Characteristics of Accounting Fraud: Study of Company Profitability

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Introduction

This study examines the relationship between company profitability and a set of independent factors associated with an increased risk of financial statement fraud. The sample consists of public companies in the United States that had financial restatements in 2017-2019.

Public companies aim to maximize profitability in order to gain the attention of investors and maintain a good relationship with their shareholders. A key aspect of profitability is reputation, which is determined by the integrity of an organization. This study analyzes if companies can reduce the risk of fraud while also increasing profitability. Using this data, the SEC, AICPA, and PCAOB can create more relevant guidelines for internal controls and public company audits to enforce more reliable financial statements and help companies better account for fraud while optimizing earnings. It is beneficial for a company to take all the measures to reduce the risk of fraud because it will make them more profitable.

Literature Review

- **Jiang et. al. (2010):** Companies with internal control weaknesses are more likely to receive a going concern and are considered less financially stable.
- **Thornton et. al. (1993):** The fees of an audit can depend on the risk associated with the business, the complexity of the audit, and the impact of the audit on security prices.
- **Chen et. al. (2012):** A change in upper management is often implemented when a company is performing poorly. A new CEO is not related to increased earnings for a troubled company.
- **Gill et. al. (2011):** A company's capital structure and use of debt financing can maximize company profitability. The best capital structure includes debt but is not based all on debt.
- **Hribar and Jenkins (2004):** Restatements can lead to or indicate a decreased firm value and a decrease in expected future earnings.

Research Question & Hypothesis

Research Questions: Does a lower risk of accounting fraud make a company more profitable?

Hypothesis:

- **The fewer internal control material weaknesses a company has, the higher its earnings will be**
- **The lower the audit fee ratio of a company, the higher the earnings will be**

Empirical Framework

$$ebit_{it} = B_0 + B_1 controlweak_{it} + B_2 feeratio_{it} + B_3 restatement_{it} + B_4 changedirector_{it} + B_5 bigfirm_{it} + B_6 debt_{it} + \varepsilon_{it}$$

- The assumed relationship between internal control weaknesses and profitability is negative. If there is a material weakness found within the internal controls, the controls are not successful in protecting the financial data from misstatements and errors. More weaknesses will lead to fewer earnings.
- The variable *feeratio* is generated from the audit fee and the total fees to account for different-sized companies. The higher ratio of an audit fee indicates a more complex audit, with potentially more risk for fraud. The anticipated relationship between the audit fee ratio and profitability is negative.

Variables

Ebit Annual earnings before interest and tax.

Controlweak The number of internal control material weaknesses found by the auditor

Feeratio The audit fee divided by the total fee, which accounts for the difference in the size of the companies.

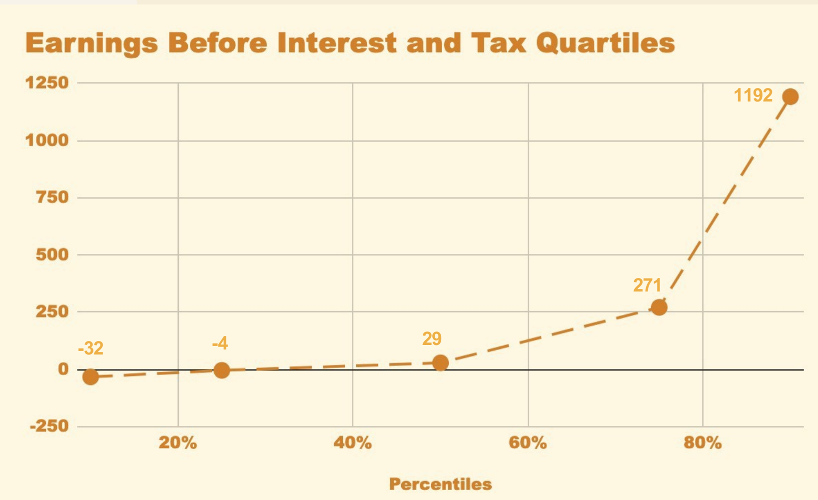
Bigfirm Whether or not the company if audited by one of the big four accounting firms

Changedirector A change in C-level or executive-level position during the year.

Restatement A restatement is filed when an error is not caught during the audit, this variable is whether or not there was a restatement.

Debt The total amount of debt the company has at year end.

Data



The graph depicts the disparity in earnings among the sample. The different quartiles show that there are 10% of companies with losses of over $32, while 90% of the companies have over $1,192 in earnings. The sample consists of a large range of varying data. The explanatory variables give insight into these disparities.

The data consists of 7,163 observations. The correlation suggests multicollinearity, due to variables being highly correlated; *bigfirm* and *controlweak* are highly correlated with many of the other variables.

Regression Results

Dependent Variable = *ebit*	
VARIABLES	Estimation 1
controlweak	-0.0120***
feeratio	-0.0146***
bigfirm	0.00387***
changedirector	-0.00241
restatement	-0.00326***
debt	0.364***
Constant	0.0195***
Observations	7,163
R-squared	0.611

Sources: Compustat & Audit Analytics

*** p<0.01, ** p<0.05, * p<0.1

Conclusion & Further Research

Conclusion:

- The significance of accounting fraud for company profitability has to do with the integrity of the company. A company must maintain the confidence of investors and stakeholders to be profitable.
- To increase earnings a company should use a big four firm, maintain strong controls, and ensure a smooth audit with a low risk of restatements.
- The small coefficients and changedirector variable being statistically insignificant is due to multicollinearity.

Further Research:

- The relationship between capital structure, the optimal amount of debt, and earnings
- What factors lead to stronger internal controls