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THE MARKET FOR AUDIT SERVICES AND S&P 500 INDEX CLIENTS

Sharad Asthana*
Professor

And

Rachana Kalelkar
Doctoral Student

Department of Accounting
College of Business Administration
University of Texas at San Antonio

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Sharad Asthana*
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College of Business Administration
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Abstract: Literature on S&P 500 index firms shows that there is significant improvement in the performance due to increased scrutiny of media and investors. Recently Platikonova (2008) documents improvement in the disclosure quality for firms following their inclusion in the index. Since, auditors are responsible for certifying the quality of reporting and the audit fee reflects their perception of earnings quality, we examine whether the improvement in the reporting due to S&P scrutiny is reflected in audit fees.

Our analysis shows that audit fees are significantly lower for S&P firms. This suggests that auditors believe that the quality of reporting improves for firms when they enter S&P index. Our further investigation shows that this reduction in fees is higher for firms that stay in the index for longer time. This shows that auditors consider the time length of a firm in the index while providing the discount. Lastly, we find that expert auditor to less likely lowball their fees for S&P clients. In fact we find expert auditors to charge higher fees for auditing S&P firms.

Overall we conclude that S&P index scrutiny not only improves firm's performance but also improves firms reporting.

JEL Classification Codes: C21; D53; G32; M42

Key Words: S&P index; Auditors; Audit Fee; Client Risk; Earnings Quality; Industry Experts; Influential Clients

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**Corresponding Author*
Department of Accounting
College of Business
University of Texas at San Antonio
One UTSA Circle
San Antonio, TX 78249
Phone: 210-458-5232
Fax: 210-458-4322
sharad.asthana@utsa.edu

THE MARKET FOR AUDIT SERVICES AND S&P 500 INDEX CLIENTS

Introduction:

S&P index is an elite index. Firms belonging to this index constitute top 500 firms of US. These firms are selected based on their market size, liquidity, trading volume, financial performance, and industry. Many studies on S&P 500 firms show that there is significant increase in the stock price for the S&P 500 firms (Shleifer (1986), Harris and Gurel (1986), Dhillon and Johnson (1991), Beneish and Whaley (1996), Lynch and Mendenhall (1997), and Chen, Noronha, and Singal (2004)), reduction in the cost of capital (Hegde and McDermott 2003), increase in monitoring due to increase media coverage. From these literature it is clear that S&P index conveys information to investors that the future performance of the newly included firm will be better than expected[1]. Recently Platikanova (2008) find that the quality of earnings disclosure improves following the firm's inclusion in the index. Since auditors are responsible for certifying the quality of financial reporting, we examine whether the improvement in the financial reporting of S&P firms is reflected in the audit fees of these firms.

Quality of financial statements has significant effect on audit fees. Extant auditing literature show that audit fees is negatively associated with the financial reporting quality of the client firm. Audit fees are usually high when the firm manages earnings. This is because shareholders expect auditors to convey true information about the firm's performance and sue them when the information is not accurate. Hence auditors compensate themselves for the risk by charging high fees. Prior studies show that audit fee is positively associated with amount of time spend on audit (Gul, Chen, and Tsui (2003); Bedard and Johnstone (2004)) and the risk of being

[1] The S&P 500 committee explicitly states that "company additions and deletions from an S&P equity index do not in any way reflect an opinion of the investment merits of the company" (Standard and Poor's, 2002b).

sued by the shareholders (Seetharaman et al. (2002); Simunic and Stein (1996); Pratt and Stice (1994)).

Firms in the S&P index are better performing, reputable firms. Studies show that reporting quality is positively associated with performance. Also constant media coverage further improves the financial reporting of the firm. As a result auditors have to spend less time auditing the financial reports of these companies. Further the low riskiness of these firms may create competition among the auditors to have them in their portfolios (Johnstone and Bedard 2004). Auditing literature show that competition has negative association with audit fees (DeAngelo 1981; Ghosh and Lustgarten 2006; Kanodia and Mukherji 1994; Maher, Tiessen, Colson and Broman, 1992). So we examine whether auditors lower their fees for S&P firms in response to competition and lower audit cost.

Using a sample of firms from 2003 to 2007 that are added to the S&P index, we hypothesize that audit fees to be lower for S&P firms than other firms[2]. This hypothesize is based on the assumption that S&P index scrutiny improves firms' reporting quality, thereby increasing the competition among the auditors to have them in their portfolio. We further looked at the fee size of these firms at three time periods: before they enter the index, when they are in the index, and after they get out of the index. If lowballing is due to improvement in earnings disclosure due to S&P index scrutiny, we expect that audit fees should be lower when the firms are in the index compare to fees charge when they are outside the index.

Our findings from the analysis are as follows: After controlling for other factors that

[2] S&P firms are firms in the S&P 500 index during our period while non S&P firms are firms that are not in the index.

influence audit fees, our level model shows that audit fees is significantly lower for firms that are in S&P index. Further comparison of the audit fees size of firm when they are in the index with when they are out shows that audit fees are significantly lower for the time when firms are in the index compare to when they are outside the index. Our results are further confirmed when we have similar findings using change model. Our change model shows that there is significant decline in audit fees in the subsequent year for firms entering the index and it increases in the subsequent year when the firms get out of the index. Our untabulated results shows that audit fees decrease by approximately 8.6% when the firms enter the index and increase by 26% when it get out of the index suggesting that auditors do lower their fees for S&P clients and the firms enjoy this benefit to the extent they are in the index.

We further extent our study by looking at how the length of time in the index and auditor expertise impacts the audit fees of the firm. DeAngelo (1981) states that discounting is a function of future benefits that auditor would experience from having the client in its portfolio. Since auditors would benefit more, in terms of low audit costs, if their client stays for a longer time in the index, they would consider the length of firms stay in the index while providing them a discount. So we expect discounting to be more for firms that stay in the index for longer time. On the other hand, we expect the auditors with industry expertise to give no discount. One reason is these auditors would already have good firms in their portfolios and would make very little effort to have S&P firms in their portfolios. After interacting indicator variable DURATION with S&P firms, we compare the effect of length of stay on the audit fees. Our results show negative association between interacting variable (OLD) and audit fees. This suggests that auditors consider the length of firm in the S&P index while lowering the audit fees. On the other hand, we find positive association between audit fees and expert auditor. We measure auditor expertise by

using market share of each auditor in that industry. Our result shows that expert auditors are less likely to discount their fees for firms that enter the index.

This study is important because it shed light on some unanswered issues. First, it supports Platikanova (2008) findings that S&P scrutiny improves firm's reporting. Second, this result indicates that shareholders benefit not only from increase stock price but also from reduction in audit expenses. The benefits of lower audit fees are higher if the firm stays in the index for a longer period and is audited by a non-specialist auditor. Third, it provides support to the studies by DeAngelo (1981), Sankaraguruswamy and Whisenant (2005), and Kanodia and Mukherji (1994) by showing that auditors lowball their fees even when audit fees is disclosed publicly.

II. THEORETICAL FRAMEWORK AND HYPOTHESES

Background:

Standards and Poors (S&P) is a very old and reputable index consisting top 500 companies of US. Every year significant number of firms is added (deleted) to (from) the index. To be a member of the index, firms have to satisfy certain conditions. For instance, firms have to be liquid, have market capitalization, have positive stream of earnings, market float, and industry representation. Firms lose their position in the index if they fail to meet any of these conditions. Such firms are then replaced by other firms who fulfill the index requirements. Therefore to maintain their position in the index, firms strive to retain or enhance their performance.

S&P index attracts various firms because firms in the index enjoy significant benefit associated with the index. Studies that examined S&P firms find that these firms experience positive stock return, lower cost of capital, and increased scrutiny following their entry in the index. For instance Shleifer (1986) find increase in the stock price of the firms following their

inclusion in the index. He finds that the stock price of a newly added firm increases by 2.97 %. This result is supported by Harris and Gurel (1986), Dhillon and Johnson (1991), and Jain (1990) who also find positive return following a firm's inclusion in the index. Using a sample of firms added during 1989 to 1993, Beneish and Whaley (1996) find 5.90 percent CARs from the announcement date to the day after the addition that the stock price inclusion[3].

In addition to stock performance, S&P firms also experience reduction in their transaction costs. Hegde and McDermott (2003) examine the cost of capital of firms added to the S&P index. They find that the cost of capital for firms included in the index reduces significantly. Using a sample of firms that are added to the index between 1983 and 1989, Edmister, Graham, and Pirie (1996) find an increase in the trading volume for such firms. Thus, these studies suggest that there is improvement in the liquidity of firms following their entry in the index.

Recently Becker-Blease and Paul (2006) and Denis et al (2003) examine the firm performance of firms included in the index. Becker-Blease and Paul (2006) find that the investments for the firms included in the index improve significantly. Denis et al. (2003) compare the analyst forecast error of the newly include firms with other firms. They find that the magnitude of error is low. Further the analysts are more optimistic about the performance of newly added firms. They conclude that better monitoring and fear of reputation loss forces management to exert positive effort. This result is consistent with Chen, Noronha, and Singal (2004) who examine investor awareness for firms added to and deleted from the index. They find

[3] Although Gurel (1986), Sheilfer (1986), Jain (1990), and Dhillon and Johnson (1991) comes up with different explanation for the increase in the stock price of firms following inclusion in the index, they all support the notion that there are positive abnormal returns for these firms.

that firm's monitoring is improves significantly following their inclusion in the index.

The importance of the membership of the index is further enhanced when studies find that these benefits of increase stock price and lower stock price are lost once firms get deleted from the index. Lynch and Mendenhall (1997) find that negative abnormal returns of deleted firms are around 15%. Benish and Whaley (1996) find the abnormal returns to be around -11% respectively for a period beginning from the announcement to the effective date. Hegde and McDermott (2003) examine the cost of capital of 27 firms deleted from the index between 1993 and 1998. They find that cost of equity of these firms increase significantly following the deletion because the volume of trade transacted decline significantly.

Overall, literature on S&P index show index inclusion communicates that firms are likely to improve their performance following their inclusion to the index to the investors. This is probably due to easy access to capital, greater scrutiny by investors and analysts, and fear of reputational loss in case firms fail to meet the expectation of their stakeholders. However, greater scrutiny also improves the quality of earnings by constraining the self serving behavior of managers. Chung, Firth, and Kim (2001) examine the monitoring role of institutional investors in firm. They find that the presence of institutional investors reduce the manager's use of discretionary accruals for achieving the desired profits. Recently Platikanova (2008) examine the earnings quality of firms added to the S&P index. She argues that the media attention and investor scrutiny improves not only firm's performance but also create incentives for managers to enhance the disclosure. She finds that the magnitude of accruals reduces significantly and firms report conservatively after they are added into the index[4]. Further her results show that the

[4] Hrazdil and Scott (2008) find contrasting result when they analyze firms between 1989 and 1999. There results show that higher discretionary accruals (rather than cashflow and nondiscretionary accruals) contribute to the firm's

earnings become more informative following the addition thereby suggesting that S&P index enhance firm's reporting.

We extend Platikanova (2008) study by examining the auditor's response to the improved disclosure of firm. Auditing literature have shown that auditor's perception about the earnings quality is reflected in their audit fees. Using this argument, we examine whether there is any change in the audit fees of firms following their index inclusion.

Hypothesis Development:

Primary responsibility of ensuring the correctness of financial reports is with the auditors. Section 404 requires auditors to certify the accuracy of the financial statements of the firms. Prior studies show that investors believe auditors to detect the errors and fraud reported on the financial statements and present them the true picture of firm's performance to them. Failure on their part to detect the error causes investors to sue them. The fear of lawsuits forces auditors to spend more time and effort with the financial statements when the quality of financial reporting of a firm is poor. Their effort and time spend on auditing is reflected in their audit fees.

Bedard and Johnstone (2004) examine auditors' response to managers' earnings manipulation. They find that auditors increase their fees for clients manipulating their earnings. One reason provided for increase in audit fees is employment of more staff with specialized knowledge to audit the reports which raises the cost of conducting audit. Gul, Chen, and Tsui (2003) also find that auditors charge high fees for firms with high discretionary accruals. They

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better performance following their inclusion. However they did not find the same earnings management behavior during 2000-2004.

argue that since auditors are sued by investors for any misstatements, they compensate their high risk by charging high audit fees. This finding is also supported by Seetharaman et al. (2002), Simunic and Stein (1996), and Pratt and Stice (1994) who examine the association between litigation risk and audit fees.

Using sample of UK firms cross-listed on US markets Seetharaman et al. (2002) examine audit fees in two different risk regime. They find that auditors charge higher fees for firms traded on US stock exchange, a more litigious stock exchange, compare to UK stock exchange. Simunic and Stein (1996) examine the impact of litigation risk on audit fees and find that audit firms increase their audit fees to compensate for the litigation risk. Pratt and Stice (1994) find that audit fees are high for client firms with weak financial condition, a proxy for high litigation risk. Thus fear of litigation and cost of audit increases audit fees for firms with poor quality of earnings.

Recent studies find that loss from litigation encourages auditors to have low risk clients in their portfolio. This preference will influence audit fees as auditors have to compete with each other to attract and retain clients with good reporting quality. Auditing literature shows that auditors lowball their fees in response to competition. DeAngelo (1981) examine audit fee of firms in their first year of engagement. She finds that audit firms lowball their fees in order to attract new clients. Ghosh and Lustgarten (2006) examine the magnitude of low balling in two audit markets: atomistic audit market dominated by many small audit firms and oligopoly audit market dominated by few big firms. They find that low balling is more among small auditors than among big auditors. This finding is consistent with DeAngelo (1981) that audit fees are lower when the competition is high. Maher et al. (1992) examine the effect of competition on audit fees between 1977 and 1981. This period summarize increase in the competition for the

audit service. They find significant reduction in the audit fee during this period. Thus literature on audit fees suggest that audit fees reflect the auditor's perception of the financial reporting.

Audit fees are low when the auditor has to spend less time in auditing the reports and are further reduce when there is competition among auditors to have such firms in the portfolio. S&P index consists of 500 highly scrutinize, better quality earnings firms. Since S&P index improves earnings reporting, there will be increased competition among the auditors to have them in their portfolio. As a result of this competition among auditors and overall good quality earnings we expect auditors to reduce their fees significantly for firms when they enter the index. If the lowering of audit fees is due to S&P index, we do not expect to see the effect for non S&P firms. So we hypothesize that there is significant reduction in the audit fees for firms that enter the S&P index.

H1: Audit fees are lower for firms for S&P firms than for non S&P firms.

We further extent this argument by comparing the total audit fees of S&P firms before they enter the index with when they are in the index. Similarly we also compare the fee size of firms when they are in the index with when they get deleted from the index. If auditors give discounts to their clients in response to improvement in financial reporting quality following their index inclusion, we expect to see significant difference in the fee level of these firms when inside the index with when outside the S&P index. We hypothesize that the audit fee of S&P firms to be higher when they are out of the index than when in the index.

H1a: Audit fees are higher before the firms enter the index than in the index.

H1b: Audit fees are higher after the firms exit the index than in the index.

DeAngelo (1981) states that auditors reduce their fees depending upon the future benefits they will receive from the audit engagement. Using the same argument, we examine whether auditors reduce their fees depending upon the length of firm's stay in the index. Auditors would benefit more from low audit costs if the client firms stay in the index for a longer time. Hence the competition will be more for firms with longer duration in the S&P index. Ghosh and Lustgarten (2006) state that fees reduction will be higher for firms where the level of competition among auditors to acquire them is high. So we hypothesis that reduction in the fees is a function of time spend by the firm in the index.

H2: Audit fees are lower for firms that stay longer in the S&P firms than for firms staying for shorter period.

Lastly we examine the extent to which auditors' characteristic influence the fee discounting. Auditors with industry expertise enjoy lot of reputation of providing quality audit due to its industry specific knowledge. Evidence shows that firm's statements exhibit less error and fraud (Carcello and Nagy 2002) and better predictability of future cash flow (Gramling et al.2001) than firm's reports audited by a non specialist auditor. Balsam, Krishnan, and Yang (2003) and Krishnan (2003) examine the earnings quality of firms audited by specialized auditor. Both these studies find that the earnings quality, proxied by earnings response coefficient, is significantly higher for such firms.[5] Thus specialist auditors assure audit quality which is reflected in their audit fees.

Further their technological advantage differentiates these expert auditors from their competitors thereby improving their bargaining power. Prior studies show that auditors who

[5] Becker et al. (1998), Francis et al. (1999a) and Reynolds and Francis (2000) also find similar results when they compare discretionary accruals of clients audited by Big 6 auditors and non-Big 6 auditors' clients.

enjoy significant bargaining power are able to charge premium for their service. Further these auditors are less likely to share their benefit of cost-saving with their clients due to their status. As a result these studies find audit fees to be high for firms audited by expert auditor.

Craswell et al. (1995) examine audit fee of expert auditor in Australian market and find higher fees charge by expert auditor. Ferguson and Stokes (2002) find similar result when they use 15 percent market share as cutoff for industry specialization. Recently Mayhews and Wilkins (2003) examine the audit fee charge by the expert auditors using a sample of US IPO firms. They find that industry-leading audit firms that possess significantly higher market shares than their competitors earn fee premiums. In general, audit quality assurance and high bargaining power encourage specialist auditors to charge premium to their clients.

S&P 500 firms are followed by many investors worldwide. Hence firms in the index would prefer their financial statements to be audited by the expert auditors in order to enhance the disclosure. These would increase demand for the expert auditors which will prevent them from giving any discount to the clients. Based on this evidence, we argue that expert auditors are less likely to share their cost savings with the S&P firms even though these firms have better reporting. Further these auditors would also charge premium to their clients for their services. This should increase the audit fees for the S&P clients. Thus we hypothesize that S&P firms will not receive any discount if audited by specialist auditor. In fact we expect to see increase in their audit fees.

H3: Specialized auditor will not lower their audit fees following firms entering the index.

III. Research Design

Variables:

To examine the effect of S&P index on audit fee, we regress audit fee on an indicator variable (SP) that takes value 1 for firms that are in the S&P index. We compute audit fees as logarithm of the total audit fee. To ensure that audit fee discounting is not due to any other reasons, we control for other factors that affect audit fees. These variables are similar to those used in Ghosh and Lustgarten (2006), Craswell and Francis (1999); Craswell, Francis, and Taylor (1995); and Simon and Francis (1988) analysis.

Simunic (1980) show that audit fees is higher for big firms compare to small firms. So we control for size (LOGTA) in the model. LOGTA is computed as the logarithm of total asset. We predict the coefficient on LOGTA to be positive. Audit risk is positively related to audit fees. Hence we control for audit risk by using following proxies: Current ratio, *Current-to-total assets*, *Inventory ratio*, profit, and *Leverage*. CURRENT is measure as current asset divided by current liabilities. Current-to –total asset (CURRTA) is measured as current asset to total asset. INVENTORY is inventory deflated by total asset and PROFIT is income before extra-ordinary items. Leverage is total debt deflated by total asset. We expect positive association between the audit fee and each of this audit risk variables except current ratio and PROFIT. We expect negative association between audit fees and current ratio and PROFIT.

Auditing literature shows that big4 auditors charge higher fees compare to nonbig4. We include a dummy variable (LARGE) for big4 auditors to control for this effect. Audit complexity increases the audit fees (Simunic 1980; Ashton et al.1987; Ashton et al.1989; Cushing 1989; Ng and Tai 1994). We use indicator variable (Foreign) for foreign firms and (Loss) if the firm has loss in the current and/or prior year. We also control for auditor characteristics such as (BUSY), (CITY), and (LDELAY). We expect these variables to be positively associated with audit fees. Ghosh and Lustgarten (2006) and DeAngelo (1981) show that audit fees are less in the year of

initial engagement. We include (CHANGE) a dummy variable if there is change in the auditor in the previous year to control for this effect. YEAR are yearly dummies for 2004-07 and MANUF, UTILITY, FINANCIAL are industry specific dummies based on Fama and French's (1997) industry classification. These two sets of dummies control for year- or industry-specific effects that arise from pooling cross-sectional data across time. MANUF is a proxy for manufacturing industry that has high cost of auditing while UTILITY and FINANCIAL controls for lower costs of auditing in utility and financial industries (Simunic 1980; Palmrose 1986). Detailed variable description is provided in table 1.

[Insert Table 1 here]

After including the control variables, the model use to test the first hypothesis looks like the following:

$$AUDIT\_FEE = a_0 + a_1SP + a_2\sum CONTROLS + \varepsilon \quad (1)$$

In the first hypothesis we examine the relationship of audit fees of firms in the S&P index with other firms. If auditors lowball their fees for clients, in response to improvement in firm's reporting following their addition to the index, we expect audit fees for S&P firms to be lower than non-S&P firms. So we expect SP (a_1) to be negatively associated with AUDIT_FEE. CONTROLS include variables proxy for size, audit risk, complexity, audit characteristics, and year and industry dummies.

We extent our H1 to examine the audit fee of S&P firms when they are out of the index with the audit fees when in the index. To test the extension of the first hypothesis, we include two variables in the above model. We create a dummy variable for S&P firms for firm years

before they enter the index (BEF) and for firm's years after they get out of the index (AFT)[6]. SP includes firm years observation when the firms where in the index. We rerun the above model using these new variables.

$$AUDIT\_FEE = a_0 + a_1BEF + a_2SP + a_3AFT + a_4\sum CONTROLS + \varepsilon \quad (2)$$

We compare the coefficient of BEF and AFT with SP. We expect the coefficient of BEF (a_1) and AFT (a_3) to be significantly higher than SP (a_2). Further we also expect the coefficient of AFT to be higher than BEF because penalty for the poor performance is usually more than the reward for good performance. The control variables are same as those used in model 1.

We also test this extension by using a change model. This model measures the change in the audit fees for firms when they enter the index and exit the index. In this model we use CH_AUDIT as the dependent variable. CH_AUDIT is the change in the log of audit fee (t-(t-1)). We include two variables in the change model: INPLUS and DEPLUS[7]. INPLUS is an indicator variable for the year following the year of entry in to the index (t+1). DEPLUS is an indicator variable for the year following the year of exit of the firm from the index (t+1). We focus on t+1 year instead of year t because audit fees might be determined before the firms enter the S&P index. Hence the change in the firm's status might not be reflected in the audit fees in year *t*.

$$AUDIT\_FEE = a_0 + a_1INPLUS + a_2DEPLUS + a_3\sum CONTROLS + \varepsilon \quad (3)$$

We expect coefficient for INPLUS (a_1) to be negative and significant. On the other hand we expect coefficient of DEPLUS (a_2) to be positive and significant. This result would indicate

[6] We use inclusion sample (110 firms) to create dummy variable (BEF) and Deletion sample (32 firms) to create (AFT). SP is constructed using firms from both the sample. We have to use two different samples because we do not have firms whose inclusion and deletion happened in the sample period.

[7] INPLUS is created using inclusion sample (110 firms) and DEPLUS is created using deletion sample (32 firms).

that firms receive discount in their audit fees following their entry in the S&P index. This benefit is withdrawn when they get out of the index. We take the change of the control variables describe above. We expect proxies for change in audit size, complexity, and risk to be positively associated with the change in audit fees.

In the second hypothesis we investigate whether the length of time spend in the index is related to the magnitude of discount given by the auditor. To examine this we include a new variable (OLD) in the model that indicates the interaction between number of years a firm spends in the index (DURATION) and S&P firms (SP). If the discount to firms is due to their S&P index membership, we expect it to be more for firms that stay for longer time in the index. In other words, we expect negative association between OLD and AUDIT_FEE.

$$AUDIT\_FEE = a_0 + a_1SP + a_2OLD + a_3\sum CONTROLS + \varepsilon \qquad (4)$$

Lastly we examine our third hypothesis where we look at how "Expert" auditors deal with S&P firms. To examine this we include EXPERT in the model that takes value 1 if the auditor holds more than 20% of the market share in that industry. We interact SP with EXPERT to see the audit fees charged by expert auditors to their S&P clients.

$$AUDIT\_FEE = a_0 + a_1SP + a_2EXPERT + a_3SP\_EXPERT + a_4\sum CONTROLS + \varepsilon \qquad (5)$$

The assumption is that S&P firms would demand the service of expert auditors' in order to increase their financial reporting quality. Also due to their self reputation, expert auditors have to make lesser efforts to attract clients towards them. So we expect that expert auditors will less likely give a discount to S&P firm. We expect SP to be negative and significant. However we expect EXPERT (a_2) and SP_EXPERT (a_3) to be positive. Positive association between

AUDIT_FEE and SP_EXPERT indicates that "expert" auditors do not give discount to their S&P clients.

IV. SAMPLE

In this study we examine the audit fees for firms that enter and exit the S&P index. We obtain the data for firms entering and exiting the index from the Standards and Poors website. Data on audit fees and other firm specific variables is obtained from the audit analytics and Compustat database. We collect data for the period 2003 to 2007. Following Arthur Andersen (AA) demise, AA's client had to change their auditors. Also there were significant mergers and acquisition of firms due to scandals that might cause changes in the S&P index. We collect our sample from 2003 to exclude the impact of AA demise and the Enron scandal from our study.

Between 2003 and 2007, 122 (122) firms are added (deleted) to (from) the index. After deleting missing variables we have information for 110 firms for our inclusion sample. Most of the firms deleted from S&P index cease to index due to mergers, bankruptcy, liquidation, buy outs, or delisting. As a result our sample of S&P deleted firms is lesser than inclusion sample firms (32 firms). From a total sample of 4030, we have a sample of 110 firms that are newly added and 32 firms deleted from the index. The rest are non-S&P firm. In table 2 panel A, we present our sample selection procedures.

[Insert Table 2 here]

In panel B, we present the distribution of S&P firm changes during our sample period. The distribution shows that S&P firm change increase significantly in the recent years. In 2003 only 9 firms were included (and deleted) in the index. This increased to 41 in 2007. In panel C, we provide distribution of S&P firms across industries. We find that there is significant number

of firms representing each of the industry, suggesting that our results are not specific to particular industry.

V. RESULTS

In this section we present the results of our analysis. In this paper we examine whether the firms S&P membership has any impact on the audit fees. This is based on the assumption that increase scrutiny will improve firm's financial reporting. This will reduce auditor's risk of auditing the firm thereby encouraging them to give discount to the client firms.

Descriptive Statistics:

In table 3 we present the correlation matrix of the variables use in the analysis. Correlation analysis shows that AUDIT_FEE is positively related to LOGTA (0.59) which is consistent with prior studies that auditor charge more for bigger firms. Similarly correlation of AUDIT_FEE with LARGE and NONAUDIT is 0.13 and 0.42 respectively. This shows that Big4 auditors charge premium from their client. DURATION, which measures the number of years a firm spend in the index, is negatively related to AUDIT_FEE (correlation= -0.07). This indicates that the firms that stay in the index pay lower audit fees than other firms.

[Insert table 3 here]

In table 4, we present the descriptive statistics of firms in the S&P index. The mean (median) AUDIT_FEE is 4370034.66 (2853000). Mean (median) age of firms belonging to the index (SP) during the sample period is 4 (5) years. This shows that firms spend considerable amount of time in the index, thus allowing us to test the impact of improved financial reporting on auditor's fees. Further the firms in the S&P index are big firms with mean (median) assets to be 8.8635113 (8.6952390) millions. This is consistent with the S&P reports that firms belonging

to the index are big firms of US market.

[Insert table 4 here]

Main Results:

In table 5 we present the results of our first hypothesis where we examine whether auditors lower their fees for S&P clients. The underlying theory is that S&P firms have better earnings compare to other firms. Also, increased scrutiny of the index can further improve firm's reporting, thus making them less risky compare to non S&P firms. Hence auditors would provide discount to S&P firms to attract or retain them in their portfolio. To test this hypothesis we regress audit fees on indicator variable SP and other control variables. SP measures the audit fees of the S&P firms.

Panel A of table 5 presents the results. The results shows that overall firms included in the index have lower audit fees than other non S&P firms. The coefficient on SP is -0.127 (t-value=-3.81) and is highly significant. This shows that auditors lowball their fees for S&P clients in response to improvement in earnings quality. As predicted our control variables are in the right direction. LOGTA, proxy for size, is positive (0.455) and significant at 1%. Audit risk variables are also in their predicted direction. CURRENT is -0.025, CURRTA is 0.629, PROFIT is -0.040, and LEVERAGE is 0.079. These variables are all significant at 1%. We also find that big4 auditor charge higher fees than nonbig4 (LARGE= 0.211) and audit fees is positively associated with complexity (FOREIGN= 0.315 and LOSS =0.202). Lastly, we find that audit fees are negatively related to CHANGE (-0.317) and positively related to DELAY (0.0001), CITY (0.137) and NAUDITFEE (0.135).

In panel B, we extent our H1 and examine the audit fee of firms when they are in the

index with the fees when they are out. We regress audit fees on BEF (periods before the firm enter the index), SP (period when firms are in the index), and AFT (periods after the firm get out of the index). We expect coefficient of BEF and AFT to be higher than the coefficient of SP. This will indicate that audit fees are higher for S&P firms when they are outside the index and are lower when they enter the index. Our results show that BEF is -0.039 (t-value = -0.85), SP is -0.129 (t-value = -4.99), and AFT is 0.222(4.94). Our unreported results show that there is significant difference in the coefficient of BEF and SP (significant at 10%) and AFT and SP (significant at 1%). Further AFT is significantly higher than BEF (at 1% significance level). This supports our results in panel A. Further calculation shows that the total audit fees for S&P firms decrease by 8.6% when they enter the index. This fee is increase by 26% when the firms are deleted from the index.

In panel C we examine the change in audit fee of S&P firms when they enter and exit the index using a change model. In this model we regress the audit fee on INPLUS (a year following the year of inclusion of index) and DEPLUS (a year following the year of deletion). This will shed light on whether auditors immediately change their audit fees following the change in the firm's status. INPLUS is negative (-0.127) and DEPLUS (0.122). Both this variables are significant at 5% respectively. This confirms our first hypothesis that auditors reduce their fees in response to improvement in financial reporting.

[Insert table 5 here]

Since we get results supporting our first hypothesis, we proceed further to test whether this discounting is a function of length of firm's stay in the index. If auditors consider firm's stay in the index while deciding the audit fees, we expect audit fees to be lower for firms that stay for

a longer time. To investigate this issue, we interact our S&P firms with the number of years they are in the index (OLD). Negative coefficient for OLD indicates that discounting is more for firms staying for longer time in the index.

We present the result of our H2 in table 6. Results show that SP is negative and significant (-0.123, t-value=-3.69). Our main variable in this model, OLD, is negative and significant. Coefficient for OLD is -0.056 and is significant at 5% (t-value = -2.05). This indicates that time a firm spends in the index is an important determinant of audit fee discounting for S&P firms. Longer the firm stays in the index, higher discount they earn from their auditor.

[Insert table 6 here]

Lastly we examine whether expert auditor will also lowball their fees when their clients enter S&P firms. The assumption is expert auditor has its own reputation and would be in demand by the firms in the S&P index. Studies show that audit by expert auditor increases the credibility of financial reporting. Since S&P firms are followed by everyone, S&P firms would like to make sure that there is no error in their reporting. So we expect that increase demand for expert auditor will in fact increase audit fees for S&P firms.

To examine this angel, we include EXPERT in our model. An auditor is said to be EXPERT if market share of auditor is greater than 20%. Our result is presented in table 7. Results show that S_P is negative and significant. As expected, SP_EXPERT is positive and significant (t-value=2.21). Coefficient of SP_EXPERT is 0.142. This indicates that although firms in general receive discount in their audit fees for being in the index, this benefit is not received if the firm is audited by an EXPERT.

[Insert table 7 here]

VI. CONCLUSION

Literature on S&P 500 index firms shows that there is significant improvement in the performance due to increased scrutiny of media and investors. Recently Platikonova (2008) documents improvement in the disclosure quality for firms following their inclusion in the index. Since, auditors are responsible for certifying the quality of reporting and the audit fee reflects their perception of earnings quality, we examine whether the improvement in the reporting due to S&P scrutiny is reflected in audit fees.

Our analysis shows that audit fees are significantly lower for S&P firms. This suggests that auditors believe that the quality of reporting improves for firms when they enter S&P index. Our further investigation shows that this reduction in fees is higher for firms that stay in the index for longer time. This shows that auditors consider the time length of a firm in the index while providing the discount. Lastly, we find that expert auditor to less likely lowball their fees for S&P clients. In fact we find expert auditors to charge higher fees for auditing S&P firms.

Overall we conclude that S&P index scrutiny not only improves firm's performance but also improves firms reporting.

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TABLE 1

VARIABLE DEFINITIONS

Variable	Definition
Main Variables	
LAUDITFEE	Natural logarithm of audit fee from Audit Analytics, adjusted for inflation relative to 2006 dollar value.
CH_AUDIT	LAUDITFEE of year t minus LAUDITFEE of year t-1.
SP	A dichotomous variable with value of one for SP firms when they are in the index.
BEF	A dichotomous variable with value of one for SP firms before they enter the index.
AFT	A dichotomous variable with value of one for SP firms after they exit from the index.
OLD	Number of years a SP firms have been in the index.
EXPERT	A dichotomous variable with value of one if the auditor has 20% or more market share (based on clients log of total assets) in the two-digit SIC code industry
INPLUS	A dichotomous variable with value of one for SP firms for the year following the year of addition to the index.
DEPLUS	A dichotomous variable with value of one for SP firms for the year following the year of deletion to the index.
Control Variables	
BUSY	A dichotomous variable with value of one if the client has a fiscal year-end in December; and zero otherwise
CHANGE	A dichotomous variable with value of one if there is an auditor switch
CITY	A dichotomous variable with value of one if the audit office is located in one of the five largest US cities; and zero otherwise
CURRENT	Current ratio; ratio of current assets (data #4) to current liabilities (data #5)
CURRTA	Ratio of current assets (data #4) to total assets (data #6)
FINANCIAL	A dichotomous variable with value of one if the client firm operates in a financial industry (SIC codes 60-69)
FOREIGN	Proportion of a client's operations outside the United States
INVENTORY	Inventory (data #3) deflated by total assets (data #6)
LARGE	A dichotomous variable with value of one if the auditor (data #149) is one of the Big 4 (or Big 5); and zero otherwise
DELAY	Natural logarithm of audit delay, measured as the number of calendar days from fiscal year-end to date of auditors' report
LEV	Total debt (data #9 + data #34) deflated by total assets (data #6)
LNONAUDIT	Natural logarithm of non-audit fee, adjusted for inflation relative to 2006 dollar value.
LOGTA	Natural logarithm of firm's total assets (Compustat data #6)
LOSS	A dichotomous variable with value of one if client has a negative net income before extraordinary items in year t or t-1; and zero otherwise
MANUF	A dichotomous variable with value of one if the client firm operates in a manufacturing industry (SIC codes 20-39)
PROFIT	Net income before extraordinary items and cumulative effect of accounting changes (data #18) deflated by total assets (data #6)

UTILITY	A dichotomous variable with value of one if the client firm operates in a utility industry (SIC codes 40-49)
YEAR	Dummy variables for years 2004 to 2008

Table 2
SAMPLE SELECTION AND DISTRIBUTION

Panel A: Sample Selection

Procedure	Firms	Observations
Firms and firm observations after merging Audit analytics and Compustat databases	5730	22016
Delete missing observations	(1700)	(6612)
Final Sample for analysis	4030	15404
S&P Firms- inclusion	110	255
-deleted	32	77
Non-S&P Firms	3888	15072

Panel B: Distribution across Industries

Industry Classification (2 digit SIC)	# of firms
12 COALMINING	2
13 OIL AND GAS EXTRACTION	38
15 Building Cnstrctn - General Contractors & Operative Builders	6
16 Heavy Cnstrctn, Except Building Construction - Contractors	6
20 Food and Kindred Products	23
23 Apparel, Finished Prdcts from Fabrics & Similar Materials	11
24 Lumber and Wood Products, Except Furniture	9
26 Paper and Allied Products	10
27 Printing, Publishing and Allied Industries	5
28 Chemicals and Allied Products	44
29 Petroleum Refining and Related Industries	8
30 Rubber and Miscellaneous Plastic Products	6
31 Leather and Leather Products	5
33 Primary Metal Industries	3
34 Fabricated Metal Prdcts, Except Machinery & Transport Eqpmnt	2
35 Industrial and Commercial Machinery and Computer Equipment	22
36 Electronic, Elctrcl Eqpmnt & Cmpnts, Excpt Computer Eqpmnt	77
37 Transportation Equipment	18
38 Mesr/Anlyz/Cntrl Instrmnts; Photo/Med/Opt Gds; Watchs/Clocks	22
39 Miscellaneous Manufacturing Industries	5
42 Motor Freight Transportation	5
45 Transportation by Air	4
47 Transportation Services	3
48 Communications	20
49 Electric, Gas and Sanitary Services	23
50 Wholesale Trade - Durable Goods	3
51 Wholesale Trade - Nondurable Goods	5

53 General Merchandise Stores	7
54 Food Stores	5
55 Automotive Dealers and Gasoline Service Stations	5
56 Apparel and Accessory Stores	1
57 Home Furniture, Furnishings and Equipment Stores	1
58 Eating and Drinking Places	5
59 Miscellaneous Retail	8
60 Depository Institutions	25
61 Nondepository Credit Institutions	1
62 Security & Commodity Brokers, Dealers, Exchanges & Services	19
63 Insurance Carriers	34
64 Insurance Agents, Brokers and Service	5
65 Real Estate	4
67 Holding and Other Investment Offices	33
70 Hotels, Rooming Houses, Camps, and Other Lodging Places	5
73 Business Services	62
80 Health Services	17
82 Educational Services	6
99 Nonclassifiable Establishments	1

Panel C: Distribution of SP firms year wise.

Year	# of Firms Added
2003	9
2004	20
2005	21
2006	31
2007	41

Table 3: Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Manuf	-0.16																		
Utility	0.11	-0.18																	
Financial	0.26	-0.34	-0.10																
Logta	**0.59**	-0.40	0.17	0.45															
Currta	-0.25	0.41	-0.26	-0.06	-0.58														
Current	-0.38	0.43	-0.16	-0.11	-0.38	0.56													
Inventory	0.001	0.17	-0.14	-0.18	-0.05	0.32	-0.06												
Lev	0.09	-0.18	0.15	0.14	0.14	-0.44	-0.29	-0.05											
Profit	-0.21	0.02	-0.07	-0.12	-0.32	0.21	0.06	-0.00	-0.13										
Loss	0.02	0.19	0.11	-0.11	-0.06	-0.04	0.07	-0.01	0.11	-0.52									
Large	**0.13**	-0.12	0.03	0.05	0.04	-0.05	-0.07	-0.08	0.06	-0.06	-0.00								
Busy	0.20	-0.17	0.15	0.20	0.30	-0.41	-0.25	-0.39	0.18	-0.09	-0.01	0.05							
Change	-0.09	-0.01	0.02	-0.06	0.01	-0.01	-0.01	-0.01	0.08	0.01	0.03	-0.01	-0.05						
Foreign	0.15	0.24	-0.11	-0.12	-0.19	0.23	0.13	-0.01	-0.30	0.17	-0.06	-0.05	-0.12	-0.06					
Lnonaudit	**0.42**	-0.01	0.08	0.20	0.34	-0.08	-0.13	-0.08	0.03	-0.24	0.08	0.09	0.10	-0.07	0.06				
Year	0.27	-0.08	0.01	0.04	0.12	-0.06	-0.07	0.02	0.02	0.13	-0.18	0.02	0.02	0.01	0.03	-0.14			
Delay	-0.03	-0.01	0.03	0.04	0.01	-0.03	0.00	-0.03	-0.04	0.01	-0.01	0.00	0.12	-0.33	0.04	0.05	-0.13		
CITY	**0.15**	-0.04	0.00	0.17	0.21	-0.06	-0.08	0.01	0.05	0.08	-0.03	-0.26	0.05	-0.04	-0.02	0.04	0.06	0.00	
Duration	**-0.07**	0.04	-0.11	-0.01	0.00	0.11	0.09	-0.07	-0.06	0.09	-0.03	-0.02	-0.11	-0.06	0.01	0.02	-0.20	0.07	-0.03

LAUDITFEE is Natural logarithm of audit fee. BUSY is one if the client has a fiscal year-end in December; and zero otherwise. CHANGE is one if there is an auditor switch. CITY is one if the audit office is located in one of the five largest US cities; and zero otherwise. CURRENT is ratio of current assets (data #4) to current liabilities (data #5). CURRTA is Ratio of current assets (data #4) to total assets (data #6). FINANCIAL is one if the client firm operates in a financial industry (SIC codes 60-69). FOREIGN is a Proportion of a client's operations outside the United States. INVENTORY is (data #3) deflated by total assets (data #6), LARGE is one if the auditor (data #149) is one of the Big 4 and zero otherwise. LDELAY is Natural logarithm of number of calendar days from fiscal year-end to date of auditors' report, LEVERAGE is Total debt (data #9 + data #34) deflated by total assets (data #6), LNONAUDIT is Natural logarithm of non-audit fee. LOGTA is natural logarithm of firm's total assets (Compustat data #6). LOSS is one if client has a negative net income before extraordinary items in year t or t-1; and zero otherwise. MANUF is one if the client firm operates in a manufacturing industry (SIC codes 20-39). PROFIT is net income before extraordinary items and cumulative effect of accounting changes (data #18) deflated by total assets (data #6). UTILITY is one if the client firm operates in a utility industry (SIC codes 40-49). YEAR is a dummy variable for years 2004 to 2008. DURATION is number of firm years of S&P firms in the S&P index.

Table 4 Descriptive Statistics

Variable	N	Mean	Median	Q1	Q3
AUDIT_FEES	629	4370034.66	2853000.00	1565870.00	4770000.00
LOGTA	629	8.8635113	8.6952390	7.9616142	9.4367765
CURRTA	514	0.4242921	0.3931368	0.2313921	0.6003352
CURRENT	514	2.3101753	1.6672238	1.2214525	2.7619680
INVENTORY	610	0.0776758	0.0340353	0	0.1153597
LEV	619	0.2320583	0.2041093	0.0697063	0.3542808
PROFIT	629	0.0628902	0.0534659	0.0160258	0.1042957
NON-AUDITFEES	629	1201218.63	730000.00	279250.00	1474450.00
DELAY	629	-99.7440382	-90.0000000	-104.0000000	-80.0000000
DURATION	629	4.0937997	5.0000000	3.0000000	5.0000000

AUDIT_FEE is audit fee. LOGTA is natural logarithm of firm's total assets (Compustat data #6). CURRTA is ratio of current assets (data #4) to total assets (data #6). CURRENT is ratio of current assets (data #4) to current liabilities (data #5). INVENTORY is (data #3) deflated by total assets (data #6), LEV is Total debt (data #9 + data #34) deflated by total assets (data #6), NON_AUDITFEE is non-audit fee. DELAY is natural logarithm of number of calendar days from fiscal year-end to date of auditors' report, DURATION is number of firm years of S&P firms in the S&P index.

Table 5:

Panel A: $AUDIT\_FEE = a_0 + a_1SP + a_2\sum CONTROLS + \varepsilon$

VARIABLE	*COEFFICIENT*	*STD ERRORS*	*T-VALUES*	*P-VALUES*
Intercept	8.08851	0.04689	172.49	<.0001
SP	-0.12753	0.03343	-3.81	0.0001
manuf	0.08648	0.01228	7.04	<.0001
utility	-0.09966	0.02293	-4.35	<.0001
financial	-0.03814	0.03272	-1.17	0.2437
logta	0.45586	0.00434	104.98	<.0001
currta	0.62994	0.02896	21.75	<.0001
current	-0.02445	0.00116	-21.07	<.0001
inventory	-0.39180	0.05140	-7.62	<.0001
lev	0.07978	0.01980	4.03	<.0001
profit	-0.04038	0.00827	-4.88	<.0001
loss	0.20258	0.01247	16.24	<.0001
large	0.21109	0.01615	13.07	<.0001
busy	0.13358	0.01229	10.87	<.0001
year	0.48326	0.01144	42.25	<.0001
foreign	0.31591	0.01230	25.69	<.0001
lnonaudit	0.13582	0.00428	31.72	<.0001
change	-0.31779	0.01643	-19.34	<.0001
delay	0.00018889	0.00006296	3.00	0.0027
CITY	0.13796	0.01937	7.12	<.0001

Panel B: $AUDIT\_FEE = a_0 + a_1BEF + a_2SP + a_3AFT + a_4\sum CONTROLS + \varepsilon$

VARIABLE	*COEFFICIENT*	*STD ERRORS*	*T-VALUES*	*P-VALUES*
α_0:INTERCEPT	8.363	0.040	206.97	<0.0001
α_1:BEF	-0.039	0.046	-0.85	0.396
α_1:S_P	-0.129	0.026	-4.99	<0.0001
α_2:AFT	0.222	0.045	4.94	<0.0001
α_3:MANUF	0.095	0.010	9.31	<0.0001
α_4:UTILITY	-0.125	0.019	-6.57	<0.0001
α_5:FINANCIAL	-0.060	0.028	-2.19	0.029
α_6:LOGTA	0.496	0.004	142.80	<0.0001
α_7:CURRTA	0.748	0.024	30.69	<0.0001
α_8:CURRENT	-0.030	0.001	-25.09	<0.0001
α_9:INVENTORY	-0.506	0.043	-11.85	<0.0001
α_{10}:LEV	0.036	0.017	2.14	0.032
α_{11}:PROFIT	-0.085	0.014	-6.29	<0.0001
α_{12}:LOSS	0.184	0.011	17.15	<0.0001
α_{13}:BUSY	0.155	0.010	15.29	<0.0001
α_{14}:FOREIGN	0.336	0.010	33.25	<0.0001
α_{15}:LNONAUDIT	0.120	0.004	33.28	<0.0001
α_{16}:CHANGE	-0.345	0.015	-22.52	<0.0001
α_{17}:YEAR	0.281	0.011	26.44	<0.0001
α_{18}:DELAY	-0.0005	0.0001	-0.63	0.526
α_{19}:CITY	0.130	0.016	8.19	0.001
Adj R^2				

Panel C: $AUDIT\_FEE = a_0 + a_1 INPLUS + a_2 DEPLUS + a_3 \sum CONTROLS + \varepsilon$

VARIABLE	*COEFFICIENT*	*STD ERRORS*	*T-VALUES*	*P-VALUES*
α_0:INTERCEPT	-0.197	0.070	-2.80	0.005
α_1:INPLUS	-0.127	0.058	-2.19	0.029
α_1:DEPLUS	0.122	0.063	1.94	0.053
α_3:MANUF	0.006	0.008	0.83	0.404
α_4:UTILITY	-0.006	0.014	-0.45	0.652
α_5:FINANCIAL	-0.023	0.021	-1.09	0.275
α_6:LOGTA	0.359	0.011	31.40	<0.0001
α_7:CURRTA	-0.031	0.038	-0.81	0.416
α_7:LARGE	0.057	0.010	5.91	<0.0001
α_8:CURRENT	-0.004	0.001	-4.01	<0.0001
α_9:INVENTORY	0.227	0.106	2.15	0.032
α_{10}:LEV	-0.026	0.015	-1.68	0.093
α_{11}:PROFIT	-0.046	0.009	-4.98	<0.0001
α_{12}:PLOSS	-0.002	0.013	-0.16	0.870
α_{12}:NLOSS	0.062	0.017	3.62	0.0003
α_{13}:BUSY	-0.033	0.008	-4.25	<0.0001
α_{14}:FOREIGN	-0.006	0.007	-0.87	0.383
α_{15}:LNONAUDIT	0.003	0.003	1.03	0.303
α_{16}:CHANGE	-0.129	0.015	-8.69	<0.0001
α_{17}:YEAR	0.345	0.069	4.99	<0.0001
α_{18}:DELAY	0.0002	0.0001	5.96	<0.0001
α_{19}:CITY	-0.024	0.012	-1.97	0.049
Adj R^2				

LAUDITFEE is Natural logarithm of audit fee. SP is a dichotomous variable with value of one for SP firms when they are in the index. BEF is one for SP firms before they enter the index. AFT is one for SP firms after they exit from the index. INPLUS is one for SP firms for the year following the year of addition to the index, DEPLUS is one for SP firms for the year following the year of deletion to the index. BUSY is one if the client has a fiscal year-end in December; and zero otherwise. CHANGE is one if there is an auditor switch. CITY is one if the audit office is located in one of the five largest US cities; and zero otherwise. CURRENT is ratio of current assets (data #4) to current liabilities (data #5). CURRTA is Ratio of current assets (data #4) to total assets (data #6). FINANCIAL is one if the client firm operates in a financial industry (SIC codes 60-69). FOREIGN is a Proportion of a client's operations outside the United States. INVENTORY is (data #3) deflated by total assets (data #6), LARGE is one if the auditor (data #149) is one of the Big 4 and zero otherwise. LDELAY is Natural logarithm of number of calendar days from fiscal year-end to date of auditors' report, LEVERAGE is Total debt (data #9 + data #34) deflated by total assets (data #6), LNONAUDIT is Natural logarithm of non-audit fee. LOGTA is natural logarithm of firm's total assets (Compustat data #6). LOSS is one if client has a negative net income before extraordinary items in year t or t-1; and zero otherwise. MANUF is one if the client firm operates in a manufacturing industry (SIC codes 20-39). PROFIT is net income before extraordinary items and cumulative effect of accounting changes (data #18) deflated by total assets (data #6). UTILITY is one if the client firm operates in a utility industry (SIC codes 40-49). YEAR is a dummy variables for years 2004 to 2008.

Table 6:

$$AUDIT\_FEE = a_0 + a_1SP + a_2OLD + a_3\sum CONTROLS + \varepsilon$$

Variable	Estimate	Error	t Value	Pr>|t|
INTERCEPT	8.34608	0.04756	175.47	<.0001
SP	-0.12278	0.03331	-3.69	0.0002
OLD	-0.05649	0.02762	-2.05	0.0409
MANUF	0.08438	0.01216	6.94	<.0001
UTILITY	-0.09876	0.02265	-4.36	<.0001
FINANCIAL	-0.08565	0.03241	-2.64	0.0082
LOGTA	0.47338	0.00436	108.59	<.0001
CURRTA	0.70818	0.02888	24.53	<.0001
CURRENT	-0.02926	0.00129	-22.61	<.0001
INVENTORY	-0.43806	0.05098	-8.59	<.0001
LEV	0.03687	0.01974	1.87	0.0618
PROFIT	-0.11507	0.01539	-7.48	<.0001
LOSS	0.17777	0.01272	13.97	<.0001
LARGE	0.27295	0.01594	17.13	<.0001
BUSY	0.12716	0.01213	10.49	<.0001
CHANGE	-0.14043	0.01803	-7.79	<.0001
FOREIGN	0.33333	0.01205	27.66	<.0001
LNONAUDIT	0.11553	0.00421	27.47	<.0001
YEAR	0.29646	0.01266	23.42	<.0001
DELAY	0.00004901	0.00008579	0.57	0.5678
CITY	0.13986	0.01898	7.37	<.0001

LAUDITFEE is Natural logarithm of audit fee. SP is a dichotomous variable with value of one for SP firms when they are in the index. OLD is interaction of SP and length of firm's stay in the index. BUSY is one if the client has a fiscal year-end in December; and zero otherwise. CHANGE is one if there is an auditor switch. CITY is one if the audit office is located in one of the five largest US cities; and zero otherwise. CURRENT is ratio of current assets (data #4) to current liabilities (data #5). CURRTA is Ratio of current assets (data #4) to total assets (data #6). FINANCIAL is one if the client firm operates in a financial industry (SIC codes 60-69). FOREIGN is a Proportion of a client's operations outside the United States. INVENTORY is (data #3) deflated by total assets (data #6), LARGE is one if the auditor (data #149) is one of the Big 4 and zero otherwise. LDELAY is Natural logarithm of number of calendar days from fiscal year-end to date of auditors' report, LEVERAGE is Total debt (data #9 + data #34) deflated by total assets (data #6), LNONAUDIT is Natural logarithm of non-audit fee. LOGTA is natural logarithm of firm's total assets (Compustat data #6). LOSS is one if client has a negative net income before extraordinary items in year t or t-1; and zero otherwise. MANUF is one if the client firm operates in a manufacturing industry (SIC codes 20-39). PROFIT is net income before extraordinary items and cumulative effect of accounting changes (data #18) deflated by total assets (data #6). UTILITY is one if the client firm operates in a utility industry (SIC codes 40-49). YEAR is a dummy variables for years 2004 to 2008.

Table 7:

$$AUDIT\_FEE = a_0 + a_1SP + a_2EXPERT + a_3SP\_EXPERT + a_4\sum CONTROLS + \varepsilon$$

Variable	Estimate	Error	t Value	Pr > |t|
INTERCEPT	8.35577	0.04464	187.19	<.0001
SP	-0.28349	0.07269	-3.90	<.0001
EXPERT	0.32894	0.04429	7.43	<.0001
SP_EXPERT	0.56479	0.24593	2.30	0.0217
MANUF	0.09326	0.01137	8.20	<.0001
UTILITY	-0.11970	0.02114	-5.66	<.0001
FINANCIAL	-0.05094	0.03032	-1.68	0.0929
LOGTA	0.47244	0.00411	114.94	<.0001
CURRTA	0.70773	0.02706	26.15	<.0001
CURRENT	-0.03041	0.00129	-23.58	<.0001
INVENTORY	-0.44901	0.04764	-9.43	<.0001
LEV	0.03285	0.01841	1.78	0.0745
PROFIT	-0.10752	0.01449	-7.42	<.0001
LOSS	0.17842	0.01188	15.01	<.0001
LARGE	0.22109	0.01798	12.30	<.0001
BUSY	0.13963	0.01131	12.35	<.0001
CHANGE	-0.07708	0.01715	-4.49	<.0001
FOREIGN	0.32320	0.01125	28.72	<.0001
LNONAUDIT	0.11246	0.00396	28.39	<.0001
YEAR	0.29557	0.01183	24.98	<.0001
DELAY	0.00000122	0.00008097	0.02	0.9880
CITY	0.13533	0.01761	7.68	<.0001

LAUDITFEE is Natural logarithm of audit fee. SP is a dichotomous variable with value of one for SP firms when they are in the index. EXPERT is one if the auditor has 20% or more market share (based on clients log of total assets) in the two-digit SIC code industry. SP_EXPERT is interaction of SP and EXPERT. BUSY is one if the client has a fiscal year-end in December; and zero otherwise. CHANGE is one if there is an auditor switch. CITY is one if the audit office is located in one of the five largest US cities; and zero otherwise. CURRENT is ratio of current assets (data #4) to current liabilities (data #5). CURRTA is Ratio of current assets (data #4) to total assets (data #6). FINANCIAL is one if the client firm operates in a financial industry (SIC codes 60-69). FOREIGN is a Proportion of a client's operations outside the United States. INVENTORY is (data #3) deflated by total assets (data #6), LARGE is one if the auditor (data #149) is one of the Big 4 and zero otherwise. LDELAY is Natural logarithm of number of calendar days from fiscal year-end to date of auditors' report, LEVERAGE is Total debt (data #9 + data #34) deflated by total assets (data #6), LNONAUDIT is Natural logarithm of non-audit fee. LOGTA is natural logarithm of firm's total assets (Compustat data #6). LOSS is one if client has a negative net income before extraordinary items in year t or t-1; and zero otherwise. MANUF is one if the client firm operates in a manufacturing industry (SIC codes 20-39). PROFIT is net income before extraordinary items and cumulative effect of accounting changes (data #18) deflated by total assets (data #6). UTILITY is one if the client firm operates in a utility industry (SIC codes 40-49). YEAR is a dummy variables for years 2004 to 2008.