1. Introduction

Positive accounting theory, a cornerstone of accounting research, examines managers' behaviors and the motivations for adopting accounting practices under various conditions. This theory posits that managers' accounting behaviors are influenced by factors such as financial incentives, financing needs, and governance aspects. Misclassification of items in the income statement—such as shifting operating expenses to non-operating categories or the reverse—can distort a company's financial performance without altering net income. These actions, known as "classification management," are often undertaken to achieve short-term goals, such as influencing stock prices or securing managerial bonuses. McVay (2006) demonstrated that managers reclassify operating expenses as non-operating items or the reverse. This reclassification does not affect net income but understates or overstates operating income. Managers pursue reclassification to meet analysts' forecasts of company earnings, since non-operating items are typically excluded from such forecasts. As the business environment becomes increasingly complex and sensitivity to financial statement information quality grows, the role of the board of directors—a key component of corporate governance—becomes increasingly prominent in enhancing financial transparency. Corporate governance mechanisms, particularly board-level ones, serve as processes, procedures, and structures that regulate management and the companies, acting as the first line of defense against such practices. Prior studies have primarily focused on the general relationship between corporate governance and earnings management. However, few studies have specifically examined the impact of board mechanisms on the misclassification of operating revenues and expenses. This study seeks to fill this gap by investigating the impact of specific board governance mechanisms on classification shifts in the income statement, via a quantile panel approach.

2. Research Hypotheses

Based on the theoretical foundations and our research question, we formulate the following: Hypothesis: The impact of different quantiles of board governance mechanisms on different quantiles of income statement item misclassification varies.

3. Methods

This descriptive-correlational, ex-post facto study uses secondary data to explore relationships. The population is all companies listed on the Tehran Stock Exchange. After applying relevant restrictions, we analyzed hypotheses using data from 120 companies spanning 2008–2024. We employed quantile regression to fit the research model. The relationship between board governance mechanisms (BCG Index) and profit misclassification (Pmisclass) is modeled as follows:

Equation 1:

$$〖Pmisclass〗_t=β^θ (〖BCG\ Index〗_t)+γ_1 〖Size〗_t+γ_2 〖Lev〗_t+γ_3 〖MB〗_t+γ_4 〖Loss〗(t-1)+γ_5 〖growth〗_t+ϵ_t^θ$$

Where: Pmisclass(i,t): Misclassification of income statement items BCG Index (i,t): Board governance index Size(i,t): Firm size Lev(i,t): Firm financial leverage MB(i,t): Firm market-to-book ratio Loss(i,t-1): Equals 1 if firm i reported a net loss in year t-1, otherwise 0. Growth(i,t): Firm sales growth

4. Results

The results show how improved corporate governance correlates with increased profit misclassification in higher quantiles (>0.6). Conversely, negative and significant coefficients in lower quantiles (<0.5) align with theory, as improved corporate governance here reduces profit misclassification. In middle quantiles (0.3–0.6), coefficients hover near zero and remain insignificant, implying minimal impact from corporate governance.

The results reveals a similar pattern for operating expenses: Positive and significant coefficients in higher quantiles of the index (>0.5) and expense misclassification (>0.6) indicate that, contrary to theoretical expectations, strengthened corporate governance may exacerbate expense classification errors. In contrast, negative and significant coefficients in lower quantiles (<0.5) suggest that, as expected, improved corporate governance mitigates such errors. In middle quantiles (0.3–0.6), coefficients are insignificant, signaling a negligible impact of corporate governance.

Finally, Positive and significant coefficients in higher quantiles of the index (>0.5) and revenue misclassification (>0.6) suggest that, contrary to theoretical expectations, strengthened corporate governance may worsen revenue classification errors. Conversely, negative and significant coefficients in lower quantiles (<0.5) align with theory, showing improved corporate governance lowers errors. In middle quantiles (0.3–0.6), coefficients remain insignificant, implying a negligible impact of corporate governance.

5. Discussion and Conclusion

The results reveal that the impact of corporate governance varies on the level of errors. In higher quantiles (firms with high errors), positive and significant coefficients suggest that, paradoxically, strengthened corporate governance exacerbates errors. In lower quantiles (firms with low errors), negative and significant coefficients indicate that improved governance reduces errors. In middle quantiles, coefficients hover near zero and remain insignificant, suggesting a negligible impact of corporate governance. This consistent pattern across operating income, expenses, and revenues confirms how the dependency of governance effects on error levels shapes outcomes, and highlights the heterogeneity of corporate governance's role.

Keywords: Corporate Governance, Board of Directors, Misclassification, Quantile-on-Quantile Regression.