Company Reputation and Auditor Choice:

Evidence from Fortune 1000 Companies

Abstract:

Purpose — the purpose of this paper is to investigate how companies' reputation affects their selection of auditors.

Design/methodology/approach — this paper measures company reputation using the reputation scores from Fortune's "America's Most Admired Companies" list. Multivariate analysis is performed to examine the impact of company reputation on public companies' auditor choice. Robustness checks include conducting Heckman procedures and instrumental-variable two-stage least square regressions to control for self-selection bias and using alternative measures to proxy for company reputation and auditor industry expertise.

Findings — this paper finds that companies with higher reputations are more likely to hire industry-specialist auditors than their counterparts. The results suggest that due to reputation concerns, high-reputation companies have strong incentives to maintain and signal their financial reporting quality, which in turn increase their demand for audit quality.

Practical Implication — this paper suggests that company reputation constitutes an important determinant of auditor selection, and therefore has both policy and practical implications for the demand of audit services. The study provides policy-makers and practitioners with insights into critical factors influencing companies' complex decision process of auditor selection.

Originality/Value — the findings of this study on the empirical link between company reputation and auditor choice contribute to the auditing literature by enhancing the understanding of the effects of different company-level characteristics in financial reporting and audit planning process. This study also adds to the growing literature on the influence of company reputation on corporate behavior by documenting the important role that company reputation plays in the managerial decision making process.

Keywords: Company reputation; auditor choice; industry-specialist auditors.

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INTRODUCTION

This study investigates how companies' reputation affects their selection of auditors. Analytical research has demonstrated that reputation plays an important role in determining behavior and the impact of reputation on a player's actions is referred as the reputation effect or the reputation mechanism (Weigelt and Camerer 1988). Researchers have shown that the reputation mechanism can effectively reduce agency problems and induce behavior that is in the interest of the principal, even without a formal contract (Wilson 1985; Weigelt and Camerer 1988).[1] Consistent with this argument, empirical studies provide evidence that reputation concerns affect corporate behavior, motivating management to take actions that provide long-term benefits rather than focusing on actions that only favor short-term interests. Studies have found that high-reputation companies tend to maintain higher earnings quality and enjoy a lower cost of debt and a lower cost of equity capital (Anginer et al. 2011; Cao et al. 2012, 2014). Recent research also documents a positive association between company reputation and firm value (Filbeck and Preece 2003; Anderson and Smith 2006).

Despite the increasing interest in company reputation and the growing body of reputation-related research, there has been limited research on the effect of reputation on companies' financial reporting activities. Cao et al. (2012) document that higher-reputation companies tend to maintain higher financial reporting quality. They also

[1] As modeled in a repeated game, a player knows that other players use his past behavior to form beliefs about his "type" (or "reputation"), which influences their responses to his actions. Thus, the player chooses a strategy that benefits all players (Wilson 1985; Weigelt and Camerer 1988).

examine the channels through which company reputation affects financial reporting quality and find that higher-reputation companies pay higher audit fees. The evidence is consistent with the argument that higher-reputation companies have greater incentives to protect their financial reporting quality and are therefore willing to pay for more audit effort. In light of the prior research, we investigate another channel through which company reputation may affect financial reporting quality, that is, the selection of external auditors.

Company reputation may influence auditor choice in two competing ways. On the one hand, reputation concerns motivate high-reputation companies to maintain and signal their high financial reporting quality. As a result, they may demand great levels of audit quality to protect their good reputations. On the other hand, the reputation effect can help reduce agency problems between owners and management and therefore reduce the demand for high-quality auditors to serve as an external monitoring function. Overall, existing theories provide alternative predictions about the effect of company reputation on the demand for high-quality auditors.

To empirically test the effect of company reputation on the selection of auditors, we measure company reputation using the reputation scores from Fortune's "America's Most Admired Companies" list, which are descriptive of overall company reputation and are by far the most widely used measure of reputation in academic research (Cao et al. 2012, 2014). Using data from Fortune 1000 companies from 2006 through 2011, we find that high-reputation companies are more likely to hire industry-specialist auditors than their counterparts, which suggests that due to greater reputation concerns, they have more incentives to maintain and signal their high financial reporting quality, resulting in higher

demand for audit quality. Our results are robust to controls for self-selection bias and endogenous problems related to simultaneity, to alternative measures of company reputation, and to alternative definitions of auditor industry expertise.

Our study contributes to the extant literature in the following ways: First, it adds to the literature that examines factors associated with the determinants of companies' auditor choice. Audit research has explored the impact of various factors on companies' selection of auditors (e.g., Abbott and Parker 2000; Kang 2014). This study shows that a unique company-level characteristic, company reputation, is associated with the demand for audit quality after controlling for self-selection bias. Thus, it makes contribution to the auditing literature by providing additional insight on the determinants of companies' auditor choice and therefore has both policy and practical implications for the demand of audit services.

Second, the findings of this study enhance our understanding of the role that company reputation plays in the managerial decision-making process. Recently, there has been a growing literature on the association between company reputation and corporate behavior. Prior research has demonstrated that company reputation affects firm value and influences corporate behavior in different ways, including production, marketing, human resources, and financing activities. However, the effect of reputation on financial reporting activities has not been fully documented. Our study extends Cao et al. (2012) by documenting that auditor choice is another channel through which company reputation affects financial reporting quality. Our approach aligns well with the framework provided by DeFond and Zhang (2014) who argue that "audit quality is a component of financial

reporting quality" (p.276) and therefore adds to the growing body of literature on the effects of company reputation.

The remainder of the paper is organized as follows: The second section presents a review of prior literature and develops the hypothesis. The third section provides a discussion of the sample and research design. The fourth section presents the empirical results, followed by additional analysis in the fifth section. The final section summarizes concluding remarks.

PRIOR LITERATURE AND HYPOTHESIS DEVELOPMENT

Following Barnett et al. (2006, p.34), we define company reputation as "observers' collective judgment of a corporation based on assessments of the financial, social, and environmental impacts attributed to the corporation over time". This definition posits that reputation concerns motivate companies to take actions that provide long-term benefits rather than focusing on actions that favor their short-term interests (Cao et al. 2012). Prior empirical research has investigated the effect of company reputation from different perspectives. For example, Anginer et al. (2011) examine how reputation affects companies' debt financing activities and costs and find that high-reputation companies enjoy a lower cost of debt. Cao et al. (2014) provide evidence that company reputation also has an impact on equity financing, i.e., companies with better reputation have a lower cost of equity capital.

Prior analytical research suggests that companies with higher reputations emphasize accountability, credibility, and trustworthiness, and have greater incentives to protect their reputations, resulting in different corporate behaviors than other companies. As argued by Wilson (1985), players with higher reputations have incentives to trade off

the immediate consequences of their current decisions against the long-term effects on their reputations. Consistent with this argument, Cao et al. (2012) examine how reputation concerns influence companies' financial reporting activities and find that higher-reputation companies report better quality accruals and are less likely to misstate their financial statements. Taken together, both analytical and empirical studies lead us to predict that, reputation concerns motivate high-reputation companies to maintain and signal their financial reporting quality, which in turn increase their demand for audit quality.

On the other hand, prior research in accounting argues that the demand for audit quality is driven by information asymmetry and conflicts of interest between managers and investors (Watts and Zimmerman 1983; Healy and Palepu 2001). The separation of ownership and management can result in opportunistic management behaviors. To mitigate such agency conflicts, owners may hire external auditors to independently check the information provided by managers (Jensen and Meckling 1976; Johnson and Lys 1990; Imhoff 2003). Therefore, the demand for the level of audit quality depends on the extent of agency conflicts the owners encounter (DeFond 1992). As argued by prior studies, the focus on long-term effects can inhibit management from engaging in activities that may negatively impact company reputation, therefore inducing behavior that is in the interest of the principal, even without a formal contract (Kose and Nachman 1985; Schwartz et al. 2000). In other words, the reputation effect can help reduce agency problems between owners and management. Due to the argument set forth above, we expect that companies with higher reputations have lower demand for high-quality

auditors to serve as an external monitoring function to alleviate agency problems between managers and shareholders.

In summary, reputation concerns motivate high-reputation companies to choose high-quality auditors to maintain and signal their financial reporting quality; however, less severe agency problems may reduce the companies' incentives to hire high-quality auditors to serve as a monitoring function. Therefore, the effect of company reputation on the demand for audit quality warrants empirical investigation. Prior research argues that industry-specialist auditors invest heavily in technologies, physical facilities, personnel, and organizational control systems that enable them to detect irregularities and misrepresentations more effectively (Simunic and Stein 1987). Empirical studies show that companies audited by industry specialists are associated with higher earnings quality and disclosure quality (Balsam et al. 2003; Krishnan 2003). Moreover, Reichelt and Wang (2010) provide evidence that audit quality is higher when the auditor is both a national and city-specific industry specialist. In light of the previous research, we use the choice of industry specialists as a proxy for companies' demand for high-quality auditors.[2] Since the existing theories provide competing and alternative predictions about the effect of company reputation on the demand for audit quality, our research hypothesis (in null form) is as follows:

Hypothesis 1: The likelihood of hiring industry specialists as external auditors is not associated with company reputation.

[2] DeFond and Zhang (2014) classify Big N as another auditor-specific characteristic in input-based audit quality measures. However, the vast majority (97.8%) of Fortunate 1000 companies in our sample hired Big N auditors. Therefore, we choose auditor industry specialization as the proxy for high-quality audits.

RESEARCH METHODOLOGY

Measurement of Company Reputation

Following prior research (Cao et al. 2012, 2014), we use the reputation scores from Fortune's "America's Most Admired Companies" list to proxy for company reputation. The "Most Admired" (MA) companies have been selected from the Fortune 1000 each year based on surveys from executives, directors, and analysts on nine criteria, including: innovation; people management; use of corporate assets; social responsibility; quality of management; financial soundness; long-term investment value; quality of products/services; and global competitiveness. Based on the assessment results, each Fortune 1000 company is assigned an overall MA score, with a higher reputation score indicating a better reputation. The companies with MA scores in top 300 or so and across more than 20 industries are selected to the MA list and their reputation scores are published.

Prior research has found that the Fortune's MA scores are descriptive of overall company reputation since when forming reputation scores, companies are evaluated on various aspects — from financial soundness to social responsibility to the community and to the environment (Fombrun and Shanley 1990; Roberts and Dowling 2002). Thus, the Fortune's MA scores are by far the most widely used measure of reputation in academic research in accounting and management (Fombrun and Shanley 1990; Flanagan and O'Shaughnessy 2005; Bowen et al. 2010, Cao et al. 2012, 2014; Kim et al. 2012; Erkens and Bonner 2013). As suggested by the prior research, we use the MA scores as the primary measure for company reputation and utilize several alternative ones as robustness checks.

Model Specification

Following prior research (e.g., Kang 2014), we test our hypothesis on the association between company reputation and auditor choice using the following regression (all the variable definitions are summarized in Table 1):[3]

$$\begin{aligned} SPEC_t = {} & \alpha_0 + \alpha_1 MA_t + \alpha_2 LTA_t + \alpha_3 CHTA_t + \alpha_4 ATURN_t + \alpha_5 DA_t \\ & + \alpha_6 CURR_t + \alpha_7 QUICK_t + \alpha_8 ROA_t + \alpha_9 LOSS_t + \alpha_{10} SEG_t + \alpha_{11} FORGN_t \\ & + \alpha_{12} BI_t + \alpha_{13} CEOCHR_t + year\ dummies + industry\ dummies + \varepsilon_t \end{aligned} \quad (1)$$

[Insert Table 1 here]

We estimate Model (1) by probit regression, where the dependent variable *SPEC* is set to one if the company hires an industry-specialist auditor in the year, and zero otherwise. Following Reichelt and Wang (2010), we measure industry expertise by auditor dominance, as dominant auditors differentiate themselves from non-specialists by investing in industry-specific specialization costs (e.g., training, personnel, and technology) that help to develop and maintain their industry expertise. Moreover, Reichelt and Wang (2010) find empirical evidence that auditors who are both national and city-specific industry specialists provide the highest audit quality. Following their research, we define an auditor as an industry specialist if it maintains industry expertise at both national and city levels.[4] Specifically, *SPEC* classifies an audit firm as an industry specialist if it is a dominator at both national and city levels. An audit firm is considered a national (city) dominator if in a given year (and in a particular city) the firm has the

[3] To avoid the influence of extreme observations, we winsorize all the continuous variables at the 1st and 99th percentiles.

[4] National level auditor industry expertise is based on the auditor's annual market share of audit fees within a two-digit SIC category. City-level auditor industry expertise is based on the auditor's annual market share of audit fees within a two-digit SIC category for a particular city. Following Francis et al. (2005), a city is defined as a Metropolitan Statistical Area (MSA). We obtain the geographic data from the U.S. Census Bureau's MSA cross-map.

largest market share in a two-digit SIC category and if its market share is at least 10 percent greater than the second largest industry leader in a national (city) audit market. To test our hypothesis, we include in the model the proxy for company reputation *MA*, which is the company's MA score in the year, and set to zero for non-MA companies. In addition, we use an alternative measure to capture company reputation, *MA_D*, which is an indicator variable set to one if the company appears on the MA List in the year, and zero otherwise.

Control Variables

As suggested by prior studies, companies' size, complexity, and risk may affect their auditor choice (Abbott and Parker 2000; Kang 2014). Following prior literature, we measure company size by the natural logarithm of total assets (*LTA*) and control for firm complexity by the absolute value of change in total assets (*CHTA*), asset turnover ratio (*ATURN*), current assets scaled by total assets (*CURR*), square root of the number of industry segments (*SEG*), and the percentage of foreign sales (*FORGN*). We include long-term debt ratio (*DA*), quick ratio (*QUICK*), return on assets (*ROA*), and an indicator for loss (*LOSS*) to measure financial structures and profitability of client firms. We also control the corporate governance characteristics in the model, including CEO duality (*CEOCHR*) and board independence (*BI*).[5] In addition, industry and year indicators (*IND* and *YEAR*) are included in the model to control for variations across industries or over time.

[5] Kang (2014) also control for other corporate governance characteristics in the model, including characteristics of audit committee (financial expertise [*ACEXP*], meeting times [*ACMT*], size [*ACSIZE*], and independence [*ACIND*]), and ownership variables. However, none of them are significantly associated with companies' auditor choice as shown in Table 3 of p. 271 (Kang 2014). Therefore, we do not include those variables in our main model. As a robustness check, we rerun the regressions by controlling them in the model and find qualitatively similar results.

Sample Selection

Our empirical analysis is performed on the Fortune 1000 companies from 2006 through 2011.[6] We obtain audit-related information from Audit Analytics, companies' financial information from Compustat, and corporate governance characteristics from RiskMetrics and proxy statements. After merging all the above data and excluding companies in financial institutions, our final sample consists of 4,595 company-year observations from 2006 through 2011.

EMPIRICAL RESULTS

Descriptive Statistics

Table 2 summarizes the industry distribution per two-digit SIC code for the full sample and the MA sample. The top three industry categories in the full sample are Electric/gas/sanitary services, Chemicals and allied products, and Business services. As shown in Table 2, the MA companies are from more than 30 industries and account for 28.6 percent of the full sample. The uneven distributions imply the importance of controlling for industry effects in our model.

[Insert Table 2 here]

Panel A of Table 3 presents the descriptive statistics of the variables for the full sample (4,595 company-year observations). As seen in the table, 12.8 percent of the companies in the full sample choose industry-specialist auditors.

Panel B of Table 3 provides the descriptive statistics of the variables for the subsamples of MA (1,316 company-year observations) and non-MA companies (3,279 company-year observations). For MA companies, MA scores average 6.764 (with

[6] Our sample period starts in 2006 to avoid the significant changes in the auditing environment due to the implementation of the Sarbanes-Oxley Act (Huang et al. 2009).

standard deviation of 0.690) and range from 4.10 to 9.05 (untabulated), suggesting considerable variation in the company reputation measure. As shown in the table, 15.7 percent of the MA companies choose industry-specialist auditors (*SPEC*), while 11.6 percent of the non-MA companies hire industry-specialist auditors. The differences in auditor choice between MA and non-MA companies are statistically significant.

Panel B of Table 3 also shows that, compared to non-MA companies, MA companies tend to be larger in terms of total assets (*TA*) and to have a greater number of industry segments (*SEG*). In addition, MA companies have higher return on assets (*ROA*), lower frequency of losses (*LOSS*), and lower leverage ratios (*DA*), indicating the higher profitability and the lower financial risk for MA companies. As for corporate governance characteristics, MA and non-MA companies have similar levels of CEO duality (*CEOCHR*), but MA companies on average have higher board independence (*BI*).

[Insert Table 3 here]

Table 4 presents the Pearson correlation matrix of the main variables. Auditor choice (*SPEC*) is significantly and positively correlated with *MA*, the measurement for company reputation. Other significant correlations between auditor choice and company characteristics (e.g., company size) are consistent with those reported in prior studies (Abbott and Parker 2000; Kang 2014). Tests for multicollinearity (Belsley et al. 1980) do not reveal any areas of concern.

[Insert Table 4 here]

Regression Results for Auditor Choice

The regression results for testing H1 are presented in Table 5.[7] As discussed

[7] Throughout this paper, the *p*-values of the independent variables are calculated based on standard errors clustered by firm to control for multiple company appearances on the MA list during the sample period

earlier, we use two variables, *MA* (a continuous MA score) and *MA_D* (an indicator variable for the company's appearance in the MA list), to capture the impact of company reputation on the selection of industry-specialist auditors. As reported in Table 5, the coefficients on *MA* and *MA_D* are both significant and positive (0.023, $p = 0.005$ for the regression on MA score; 0.149, $p = 0.008$ for the regression on MA indicator), indicating that compared to non-MA companies, MA companies are more likely to hire industry-specialist auditors. To provide additional insight on the impact of company reputation on auditor choice, we estimate the marginal change in the probability of choosing an industry-specialist auditor when *MA_D* changes from zero to one, holding all the other independent variables at their respective means. The results show that the probability of hiring industry-specialists is 5.8 percent higher for MA companies than for non-MA companies.[8] This is economically significant considering that only 12.8 percent of the sample companies choose industry-specialists in the sample period. Overall, these results indicate that the likelihood of choosing industry-specialist auditors is higher for MA companies than for non-MA companies. This suggests that due to MA companies' reputation concerns, they have greater incentives to hire high-quality auditors to maintain and signal their financial reporting quality.

The control variable results are generally consistent with the prior literature on the determinants of auditor choice. For example, the coefficients on *LTA* are significantly positive while the ones on *ROA* are significantly negative, suggesting that larger

(Petersen 2009).

[8] The dependent variable in our probit regression is $\Phi(\cdot)$, the cumulative distribution function of the standard normal distribution. We calculate the marginal effect of being selected to the MA list on auditor choice as follows: calculate the value of $\Phi_1(\cdot)$ when *MA_D* = 1 and all the other independent variables at their respective means, that is, $\Phi_1(-0.105) = 0.458$; calculate the value of $\Phi_2(\cdot)$ when *MA_D* = 0 and all the other independent variables at their respective means, that is, $\Phi_2(-0.254) = 0.400$; calculate the difference between Φ_1 and Φ_2, that is, 0.458 – 0.400 = 5.8%, which is the marginal effect of *MA_D* on *SPEC*.

companies and companies with lower profitability are more likely to appoint industry-specialists. In addition, the coefficients for both *BI* and *CEOCHR* are significant and positive, indicating that companies with higher board independence and CEO duality tend to have higher demand for audit quality. [9]

[Insert Table 5 here]

ADDITIONAL ANALYSIS

Controlling for Self-Selection Bias

As discussed by Cao et al. (2012), the potential endogeneity problem may arise when testing the association between corporate behavior and company reputation using the MA scores, as some unobservable characteristics that are not controlled in the models could affect company reputation and auditor choice simultaneously. To control for the potential self-selection bias, we conduct a Heckman two-stage procedure to reexamine the hypotheses on the impact of company reputation on auditor choice. Following Cao et al. (2012), in the first stage, we estimate the probability of being selected to the MA list using all the variables in the auditor choice model. In addition, we utilize three instrumental variables: the number of employees, research and development (R&D) intensity (R&D expenditures scaled by sales), and advertising intensity (advertising expenditures scaled by sales).[10] In the second stage, we estimate the auditor choice model by including the Inverse Mills ratios estimated from the first stage.[11]

[9] Since audit committee plays a critical role in the selection of external auditors, we perform robustness checks by including audit committee characteristics in the model. We considered all the audit committee characteristics controlled in Kang's (2014) study. However, since the audit committee independence and financial expertise are mandatory in the post SOX period, we only include in our model audit committee size (*ACSIZE*) and meeting times (*ACMT*), which we hand-collect from the proxy statements. We find that the audit committee size and meeting times are not significantly associated with auditor choice, but our results on the association between company reputation and auditor choice remain robust.

[10] As argued by Cao et al. (2012), the number of employees captures the extent of market awareness/attention; R&D intensity affects product and service quality as well as innovation; and

Table 6 reports the results from the second stage of the Heckman procedure. The results show that the coefficient on *MA_D*, the indicator variable for the company's appearance in the MA list, remains significant and positive in the auditor choice model (*SPEC*), confirming the conclusion that MA companies are more likely to hire industry-specialist auditors than non-MA companies. In addition, the coefficient on Inverse Mills ratio (*IMR*) is insignificant, indicating that self-selection is not a significant concern in the regression.

[Insert Table 6 here]

Alternative Measure of Company Reputation

Following Cao et al. (2014), we also develop an alternative measure of company reputation, *MA_N*, which is calculated as the number of sample years to date during which the company has appeared on the MA list. The primary measure of this study for company reputation is the MA scores, which vary from year to year, may not reflect the long-term nature of company reputation; instead, the alternative measure *MA_N* may help to address the concern as it increases each time the company is selected to the MA List and reflects the cumulative nature and the gradual change in company reputation.

advertising intensity can proxy for company investments in products and services and is positively associated with brand value. Our results show that these three instrumental variables are highly correlated with *MA*, but at the same time are insignificantly associated with the residuals from the auditor choice regression on all the other control variables.

[11] The Heckman procedure is implemented to address potential self-selection bias, so the first stage is a probit regression with the indicator variable *MA_D* as the dependent variable. Accordingly, in the second stage regression, we include *MA_D* as the test variable to examine our hypothesis. In addition, to mitigate potential endogeneity problem between auditor choice and MA score (a continuous variable), we perform two-stage least squares regressions (2SLS) as a robustness check. Specifically, the first stage predicts companies' MA scores using the instrument variables as identified in Cao et al. (2012); the second stage replicates the audit choice analysis (Model 1) using the predicted value of MA score instead of the actual MA score. The untabulated results show a significant and positive effect of MA score on auditor choice.

As reported in Table 7, the coefficient on *MA_N* is significantly positive in the auditor choice model (*SPEC*). This suggests that companies with longer tenure on the MA list are more likely to hire industry-specialist auditors than companies appearing occasionally or infrequently on the MA list.

[Insert Table 7 here]

Alternative Definition of Auditor Industry Expertise

In the main regression analysis, the primary measure of industry expertise is based on auditor dominance in the national and city-specific market. As a robustness check, we use an alternative measure (*SPEC_A*) in the models to proxy for auditor industry expertise. As suggested by prior literature, auditor industry expertise increases with the size of the auditor's industry market share, because an auditor with a sufficiently large industry market share has strong incentives to provide high audit quality by investing in industry-specific specialization costs (DeAngelo 1981). Accordingly, *SPEC_A* classifies an auditor as an industry specialist if it has a sufficiently large market share at both national and city levels (Reichelt and Wang 2010). We follow Neal and Riley's (2004) formula to calculate the minimum threshold for maintaining industry expertise, which is 1.2 times the inverse of the number of Big N audit firms. Specifically, *SPEC_A* defines an industry specialist if in a two-digit SIC category the auditor has a market share greater than 30 percent at the national level, and a market share greater than 50 percent at the city level for all the sample years.[12]

[12] Following Neal and Riley (2004), we define the sufficiently large industry market share at the national level as 1.2 times the inverse of the number of Big N auditors (1.2 × ¼ = 30%). As to the city level, we use the average number of auditors per city-industry combination instead of the number of Big N auditors because there are fewer auditors in a city-industry combination. On average, there are 2.5 auditors per city industry market, which computes to 48% (1.2×1/2.5), or approximately 50% (Reichelt and Wang 2010).

As presented in Table 8, results from using the alternative definition of industry-specialist auditors (*SPEC_A*) are consistent with the main results, indicating that MA companies are more likely to hire industry-specialist auditors than non-MA companies.

[Insert Table 8 here]

MA Status Change and Auditor Choice

To shed additional light on the association between company reputation and auditor choice, we identify all the companies which moved from the non-MA category to the MA category in year t, and then calculate what percentages of these companies choose industry-specialist auditors in year t-1, year t, and year t+1. Similarly, we also identify all the companies which moved from the MA category to the non-MA category in year t, and then calculate the proportions of these companies choosing industry-specialist auditors across years. In Table 9, we find that for companies moving from non-MA to MA status, the percentage of those hiring industry-specialist auditors significantly increases from year t-1 (13.0 percent) to year t (16.5 percent). In addition, for companies moving from MA to non-MA status, the percentage of those hiring industry-specialist auditors slightly decreases over the time horizon. These findings are consistent with our main results that MA companies have strong incentives to choose high-quality auditors in order to maintain their financial reporting quality and therefore good reputations.

[Insert Table 9 here]

CONCLUSION

Although the literature on auditor choice is well developed, the association between company reputation and auditor choice is less established. This study examines how a unique company-level characteristic, company reputation, affects the selection of auditors. To measure company reputation, we utilize the company reputation scores from

Fortune's "America's Most Admired Companies" list, which are descriptive of overall company reputation and are by far the most widely used measure of reputation in academic research. Using data from the Fortune 1000 companies from 2006 through 2011, we find that companies with higher reputations are more likely to hire industry-specialist auditors than their counterparts. The results suggest that due to reputation concerns, high-reputation companies have great incentives to maintain and signal their financial reporting quality, which in turn increase their demand for audit quality. Our results are robust to controls for self-selection bias and endogenous problems related to simultaneity, to alternative measures of company reputation, and to alternative definitions of industry-specialist auditors.

The findings of our study on the empirical link between company reputation and auditor choice contribute to the auditing literature by enhancing our understanding of the effects of different company-level characteristics in financial reporting and audit planning process. Our results suggest that company reputation constitutes an important determinant of auditor selection, and therefore have both policy and practical implications for the demand of audit services. Specifically, our empirical evidence provides policy-makers and practitioners with insights into critical factors influencing companies' complex decision process of auditor selection. In addition, our study adds to the growing literature on the influence of company reputation on corporate behavior by documenting the important role that company reputation plays in the managerial decision making process.

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TABLE 1

Variable Definitions

MA	=	the company's reputation score on Fortune's "America's Most Admired Companies" list in the year, and set to zero for non-MA companies;
MA_D	=	one if the company appears on the MA list in the year, and zero otherwise;
MA_N	=	the number of sample years to date during which the company has appeared on the MA list;
SPEC	=	one if the company is audited by an audit firm that is a dominator at both national and city levels, and zero otherwise (a dominator is defined as an audit firm that has the largest market share in a two-digit SIC category and whose market share is at least 10 percent greater than the second largest industry leader);
SPEC_A	=	one if the company is audited by an audit firm that has a market share greater than 30 percent at the national level, and a market share greater than 50 percent at the city level in a two-digit SIC category, and zero otherwise;
LTA	=	the natural logarithm of total assets;
CHTA	=	the absolute value of change in total assets from the previous year;
ATURN	=	asset turnover ratio, measured as sales divided by total assets;
DA	=	long-term debts divided by total assets;
CURR	=	current assets divided by total assets;
QUICK	=	current assets minus inventory divided by current liabilities;
ROA	=	earnings before extraordinary items divided by lagged total assets;
LOSS	=	1 if net income before extraordinary items is less than 0, and 0 otherwise;
SEG	=	square root of the number of industry segments in which the firm operates;
FORGN	=	foreign sales as a percentage of total sales;
CEOCHR	=	one if the CEO is also chairman of the board, and zero otherwise;
BI	=	the percentage of independent directors serving on the board;
IMR	=	inverse Mills ratio;
IND	=	industry indicators, per two-digit SIC code;
YEAR	=	year indicators (2007 to 2011).

TABLE 2

Industry Distribution

Industry (per two-digit SIC code)	No. of Firm-Years	Percent	No. of MA Firm-Years	% of MA Firm-Years
13: Oil and gas extraction	133	2.9%	32	24.1%
15: General building contractors	73	1.6%	28	38.4%
20: Food and kindred products	158	3.4%	57	36.1%
23: Apparel and other textile products	54	1.2%	28	51.9%
26: Paper and allied products	66	1.4%	24	36.4%
27: Printing and publishing	62	1.3%	10	16.1%
28: Chemicals and allied products	351	7.6%	78	22.2%
29: Petroleum and coal products	85	1.8%	19	22.4%
30: Rubber and misc. plastics products	53	1.2%	18	34.0%
33: Primary metal industries	101	2.2%	24	23.8%
34: Fabricated metal products	66	1.4%	12	18.2%
35: Industrial machinery and equipment	284	6.2%	99	34.9%
36: Electrical and electronic equipment	265	5.8%	62	23.4%
37: Transportation equipment	188	4.1%	45	23.9%
38: Instruments and related products	160	3.5%	49	30.6%
45: Transportation by air	60	1.3%	21	35.0%
48: Communications	139	3.0%	41	29.5%
49: Electric, gas, and sanitary services	400	8.7%	54	13.5%
50: Wholesale: durable goods	169	3.7%	64	37.9%
51: Wholesale: nondurable goods	131	2.9%	32	24.4%
53: General merchandise stores	109	2.4%	31	28.4%
54: Food stores	65	1.4%	23	35.4%
55: Auto dealers and gas stations	101	2.2%	19	18.8%
56: Apparel and accessory stores	90	2.0%	14	15.6%
58: Eating and drinking places	58	1.3%	33	56.9%
59: Miscellaneous retail	145	3.2%	32	22.1%
73: Business services	300	6.5%	123	41.0%
80: Health services	99	2.2%	32	32.3%
Other*	630	13.7%	212	33.7%
Total	4,595	100.0%	1,316	28.6%

Note: *Other industries include those industries that have less than 50 observations.

TABLE 3

Descriptive Statistics

Panel A: Descriptive Statistics for the Full Sample (N=4,595)

	Mean	Std. Dev.	Q1	Median	Q3
MA	1.937	3.080	0.000	0.000	6.000
SPEC	0.128	0.334	0.000	0.000	0.000
LTA	8.654	1.255	7.743	8.527	9.437
CHTA	1569.370	5170.320	130.700	358.532	1100.600
ATURN	1.282	1.006	0.638	1.029	1.587
DA	0.249	0.201	0.115	0.222	0.342
CURR	0.384	0.208	0.220	0.380	0.532
QUICK	1.208	0.844	0.735	1.075	1.503
ROA	0.048	0.173	0.020	0.051	0.091
LOSS	0.160	0.367	0.000	0.000	0.000
SEG	1.299	0.894	0.000	1.414	2.000
FORGN	0.324	2.312	0.000	0.052	0.483
BI	0.672	0.169	0.500	0.667	0.833
CEOCHR	0.498	0.402	0.000	0.000	1.000

Panel B: Descriptive Statistics by Firm Type

	MA (N=1,316)		Non-MA (N=3,279)		MA vs. Non-MA	
	Mean	Median	Mean	Median	Mean	Median
MA	6.764	6.760	-	-	**-**	-
SPEC	0.157	0.000	0.116	0.000	**0.040**	**0.000**
LTA	9.425	9.385	8.345	8.258	**1.081**	**1.127**
CHTA	3073.300	828.000	965.778	278.285	**2107.522**	**549.715**
ATURN	1.307	1.032	1.272	1.027	0.034	0.005
DA	0.204	0.189	0.267	0.239	**-0.062**	**-0.049**
CURR	0.385	0.374	0.383	0.384	0.001	-0.010
QUICK	1.201	1.038	1.210	1.092	-0.010	-0.054
ROA	0.071	0.067	0.038	0.044	**0.033**	**0.023**
LOSS	0.096	0.000	0.186	0.000	**-0.091**	**0.000**
SEG	1.355	1.732	1.276	1.414	**0.079**	**0.318**
FORGN	0.361	0.201	0.309	0.006	0.052	**0.195**
BI	0.696	0.727	0.663	0.615	**0.033**	**0.112**
CEOCHR	0.497	0.000	0.498	0.000	-0.001	0.000

Notes: Statistical tests for difference in means and medians are based on t-tests and Wilcoxon tests, respectively. The differences in **bold** are significant at 10% level. See Table 1 for variable definitions.

TABLE 4

Pearson Correlation Matrix

Variables	*MA*	*SPEC*	*LTA*	*CHTA*	*ATURN*	*DA*	*CURR*	*QUICK*	*ROA*	*LOSS*	*SEG*	*FORGN*	*BI*
SPEC	**0.056**												
LTA	**0.404**	**0.178**											
CHTA	**0.197**	**0.051**	**0.445**										
ATURN	0.015	**-0.108**	**-0.377**	**-0.119**									
DA	**-0.149**	**0.053**	**0.051**	-0.022	**-0.205**								
CURR	0.005	**-0.169**	**-0.397**	**-0.133**	**0.524**	**-0.416**							
QUICK	0.001	**-0.091**	**-0.112**	**-0.040**	**-0.122**	**-0.217**	**0.364**						
ROA	**0.092**	-0.016	**0.188**	**0.039**	**0.071**	**-0.097**	**0.027**	0.008					
LOSS	**-0.119**	-0.007	**-0.129**	-0.006	**-0.064**	**0.197**	**-0.049**	**-0.047**	**-0.388**				
SEG	**0.046**	0.003	**0.098**	**0.026**	**-0.028**	**-0.120**	**0.031**	**0.027**	**0.029**	**-0.079**			
FORGN	0.009	**-0.028**	**0.028**	0.006	-0.022	**-0.024**	**0.045**	**0.027**	0.004	-0.017	0.008		
BI	**0.089**	**0.051**	**0.152**	0.014	**-0.069**	**-0.178**	**-0.033**	-0.006	**0.085**	**-0.145**	**0.063**	0.016	
CEOCHR	-0.001	**0.193**	**0.063**	**0.031**	-0.024	**0.124**	**-0.070**	**-0.082**	**-0.044**	**0.051**	-0.016	-0.020	**-0.287**

Notes: Coefficients in **bold** are significant at 10% level. See Table 1 for variable definitions.

TABLE 5

Company Reputation and Auditor Choice

Dependent Variable: *SPEC*				
	MA Score		**MA Indicator**	
	Coeff.	**p-value**	**Coeff.**	**p-value**
Intercept	-1.345	0.000	-1.283	0.000
MA	**0.023**	**0.005**		
MA_D			**0.149**	**0.008**
LTA	0.074	0.001	0.075	0.001
CHTA	0.000	0.103	0.000	0.112
ATURN	-0.012	0.770	-0.008	0.840
DA	-0.087	0.584	-0.160	0.316
CURR	0.241	0.323	0.276	0.257
QUICK	-0.057	0.181	-0.057	0.180
ROA	-0.289	0.025	-0.309	0.016
LOSS	-0.061	0.447	-0.062	0.438
SEG	0.019	0.538	0.018	0.551
FORGN	-0.004	0.696	-0.004	0.702
BI	0.518	0.002	0.491	0.004
CEOCHR	0.138	0.046	0.131	0.057
Industry Dummies	Included			
Year Dummies	Included			
Pseudo R-square	0.255		0.255	
Observations	4,595		4,595	

Notes: The p-values are two-tailed and based on standard errors clustered by firm. See Table 1 for variable definitions.

TABLE 6

The Second Stage Results from the Heckman Procedure

Dependent Variable: *SPEC*		
	Coeff.	**p-value**
Intercept	-1.441	0.000
MA_D	**0.127**	**0.006**
LTA	0.081	0.009
CHTA	0.000	0.136
ATURN	-0.003	0.950
DA	-0.127	0.426
CURR	-0.018	0.940
QUICK	-0.054	0.210
ROA	-0.338	0.008
LOSS	-0.071	0.375
SEG	0.016	0.595
FORGN	-0.005	0.669
BI	0.586	0.002
CEOCHR	0.166	0.017
IMR	-0.045	0.660
Industry Dummies	Included	
Year Dummies	Included	
Pseudo R-square	0.253	
Observations	4,595	

Notes: The p-values are two-tailed and based on standard errors clustered by firm. See Table 1 for variable definitions.

TABLE 7

Using Alternative Measure for Company Reputation

Dependent Variable: *SPEC*		
	Coeff.	**p-value**
Intercept	-1.466	0.000
MA_N	**0.044**	**0.034**
LTA	0.083	0.009
CHTA	0.000	0.122
ATURN	-0.017	0.687
DA	-0.036	0.821
CURR	0.222	0.361
QUICK	-0.054	0.201
ROA	-0.271	0.038
LOSS	-0.046	0.562
SEG	0.021	0.498
FORGN	-0.005	0.679
BI	0.528	0.002
CEOCHR	0.147	0.034
Industry Dummies	Included	
Year Dummies	Included	
Pseudo R-square	0.256	
Observations	4,595	

Notes: The p-values are two-tailed and based on standard errors clustered by firm. See Table 1 for variable definitions.

TABLE 8

Using Alternative Definition of Industry-Specialist Auditors

Dependent Variable: *SPEC_A*				
	MA Score		**MA Indicator**	
	Coeff.	**p-value**	**Coeff.**	**p-value**
Intercept	-1.619	0.000	-1.784	0.000
MA	**0.019**	**0.022**		
MA_D			**0.111**	**0.042**
LTA	0.103	0.000	0.118	0.000
CHTA	0.000	0.096	0.000	0.113
ATURN	-0.018	0.601	-0.022	0.521
DA	0.033	0.796	0.031	0.809
CURR	0.637	0.001	0.646	0.001
QUICK	-0.077	0.023	-0.078	0.021
ROA	-0.239	0.057	-0.261	0.037
LOSS	0.102	0.126	0.100	0.135
SEG	0.048	0.062	0.050	0.051
FORGN	-0.007	0.456	-0.008	0.426
BI	0.697	0.000	0.682	0.000
CEOCHR	0.117	0.038	0.119	0.036
Industry Dummies	Included			
Year Dummies	Included			
Pseudo R-square	0.174		0.173	
Observations	4,595		4,595	

Notes: The p-values are two-tailed and based on standard errors clustered by firm. See Table 1 for variable definitions.

TABLE 9

MA Status Change and Auditor Choice

	Companies Moving from MA to Non-MA Status	Companies Moving from Non-MA to MA Status
t - 1	15.7%	13.0%
t	15.2%	16.5%
t + 1	14.2%	16.7%
No. of Observations	195	179

Notes: This table shows the percentages of companies hiring industry-specialist auditors based on MA status change by year. "Companies Moving from MA to Non-MA Status" are comprised of 195 companies that moved from MA to non-MA category in year t; "Companies Moving from Non-MA to MA Status" are comprised of 179 companies that moved from non-MA to MA category in year t.