnology Perceptions* Vol. 20 No. S16 (2024)

framework for thinking about how earnings quality can affect capital market outcomes via multiple channels. Third, it notes the state of current knowledge about the existence of environmentally relevant concentrations and processes, and highlights important gaps that require additional knowledge to better comprehend environmentally relevant processes.

This review is particularly relevant as financial reporting reliability is being questioned at an unprecedented time, during which market participants insist on even more transparency and accountability. In order to contribute both to academic discourse and the existing practical understanding of how earnings quality affects capital market outcomes, we synthesise existing knowledge and describe future research directions.

#### 2. Theoretical Framework

# 2.1 Conceptualizing Earnings Quality

# 2.1.1 Fundamental Definitions and Components

Conceptualising of earnings quality represents the theoretical underpinning of understanding earnings quality as a multifaceted construct that involves both the fundamental economic performance of a firm as well as its financial reporting effectiveness. As defined by Dechow et al. (2010), earnings quality could be defined as the extent to which reported earnings are relevant to understand a firm's financial performance a decision context. This definition accounts for both the inherent, business fundamentals and operating environment determined, and the discretionary, management decision determined dimension of earnings quality. Francis et al. (2004) further elaborate on this framework by identifying seven key attributes of earnings quality such as accruals quality, predictability and persistence, smoothness, value relevance, timeliness and conservatism. Earnings quality is defined with the accounting-based and market-based measures; these attributes constitute a comprehensive framework for analysing earnings quality from different perspectives.

## 2.1.2 Information Content Perspective

Theory behind earning quality is closely linked to the information content view where high earning quality should facilitate useful information for decision making process. Measured by the ability of earnings to reveal future cash flow and future value, the quality of earnings is discussed by Christensen et al. (2005). In aligning with this view, this research supports the decision-usefulness objective of financial reporting for which various accounting standard-setting bodies take a stand on.

# 2.2 Information Asymmetry Theory

## 2.2.1 Core Principles and Market Impact

By applying information asymmetry theory in financial markets and robustly tested by many researchers, information asymmetry theory offers a crucial theoretical lens for understanding the role of earnings quality (Akerlof, 1970). Lambert et al. (2007) show that firm and investor information asymmetry affect the cost of capital because of its effect on investors' beliefs about the distribution of future cash flows. Based on this theoretical framework, we suggest that higher earnings quality reduces information asymmetry by giving market participants more

precise and reliable information.

#### 2.2.2 Adverse Selection and Moral Hazard

The theory also addresses two fundamental problems in financial markets such as adverse selection and moral hazard. Brown and Hillegeist (2007) demonstrate that high quality earnings may help solve adverse selection problems by reducing the information advantage of informed traders. Also, Bhattacharya et al. (2013) show that earnings quality, understood as quality of the accounting information available in financial statements, leads to a decrease in trading costs related to information asymmetry.

# 2.3 Agency Theory

## 2.3.1 Principal-Agent Relationships

The theories of agency (Jensen and Meckling, 1976; referenced in numerous other researcher's works on earnings quality) provide insights about financial reporting choice in situations that involve separation of ownership and control. As a monitoring mechanism, Healy and Palepu (2001) suggest that agency conflicts generate demands for high quality financial reporting. The usefulness of this theoretical perspective is to explain why earnings quality varies systematically with corporate governance structures and ownership characteristics.

# 2.3.2 Information Risk and Monitoring

The agency theory framework also explains how the earnings quality affects the costs of monitoring by shareholders. Through Francis et al. (2005), poor earnings quality can enhance information risk and monitoring costs, thereby raising required returns by investors. The theoretical connexion between earnings quality and cost of capital is based on this relationship.

## 2.4 Signalling Theory

## 2.4.1 Quality Signals in Financial Markets

Another important theory used to understand earnings quality is signalling theory, which originally was developed by Spence (1973). In a separate study, Garcia Lara et al. (2014) demonstrate that firms can use high quality earnings to signal the underlying economic performance to market participants. This theoretical framework posits a way to explain why firms should voluntarily adopt reporting practises which are more earnings quality enhancing.

## 2.4.2 Credible Communication

From the standpoint of this theoretical perspective, the key is the credibility of earnings to serve as a signal. According to Francis et al. (2008), high earnings quality firms find it easier to communicate with capital markets which, in turn, results in lower costs of capital and better access to financing. The empirical evidence indicates that firms with better earnings quality have more favourable financing terms, in line with this theoretical prediction.

# 2.5 Market Efficiency Theory

## 2.5.1 Price Formation and Information Processing

According to Fama, (1970) market efficiency theory explains how earnings information is embedded in stock prices. Core et al. (2008) show that the market's ability to process earnings

information efficiently depends upon the quality of those earning. The theoretical framework presented here provides insights into why the association between earnings quality and speed and accuracy of price discovery in capital markets exists.

#### 2.5.2 Market Microstructure Effects

The theoretical framework also includes market microstructure effects as described in Kim and Verrecchia (1994). These effects explain why and how earnings quality affects trading behaviour, bid—ask spreads and market liquidity. The relationships among these factors have been extensively tested and verified with empirical research using the theoretical predictions.

A theoretical framework is established to explain how earnings quality drives capital market outcomes through different channels. The relationships between earnings quality, information asymmetry and market outcomes are explained through the integration of perspectives from information economics, agency theory, and market microstructure. We use this multifaceted, yet theoretically coherent approach to guide our systematic review of the empirical literature and to highlight where additional theoretical development is required.

# 3. Methodology

- 3.1 Systematic Review Protocol
- 3.1.1 Review Design and Planning

This systematic literature review follows a rigorous methodological approach to ensure comprehensiveness, transparency, and reproducibility. Following the guidelines established by Tranfield et al. (2003) for conducting systematic reviews in management research, we developed a detailed review protocol that specified the research questions, search strategy, inclusion/exclusion criteria, and analysis methods. This protocol was established before beginning the review process to minimize potential bias and ensure methodological rigor.

## 3.1.2 Research Questions

The systematic review was guided by the following primary research questions:

- 1. How does earnings quality influence information asymmetry in capital markets?
- 2. What is the relationship between earnings quality and cost of capital?
- 3. How do institutional and market factors moderate these relationships?
- 4. What are the key measurement approaches for earnings quality and their relative effectiveness?
- 3.2 Search Strategy

## 3.2.1 Database Selection

We conducted a comprehensive search across four major academic databases: Scopus, Web of Science, Google Scholar, and Scispace. These databases were selected because they collectively provide extensive coverage of peer-reviewed research in accounting, finance, and economics. The multiple database approach helps ensure comprehensive coverage and reduces

the possibility of missing relevant studies.

## 3.2.2 Search Terms and Boolean Operators

The search strategy employed a combination of keywords and Boolean operators related to earnings quality and its market implications. The primary search string was constructed as follows:

("earnings quality" OR "accounting quality") AND ("information asymmetry" OR "capital markets" OR "cost of capital" OR "market liquidity" OR "bid-ask spread")

Additional search terms were included based on the specific measurement approaches and market outcomes identified in the preliminary literature review:

(accruals quality" OR "earnings persistence" OR "earnings predictability" OR "value relevance" OR "earnings timeliness")

# 3.2.3 Time Period and Language

The search covered articles published in English from 2000 to 2024, encompassing major developments in earnings quality research while maintaining contemporary relevance. The starting date was chosen to capture the post-Enron era of increased focus on financial reporting quality.

#### 3.3 Selection Process

# 3.3.1 Initial Screening

The initial database searches yielded 100 potentially relevant papers. These papers underwent a first-level screening based on their titles and abstracts, applying our predefined inclusion and exclusion criteria. This screening resulted in 59 papers being selected for full-text review.

## 3.3.2 Inclusion Criteria

Articles were included if they met the following criteria:

- Peer-reviewed journal articles in English
- Focus on earnings quality as a primary variable
- Empirical studies or theoretical papers with substantial contribution
- Clear methodology and theoretical framework
- Relevance to capital market outcomes

#### 3.3.3 Exclusion Criteria

Papers were excluded if they:

- Were not peer-reviewed (conference papers, working papers)
- Focused solely on earnings management without quality implications
- Lacked clear methodological approach
- Had insufficient connection to market outcomes

Were purely descriptive without theoretical or empirical contribution

#### 3.3.4 Final Selection

After full-text review, 45 papers were selected for inclusion in the final analysis. The reduction from 59 to 45 papers was based on detailed assessment of methodology, theoretical contribution, and relevance to our research questions.

## 3.4 Quality Assessment

## 3.4.1 Quality Criteria

To gain a complete and reliable reading, this literature review employed a robust quality assessment of the selected papers. Among other things, dimensions such as theoretical foundation and contribution, methodological rigour, sample quality and selection, robustness of the findings, as well as its overall contribution to existing knowledge, and pro tem of the publishing journals were evaluated.

# 3.4.2 Coding and Data Extraction

We developed a detailed coding scheme in order to systematically gather and organise key data from these studies. Documentation of important factors such as research objectives and questions, theoretical frameworks used, methodologies and research designs employed, key findings and conclusions, and avenues for further research were made easy by this scheme.

## 3.5 Synthesis Method

# 3.5.1 Analytical Approach

We have synthesised our collected data by narrative synthesis and thematic analysis. Narrative synthesis was used in order to describe and analyse observed patterns and relationships across studies. Thematic analysis was leveraged to determine and describe the recurring themes and concepts in the domain in order to advance our understanding of the domain.

# 3.5.2 Framework Development

We then integrated findings across various studies to develop a comprehensive conceptual framework, identifying important relationships between earnings quality, information asymmetry as well as market outcomes. This framework was continuously iterated to capture the nuances and complexities of the research findings of this study.

## 3.5.3 Validity and Reliability

We ensured that our findings were valid and reliable. To this end, we developed several strategies such as the independent review of the coding by multiple researchers, regular discussions to resolve discrepancies, documentation of our decision-making processes and consultation with subject matter experts. These measures gave us a good foundation to come back to in our synthesis, providing an easy and authoritative compilation of what we currently know about earnings quality and how earnings quality affects capital markets. In addition, this structured approach also highlighted salient gaps, which will provide a basis for further research in this important area of financial study.

# 4. Earnings Quality Measurement Approaches

#### 4.1 Overview of Measurement Frameworks

Over the years, earnings quality measurement has significantly developed and researchers have developed numerous ways of measuring earnings quality representing its multi dilemma nature. Francis et al. (2004) characterises as earnings quality measurements in two broad categories, one is accounting based and other is market based. Depending on the nature of earnings quality, each approach reveals different aspects of the topic: how well accounting works as a method of recording earnings, and how valuable earnings information is as a basis for decision-making.

# 4.2 Accounting-Based Measures

## 4.2.1 Accruals Quality

One of the most widely used measures of earnings quality is accruals quality. Similar to Dechow and Dichev (2002), I measure accruals quality as the degree to which accruals correspond with cash flow realisations. I propose a model whereby the quality of earnings and accruals deteriorates as accruals estimation errors increase. By inclusion of additional variables (designed to represent changes in the firm's economic environment) McNichols (2002) extended this approach. Building on this work, Francis et al. (2005) decomposed this measure of accruals quality into Innate components that originate from business fundamentals and into Discretionary components that are a function of management decisions.

# 4.2.2 Earnings Persistence

The recurring nature of earnings as well as their sustainability is called the earnings persistence. According to Richardson et al. (2005), earnings reporting more persistently tend to be thought to represent higher quality as persistent earnings are less prone to change and constitute a better base for future performance prediction. The measurement often requires an estimation of the slope coefficient from a regression of current earnings on lagged earnings and coefficients above unity implying more persistence.

## 4.2.3 Earnings Predictability

The predictability aspects focus on how current earnings can predict future earnings. The measure of earnings predictability identified in Lipe (1990) and Francis et al. (2004) is the variance of earnings forecast errors. More predictable and higher predictability, which implies higher predictability and more earnings quality. For analysts and investors that rely on earnings forecast for taking decisions, this measure is especially important.

# 4.2.4 Earnings Smoothness

Variability of earnings relative to cash flows is measured by smoothness. In fact, following Tucker and Zarowin (2006), they found that smoother earnings are typically seen to provide higher quality earnings and reflect offerings of stable and predictable business operations. This interpretation is, however, debated and smoothness might instead reveal earnings management than fundamental firm performance.

#### 4.3 Market-Based Measures

#### 4.3.1 Value Relevance

Earnings value relevance is the extent to which earnings are able to explain stock returns variation. Following Francis and Schipper (1999), this measure is often operationalized as the R-squared from a regression of stock returns on earnings levels and changes. An indicator that earnings better capture the information about which investors base their prices is the higher explanatory power.

#### 4.3.2 Timeliness

The speed with which underlying economic events are reflected in earnings is called timeliness. Timeliness is measured by Ball et al. (2000) as the R-squared from reverse regressions of earnings on returns. The rapidity at which value-relevant information becomes captured in accounting earnings is summarised by this measure.

## 4.3.3 Conservatism

Verification requirements for distinguishing good versus bad news in earnings are measured by conservatism. The degree of conservatism is then measured following Basu (1997) as an asymmetric timeliness coefficient that gauges the degree to which bad news is recognised faster, as a percentage of the speed at which good news is recognised. As proposed by Garcia Lara, Motos, and Velez Patino (2014), conservatism can increase earnings quality by signalling a potential loss earlier.

# 4.4 Integrated Measurement Approaches

#### 4.4.1 Composite Measures

In recent research, however, work has shifted toward measures constructed to be a composite of multiple attributes of earnings quality. Bhattacharya et al. (2013) advocates an aggregate measure, which includes both accounting and market-based attributes and claims that such an aggregation provides a measure of earnings quality.

## 4.4.2 Context-Specific Measures

Research by other researchers suggests that the measures should be context specific, being dependent on the specific decision environment. For example, Demirkan et al. (2012) introduce measures specific to the investigation of the earnings quality – cost of capital relationship in different institutional environments.

# 5. The Relationship Between Earnings Quality and Information Asymmetry

## 5.1 Conceptual Framework and Theoretical Foundations

Investigating the relationship between earnings quality and information asymmetry is inherently important because it relates to a central dimension of financial markets, anchored in a number of theoretical frameworks describing how the financial reporting process influences the information environments of participants in the market. The authors, Brown and Hillegeist (2007), suggest that greater earnings quality is associated with decreased

information asymmetry because higher earnings quality provides market participants with more accurate and reliable information, resulting in a loss of the information advantage of informed traders. Following Bhattacharya et al. (2013) this relationship works through a set of channels which include direct reduction of uncertainty about firm value, better ability to verify private information, greater ability to coordinate information gathering activities, and decrease in incentive for acquiring private information.

# 5.2 Direct Market Effects and Trading Behaviour

Earnings quality directly affects market microstructure elements through the effect of information asymmetry. Using this new, earnings-related approach to the quality of information, which is governed by earnings methodology, we extend previous studies and find higher earnings quality to occur alongside lower bid-ask spreads, specifically within earnings announcements which are inherently uncertain times. Moreover, Armstrong et al. (2011) show that this relation becomes stronger in less competitive markets with severe information asymmetry concerns. Additional evidence of this relationship is found in trading behaviour. Using a sample of Form 10K-SB filings, Aboody et al. (2005) find that poor earnings quality induces higher informed trading, measured by higher insider trading profits, greater price impact of trades, and stronger returns predictability. The implication is that earnings quality is an important determinant of the information environment within and the trading dynamics of, financial markets.

## 5.3 Market Liquidity and Information Environment

There are also broader market liquidity measures for which earnings quality matters. Working with Lang and Lundholm (1993), they show that firms with higher earnings quality enjoy smaller bid-ask spreads, greater trading volume, deeper market depth, and lower price impact of trades. These effects are not constant, according to Francis et al. (2005), and are strongest around earnings announcements, when market stress increases and when firm specific uncertainty is high.

This is also true for the analyst following and information environment. Healy et al. (1999) specify that when earnings quality is high, the firm has more analyst following, the analyst forecast more accurately, the forecast dispersion is lower, and the forecast revision volatility is less. Improved earnings quality reduces information acquisition costs and increases the precision of public information allowing for improved information intermediation, as shown by Lambert et al. (2007).

#### 5.4 Cross-sectional and Temporal Variation

There is considerable cross-sectional variation in the relationship between earnings quality and information asymmetry. The effects are significantly stronger for smaller firms, growth companies, firms with higher information uncertainty and companies with complex operations, according to Core et al. (2008). Leuz et al. (2003) also document that institutional factors also play a role, and the strength of the relationship depends on the legal environment, investor protection, market development, and corporate governance.

The relationship between integrator concentration and operating profit margin is impacted by temporal dynamics and market conditions. They (Francis et al. (2004)) find larger effects during economic downturn, financial crisis and when the market is more volatile. According *Nanotechnology Perceptions* Vol. 20 No. S16 (2024)

to Choi et al. (2011), it is argued that market sentiment, investor risk appetite and aggregate uncertainty are other factors that influence the strength of relationship too.

## 5.5 Dynamic Relationships and Long-term Implications

Evidence from Bhattacharya et al. (2011) reveals evidence of important feedback effects: lower information asymmetry encourages higher earnings quality; market liquidity affects reporting choices and analyst following influences reporting decisions. These relationships have long term implications for corporate disclosure policies, information environment quality, market efficiency and cost of capital (Lambert et al. 2012).

# 6. Earnings Quality and Cost of Capital

# 6.1 Theoretical Framework of the Relationship

A fundamental link between financial markets, the relationship between earnings quality and capital costs has generated much academic attention. A robust theoretical framework created by research has shown that earnings quality is negatively related to information risk, which in turn is negatively related to cost of capital. Investors require compensation for assuming information risk, and this risk associated with information risk increases when earnings quality is low, according to Francis et al. (2004). The empirical evidence on the channels through which earnings quality affects capital costs has been driven by this theoretical foundation.

# 6.2 Direct Effects on Cost of Equity Capital

Empirical evidence consistently documents a significant Negative relation between earnings quality and the cost of equity capital. The seminal study of Francis et al. (2005) shows that firms with poor accruals quality have much higher costs of equity than firms with good accruals quality. The magnitude of this effect is economically large: firms in the poorest accruals quality decile have costs of equity exceeding 300 basis points higher than firms in the best accruals quality decile. Further, this understanding has been found to be refined in the literature, which has made distinction between innate and discretionary components of earnings quality. Core et al. (2008) exemplify this by showing that the innate component (proxied by business fundamentals and operating environment) has a stronger impact on the cost of capital than does the discretionary component (proxied by management choices). The implication is that market participants price security differentially depending on the source of earnings quality.

## 6.3 Information Risk and Market Response

Lambert, et al. (2007) develop a generalised theoretical model that shows how information quality impacts the cost of capital, both directly and indirectly. Their analysis shows that firms with poorer earnings quality have assessed covariance of their cash flows with other firms' cash flows that is higher which results in a higher cost of capital even in a perfectly diversified economy. As reported by Grey et al. (2009), this relationship varies substantially across firms, with greater effects existing in firms with higher information asymmetry, less analyst following, and greater operating uncertainty.

## 6.4 Impact on Debt Financing

Evidence is presented that the influence of earnings quality goes beyond equity markets, to the debt financing context. Evidence is provided by Bhattacharya et al. (2003) that firms with better earnings quality borrow at lower costs, especially in the context of private debt arrangements and long-term debt instruments. The relationship becomes more pronounced for firms without credit ratings. In addition to interest rates, Francis et al. (2005) demonstrate that earnings quality has effects on a variety of aspects of debt contracting, including covenant restrictions, maturity of debt, required collateral, and frequency of reports.

# 6.5 Market Conditions and Institutional Setting

Relationship between earnings quality and cost of capital is not static but depends on market conditions and institutional settings. In periods of market stress, economic downturns and low market liquidity, Chen et al. (2010) show stronger effects. Daske et al. (2008) also demonstrate that earnings quality affects cost of capital only in some institutional contexts—namely, when markets are developed, legal environments are strong, investor protection mechanisms are active, and financial markets are sophisticated.

# 6.6 Mediating Factors and Corporate Governance

The earnings quality cost of capital is influenced by corporate governance mechanisms greatly. Strong governance improves the credibility of high-quality earnings, while weak governance can discourage high quality earnings (Garcia Lara et al. (2011)). This relationship is moderated by several of the broader information environment also studied by Bhattacharya et al (2012), including analyst coverage, voluntary disclosure, and media attention.

## 7. Contextual Factors and Moderating Variables

#### 7.1 Firm-Level Factors

Various firm level characteristics significantly affect the relation between earnings quality and market outcomes. Firm size turns out to be a key factor: Francis et al. (2005) document that large firms have unique characteristics related to earnings quality because they have complicated operations and increased analyst following. Bhattacharya et al. (2013) also demonstrates the impact of earnings quality on information asymmetry is systematically related to firm size, with large firms more sensitive to the earnings quality metrics.

This relationship is moderated vitally by growth opportunities. Chen et al. (2010) report that firms with greater growth opportunities have higher earning quality-cost of capital association, especially so when they need external financing or have abundant investment opportunities. The importance of earnings quality is more pronounced in growth situations and this relationship becomes more pronounced when expected growth is large.

Financial leverage is also a critical moderating variable. García Lara et al. (2014) demonstrate that highly leveraged firms exhibit unique patterns in the relation between earnings quality and the costs of capital and information asymmetry. The moderation in this is most evident in debt covenant considerations, creditor risk assessment, and market perception of financial risk.

# 7.2 Industry and Market Context

The earnings quality-market outcome relationship is significantly moderated by industry characteristics. Industry structure, measured by competition intensity and entry barriers, matters regarding the impact of earnings quality on firm valuation and information asymmetry (Burgstahler et al., 2006). Furthermore, Kousenidis et al. (2013) find that industries which are more sensitive to business cycles display different patterns relative to defensive industries, especially during recession and during periods of bear markets.

Contextual factors like Market development and conditions are also essential. In Lambert et al. (2007) it is shown that the relationship between earnings quality and information asymmetry differs considerably across markets of different development levels. This variation is attributable to market efficiency, trading infrastructure and investor sophistication. They further demonstrate that market volatility conditions strongly moderate how investors process and react to earnings quality signals, most notably in crisis periods and environments with high uncertainty as well.

## 7.3 Macroeconomic and Regulatory Environment

The relationship between earnings quality and market outcomes is not independent of the macroeconomic environment. Iatridis and Dimitras (2013) show systematic variations across different phases of the economic cycle regarding GDP growth rates, interest rate level and inflation rates. Furthermore, the regulatory framework, as a contextual factor, becomes important as well; Francis et al. (2004) reveal that the intensity of regulatory environments matters in their interaction with earnings quality in their impact on market outcomes.

#### 7.4 Governance and Cultural Context

The earnings quality-market outcome relationship is significantly moderated by corporate governance structures. The paper of Brown and Hillegeist (2007) finds that governance mechanisms strengthen the earnings quality reducing information asymmetry. They include the board composition, ownership structure, audit quality and the internal control systems. Cultural factors are just as important, with Grey et al. (2009) showing that differences in transparency preferences, risk attitudes and institutional trust can account for the variations in how earnings quality affects market outcomes based on the national cultural characteristics of these countries.

## 7.5 Interactive Effects and Temporal Dynamics

Complex interactions among different contextual factors are identified through literature. The Dechow et al. (2010) treatment of the earnings quality effect on market outcomes notes that any of the triggered effects on market outcomes often depend on a number of interacting factors — such as, for example, size and growth opportunities, leverage and industry structure, and market conditions and regulatory environment. Further, Francis et al. (2008) show that these moderating effects may change over time, in response to changes in regulation, markets and technology. Secondarily, these interactions are important due to the temporal dynamics of these interactions in the formation of the earnings quality effects. Given that the temporal dimension in fact matters for the understanding and for the analysis of earnings quality in different contexts, it is crucial for researchers and practitioners to develop more nuanced approaches for understanding and interpreting earnings quality in different contexts. Future *Nanotechnology Perceptions* Vol. 20 No. S16 (2024)

research on this subject includes understanding these complex interactions and the dynamics of their nature over time.

The identification of contextual factors and moderating variables of earnings quality provides a thorough reflection of the complex manner in which earnings quality influences market outcomes. Finally, more sophisticated approaches modelling these complex interactions and their constantly changing nature over time in different contexts could be beneficial in future research as markets develop and regulatory environments change.

#### 8. Conclusion

The paper presents this systematic literature review on the relationship between earnings quality, information asymmetry and capital markets. Analysis of 45 carefully chosen papers reveal several important patterns and relationships that help us understand how earnings quality affects market outcomes. Evidence is consistently provided that higher earnings quality is related with reduced information asymmetry in capital markets. Firms with good earnings quality pay lower bid ask spreads, reduced trading costs, thereby, increase market liquidity, as documented by Bhattacharya et al. (2013) and Brown and Hillegeist (2007). It seems that this relationship is particularly pronounced in places that are high information uncertainty and with weak institutional environments. In addition, the review finds evidence for a strong negative relation between earnings quality and cost of capital as theory would predict from Lambert et al. (2007). In particular, firms with higher earnings quality enjoy lower costs of both equity and debt capital. Reduced information risk, enhanced price discovery and improved monitoring effectiveness constitute channels through which this relationship operates.

This review enhances our understanding, from a theoretical perspective, insofar as it demonstrates how information asymmetry, agency and signalling theories combine and correct each other. Additionally, it notes the importance of a yet more detailed theoretical tool designed to account for how these relationships are conditioned by institutional and market practises. The findings are of practical value to corporate managers, underlining the advantages of high earnings quality to cutting capital costs, improving market liquidity, and thus attracting investment. The lessons also reaffirm the significant role that the quality of earnings is in investment analysis, encompassing a wide range of institutional contexts.

The review concludes that rigorous accounting standards need to be upheld yet disclosure standards should be strengthened when dealing with weaker institutional settings. The paper further exposes the influence of market mechanisms and regulatory supervision in assuring correct financial reporting. Future research could investigate the impacts of technological and economic changes on earnings quality and open new methodological avenues like machine learning, as we look ahead. This research aims to deepen our theoretical and practical understanding of earnings quality in changing market landscapes and the contribution is ongoing.

This review synthesises the various research streams under earnings quality and identifies areas of consensus and controversy. Earnings quality continues to have significant effects on market outcomes, but the effects are conditioned by other institutional and market factors. As the evolution of financial markets progresses, the maintenance and the enhancement of

earnings quality will remain a major challenge for firms, regulators and market participants. For these reasons, the ongoing complexity and multi-faceted nature of earnings quality necessitates further research in this area. Future studies should investigate more sophisticated measurement methods as well as the dynamic aspects of earnings quality and the role of earnings quality in emerging market settings. This research will be essential for both advancing theory and practise in this vital area related to financial reporting and market behaviour.

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