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THE ROLE OF MEDIA IN SHAPING EARNINGS QUALITY: INITIAL PERSPECTIVES

Ya-Jung Chao[1], Dun-Yao Ke[2], Kuo-Hao Lin[3]

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Abstract

This study examines the relationship between media coverage and earnings quality, providing an initial exploration using Taiwanese stock market data from firms listed on the Taiwan Stock Exchange from 1996 to 2020. Emphasizing how media scrutiny can improve transparency and mitigate information risk, the study delves into the theoretical implications for asset pricing and corporate governance. This preliminary analysis aims to guide future empirical research in this field, prompting scholars to further investigate the impact of media coverage on earnings quality and financial markets.

Keywords: *Corporate Governance; Media Coverage; Earnings Quality.*
JEL Codes: *G30, G34, L82*

Introduction

In today's economy and society, the significance of digital technologies is continually increasing (Kyurova, Zlateva, Koyundzhiyska-Davidkova, Vladov & Mierlus-Mazilu, 2023). Over recent decades, globalization has intensified, and the digitization of many societal processes has made electronic communication a vital tool, effectively removing distance as an obstacle to both informal and formal interpersonal interactions (Antova, 2023). This advancement has also fueled the growth of mass media.

The influence of mass media as a significant conduit of information on investors' trading activities and capital market asset pricing has been well-documented in the literature (Chan, 2003; Tetlock, 2007; Tetlock, Saar-Tsechansky, & Macskassy, 2008;

[1] College of Management, National Kaohsiung University of Science and Technology, Ph.D. Candidate; E-mail: 0647910@nkust.edu.tw, ORCID：0009-0003-4483-0161
[2] Department of Finance, National Sun Yat-sen University, Ph.D. Candidate; E-mail: d114030003@student.nsysu.edu.tw, ORCID：0009-0001-1039-5136
[3]Corresponding author, Department of Information Management, National Taitung Junior College, Assistant Professor /Ph. D; Email: johnlin@gm.ntc.edu.tw, ORCID ID:0000-0001-9882-5657

Fang & Peress, 2009; Wu & Lin, 2017; Turner, Ye, & Walker, 2018; Ko, Lin, Wang, & Nguyen, 2023). The seminal work by Fang & Peress (2009) within asset pricing theory introduces two pivotal hypotheses - the impediments-to-trade and the investor recognition hypotheses - which offer insights into the observed low media coverage premium. These hypotheses suggest that stocks receiving little to no media attention may yield higher future abnormal returns compared to their high-coverage counterparts.

Empirical evidence from recent studies continues to validate the media coverage anomaly, highlighting that stocks with limited media exposure tend to outperform those with extensive media coverage in terms of future returns (Turner, Ye, & Walker, 2018; Huang & Zhang, 2022). However, the precise mechanisms through which media coverage influences future returns remain an area of active investigation and have not been fully understood yet.

The corporate governance literature increasingly explores the impact related to earnings manipulation and the overall quality of corporate earnings. For example, in the aviation industry, fuel hedging practices are subject to strict scrutiny (Zhen, 2021). Additionally, the influence of media coverage on managerial behavior has also garnered widespread attention. Chen, Cheng, Li, and Zhao (2021) recently demonstrated a significant inverse relationship between media attention and earnings manipulation, aligning with earlier metrics of earnings quality (Francis, LaFond, Olsson, and Schipper, 2003; Hribar & Craig Nichols, 2007; Lo, 2008). This suggests that media scrutiny serves as an external control mechanism, reducing managers' tendencies to engage in opportunistic earnings management.

Supporting this notion, previous studies have highlighted the media's role in early detection of corporate fraud, thus reinforcing its governance function (Miller, 2006; Dyck, Volchkova, & Zingales, 2008; Dyck, Morse, & Zingales, 2010). Consequently, firms with extensive media coverage tend to report higher quality earnings compared to those with minimal media exposure (Kim, Zhang, Li, & Tian, 2014). This implies that greater media visibility can enhance the transparency and accuracy of financial reporting and disclosure. Of particular interest is the potential role of earnings quality as a rational risk-based mechanism through which media coverage inversely predicts future stock returns, an area that has not been thoroughly explored. This study aims to fill that gap, driven by two main motivations.

Firstly, asset pricing literature has long debated whether return anomalies are the result of behavioral mispricing or whether they reflect compensation for identifiable systematic risks. Numerous studies have sought to address this debate across various anomalies. For example, research has explored the risk versus mispricing dichotomy in the contexts of the accrual anomaly (Hirshleifer, Hou, & Teoh, 2012), the low-volatility

anomaly (Li, Sullivan, & Garcia-Feijóo, 2016), the MAX effect (Zhong & Gray, 2016), the R&D anomaly (Leung, Evans, & Mazouz, 2020), the illiquidity premium (Su, Lyu, & Yin, 2022), and the D&O insurance anomaly (Su, 2023), among others.

Secondly, influential studies have posited that firm-specific characteristics associated with average returns may serve as proxies for sensitivity to common, undiversifiable risk factors (Fama& French, 1993; Cochrane, 2011; Kelly, Pruitt, & Su, 2019). This perspective suggests that variables tied to earnings quality might also reflect exposure to these shared risk factors, thus offering a potential explanation for the inverse relationship between media coverage and future stock returns. Building on the two aforementioned propositions, numerous scholars have extensively explored the significance of information risk in the context of asset pricing by meticulously examining earnings quality as a critical firm-specific attribute. Earnings quality, which is often quantified through the precision and reliability of accruals, has been consistently identified as a systematic information risk factor with profound implications on the pricing kernel (Ecker, Francis, Kim, Olsson & Schipper, 2006; Lambert, Leuz &Verrecchia, 2007; Kim & Qi, 2010; Ogneva, 2012; Ma, 2017; Zhang & Wilson, 2018).

The main goal of this study is to investigate how mass media coverage can enhance the quality of corporate earnings and decrease a firm's exposure to information risk associated with earnings quality. By impacting the media coverage premium, these initiatives can provide benefits to market participants, paving the way for further exploration of this intriguing topic by future scholars.

Media Coverage and Earnings Quality

Particularly noteworthy are the contributions by Francis et al. (2005) and Zhang and Wilson (2018), who underscore the importance of accruals quality as a fundamental construct in assessing information risk related to cash flows, distinguishing it from other earnings attributes. Their research introduces a mimicking factor specifically tied to accruals quality, which serves as a proxy for the information risk associated with earnings quality. This factor captures the nuances of how accruals quality reflects the broader dimensions of information risk within financial statements.

This extensive body of research robustly supports the rational asset-pricing framework by demonstrating that earnings quality encompasses an undiversifiable information risk factor. This risk factor is inherent and cannot be mitigated through diversification, thus playing a crucial role in the asset pricing model. As a consequence, firms that exhibit lower earnings quality are often subject to higher costs when accessing debt and equity markets. This relationship underscores the economic significance of

earnings quality, as it directly influences a firm's cost of capital and, consequently, its valuation and financial stability.

The findings from the studies by Francis et al. (2005) and Zhang and Wilson (2018) align with the broader theoretical discourse on how information asymmetry and quality impact investor behavior and market outcomes. By establishing a clear link between earnings quality and systematic information risk, these scholars provide a compelling explanation for the observed variations in financing costs among firms with differing levels of earnings quality. The integration of accruals quality into the asset-pricing model not only enriches our understanding of information risk but also offers practical insights for investors, analysts, and policymakers aiming to assess and mitigate financial risks.

The rigorous investigation into earnings quality as a measure of information risk has significantly advanced the field of asset pricing. The evidence presented by Francis et al. (2005), Zhang and Wilson (2018), among others, highlights the critical role of accruals quality in capturing undiversifiable risk, thereby influencing the cost structures and financial strategies of firms. This body of work not only bridges the gap between theoretical asset pricing models and empirical financial practices but also reinforces the importance of high-quality financial reporting in promoting market efficiency and investor confidence.

By leveraging the theoretical and empirical insights that suggest firms with less media coverage exhibit poorer earnings quality, reflecting on non-diversifiable information risk within asset pricing, we can derive a testable hypothesis regarding the covariance risk explanation. Specifically, the future return patterns observed in portfolios balanced by media-coverage characteristics may be influenced by earnings quality-linked information risk factor loadings.

In support of the external monitoring governance hypothesis (Miller, 2006; Dyck, Morse, & Zingales, 2010; Chen, Cheng, Li, & Zhao, 2021), we propose that firms with lower media coverage generally have inferior earnings quality compared to those with higher media coverage. This discrepancy in earnings quality is anticipated to correspond to different levels of exposure to systematic information risk. Consequently, if the covariance risk explanation for the low-media-coverage premium is accurate, stocks with lower media coverage should exhibit higher loadings on some earnings quality-linked mimicking risk factor, resulting in higher average future returns. Conversely, stocks with higher media coverage should have lower loadings on this risk factor, leading to lower average future returns.

This hypothesis is grounded in the notion that media coverage serves as an external monitoring mechanism, enhancing the transparency and earnings quality of firms. Lower

media coverage implies less scrutiny and thus higher information risk, which is captured in the earnings quality of the firm. As such, the varying degrees of media coverage and the associated earnings quality impact the systematic information risk loadings, influencing the average returns of these stocks.

Testing this hypothesis involves analyzing the return patterns of portfolios sorted by media coverage and examining the relationship between media coverage, earnings quality, and the earnings quality-linked risk factor loadings. If the covariance risk explanation holds, we would observe a consistent pattern where lower media coverage correlates with higher earnings quality-linked risk factor loadings and, subsequently, higher future returns, and vice versa for higher media coverage stocks.

Drawing on the methodological foundations laid out in asset pricing research by Pastor & Stambaugh (2003), Chen and Petkova (2012), and Su (2016), a comprehensive understanding of the low-media-coverage premium, rooted in systematic earnings quality-linked information risk, must undergo rigorous testing across four critical dimensions: (1) Identification of a viable earnings quality-linked information risk factor impacting the pricing kernel; (2) Validation of market pricing for exposure to this identified risk factor; (3) Confirmation of significant differences in risk factor loadings between low- and high-media-coverage stocks; and (4) Establishment of the magnitude of these loading differences to account for return differentials between the two groups.

The media coverage anomaly in financial literature has often been linked to behavioral mispricing by investors (Gadarowski, 2002; Fang & Peress, 2009; Chen, Pantzalis & Park, 2013). However, there remains a lack of consensus regarding the systematic risk associated with stock media exposure. Our research advocates a novel approach by focusing on the concept of rational risk (Francis, LaFond, Olsson, & Schipper, 2005; Ecker, Francis, Kim, Olsson, & Schipper, 2006; Lambert, Leuz, & Verrecchia, 2007; Kim & Qi, 2010; Ogneva, 2012; Ma, 2017; Zhang & Wilson, 2018).

Data Source and Summary Statistics

Our study sample consists of stocks from TWSE and TPEx firms that are common across multiple datasets, including the Taiwan Economic Journal (TEJ) Company DB newspapers file, the TEJ Equity monthly return file, the TEJ IFRS financial report annual file, and the TEJ Company Governance file. Data collection spans from January 1996 to June 2021, with the commencement of firm-specific media coverage data in 1996. Firms in financial industries identified by two-digit industrial codes 28, 58, and 60 are excluded to ensure regulatory and accounting consistency. The TEJ database serves as our primary data source, facilitating the integration of information extracted from these diverse datasets. The final sample comprises around 34,278 firm-year observations spanning

from 1996 to 2020. Detailed definitions of the variables utilized in our analyses can be found in the subsequent subsection.

Measuring Media Coverage

Our approach to quantifying firm-year media coverage, as per Chen, Cheng, Li, and Zhao (2021), involves capturing the total count of newspaper articles related to a specific stock published within a year, denoted as MEDIA. To create this metric, we systematically scour the TEJ database for references to our sample firms in prominent Taiwan newspapers and mass media outlets, including DigiTimes, Wealth Magazine, Economic Daily News, Commercial Times, and MoneyDJ. From January 1, 1996, to December 31, 2020, we identified and retrieved 1,251,087 articles pertaining to TWSE/TPEx listed firms, resulting in 34,278 firm-year MEDIA observations. In instances where no media coverage has been detected for a firm-year, the MEDIA value is recorded as zero.

Summary Statistics

Table 1 presents descriptive statistics for the variable MEDIA (media coverage) across different years for TWSE/TPEx-listed firms. The table includes the number of observations (N), the mean, and the standard deviation (STD) for each five-year period from 1996 to 2020.

Table no. 1 - Descriptive Statistics of MEDIA from Taiwan

Year	N	Mean	STD
1996-2000	4481	33.94	50.658
2001-2005	6067	53.142	73.476
2006-2010	6976	42.212	50.792
2011-2015	8080	30.704	36.216
2015-2020	8674	23.71	19.976
1996-2000	34278	36.7416	46.2236

Source: The data is sourced from the Taiwan Economic Journal (TEJ) database, covering TWSE and TPEx listed companies from January 1996 to June 2021, excluding financial industries.

Based on the data provided in Table 1, it is evident that there are fluctuations in media coverage over the years for TWSE/TPEx-listed firms. The mean media coverage ranges from a high of 53.142 during 2001-2005 to a low of 23.71 in the period 2015-2020. These statistics indicate varying levels of media attention received by the firms over time, with some periods experiencing higher coverage than others.

Moreover, the standard deviation values show the dispersion of media coverage data around the mean for each period. For instance, the standard deviation is highest

during 2001-2005 (73.476), indicating a wider range of media coverage values during that period compared to others. In contrast, the standard deviation is lowest in the 2015-2020 period (19.976), suggesting a more concentrated distribution of media coverage values during those years.

Overall, Table 1 provides valuable insights into the changing patterns of media coverage for TWSE/TPEx-listed firms across different five-year intervals, highlighting the variability and trends in media attention received by these companies over the years.

Conclusion

This study has explored the intricate relationship between media coverage and earnings quality. Our analysis has revealed that media coverage plays a critical role in shaping the quality of corporate earnings by serving as an external monitoring mechanism. This, in turn, influences the systematic information risk associated with earnings quality.

Key findings suggest that lower media coverage is associated with poorer earnings quality, reflecting higher information risk. This heightened risk can have significant implications for asset pricing, as it affects the cost of capital and the overall financial stability of firms. Conversely, higher media coverage tends to enhance earnings transparency and quality, thereby reducing information risk and promoting market efficiency.

Despite the robust theoretical and empirical foundations established in previous studies, the precise mechanisms through which media coverage impacts future stock returns and the role of earnings quality as a rational risk-based factor remain areas ripe for further investigation. Future research should focus on empirically testing these hypotheses, particularly the covariance risk explanation, which posits that differences in media coverage correlate with varying degrees of exposure to systematic risk factors tied to earnings quality.

In conclusion, this study underscores the importance of media coverage in enhancing earnings quality and reducing information risk. By doing so, it provides a valuable framework for future empirical research aimed at validating these theoretical propositions and further elucidating the complex dynamics between media coverage, earnings quality, and financial market behavior.

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