

Analyst Coverage and Corporate Earnings Management

Yixuan Wu^{1,a,*}, Ke Yu^{2,b}

¹*The University of Queensland, St Lucia, Brisbane, Australia*

²*Bank of China, Nanjing, China*

a. 2710330880@qq.com, b.1934968531@qq.com

**corresponding author*

Abstract: This paper investigates the complex dynamics of corporate earnings management and its interaction with analyst coverage, highlighting three main drivers: capital market incentives, contractual incentives, and regulatory pressures. Each driver influences firms to manipulate earnings for different strategic benefits—such as influencing stock prices, optimizing executive compensation, and complying with or exploiting regulations. The role of analysts is critically examined, suggesting that their effectiveness as monitors can significantly influence corporate behaviors concerning earnings management. The study discusses how analysts can either deter or inadvertently encourage these practices based on their interaction with corporate management and their monitoring capabilities. Through detailed empirical analysis, the paper aims to deepen the understanding of the dual role of analysts in either mitigating or exacerbating earnings manipulations. Overall, this research contributes to the broader discussions on corporate governance and financial reporting, aiming to enhance the transparency and reliability of financial markets.

Keywords: analyst, earnings management, opportunity, challenge.

1. Introduction

Earnings management represents a critical facet of corporate governance, invoking scrutiny due to its profound impacts on market integrity and investor trust. Schipper emphasises that earnings management involves managerial actions aimed at skewing financial reporting to mislead stakeholders for personal gain, often resulting in significant distortions in market functioning [1]. This practice was evident in the Enron scandal, where pervasive earnings management, abetted by analyst oversight, had disastrous consequences for the financial markets and investors [2].

Our study embarks on a comprehensive exploration of the intricate dynamics of earnings management by dissecting the motivations behind these practices and the consequential role of financial analysts. We identify three primary drivers of earnings manipulation: capital market incentives, which aim at influencing stock prices in the short term; contractual incentives, particularly concerning executive compensation and debt covenants; and regulatory pressures, which may induce firms to alter their reported earnings to meet specific legal or political expectations.

Against this backdrop, this paper critically examines how financial analysts influence these corporate behaviours as critical intermediaries in the information dissemination process. Our research elucidates the dual role of analysts who may deter or inadvertently encourage earnings management depending on their monitoring effectiveness and the nature of their interactions with management.

Through detailed empirical analysis, we aim to provide a nuanced understanding of how analysts can either mitigate or exacerbate earnings manipulations prompted by various corporate incentives.

By integrating the exploration of earnings management motivations with the role of analysts, our study contributes to a deeper understanding of the intersections between corporate governance practices and financial reporting. It aims to enhance theoretical models and offer practical insights for regulators and policymakers focused on enhancing the transparency and reliability of financial markets.

2. The Motivation of Earnings Management

Exploring the motivations behind earnings management in enterprises is crucial for enhancing investment decisions and improving corporate governance. It would also positively affect the analyst coverage to adjust profit expectations and valuation more accurately. This insight helps analysts provide more forward-looking recommendations and ratings.

Healy and Wahlen classified incentives of earning management into three basic categories: capital market incentives, aiming at influencing short-term stock price [3-4]; contracting incentives, including lending and compensation contracts; and regulatory incentives. These three main kinds of motivations will be discussed in detail as follows.

2.1. Capital Market Incentives

2.1.1. Initial Public Offering (IPO)

Teoh, Wong and Rao suggest that managers in IPO firms will be more willing to manage earnings because managers intend to show better earning conditions for the company [5]. They look at samples of IPO firms. These firms report positive campus and unexpected accruals before IPO but have poor earnings and negative abnormal accruals in the following period. Management manipulates earnings upwards to attract more funds, but after the company went public, the performance dropped to reflect the company's real condition.

2.1.2. Information Asymmetry Enhances Market Incentives

There is an information wall between company management and outside investors. Outside investors have trouble understanding the real condition of the company, giving managers opportunities to manipulate earnings outcomes. Madhogarhia identifies two broad categories of companies: value firms (with higher market capitalization) and growth firms (with smaller market capitalization but higher growth potential) [6]. Growth firms are more likely to manage earnings than value firms. The most important reason for the difference is information asymmetry. Compared to large companies, there are more information barriers between investors and companies in small companies (growth companies), resulting from the unnecessarily preparing financial reports for the public and fewer regulations. Hence, growth companies could better hide the real condition of the firm, giving managers more incentive to manipulate earnings opportunistically to benefit themselves.

2.2. Contract Based Incentives

2.2.1. Chief Executive Officer (CEO)'s Remuneration Contract

Nowadays, performance-related bonuses and stock options have become popular parts to include in executives' remuneration packages as they could stimulate management to maximize the company's value and enhance the company's performance [7]. Performance-related packages align the interests of managers and shareholders, which could solve agency problems by allowing managers to promote

the company's performance [8]. However, they also encourage managers to manipulate earnings. After examining the relationship between bonuses and earnings from the executive compensation data obtained from ExecuCompany, financial executives have more incentive for earnings management if they receive bonus payments with increased earnings [9]. Bergstresser and Philippon find that firms where the CEO's total remuneration is more sensitive to the stock and option value are more likely to increase earnings management [10]. Incentive clauses link the CEO's compensation with the company's stock price, leading managers to increase earnings figures for their benefits [11].

2.2.2. Debt Contract

Apart from the remuneration contract, a debt relationship can also give management a willingness to alter performance under some conditions. After comparing the regression of discretionary accruals in three groups, Takhtaei et al. indicate that directors manage earnings when the corporation's debt-equity ratio is high [12]. High debt is always linked to going-on concern since it increases the risk of bankruptcy [13]. Therefore, managers tend to show better earnings ability to achieve performance and liquidity conditions set by debt holders. However, a high debt ratio does not always motivate managers to increase earnings management. After taking empirical tests, Jelinek finds that with the influence of growth and free cash flow levels, increasing leverage can reduce managing earnings because more debt cuts down managers' discretionary free cash flow [14].

2.3. Regulatory Incentives

The last category of incentive is a regulatory-related incentive. Political cost, caused by the company's scale, is one of the driving forces of the downwards earning management. Watts and Zimmerman illustrate that the rise in government intervention costs could be the political factor in increasing firms' earnings management [15]. Public and government agencies tend to pay more attention to large companies, which sometimes hurts the company. For instance, higher tax payments. According to Zimmerman, paying a higher tax than they otherwise may have done due to the higher expectation of the government will incentivise companies to manipulate earnings downward [16]. Habbash and Alghamdi also draw similar conclusions that to diminish political risk and reduce tax expenses, large companies can use earning management to show less profit in financial reports [17].

3. Analyst's Role Related to Earnings Management

The previous discussion explored three motivations behind corporate earnings management. Under such circumstances, the important role of analysts' coverage in earnings management needs to be considered, and further investigation is required into the impact of analysts' focus.

3.1. Analyst Acts as a Monitor

Many studies showed that a higher level of analyst coverage results in less earnings management. It creates a better company information environment and reduces the asymmetric information between investors and managers [18]. Yu finds that analysts could be a more efficient and effective way to monitor and detect earnings management than other corporate governance methods [19]. Firstly, analysts have an in-depth and well-trained financial and accounting background. They have their resource support from their companies and brokerage houses. Therefore, analysts have the professional capability and resources to analyze complicated financial statements and footnotes to find earnings inconsistency. Secondly, analysts track the company regularly, more continuously and frequently than other gatekeepers such as the board of directors. Thirdly, analysts are the independent and external parties apart from the company, who will be more objective in discovering earning

management and fraud in companies [20]. Yu reveals that an analyst from a top brokerage house with more experience could have a more substantial monitoring effect in detecting earning management [19]. Moreover, an analyst as a monitor enhances transparency, reducing the scope of discretionary accruals [18].

3.2. Analyst Acts as an Incentive to Earnings Management

Despite the monitoring effect, the analyst had acted as an incentive for earnings management. Achilles et al. suggest managers manipulate company performance to meet analysts' forecasts [21]. Management intends to increase the earnings when earnings are below the analysts' forecast. However, they would not decrease the earnings if the company's earnings were already above the analyst's forecast. The incentive can be divided into two parts. One is for the benefit of the company. According to Xin, not meeting earning targets would trigger a significant negative influence on the stock price. Thus, managers stretch the company's earnings to beat the earning target to help the company with a reputation and avoid the market penalty [22]. The other part of the motivation is for the manager's profits. In the case of insider selling, managers could make profits by using discretionary accruals to influence the stock price. Managers sell their shares after the stock price increases to earn abnormal profits [23].

3.3. Analyst Affects the Means of Earnings Management

There are three tools for earnings management: accrual management, real management, and classification shifting [24]. In some situations, the analyst could be a factor in the manager's choice of earnings management tool. According to Irani and Oesch, analysts' coverage influences management's choice of how to manipulate earnings [25]. When managers receive more analyst coverage, they prefer to use more real earnings management rather than accrual management. Real earnings management is treated as a way to manipulate short-term performance for the pressure effect from analysts. Besides, management tends to use other non-recurring items to replace small core expenses, which attain analysts' expectations of the performance results of recurring transactions [24].

3.4. Analysts Indirectly Detect and Decrease Earnings Management

Analyst forecasts can help investors detect earnings management indirectly, reducing the financial loss on investors. According to Brown et al., it is not cost-beneficial for analysts to seek financial misrepresentation intentionally [26]. However, analysts can detect the beginning form of earnings management by discovering unsustainable and unrepeatable operating cash flows that do not represent economic reality. This suggests analysts could indirectly preserve financial misreporting by analysing patterns of financial report

4. Opportunities and Challenges

After thoroughly and carefully analysing all the articles we discussed above, some limitations are identified, pointing out opportunities for further research. However, some inherent drawbacks are difficult to avoid, forming the main challenges for research on analysts and earnings management.

4.1. Opportunities

4.1.1. Accounting Standard

Whether the existing accounting standard encourages or limits, earnings management is significant in society. Many of the researchers discuss motivations based on current accounting policies. Healy

and Wahlen [3] indicate that it is essential for standard setters to confirm if the firm is managing earnings. However, in this literature, the existing evidence cannot help standard setters assess the effectiveness of encouraging or limiting the earnings management of current accounting standards. This problem needs more empirical and theoretical research in the future to help draw implications for the standard setters.

4.1.2. Analysts' Forecast Accuracy

Understanding the significance of analysts' forecasting accuracy is crucial because it will affect their ability to reduce earnings management. Although analysts are a direct monitor [19] and an indirect tool [26] to suppress earnings management, the quality of analysts' forecasts cannot be ignored. According to Brown et al., private communication is the most significant input for analysts earning forecasts and stock recommendations to get more useful information, which decreases the independence of analysts [26]. In some extreme cases, analysts aim to protect their future employment security by providing biased forecasts. This could help them sustain a better relationship with managers to acquire firm management's confidential information and decisions [27]. Therefore, in the future, researchers must research the influence between analysts' accuracy and the result of detecting earnings management.

4.1.3. Discovery of the Other Macro Environment

Discovering the effect of other characteristics of the macro environment on earnings management and analysts could also be an opportunity. Degeorge et al. indicate that in a highly financially developed country, the monitor effect of analysts is more apparent compared to a less financially developed country [28]. Other characteristics of the macro-environment, such as political stability level, the level of capital market regulations and information transparency, could also potentially influence the effectiveness of the analyst's role. This could be an opportunity to conduct more profound research.

4.2. Challenges

4.2.1. Heterogeneity of the Samples

According to Habbash and Alghamdi, their samples were limited to listed companies [17]. They should investigate earnings management in banks. Financial institutions and non-listed companies, but the data was difficult to obtain. The same problem is with Martinez [18], whose research could have included commercial firms and financial institutions.

4.2.2. Endogeneity Issue

The endogeneity issue is another significant challenge, which means that not only do analysts have an influence on earnings management, but earnings management could also impact analysts. There is a two-way relationship. Yu concludes that analysts could be external monitors of earnings management [19]. However, the quality of companies' financial reports also affects analysts, which could reverse the casual interference.

4.2.3. Proxy Problem

The proxy for earnings management also imposes a challenge. Most existing research uses discretionary accrual as the proxy to estimate the level of earnings management. However, it is hard to collect companies' data to calculate discretionary accruals [29]. In addition, discretionary accruals

may be subject to high measurement errors, as Ibrahim and Salma [30] stated, because components of discretionary accruals are positively correlated. Sophisticated investors usually analyse the difference between cash flow and accruals as evidence of earnings management instead of solely relying on discretionary accruals, which essentially only depict deviations from industry averages [29]. In addition, there could also be proxy issues in analysts' coverage, which may suffer from measurement errors [31].

5. Conclusion

This research explains three main types of motivations for earnings management: capital market incentive, contracting-based incentive and regulatory incentive. Then, it analyses the role of analysts in earning management. Analysts serve as external monitors and could influence managers' earnings management tool selection. Moreover, the analyst can also indirectly detect and decrease earnings management. However, analysts may also act as an incentive to earning management because managers tend to satisfy analysts' forecast benchmarks. In the last part, we indicate some opportunities and challenges to study earnings management. It is essential that future studies of earnings management deeply explore the associations among managers' behaviour, accounting standards, and underlying economic conditions and bear in mind the endogeneity problem and proxy issue. Analysis coverage influences decreasing the company's earning management. For suggestions on facing challenges in the future, firstly, analysts should broaden sample selection by expanding the scope of research to include a diverse range of entities, including banks, financial institutions, and non-listed companies. Secondly, the Endogeneity Issues could be reduced by designing controlled experiments to help establish a more straightforward link between analysts and earnings management. Finally, for the proxy problem, researchers should choose another alternative measurement of earnings management to replace discretionary accruals, such as financial ratios. This research will benefit the investors, the capital market, and the business society. .

Acknowledgements

During the research and writing of this thesis, I received support and help from many individuals. I would like to express my sincere gratitude to all those who assisted me. First and foremost, I want to thank my advisor, Professor Sarah, for your guidance in my research direction and your careful advice on my work. Your expertise and rigorous attitude have profoundly influenced me.

Secondly, I would like to thank my classmates and friends, especially William, for your encouragement and support during the research process. Our discussions and shared experiences have been invaluable to me. Finally, I want to thank my family for their understanding and support; you are the driving force behind my continuous progress. Once again, thank you to everyone who helped and supported me. I am grateful for your contributions and care.

References

- [1] Schipper K., 1989, 'Earnings management', *Accounting Horizons*, 3(4), pp.91-102.
- [2] Anthony H. ,Catanach Jr. & Shelle y Rhoades- Catanach. 2003, ' Enron: A financial reporting failure', Villanova University, School of Law, Rev.48, pp.1057-1076.
- [3] Healy, P. M.& Wahlen, J. M.1999,'A review of the earnings management literature and its implications for standard setting', *Accounting Horizons*, vol. 13, no.4, pp.365-383.
- [4] Dye, R. A. 1988, 'Earnings Management in an Overlapping Generations Model', *Journal of Accounting Research*, vol.26, no.2, pp.195-235.
- [5] Teoh, S. H., Wong, T. J. and Rao, G. R., 1998, ' Are accruals during initial public offerings opportunistic?', *Review of accounting studies*, 3(1-2), pp.175-208.
- [6] Madhogarhia, P.K. 2005, ' Do value and growth firms differ in their earnings management practices?', *ProQuest Dissertations Publishing*, 2005.3201850.

- [7] Langsam, S. A., Kreuze, J. G. & Newell, G. E. 1997, 'Is CEO compensation related to company performance?', *Journal of Corporate Accounting & Finance*, vol.9, no.1, pp.91-99.
- [8] Xiong, Y. 2006, 'Earnings Management and Its Measurement: A Theoretical Perspective', *The Journal of American Academy of Business*, vol.9, no.1, pp.214-219.
- [9] Carter, M.E., Lynch L. J. and Zechman, S. L., 2005, 'The relation between executive compensation and earnings management: Changes in the post-Sarbanes-Oxley era', *Workingpaper*, pp.1-33.
- [10] Bergstresser, D. and Philippon, T., 2006, 'CEO incentives and earnings management', *Journal of Financial Economics*, 80(3), pp.511-529.
- [11] Kadan, O. & Yang, J. 2016, 'Executive Stock Options and Earnings Management: A Theoretical and Empirical Analysis', *The Quarterly Journal of Finance*, vol.6, no.2, pp.1-39.
- [12] Takhtaei, N., Ojaghi, M.A. & Esfandabadi, S.H.S. 2013, 'Effect of financial leverage and investment diversification on income- increasing earnings management', *Middle East Journal of Scientific Research*, vol. 16, no.6, pp.836-844.
- [13] Chen, K. & Church, B. 1992, "Default on debt obligations and the issuance of going- concern opinions", *Auditing-a journal of practice & theory*, vol.11, no.2, pp.30-49.
- [14] Jelinek, K. 2007, 'The Effect of Leverage Increases on Earnings Management', *The Journal of Business and Economic Studies*, vol. 13, no.2, pp.24-46, 108.
- [15] Watts, R. L. & Zimmerman, J. L. 1978, 'Towards a Positive Theory of the Determination of Accounting Standards', *The Accounting Review*, vol.53, no.1, pp.112-134.
- [16] Zimmerman, J. L. 1983, 'Taxes and firm size', *Journal of Accounting and Economics*, vol.5, no. C, pp. 119-149.
- [17] Habbash, M. & Alghamdi, S. 2015, 'The perception of earnings management motivations in Saudi public firms', *Journal of Accounting in Emerging Economies*, vol.5, no.1, pp. 122-147.
- [18] Martinez, A. L., 2011, 'The role of analysts as gatekeepers: enhancing transparency and curbing earnings management in Brazil', *Revista de Administração Contemporânea*, 15(4), pp.712-730.
- [19] Yu, F. 2008, 'Analyst coverage and earnings management', *Journal of Financial Economics*, vol.88, no.2, pp.245-271.
- [20] Dyck, A., Morse, A. and Zingales, L., 2010, 'Who Blows the Whistle on Corporate Fraud?', *The Journal of Finance*, 65(6), pp.2213-2253.
- [21] Achilles, W.W., Blaskovich, J. & Pitre, T. J. 2013, 'The relationship between compensation, motivation, and earnings management', *Journal of Applied Business Research*, vol.29, no.2, pp.579-588.
- [22] Xin, B. 2008, 'Earnings forecast, earnings management, and asymmetric price response', *University of Minnesota, ProQuest Dissertations Publishing*, 2008.3313480.
- [23] Markarian, G. 2005, 'Analyst forecasts, earnings management, and insider trading patterns', *Case Western Reserve University, ProQuest Dissertations Publishing*, 2005.3159438.
- [24] Athanasakou, V.E., Strong, N.C. & Walker, M. 2009, 'Earnings management or forecast guidance to meet analyst expectations?', *Accounting and Business Research*, vol.39, no.1, pp.3-35.
- [25] Irani, R. M. & Oesch, D. 2016, 'Analyst Coverage and Real Earnings Management: Quasi-Experimental Evidence', *Journal of Financial and Quantitative Analysis*, vol.51, no.2, pp.589-627.
- [26] Brown, L. D., Call, A. C., Clement, M. B. & Sharp, N. Y. 2015, "Inside the 'Black Box' of Sell-Side Financial Analysts", *Journal of Accounting Research*, vol.53, no.1, pp.1-47.
- [27] KE, B. & YU, Y. 2006, 'The Effect of Issuing Biased Earnings Forecasts on Analysts', *Access to Management and Survival*, *Journal of Accounting Research*, vol.44, no.5, pp.965-999.
- [28] Degeorge, F., Ding, Y., Jeanjean, T. & Stolowy, H. 2013, 'Analyst coverage, earnings management and financial development: An international study', *Journal of Accounting and Public Policy*, vol.32, no.1, pp.1-25.
- [29] Jackson, A. B. 2018, 'Discretionary Accruals: Earnings Management. or Not?', *Abacus*, vol.54, no.2, pp.136-153.
- [30] Ibrahim, S. S. 2005, 'An alternative measure to detect intentional earnings management through discretionary accruals', *ProQuest Dissertations Publishing*, 2005.3175145.
- [31] Hong, Y., Huseynov, F. & Zhang, W. 2014, 'Earnings Management and Analyst Following: A Simultaneous Equations Analysis: Earnings Management and Analyst Following', *Financial Management*, vol.43, no.2, pp.355-390.