Panos Patatoukas

PhD Accounting

Data Mining Project Proposal

Synopsis

The Sarbanes Oxley (SOX) Act of 2002 is a US federal law passed in response to a series of major corporate scandals including those related to Enron, Worldcom and other companies such as Adelphia, Xerox and Global Crossing. The SOX Act is the most sweeping federal law concerning corporate governance since the adoption of the initial Securities Laws in 1933 and 1934. The SOX act aims to improve the reliability of corporate disclosures by modifying the governance, reporting and disclosure requirements for public companies. In general, investors anticipated that SOX would constrain earnings management and enhance the quality of financial statement information.

Understanding and measuring earnings quality is an issue of paramount importance for both academics and practitioners. Investors value earnings quality and are willing to pay more for the equity of high earnings quality firms. A high-quality earnings number, as defined by Dechow and Schrand (2004) is one that satisfies the following three criteria: “It reflects current operating performance; it is a good indicator of future operating performance; and it accurately annualizes the intrinsic value of the firm”.

Reporting conservatism impacts the quality of earnings but it should not be confused with earnings management. In the empirical accounting literature, Basu (1997) defines conservatism as the accountant’s tendency to require a higher degree of verification to recognize good news than bad news. Traditionally low earnings quality has been associated to aggressive accounting choices and high earnings quality to conservative accounting choices. The SEC supports the view that both excessively conservative and aggressive reporting choices are forms of managing earnings.

In this study I revisit the question whether earnings management, earnings quality and reporting conservatism have changed in the pre and post SOX period. I will build previous research and I will employ data mining methods in order to tackle this question.

Data

In the final sample there will be more than 400 firms listed in the major US exchanges with full record for 12 different attributes in the year before and after the implementation of the SOX Act.

The data consist of firm-years from the intersection of the **COMPUSTAT** and the **CRSP** databases (both included in the **WRDS** platform: http://wrds.wharton.upenn.edu). The minimum data required for each firm year to be included in the sample are the current year's earnings before extraordinary items per share, common shares outstanding, book value of total assets, operating income, cash flow from operations, historical SIC code, R&D expenses, marketing expenses, inventory, intangible assets, liabilities, cash, extraordinary items, current debt, the previous year's fiscal year end stock price and fiscal year equity returns. I exclude from the sample penny stocks (stocks trading at less than a dollar per share). Prices and per share accounting items have been adjusted for stock splits and new equity issues.

Fiscal year returns are twelve month buy and hold returns beginning the fourth month of the fiscal year so as to ensure that the market response to the previous year's earnings is excluded. Returns are adjusted by the CRSP equal weighted index.