The Geography of REIT Audit Service Investments

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Abstract

We examine the geographic component of the audit service investments in REIT industry. Because REIT firms have strong incentive for information transparency and high audit quality, we expect that geographic distances, as a proxy for information flow, between REIT firms, their auditors, and the SEC offices have effects on the audit fees and non-audit fees paid by REIT firms. We find that 1) REIT firms pay more audit fees and non-audit fees to their auditor when the REIT firm headquarters are located closer to the SEC offices. 2) REIT firms pay higher audit and non-audit fees when their auditor offices are closer to the SEC. 3) REIT firms pay higher audit fees and non-audit fees when their auditor offices are located closer to their headquarters. 4) REIT firms that are closest to both the SEC and the auditors pay the highest fees in both audit services and non-audit services. The results are consistent with our expectation that REIT firms desire high quality audit service and are willing to pay higher fees for it. Also, REIT industry may enjoy the knowledge spillovers between audit side and non-audit side and the industry specialization from their auditors.

JEL Classification: G00, M40, M41, R10

Keywords: REIT, Audit Fees, Non-Audit Fees, Geography, Information Asymmetry

This draft: December 2017

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1. Introduction

Real Estate Investment Trust (REITs) firms have strong incentives to improve their financial reporting quality and mitigate information asymmetry in the market in order to obtain/maintain lower costs of capital. To maintain REIT status, REIT firms must distribute at least 90 percent[1] of their taxable income to the shareholders. Therefore, REIT firms with little retained earnings are frequent visitors to the external capital markets. Figure 1 shows the IPO activities in REIT industry compared to non-REIT firms. Figures 2 and 3 show the percentage changes in total liabilities and number of shares outstanding in REIT industry compared to non-REIT firms.[2] Thus, their auditors constantly play a crucial role in the events of seasoned equity issuance or debt borrowing. Also, the special tax status of REIT firms also presents a unique opportunity for the increasing roles of auditors in the industry.[3] Danielsen, Harrison, Van Ness, and Warr (2009) find that REIT firms with an over-investment in audit services are rewarded by the market with higher stock liquidity (as measured by bid-ask spread). Their evidence suggests that REIT audit fees are related to market transparency. Danielsen, Harrison, Van Ness, and Warr (2014) find consistent and similar results.

[1] REIT Modernization Act (RMA) of 1999 reduces the minimum percentage of distribution from 95 percent to 90 percent.

[2] We use Figures 2 and 3 to illustrate the rough estimations in debt issuances and seasoned equity offerings in REIT industry. We acknowledge that there are many factors contributing to the level changes in liabilities and shares outstanding. These two figures are only used to show some evidence in the differences between REIT industry and other industries.

[3] Please see the industry interview of Jennifer Weiss published in 2011 at NAREIT website: https://www.reit.com/news/articles/audits-reits-increasing

In this research, we investigate the geographic proximity effects on the audit service investments (including both audit fees and non-audit fees) by REIT firms. We study the REIT audit service investments because there is limited literature on the audit fees paid by the REIT industry even though the role of auditors is important to REIT firms. We examine the geographic components among REIT firms, their auditors and SEC offices in relation to audit services because geographic proximity has recently been established as a proxy for information asymmetry/transparency. For example, Kedia and Rajgopal (2011) examine the geographic distance between firms and SEC offices; DeFond, Francis, and Hu (2011) test the geographic proximity between auditors and SEC offices on the independence of the auditors; Choi, Kim, Qiu, and Zang (2012) study the audit service quality by investigating the geographic proximity between firms and their auditors. Our research effort here extends and complements the existing literature on REIT audit service by examining all three geographic components (i.e. distance between REIT firms and SEC offices, distance between REIT firms and auditors, and distance between auditor and SEC offices).

After we control for audit fee determinants suggested by Whisenant, Sankaraguruswamy, and Raghunandan (2003) [WSR thereafter], our empirical results are threefold. First, we find that REIT firms pay higher audit fees to their auditors when the REIT firm headquarters are located closer to the SEC offices. As suggested by Kedia and Rajgopal (2011), the SEC tends to investigate firms located closer to its offices. REIT firms which are closer to SEC offices, thus, are subject to higher likelihood of investigation. These REIT firms pay more to their auditors to maintain and improve the financial reporting quality. We also find that REIT firms pay less non-audit fees when their headquarters are located farther away from the SEC offices. Firms located farther away from SEC offices are perceived to be more likely to misreport (Kedia and Rajgopal,

2011). Our result suggests that REIT firms that are located farther away from SEC offices want to mitigate this negative perception by reducing investments in non-audit services provided by auditors.

Second, we find that REIT firms pay higher audit fees and non-audit fees when their auditor engagement offices are located closer to the SEC offices. One possible explanation is that auditors that are closer to SEC offices may have informational advantage and have better grasp of the ambiguity of the regulation rules (Kedia and Rajgopal, 2011). Thus, REIT firms which want higher quality of audit services would pay more to obtain these auditors' services. Another explanation is that audit effort increases the audit fees, and decreases expected litigation losses (Simunic, 1980). Auditors are more likely to detect material misstatements and satisfy audit standards, and therefore mitigate audit risks when they are located closer to the SEC offices. This theory is also consistent with the empirical findings in Kedia and Rajgopal (2011).

The finding with non-audit fees[4] seems to tell a "knowledge spillover" story. Lim and Tan (2008) show that industry specialist auditors are more likely to benefit from knowledge spillovers from the provision of non-audit services. They find evidence that audit quality increases with the level of non-audit services acquired from industry-specialist auditors compared to non-specialist auditors. Hence, we argue that REIT firms pay higher non-audit fees

[4] Empirical findings in the literature do not always agree on the negative perception of non-audit fees that non-audit fees compromise auditor independence. For example, Lai and Krishnan (2009) find that investors regard non-audit services related to financial information system (FIS) as value-adding activities. They show that market value of equity is greater for firms that purchase FIS-related services from their incumbent auditors relative to firms that do not. Ghosh, Kallapur and Moon (2009) find that there is no evidence of a relation between perceived auditor independence and the non-audit fee ratio. Zaman, Hudaib and Haniffa (2011) find a significantly positive relation between non-audit fees and audit committee effectiveness, especially for larger clients. They suggest that larger clients tend to purchase non-audit services due to the complexity of their business activities.

for the auditors' industry specialization because REIT industry is a unique and highly-regulated industry. Alternatively, we argue that REIT firms may benefit from the knowledge spillover[5] between audit side and non-audit side of the auditors because of their complex business activities.

Third, we show that REIT firms pay higher audit fees and non-audit fees when their auditor engagement offices are closer to the REIT firm headquarters. This is an interesting result, which is the opposite of the finding from Jensen *et al* (2015). Choi, Kim, Qiu, and Zang (2012) suggest that "local" auditors have informational advantage about the REIT firms over "non-local" auditors. Thus, these "local" auditors provide higher quality services than non-"local" auditors. As Choi, Kim, Kim, and Zang (2010) find significant positive relationship between audit quality and audit fees, we find our results in line with their stories. We believe that our result regarding the distance between REIT firms and their auditors reveals the trade-off between information advantage and audit service quality. Jensen *et al* (2015) suggest that the information advantage of auditors which are closer to their clients reduce the cost of monitoring and decrease the audit fees; while Choi *et al* (2010) find that firms are willing to pay more for better audit quality. As modeled in Simunic (1980), audit fees are a function of trade-off between auditor quality (auditor effort) and auditor litigation risk. Our results suggest that, in REIT industry, the importance of audit quality outweighs the reduced cost of monitoring from information advantage by the auditors. The reduced cost of monitoring may in turn result in increasing auditors' litigation risk.

[5] Krishnan and Yu (2011) show that a significantly negative relation between audit fees and non-audit fees suggest that knowledge spillover flows between audit and non-audit sides. In section 4, we show that the audit fees and predicted non-audit fees are significantly negatively correlated in the two-stage regression analysis. This evidence indicates that the REIT auditors are likely to have knowledge spillover between their audit side and non-audit side.

Our research contributes to a rich body of literature on the effects of geographic proximity on investor behavior or firm behavior (e.g., Coval and Moskowitz, 2001; Lambson, McQueen, and Slade, 2004; Malloy, 2005; Pirinsky and Wang, 2006; Imazeki and Gallimore, 2009; Kedia and Rajgopal, 2009; Das, 2011; Kedia and Rajgopal, 2011; DeFond, Francis, and Hu, 2011; and Choi, Kim, Qiu, and Zang, 2012). To the best of our knowledge, our research effort is the first one to examine the relation between geographic locations and audit service fees in REIT industry. We wish to shed light on the relation between physical locations and REIT firm behaviors.

The remainder of this paper is organized as follows. Section 2 reviews related literature and develops the hypotheses. Section 3 presents research methodology and describes the data sample. Section 4 reports and discusses empirical results. Section 5 concludes.

2. Literature Review

2.1.Geographic Proximity

During the past two decades, a rich body of literature has paid great attention to the geographic component in investments and firm behavior. Geographic proximity is considered as a proxy for soft information and information flows in financial markets. Initially, the attention was focused on geographic proximity and investor/individual behavior (e.g. Coval and Moskowitz, 1999; Grinblatt and Keloharju, 2001; Feng and Seasholes, 2002; Malloy, 2005; Ivkovic and Weisbenner, 2005; Pool, Stoffman, and Yonker, 2012). As time progresses, the focus of finance literature has expanded to the effects of firm geographic locations on the firm stock returns, firm characteristics and corporate behavior (e.g. Loughran and Schultz, 2005; Pirinsky and Wang, 2006; Kang and Kim, 2008; Kedia and Rajgopal, 2009; Becker, Ivkovic, and Weisbenner, 2011; John, Knyazeva, and Knyazeva, 2011; Garcia and Norli, 2012).

Spatial distance and geographic factors have long been included in real estate and urban economic studies, especially in housing markets (e.g., Rosen, 1979; Cromwell, 1992; Meen, 1999; Glaeser, Gyourko, and Saiz, 2008; Harding, Rosenblatt, and Yao, 2009; Zhu, Fuss, and Rottke, 2013). For REIT industry, Capozza and Seguin (1999) examine the diversification effects within REIT industry. They study both diversification in property types, and diversification in geography. However, in their research, they find that property type diversification is stronger than geographic diversification. Diversified property types decrease REIT firm value due to higher administrative expenses. Adams, Fuss, and Schindler (2015) study the risk spillovers among U.S. REITs and find evidence for the impact of geographic proximity. They show that the exposure of a REIT firm to risk spillovers is mainly determined by geographic distance. As distances between properties of REIT firms increase, risk spillovers decrease quickly and remain at a low level for distances greater than 250 miles.

All in all, these researches indicate that geographic component is an important factor when we study both investor and firm behavior as geography is related to agency problem and information asymmetry. Physical distance represents the information flow. When the distance is short, the information flow is fast and easy, and there is less information asymmetry. When the distance is long, the information flow is slow and difficult, and there are severe information asymmetry problems.

2.2. Geographic Proximity among Firms, Auditors, and SEC offices

This section focuses on the related literature on geographic effects on audit service. Jensen, Kim, and Yi (2015) examine the geography of U.S. auditors. Specifically, they study the geographic distances between firms and their auditors. They document a direct link between distance and audit fees: audit fees are positively related to distance. They suggest that local

auditors have informational advantage over remote auditors. Thus, these local auditors have lower monitoring costs, and in turn, charge lower fees. They also find that audit quality (as measured by the absolute magnitude of abnormal accruals) is negatively associated with distance.

Similarly, Choi, Kim, Qiu, and Zang (2012) also study the geographic proximity between firms and auditors. They use accrual-based earnings quality as a proxy for audit quality. Consistent with the findings in Jensen et al. (2015), they show that local auditors (ones located within 100 kilometers of clients' headquarters or in the same MSA) provide higher quality audit services than non-local auditors. They make the same suggestion that local auditors have informational advantage over non-local ones.

Kedia and Rajgopal (2011) focus on the geography of SEC enforcement. They study violations in firms' financial reporting. They find that firms located close to the SEC and in areas with greater SEC enforcement activity are less likely to restate their financial statements. Firms that restate their financial statement are considered to be potential violators in financial reporting. In their research, the distance between a firm and the SEC is estimated as the distance between the county in which the firm is located in and the nearest SEC office address. They also find that the SEC tends to investigate firms that are located closer to its offices.

DeFond, Francis, and Hu (2011) take into account the distance between auditors and the SEC offices when they study the geography of SEC enforcement. They are particularly interested in the auditor reporting for their financially distressed clients. By measuring the likelihood of issuing going-concern reports for these distressed clients, the authors are able to quantify the independence of auditors. They find that both Big-4 and non-Big-4 auditors are more likely to issue going-concern reports for clients that are located farther away from an SEC office. This

finding is consistent with Kedia and Rajgopal (2011) that firms located farther away from the SEC are more likely to misreport. Therefore, auditors for these firms tend to issue going-concern opinion for self-preservation in case of fallout.

Moreover, they show that non-Big-4 auditors are less likely to issue going-concern reports for their distressed clients when the auditor engagement office is farther away from an SEC office. This result is also consistent with Kedia and Rajgopal (2011) that the SEC is more likely to investigate firms that are closer to its offices. Therefore, auditors that are located farther from the SEC have lower risk to be investigated. Thus, they have more incentive to compromise their independence by not issuing going-concern reports.

2.3. Audit Fees and Non-Audit Fees

2.3.1. Audit Fees and Audit Quality

Palmrose (1986) provides evidence that large auditors earn higher fees in part by providing higher quality of audit service. Lennox (1990) studies the role of audit fees and auditor reputation in the audit service. Bar-Yosef and Sarath (2005) build a model in which audit fees serve as a screening mechanism. Auditors want to avoid low-quality clients by setting up higher audit fees. Market perception of audit quality is particularly valuable to firm that are going public (e.g., Beatty, 1989; Firth and Liau-Tan, 1998). Beatty (1989) finds that the premium that a firm pays for registration audit is consistent with the firm's signal of information transparency for IPO. Choi, Kim, Kim, and Zang (2010) suggest that audit quality (measured by unsigned abnormal accruals) is significantly positively related to audit fees after controlling for audit firm size and industry expertise. Therefore, it is reasonable for us to infer that higher audit fees are associated with higher quality of audit service.

2.3.2. Non-Audit Fees and Audit Quality

Auditing firms have performed both audit and non-audit services for their clients. Non-audit services can include management consulting, tax advice, human resources consulting, and etc. Some of the non-audit services may be considered as a potential conflict of interest. Since the adoption of the Sarbanes-Oxley Act, the non-audit services that an audit firm can provide to its auditing clients have been significantly restricted. However, they are not eliminated. Auditors continue to perform non-audit services to their clients following the regulations.

There has been a long lasting debate on whether non-audit fees affect auditor independence and auditing quality. Historically, some argue that non-audit fees compromise auditor's independence (e.g., Frankel, Johnson, and Nelson, 2002; Ferguson, Seow, and Young, 2004; Gore, Pope, and Singh, 2001). However, Ashbaugh, LaFond, and Mayhew (2003) challenge the findings of Frankel, Johnson, and Nelson (2002). They find no statistically significant association between firms meeting analyst forecasts and auditor fees. Antel, Gordon, Narayanamoorthy, and Zhou (2006) do not find such a positive correlation between non-audit fees and abnormal accruals, either. They find the opposite. They show that non-audit fees decrease abnormal accruals. They find evidence consistent with knowledge spillovers between auditing and non-auditing services. Their results are robust with both U.S. data and U.K. data.

Subsequently, researches show that the impact of non-audit fees on audit quality and transparency may differ, depending on numerous auditor and client characteristics (e.g., Lim and Tan, 2008; Ghosh et al, 2009; Lai and Krishnan, 2009; Zaman et al. 2011; Lim, Ding, and Charoenwong, 2013). Knowledge spillovers between non-audit services and auditing services allow auditors greater insights to their clients. Although the concept itself is not new (see, for example, Cohen Commission Report 1978 and Simunic 1984), it is until recent times that we

have more empirical studies to show evidence of knowledge spillovers between auditing and non-auditing services.

Krishnan and Yu (2010) show support of this notion and indicate that some auditor and client characteristics (e.g., big-4 auditors, long auditor tenure, large clients, extent of tax services, and client importance) induce significant knowledge spillovers. Koh, Rajgopal, and Srinivasan (2013) find evidence to support the knowledge spillovers and reputation theories. They show that non-audit services are associated with lower earnings management and higher earnings informativeness.

2.3.3. REIT Audit Service Investments

According to IRS regulatory rules, REIT firms must distribute at least 90 percent of their taxable income to the shareholders. Therefore, REIT firms with little retained earnings must frequently visit the external capital markets to raise capital. Thus, their auditors constantly play a crucial role in the events of seasoned equity issuance or debt borrowing. REIT firms have strong incentives to improve their financial reporting quality and mitigate information asymmetry in the market in order to obtain lower costs of capital. Also, REIT industry has special tax situations as a "pass-through" investment vehicle. Thus, examining the audit fees and non-audit fees within REIT industry may yield specific results that indicate the importance role of auditors in REIT industry.

Danielsen, Harrison, Van Ness, and Warr (2009) specifically study audit fees and market transparency in REIT industry. They follow the same methodology as in Whisenant, Sankaraguruswamy, and Raghunandan [WSR] (2003) and obtain the over-investment in the audit fees and non-audit fees. Then, they link the over-investment in auditors' services with the REIT firm's stock liquidity. They find that REIT firms which over-invest in audit fees are rewarded by

the stock market by narrowing bid-ask spread. However, REIT firms that over-invest in non-audit fees are penalized by the stock market by widening bid-ask spread. Danielsen, Harrison, Van Ness, and Warr (2014) find similar results.

2.4.Hypothesis Development

Upon reviewing related literature on geographic proximity and audit fees, and given the motivation that REIT firms have unusually high incentive to seek high-quality audit services, we develop the following hypotheses regarding audit fees and non-audit fees.

Our main underlying assumptions are 1) there is a connection between geographic distance and audit quality, and 2) geographic proximity is related to information asymmetry. If REIT firms desire high audit quality, they would pay high fees for the service. Therefore, before we go into the hypotheses related to audit fees, we would like to suggest two hypotheses related to these underlying assumptions:

H1: Auditors that are located closer to SEC offices provide higher quality in audit services.

H2: Information asymmetry is more severe when geographic distances are longer.

The SEC is more likely to investigate firms that are closer to its offices. REIT firms would like high quality of audit service, and high quality service may be associated with high audit fees. Firms that are located farther away from the SEC have higher tendency to misreport. REIT firms, which have strong incentive for information transparency, do not wish to be penalized even more by purchasing non-audit services. We hypothesize:

H3: REIT firms that are located closer to the SEC pay more in audit fees than those are located farther away from the SEC. REIT firms that are located farther from the SEC pay less in non-audit fees.

Auditors that are closer to the SEC may be subject to more scrutiny from the SEC and also have "soft" information on SEC regulations. Thus, they may have good reputation in the market for providing high-quality audit reports. Also, they may want to screen out low-quality clients. REIT industry is a specialized unique industry that may require industry specialization from the auditors. Also, REIT industry usually has relatively high institutional ownership. Plus the complexity of real estate business operations, REIT firms may benefit from the knowledge spillovers between audit fees and non-audit fees. Thus, we hypothesize:

H4: REIT firms pay higher audit fees and non-audit fees to auditors that are located closer to the SEC.

Jensen et al (2015) suggest that information advantage reduces cost of monitoring and finds that firms pay less in audit fees if they are located closer to their auditors. However, on the other hand, these auditors that are closer to firms show higher audit quality (Choi, Kim, Qiu, and Zang, 2012). Choi, Kim, Kim, and Zang (2010) show that audit quality and audit fees are positively correlated. Thus, there is a trade-off between the reducing cost of monitoring and increasing audit quality. Thus, we hypothesize:

H5: REIT firms pay higher (lower) audit fees and non-audit fees to auditors that are located closer to their REIT headquarters if the increasing audit quality is valued more (less) than the reducing cost of monitoring in the REIT industry.

3. Data and Methodology

3.1.Distance Measure

Our initial sample is obtained from Audit Analytics database for thirteen-year period from 2001-2013. We use the headquarter locations to proxy for REIT firm locations as corporate headquarters are the center of information exchange (e.g., Davis and Henderson, 2004; Pirinsky

and Wang, 2006). We obtain the street-level addresses (including street name, city, state, and zip code) of REIT firm headquarters provided in Audit Opinion File of Audit Analytics. Audit Analytics only provides the cities, not the street addresses, for the auditors' engagement offices are located in. Thus, we manually search the street-level addresses of the auditors' engagement offices on the corresponding auditors' websites[6]. We use the SEC website[7] to identify the street addresses of the regional and national offices, following Kedia and Rajgopal (2011) and DeFond, Francis, and Hu (2011). SEC national office is in Washington DC and regional offices are located in Atlanta, GA; Boston, MA; Chicago, IL; Denver, CO; Fort Worth, TX; Los Angeles, LA; Miami, FL; New York, NY; Philadelphia, PA; Salt Lake City, UT and San Francisco, CA.

Next, we use geocoding service from Texas A&M University[8] to obtain the latitude and longitude of each street address for REIT firm headquarters, auditor offices, and SEC offices. We use SAS new function GEODIST to calculate the distance in miles. GEODIST function is based on Vincenty formula[9]. The Vincenty based formula is considered to have millimeter accuracy[10].

Our distance measure is more accurate than those in previous literature as we use the street addresses to pinpoint each location instead of using zip code, city, county or MSA level of locations. We calculate the distances between a REIT firm headquarter and all 12 SEC offices. We use the minimum of those 12 distances as the distance between the specific REIT firm and SEC (*LNREITSECDIST*). Similarly, we use the minimum of the 12 distances as the distance

[6] If the engagement office city no long exists on the auditor's website, we use the latitude and longitude of the city center to approximate the location of the engagement office.

[7] Please refer to http://www.sec.gov/contact/addresses.htm for their addresses.

[8] We thank Texas A&M University for providing this service. https://geoservices.tamu.edu/

[9] The Vincenty formulae can be referred in Vincenty (1975).

[10] http://www.ga.gov.au/geodesy/datums/vincenty_direct.jsp

between the specific auditor engagement office and SEC (*LNAUDITSECDIST*). We calculate the distance between a REIT firm headquarter and its corresponding auditor office (*LNREITAUDITDIST*). All the distances used in our empirical analysis are in natural logarithm.

Furthermore, following Coval and Moskowitz (2001), Malloy (2005) and Kedia and Rajgopal (2011), we create distance dummy variables: *REITSECDUMMY* is equal to 1 if the distance between a REIT firm and SEC is greater than 28 miles[11], and 0 otherwise; AUDITSECDUMMY is equal to 1 if the distance between an auditor office and SEC is greater than 28 miles, and 0 otherwise; *REITAUDITDUMMY* is equal to 1 if the distance between a REIT firm and its auditor office is greater than 28 miles, and 0 otherwise.

3.2.Research Design

Our main research design closely follows Whisenant, Sankaraguruswamy, and Raghunandan [WSR] (2003). In their research, the authors propose that audit fees and non-audit fees are jointly determined. They find that total assets, number of employees, number of segments, inventory, Big-5 auditor, reporting negative net income previously, return volatility, restatement, and foreign operations are all positively related to audit fees. Corporate liquidity, ROA, initial reporting, book-to-market ratio, stock returns, and change in bankruptcy probability are negatively related to audit fees. Total assets, number of segments, number of employees, institutional ownership, Big-5 auditor, foreign operation, sales growth, return volatility, extraordinary items, and issuing new equity or debt are all positively related to non-audit fees; total debt, corporate liquidity, ROA, initial reporting, book-to-market, change in bankruptcy probability, restatement, and stock returns negatively determine non-audit fees. We will use the same framework as in WSR (2003) to analyze REIT audit fees and non-audit fees.

[11] The use of 28 miles as the cut-off point is due to the median of the distance between in Table 1.

3.2.1. Audit fee OLS model

Closely following WSR (2003)[12], we adopt the following OLS regression to link auditor audit fees with REIT firms' proximity to the SEC offices and their auditors, and other control variables for REIT firms' operation complexity, firm size, risk, performance as well as other firm and auditor characteristics.

For audit fees, we have

$$LNAUDIT = \alpha_0 + \beta_1(DISTANCEMEASURES) + \beta_2(LNTA) + \beta_3(SQEMPLS) + \beta_4(LEV) + \beta_5(ROA) + \beta_6(IO) + \beta_7(INITIAL) + \beta_8(BIG4) + \beta_9(FOROPS) + \beta_{10}(LOSS) + \beta_{11}(REVGRO) + \beta_{12}(BM) + \beta_{13}(XDOPS) + \beta_{14}(RESTATES) + \beta_{15}(RET) + \beta_{16}(LAG) + \beta_{17}(PROPTYPE) + \varepsilon \quad (1)$$

For non-audit fees, we have

$$LNNAF = \gamma_0 + \gamma_1(DISTANCEMEASURES) + \gamma_2(LNTA) + \gamma_3(SQEMPLS) + \gamma_4(LEV) + \gamma_5(ROA) + \gamma_6(IO) + \gamma_7(INITIAL) + \gamma_8(BIG4) + \gamma_9(FOROPS) + \gamma_{10}(LOSS) + \gamma_{11}(REVGRO) + \gamma_{12}(BM) + \gamma_{13}(XDOPS) + \gamma_{14}(RESTATES) + \gamma_{15}(RET) + \gamma_{16}(LAG) + \gamma_{18}(PROPTYPE) + \epsilon \quad (2)$$

Variables are used in the regressions are defined as follows:

LNAUDIT = Log of the audit fees in the current fiscal year;

LNNAF = Log of the sum of all non-audit fees paid to the auditor in the current fiscal year;

[12] While we closely follow their framework, we make some adjustments to the models to fit the REIT industry. For example, we exclude Inventory variable from their model because REIT firms typically do not have inventories. Also we exclude the ratio between current assets and current liabilities because a lot of REIT firms do not report their current assets. Therefore, our methodology framework is very similar to their framework but with some variations.

DISTANCEMEASURES= LNREITSECDIST (REITSECDUMMY), LNAUDITSECDIST (AUDITSECDUMMY) or LNREITAUDITDIST (REITAUDITDUMMY);

LNTA = Log of total assets;

SQEMPLS = the square root of the number of employees reported in 10-K;

LEV = financial leverage (total debt/total assets);

ROA = return on assets;

IO = Institutional ownership in percentage at the beginning of the fiscal year;

INITIAL = 1 if the audit engagement is in either the first or second year, 0 otherwise;

BIG4 = 1 if the auditor is a Big 4 firm, 0 otherwise;

FOROPS = 1 if the REIT has foreign operations, 0 otherwise;

LOSS = 1 if the REIT firm reports negative net income in either of the two previous fiscal years, 0 otherwise;

REVGRO = growth rate in total revenue over the previous fiscal year;

BM = book-to-market ratio;

XDOPS = 1 if the REIT firm reported extraordinary items or discontinued operations, 0 otherwise;

RESTATES = 1 if the firm restated earnings or assets for reasons other than accounting rule change or adoption of new method, 0 otherwise;

RET = the REIT firm's stock return over the current fiscal year;

LAG = reporting lag, defined as the number of days between current fiscal year-end and earnings announcement date;

PROTYPE = dummy variables for property types.

Our distance measures in the model include the following variables: *LNREITSECDIST* (*REITSECDUMMY*), *LNAUDITSECDIST* (*AUDITSECDUMMY*) or *LNREITAUDITDIST* (*REITAUDITDUMMY*), which are defined in the previous section. Distance measures in the model are our main variables of interest. If we observe a significant negative coefficient on distance measures, then it consists with the notion that higher auditor fess are associated with information advantage and higher reporting quality.

We include *LNTA* to control for firm size. *REVGRO, SQEMPLS* and *FOROPS* are included to control for client complexity in business operation. We include *ROA*, *BM*, *LEV*, *LOSS* and *RET* to control for client performance and risk, following WSR (2003). Reporting lags (LAG) as documented in Gul (1999) is positively associated with audit fees. As suggested by DeAngelo (1981), Big 4 auditors provide high quality audits than non-Big 4 audits and charge a higher fee premium (Francis et al. 2005). We include *BIG4* controlling for auditor reputation. DeAngelo (1981) document that auditors typically charge less and discount audit fees because of low-bailing at the time of initial engagement of auditors, therefore we include *INITIAL* to control for this effect. As in WSR (2003), we include *IO*, *RESTATES*, and *XDOPS* for institutional ownership, restatement, and extraordinary items or discontinued operation, respectively. Institutional ownership (*IO*) is an important control variable, especially in REIT studies, because U.S. REITs have a fairly high percentage in institutional holdings (Packer, Riddiough, and Shek, 2014). The model also includes year dummy and property dummy as control variables. We control for property types because different property types are associated with different risk

factors and different cycles (Evans and Mueller, 2016). The definitions of all variables are tabulated in the appendix.

3.2.2. Two-Stage Regression Models

WSR (2003) document evidence that audit fees and non-audit fees are jointly determined and failure to control for the simultaneous determination of audit fees and non-audit fees leads to biased estimation. For the simultaneous-equation specification, we use an instrumental variables approach (two-stage least squares, 2SLS). Instead of using the actual value of *LNNAF (LNAUDIT)*, we regress *LNNAF (LNAUDIT)* onto the exogenous fee determinants. The fitted value of *LNNAF^P (LNAUDIT^P)*, which is independent of the error term, is used as an instrumental variable in the second stage.

The audit fee model is as follows:

Stage 1: $LNNAF = \delta_0 + \delta_1(DISTANCEMEASURE) + \delta(DETERMINANTS) + \tau$ (3a)

From Model (3a), we save the predicted values of non-audit fees ($LNNAF^P$) and then use the predicated values in the next stage.

Stage 2:

$LNAUDIT = \delta_0 + \delta_1 LNNAF^P + \delta_2(DISTANCEMEASURE) + \delta(DETERMINANTS) + \tau$ (3b)

Similarly, we have the non-audit fee model as follows:

Stage 1: $LNAUDIT = \gamma_0 + \gamma_1(DISTANCEMEASURE) + \gamma(DETERMINANTS) + \sigma$ (4a)

From Model (4a), we save the predicted values of audit fees ($LNAUDIT^P$) and then use the predicated values in the next stage.

Stage 2:

$LNNAF = \gamma_0 + \gamma_1 LNAUDIT^P + \gamma_2(DISTANCEMEASURE) + \gamma(DETERMINANTS) + \sigma$ (4b)

According to WSR (2003), to avoid creating a singular covariance matrix in the second stage of the estimation of the fee equations, we specify determinants variables conjectured to be unique in their direct influence on audit fees. The reporting lag is unique to audit fees as shown in Gul (1999). Thus, *LAG* is excluded from the non-audit fee model.

3.3.Data Sample

Our sample selection process starts with the Audit Analytics databases Audit Opinion File for the years 2001 through 2013. Our year coverage starts from the year of 2001 because it is the year when SEC required public firms to disclose audit fees and non-audit fees in the proxy statements.

We merge the initial file which has the distance calculation with Audit Fee File from Audit Analytics to obtain non-missing audit fee information. We obtain financial statement variables including segment data from Compustat, institutional holding from Thomson Reuters Institutional Holdings File, and stock return and price data from CRSP database. We delete the observations with missing data and outliers with respect to all continuous variables in the extreme 1 percentile of their respective distributions. We also delete the observations with the distance between auditor engagement office and SEC office and the distance between REIT firm headquarter and SEC office in the extreme 1 percentile of their respective distributions. This step eliminates those REIT firms or their auditors are located outside of the continental United States (i.e. Hawaii and Alaska). After the data selection procedure, the final sample yields 1,482 firm year observations. The final sample consists of 135 REIT firms in 28 continental states of United States.

4. Main Results

4.1.Sample Description

Table 1 shows the summary statistics of the whole sample for the period from January 2001 to December 2013. The mean (median) value of audit fees is 1,043,000 (684,000) U.S. dollars. The mean (median) value of non-audit fees is 460,000 (158,136) U.S. dollars. The mean (median) value of *REITSECDIST* (i.e. the distance between a REIT firm and the SEC) is 115.063 (27.940) miles. The mean (median) value of *AUDITSECDIST* (i.e. the distance between an auditor engagement office and the SEC) is 106.982 (11.884) miles. The mean (median) value of *LNREITAUDITDIST* (i.e. the distance between a REIT firm and its auditor engagement office) is 91.386 (11.337) miles. As we can see that the raw data distribution is skewed, we use the natural logarithm forms of audit fees (*LNAUDIT*), non-audit fees (*LNNAF*), and all three distances in our empirical analysis from now on. Detailed definitions of the variable are described in the previous section and tabulated in the Appendix.

[Insert Table 1 here]

We choose the median value of the distance between a REIT firm and the SEC as the cut-off point to partition our sample. [13] To show the differences of the mean value in terms of audit fees and non-audit fees between distance measures are farther away than 28 miles and less than 28 miles, we perform T-tests on the variable means between these two groups of firms among REITs, their auditors and SEC. Table 2 shows the t-test results. We report the pooled t-statistics (assuming equal variance) and the Satterthwaite t-statistics (assuming unequal variance situations).

[Insert Table 2 here]

[13] We also use 50 mile and 100 mile as the cut-off point to partition our sample. The results are similar as using 28 mile.

Panel A is based on the distance between REITs and SECs. Natural logarithm of audit and non-audit fees are significantly lower for those firms who are located 28 miles farther away from the nearest SEC office. Those firms are observed to have smaller firm size, lower Book-to-Market ratio (BM), shorter reporting lag and less auditor industry expertise. Panel B is based on the distance between REITs' auditor and SEC. Both audit and non-audit fees paid by REITs whose auditors are located 28 miles farther away from the nearest SEC office are significantly lower than REITs whose auditors are located less than 28 miles from the nearest SEC office. When auditors are 28 miles farther away from the nearest SEC office, REITs firms have significantly lower total assets, ROA, institutional ownership, revenue growth and auditor industry expertise. Those firms also have significantly higher leverage and BM, longer reporting lag and higher bid-ask spread. Penal C is based on the distance between REITs and their auditors. Both audit and non-audit fees are significantly lower for the clients whose auditors are 28 miles farther away from REITs' headquarter. We also find these firms have lower leverage and BM. Their auditors lack of industry expertise. These firms are also smaller in size and have higher bid-ask spread.

4.2. Geographic distances, audit quality, and information asymmetry

Before we examine the audit fees and non-audit fees models proposed in the earlier sections, we would like to test our first and second hypotheses (H1 and H2) related to audit quality and information asymmetry. We use national level auditor industry expertise to measure audit quality (*MKTSHARE*), which is based on the auditor's annual market share of audit fees within the same industry (Ferguson, Francis, and Stokes, 2003; Hogan and Jeter, 1999; Francis, Reichelt and Wang, 2005; Reichelt and Wang, 2010). Neal and Riley (2004)'s study emphases "The firms with the largest market shares have developed the largest knowledge base within that

particular industry and significant market shares within an industry reflect significant investments by audit firms in developing industry-specific audit technologies with the expected benefits being increased economies of scale and improved audit quality". Prior literature document that auditor industry expertise based on national clienteles is associated with higher-quality audits as evidenced by smaller abnormal accruals and a higher market valuation of earnings (Balsam, Krishnan, and Yang, 2003).

As for information asymmetry (or market transparency), we use effective bid-ask spread as a proxy. Bid-ask spread has been traditionally considered as a measure of transaction costs. In turn, it has become an effective measurement for information asymmetry (Amihud and Mendelson, 1986; Wei, Hsieh, and Sirmans, 1995). Higher bid-ask spread is interpreted as lower stock liquidity and higher degree of information asymmetry. *SPREAD* is calculated as the annual average of the daily closing bid-ask spread as a percentage of daily mid-point.

Table 3 presents the regression results on the relationship between auditor industrial expertise (*MKTSHARE*) and audit fees and non-audit fees after controlling the distance between REIT's auditor and SEC office. It also presents the regression results on the relationship between market transparency (SPREAD) and audit fees and non-audit fees. The first two columns in Table 3 are regression results for auditor industrial expertise. The coefficients on the distance variables (*LNAUDITSECDIST* and *AUDITSECDUMMY*) are significantly negative (-0.002 and -0.0023). These results indicate that the auditors located further away from SEC offices have lower national industry expertise therefore provide with lower audit quality. The last two columns in Table 3 are regression results for market transparency. The coefficients on the distance variables (*LNAUDITSECDIST* and *AUDITSECDUMMY*) are significantly positive

(0.188 and 0.789) at the 1 percent level. These results suggest that the auditors located further away from SEC offices have higher bid-ask spread (higher level of information asymmetry).

[Insert Table 3 here]

4.3.Audit Fee OLS Models

Danielsen, Harrison, Van Ness, and Warr (2009, 2014) suggest that an over-investment in audit fees infers a higher level of transparency, lower level of information asymmetry in the capital markets and better bid-ask spread. We intend to analyze the differences of audit fees and non-audit fees when the distance between SEC and REITs is less than or farther away than 28 miles, if there is any. Equation (1) and (2) are applied here to test our third hypothesis (H3). Variables that measure corporate liquidity are introduced and defined in the previous section and in the Appendix. Table 4 presents the OLS regression results from different model specifications from Equation (1) and (2). Year fixed effects and property types are controlled for in the analysis. T-statistics are estimated using standard errors clustered by firm.

[Insert Table 4 here]

The findings from Table 4 show that the coefficients on *LNREITSECDIST* and *REITSECDUMMY* are significantly negative. It confirms that REIT firms that are located closer to SEC offices pay more in audit fees than those that are farther away. This is because SEC tends to investigate forms that are located closer (Kedia and Rajgopal, 2011). Choi, Kim, Kim, and Zang (2010) suggest a strong positive relation between audit fees and audit quality. Therefore, REIT firms pay more to their auditors to maintain the reporting quality and increase the information transparency, which is consistent with the findings in Danielsen, Harrison, Van Ness, and Warr (2009, 2014). We also find REIT firms pay more to their auditors when they are large in size, have more employees, have concentrated institutional ownership, use reputable Big

4 auditors, have foreign operation and restate their earnings other than accounting change. The results also indicate that REITs pay less to their auditors when their auditor engagement is the in the initial two years and these firms have higher book-to-market ratio and have higher revenue growth.

The last two columns in Table 4 report that coefficients on *LNREITSECDIST* and *REITSECDUMMY* are significantly negative. It shows that REIT firms that are located farther away from the SEC offices pay less non-audit fees than those that are closer. One possible explanation is that REITs located farther than SEC do not want to be punished more for information asymmetry associated with purchasing non-audit expenditure. These firms want to mitigate the negative perception of misreporting by reducing investments in non-audit fees. We also find REIT firms pay more non-audit fees when they have more employees, have more concentrated institutional ownership, have foreign operation and have positive revenue growth. The results also indicate that REITs pay less non-audit fees when their auditor engagement is the in the initial two years and when they have higher book-to-market ratio.

Table 5 presents the OLS regression results from different model specifications from Equation (1) and (2) to test H4. Table 5 shows that, in general, the distance between REITs' auditors and the nearest SEC office are negatively related to audit fees and non-audit fees paid by REITs. Both distance measures in the regressions are significantly negative.

[Insert Table 5 here]

Our evidence from Table 6 indicates that auditors that are closer to SEC may have regulatory information advantage over distant auditors (Kedia and Rajgopal, 2011). They charge higher audit fees due to informational advantage or a higher litigation risk in that these auditors may be subject to more scrutiny from the SEC. Another possible explanation is that these

auditors set up high audit fees to screen out low-quality clients for self-protection. This finding is consistent with DeFond, Francis, and Hu (2011) and Kedia and Rajgopal (2011). They find that auditors that are closer to an SEC regional office are more likely to issue going-concern reports because SEC offices are more likely to issue Accounting and Auditing Enforcement Release. They attribute their findings to the reason that auditors in the nearby offices of SEC are likely to be both better informed about SEC enforcement, and more aware of the consequences of compromising their independence, relative to auditors farther away from SEC offices.

We find that REIT firms pay more in non-audit fees to auditors that are closer to the SEC. We argue that REIT firms pay higher non-audit fees for the auditors' industry specialization because REIT industry is a unique and highly-regulated industry (Lim and Tan, 2008). Another possible explanation is that REIT firms have complex business activities. REIT firms may benefit from the knowledge spillover[14] between audit side and non-audit side of the auditors. All control variables have similar signs and significance level as Table 4.

Table 6 presents the OLS regression results from different model specifications from Equation (1) and (2) to test H5. Table 6 shows that, in general, the distance between REITs and their auditors are negatively related to audit fees and non-audit fees paid by REITs. All distance measures in the regressions are significantly negative at the 1 percent level. The coefficients on the control variables show the similar signs and significance level comparable to the previous tables.

[14] Krishnan and Yu (2011) show that a significantly negative relation between audit fees and non-audit fees suggest that knowledge spillover flows between audit and non-audit sides. In section 4, we show that the audit fees and predicted non-audit fees are significantly negatively correlated in the two-stage regression analysis. This evidence indicates that the REIT auditors are likely to have knowledge spillover between their audit side and non-audit side.

Our interesting results are the opposite to the findings in Jensen et al (2015). We show that better audit quality outweighs the reducing monitoring costs from information advantage in REIT industry. Auditors which are closer to their REIT clients provide higher quality of audit service thus reduce audit risks for the REIT firms. This finding is consistent with the results as in Choi, Kim, Qiu, and Zang (2012) that local auditors develop information advantage about their clients' business risks. They suggest that local auditor is better at monitoring their clients and mitigating opportunistic earnings management. Choi, Kim, Kim, and Zang (2010) document evidence that audit fees are significantly positively related to audit quality. Therefore, given the unusually high incentive for high quality audit service from REIT firms, it is reasonable to find that REIT firms are willing to pay higher audit fees for their local auditors.

[Insert Table 6 here]

4.4.Audit Fee Two-Stage Estimations

WSR (2003) document that audit and non-audit fees are jointly determined. They suggest that failure to control for the simultaneous determination of audit and non-audit fees leads to biased estimation. Therefore, to disentangle the interaction between audit fees and non-audit fees, we perform two-stage regression analyses. Table 7 reports the two-stage regression results on audit fees from Equation (3b) with non-audit fees as endogenous variables. Instrument variables are *LNTA, SQEMPLS, LEV, ROA, IO, INITIAL, BIG4, FOROPS, LOSS, REVGRO, BM, XDOPS, RESTATES* and *RET*. We control for both year fixed effects and property type in the regression analysis.

[Insert Table 7 here]

Table 7 shows the coefficients on *LNREITSECDIST*, *LNAUDITSECDIST* and *LNREITAUDITDIST* are -0.120, -0.075 and -0.114, which are statistically and significantly

negative. Our result confirms with our prediction and is consistent with our prior findings from OLS regressions. We also find the coefficients on $LNNAF^p$ are significantly negative at the 1 percent level after estimating simultaneously the audit and non-audit fee equations. The evidence is consistent with non-audit fees having a direct influence on the determination of audit fees. This evidence indicates that the REIT auditors are likely to have knowledge spillover between their audit side and non-audit side.

Table 8 reports the two-stage regression results on non-audit fees from Equation (4b) with audit fees as the endogenous variable. Instrument variables are *LNTA, SQEMPLS, LEV, ROA, IO, INITIAL, BIG4, FOROPS, LOSS, REVGRO, BM, XDOPS, RESTATES, RET*, and *LAG*. We control for year fixed effects and property type in the regression analysis.

[Insert Table 8 here]

Table 8 shows the coefficients on *LNREITSECDIST*, *LNAUDITSECDIST* and *LNREITAUDITDIST* are -0.323, -0.206 and -0.311, which are significantly negative at the 1 percent level. Our result confirms with our prediction and is consistent with our prior findings from OLS regressions. We also find the coefficients on $LNAUDIT^p$ are significantly negative at the 1 percent level after estimating simultaneously the audit and non-audit fee equations. The evidence is consistent with audit fees having a direct influence on the determination of non-audit fees.

4.5. Robustness Checks

4.5.1. Grouping by distances

Thus far, we have used three distances in our empirical analysis: distance between REITs and the SEC, distance between auditors and the SEC, as well as distance between REITs and auditors. The following analysis intends to examine how the two distances about REIT firms (i.e.

distance between REITs and the SEC, and distance between REITs and their auditors) interact with each other, and their effects on the audit fees and non-audit fees. To make our empirical analysis straightforward, we create dummy variables to classify REIT firms into the distance quadrant illustrated in Table 9.

[Insert Table 9 here]

D1 is a dummy variable that is equal to 1 if the distance between REIT firms and the SEC is less than 28 miles and the distance between REIT firms and their auditors is less than 28 miles, and 0 otherwise. *D2* is a dummy variable that equal to 1 if the distance between REIT firms and the SEC is less than 28 miles and the distance between REIT firms and their auditors is greater or equal to 28 miles, and 0 otherwise. *D3* is a dummy variable that is equal to 1 if the distance between REIT firms and the SEC is greater or equal to 28 miles and the distance between REIT firms and their auditors is less than 28 miles, and 0 otherwise. *D4* is a dummy variable that is equal to 1 if the distance between REIT firms and the SEC is greater or equal to 28 miles and the distance between REIT firms and their auditors is greater or equal to 28 miles, and 0 otherwise.

Table 10 reports the results when the dummy variables are included into the regressions. The REIT firms in *D4* quadrant (i.e. farther away from both the SEC and their auditors) are the reference case. The coefficient on *D1* in audit fees regression is 0.601, which is significantly positive at the 1 percent level, indicating that auditors charge the highest audit fees to REITs client when they locate within 28 mile radius from SEC offices and their auditors. When *D1*, *D2* and *D3* are included, the coefficient on D1 in non-audit fees regression is 1.093, which is significantly positive at the 1 percent level, indicating that non-audit fees are the highest when REIT firms locate within 28 mile radius from SEC offices and their auditors as well.

[Insert Table 10 here]

4.5.2. Grouping by B/M

Table 11 presents the OLS regression results on the effects of high versus low BM and distance variables on audit fees. The dependent variables are audit fees. The independent variables are the distance variables among REITs, their auditor offices and their relevant distance to SEC and other control variables. We separate our sample into high and low BM groups based on the median value of BM's distribution in each year. We control for both property type and year fixed effects. Panel A presents the OLS regression results on the effects of high BM subgroup and distance variable on audit fees. Only *LNREITAUDITDIST* has marginally and significantly negative coefficient, which indicate that the further away the distance, the lower audit fees are paid. Penal B presents the OLS regression results on the effects of low BM subgroup and distance variables on audit fees. All distance variables other than *AUDITSECDUMMY* have significantly negative coefficients in all six regressions. These results indicate that the higher growth firms (low BM subgroup) have higher incentive for higher market transparency by quality audit services.

[Insert Table 11 here]

4.5.3. Sub periods analysis

Both Sarbanes-Oxley and Dodd-Frank increase the importance of financial transparency and accuracy in financial reporting. Table 12 provides sub-period analysis. We include two dummy variables: *SOX* and *DODD*. SOX is 1 if fiscal year-end is later than July 30th 2002, 0 otherwise. *DODD* is 1 if fiscal year-end is later than July 21st 2010, 0 otherwise. The results in Table 12 show statistically significant negative coefficients on all distance variables consistent with previous findings. We find insignificant coefficients on SOX but statistically significant

coefficients on DOSS in all six regressions. These indicates that post-Dodd-Frank regulation period, the audit fees are significantly higher than pre-Dodd-Frank period.

[Insert Table 12 here]

4.5.4. Controlling for cost of living

As we observe from the locations of SEC cities and many auditor offices, it is reasonable to infer that the fees charged by the auditors can be influenced by the cost of living in the local areas. Thus, in this section, we try to control for the cost of living in our analysis to see if our main results still hold. We create a proxy variable for cost of living at Metropolitan Statistical Area (MSA) level. We obtain data from American Community Surveys (ACS) for the period of Year 2005 to Year 2013. For each year, we calculate the ratio between median home price and median household income for each MSA. The higher this ratio is, the costlier it is to live in that metropolitan area. Next, we rank the ratios for all the MSAs each year and identify the high cost of living MSAs as the top 40[15] MSAs with high home-to-income ratios. Then, we manually search the MSAs to which the cities where the auditor offices are located belong and create a dummy variable (TOP40) that is equal to 1 if the auditor city is located in the high cost-of-living MSAs, and 0 otherwise.

We reexamine the results from Tables 4, 5, and 6 with the inclusion of the TOP40 dummy variable. Because TOP40 variable starts at year 2005, we conduct the regression analysis using the sub period sample from 2005 to 2013. Tables 13A, 13B, 13C report the results after we control for cost of living.

[Insert Tables 13A, 13B, 13C here]

[15] On average, there are about 360-380 MSAs in United States. Top 40 is an arbitrary selection for approximately top 10 percentile of all the MSAs in US.

From the results reported in Tables 13 (A, B, and C), we can see that our main results remain significantly consistent with the findings in Tables 4-6. As we expected, the level of cost of living does have effects on the audit fees and non-audit fees charged by the auditors. However, even after controlling for this factor, our distance variables remain negative and significant.

5. Conclusion

In this research, we examine the geographic component of the audit service investments in REIT industry. Geographic distance has been well recognized as a proxy for information asymmetry in recent literature (see, for example, Coval and Moskowitz 2001, Ivkovic and Weisbenner 2005, Malloy (2005), Imazeki and Gallimore 2009, Becker et al. 2011, and John et al. 2011). Recently, several studies have focused on the distances between firms and the SEC (Kedia and Rajgopal 2011), the distances between auditors and the SEC (DeFond, Francis, and Hu, 2011), and the distances between firms and auditors (Choi, Kim, Qiu, and Zang, 2012). Our research incorporates all three distances in the empirical analysis and examines the impacts of geographic effects on the audit and non-audit fees paid by REIT firms.

After we control for audit fee determinants suggested by WSR (2003), our empirical results are as follows. First, we find that REIT firms pay more audit fees and non-audit fees to their auditor when the REIT firm headquarters are located closer to the SEC offices. Second, we show that REIT firms pay higher audit and non-audit fees when their auditor offices are closer to the SEC. Third, We show that REIT firms pay higher audit fees and non-audit fees when their auditor offices are located closer to their headquarters. Fourth, we show that REIT firms that are located within 28-mile radius of both the SEC and the auditors pay the highest fees in both audit services and non-audit services.

The results are consistent with our expectation that REIT firms desire high quality audit service and are willing to pay higher fees for it. Also, as a unique and highly regulated industry, REIT industry may enjoy the knowledge spillovers between audit side and non-audit side (Krishnan and Yu 2011) and/or the industry specialization from their auditors (Lim and Tan 2008). Our main results remain significant and strong even after we control for the effect of living costs in the auditor cities.

We also find that REIT growth potentials have a great impact on the audit fees they pay. If a REIT firm has higher book-to-market ratio (lower growth potential), the audit fees paid by the firm are insensitive to the geographic distances. However, if a REIT firm has lower book-to-market ratio (higher growth potential), the fees are significantly sensitive to the geographic components. Additionally, we find that the Dodd-Frank Act has made all REITs to pay more for their auditing and non-auditing services. Our future research efforts can extend to property-level geographic proximity and cross-sectional analysis in REIT firm characteristics in auditor choices.

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Appendix: Variable Definitions

LNREITSECDIST and REITSECDUMMY	The distance is measured as the actual miles based on the longitude and latitude between REIT firms' office and SEC national/regional office; We calculate the log transformation of the distance. LNREITSECDIST is the minimum distance between REIT firms' office and SEC national or regional office. REITSECDUMMY is 1 if the minimum distance between REIT firms' office and SEC national or regional office is farther than or equal to 28 miles; 0 otherwise.
LNAUDITSECDIST and AUDITSECDUMMY	The distance is measured as the actual miles based on the longitude and latitude between REITs' auditors and SEC national/regional office; We calculate the log transformation of the distance. LNAUDITSECDIST is the minimum distance between REITs' auditors and SEC national or regional office. AUDITSECDUMMY is 1 if the minimum distance between REITs' auditors and SEC national or regional office is farther than or equal to 28 miles; 0 otherwise.
LNREITAUDITDIST and REITAUDITDUMMY	The distance is measured as the actual miles based on the longitude and latitude between REIT firms' office and their auditors; We calculate the log transformation of the distance (LNREITAUDITDIST). REITAUDITDUMMY is 1 if the distance between REIT firms' office and their auditors is farther than or equal to 28 miles; 0 otherwise.
D1	The dummy variable is equal to 1 if the distance between REIT firms' office and SEC is less than 28 miles and the distance between REIT firms' office and their auditors is less than 28 miles; and 0 otherwise.
D2	The dummy variable is equal to 1 if the distance between REIT firms' office and SEC is less than 28 miles and the distance between REIT firms' office and their auditors is greater than or equal to 28 miles; and 0 otherwise.
D3	The dummy variable is equal to 1 if the distance between REIT firms' office and SEC is greater than or equal to 28 miles and the distance between REIT firms' office and their auditors is less than 28 miles; and 0 otherwise.
D4	The dummy variable is equal to 1 if the distance between REIT firms' office and SEC is greater than or equal to 28 miles and the distance between REIT firms' office and their auditors is greater than or equal to 28 miles as well; and 0 otherwise.
LNAUDIT	The log transformation of the audit fees
LNNAF	The log transformation of the nonaudit fees
LNTA	The log transformation of total assets (TA)
SQEMPLS	The square root of the number of employees reported in 10-K
LEV	Total debt divided by total assets
ROA	Operating income after depreciation divided by total assets
IO	The percentage of institutional holdings in percentage at the beginning of the fiscal year
INITIAL	An indicator variable equal to one if the audit engagement is the initial two years, zero otherwise.

BIG4	An indicator variable equal to one when an auditor is a member of the Big 4, zero otherwise.
FOROPS	An indicator variable equal to one if the REIT firm recorded a foreign sales amount or foreign income tax amount, zero otherwise.
LOSS	An indicator variable equal to one if the REIT firm reports negative net income in either of the two previous fiscal years, zero otherwise.
REVGRO	The growth rate in total revenue over the previous fiscal year
BM	The book-to market ratio
XDOPS	An indicator variable equal to one if the REIT firm reports extraordinary items or discontinued operation, zero otherwise.
RESTATES	An indicator variable equal to one if the REIT firm restates earnings or assets for reasons other than accounting rule change or adoption of new method, zero otherwise.
RET	The REIT firm's stock return over the current fiscal year including dividend
LAG	Reporting lag, defined as the number of days between fiscal year end and earnings announcement date
MKTSHAR	National auditor industry expertise by auditor market share approach is measured by the auditor's annual market share of audit fees within a two-digit SIC code.
SPREAD	The yearly average of daily bid-ask spread
PROTYPE	An indicator variable equal to one if the REIT firm is operating within a given property type sector, including office, retail, industrial, apartment, diversified and other properties; zero otherwise.
TOP40	We use the ratio between median home value and median household income as a proxy for cost of living at MSA level. TOP40 is equal to 1 if the auditor city is located in the top 40 highest cost-of-living MSAs, and 0 otherwise.

Figure 1 this figure shows the percentage of REITs' IPO relative to total REITs' market value compared with the percentage of all non-REITs firms' IPO to their total market value. Non-REITs IPO data is obtained from Jay Ritter's website (https://site.warrington.ufl.edu/ritter/files/2017/08/IPOs2016Statistics.pdf). Non-REITs' total market value is obtained from CRSP.

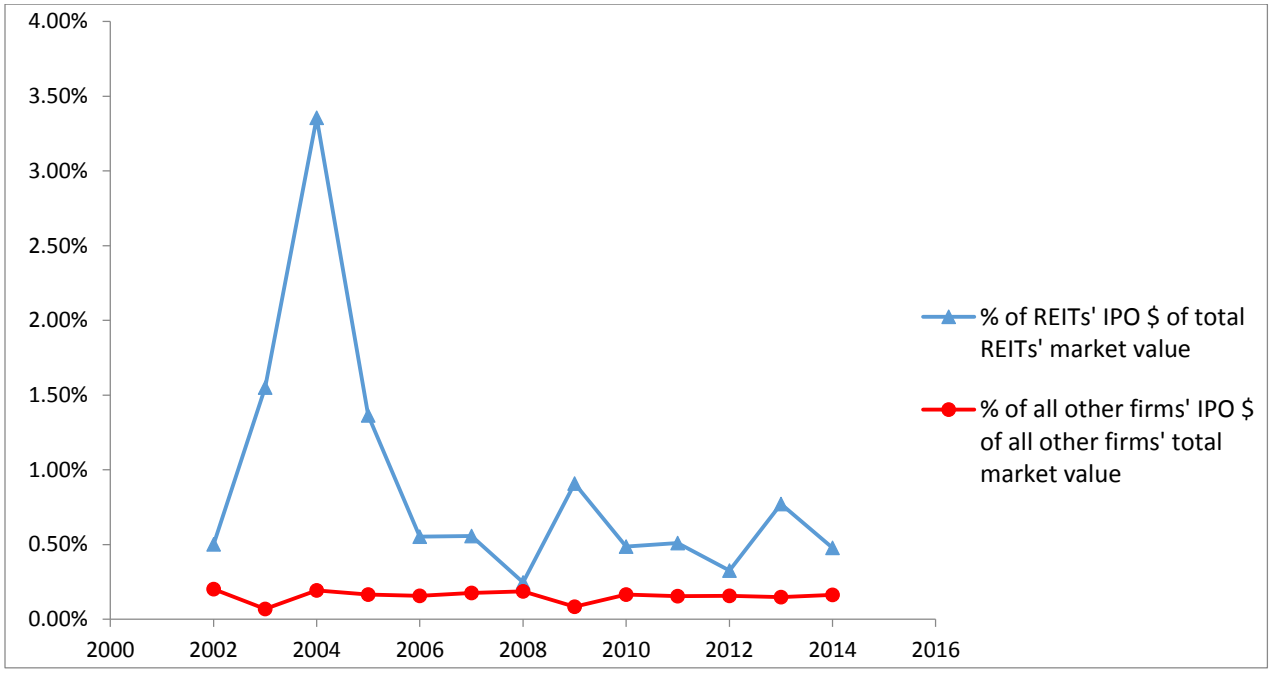

Figure 2 this figure shows the comparison between the percentage of change in total liabilities in REITs and the percentage of change in total liabilities in non-REIT firms, data obtained from COMPUSTAT.

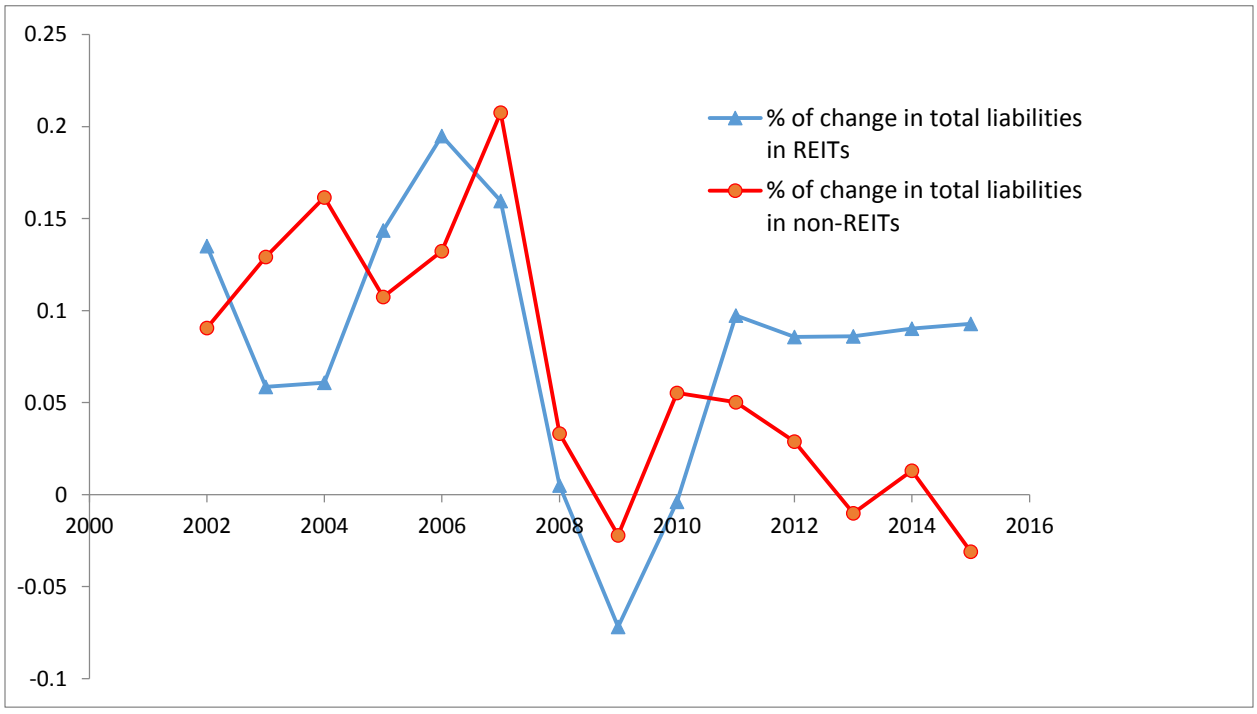

Figure 3 this figure presents the comparison between the percentage of change of total REITs' outstanding shares to the percentage of change of total non-REITs' outstanding shares, data obtained from CRSP.

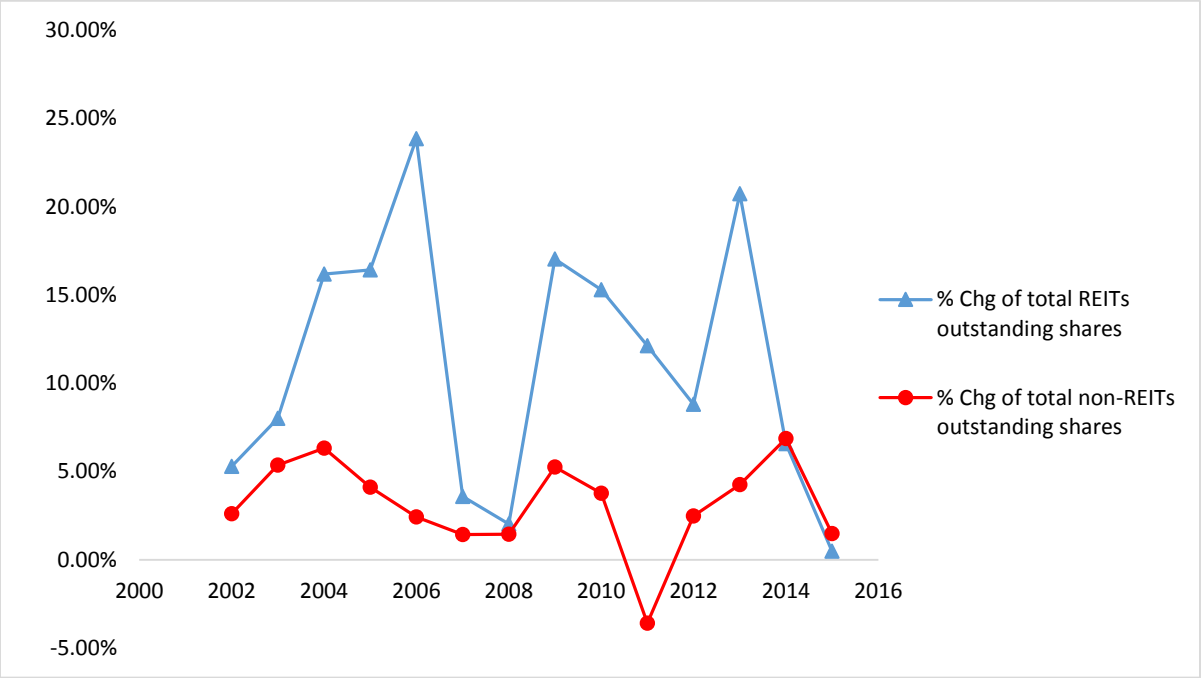

Table 1: Summary Statistics

This table presents the summary statistics of the variables in our analyses. The sample period is from 2001 to 2013. Please refer the Appendix for variable definitions.

Variable	N	Mean	Std Dev	Q1	Median	Q3
LNAUDIT	1,482	13.025	2.189	12.661	13.435	13.903
LNNAF	1,482	10.926	3.743	10.558	11.971	12.895
AUDIT (USD in 000s)	1,482	1,043	1,423	315,328	683.767	1,095,000
NAF (USD in 000s)	1,482	460	1,004	38,482	158,136	398,276
LNREITSECDIST	1,482	3.440	2.020	2.184	3.330	5.414
LNAUDITSECDIST	1,482	2.712	2.502	1.171	2.475	5.353
LNREITAUDITDIST	1,482	2.016	2.835	1.459	2.428	3.154
REITSECDIST	1,482	115.063	149.066	8.881	27.940	224.619
AUDITSECDIST	1,482	106.982	155.572	3.224	11.884	211.289
REITAUDITDIST	1,482	91.386	313.134	4.300	11.337	23.432
LNTA	1,482	7.391	1.352	6.638	7.499	8.272
SQEMPLS	1,482	30.819	54.908	6.481	16.000	33.045
LEV	1,482	0.585	0.198	0.485	0.578	0.679
ROA	1,482	0.050	0.057	0.028	0.047	0.066
IO	1,482	0.638	0.308	0.415	0.719	0.879
INITIAL	1,482	0.196	0.397	0	0	0
BIG4	1,482	0.792	0.406	1	1	1
FOROPS	1,482	0.103	0.304	0	0	0
LOSS	1,482	0.253	0.435	0	0	1
REVGRO	1,482	0.126	0.318	-0.001	0.067	0.158
BM	1,482	0.646	0.605	0.356	0.535	0.736
XDOPS	1,482	0.676	0.468	0	1	1
RESTATES	1,482	0.131	0.337	0	0	0
RET	1,482	0.125	0.356	-0.058	0.125	0.303
LAG	1,482	50.331	17.660	38.000	48.000	57.000
MKTSHARE	1,482	0.207	0.126	0.118	0.205	0.333
SPREAD	1,482	0.002	0.003	0.000	0.000	0.001

Table 2: Compare among REITs, their Auditors and SEC Greater than 28 Miles and Less than 28 Miles

This table exhibits the differences of the distance among REITs, their auditors, and SEC in terms of audit fees, non-audit fees and firm characteristics. Both pooled t-value (assuming equal variance) and Satterthwaite t-value (assuming unequal variance) are reported. Variable definitions can be found in the Appendix. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Panel A: Comparison between REITs and SEC Greater than 28 Miles and Less than 28 Miles					
Variable	**>=28 Miles (709)**	**<28 Miles (N=773)**	**Difference of the Mean Value**	**Pooled T**	**Satterthwaite T**
LNAUDIT	12.871	13.167	-0.295	-2.60***	-2.59***
LNNAF	10.560	11.261	-0.701	-3.62***	-3.61***
LNTA	7.235	7.533	-0.300	-4.27***	-4.26***
SQEMPLS	33.658	28.235	5.422	1.89*	1.90*
LEV	0.580	0.590	-0.010	-0.96	-0.97
ROA	0.049	0.050	-0.001	-0.34	-0.35
IO	0.647	0.629	0.018	1.11	1.12
REVGRO	0.135	0.118	0.017	1.02	1.01
BM	0.531	0.751	-0.221	-7.13***	-7.34***
RET	0.120	0.130	-0.011	-0.59	-0.60
LAG	48.805	51.730	-2.924	-3.19***	-3.19***
MKTSHARE	0.194	0.218	-0.024	-3.66***	-3.66***
SPREAD	0.002	0.002	0.000	0.67	0.67
Panel B: Comparison between REITs' auditors and SEC Greater than 28 Miles and Less than 28 Miles					
Variable	**>=28 Miles (N=657)**	**<28 Miles (N=825)**	**Difference of the Mean Value**	**Pooled T**	**Satterthwaite T**
LNAUDIT	12.754	13.242	-0.488	-4.29***	-4.21***
LNNAF	10.224	11.485	-1.261	-6.38***	6.53***
LNTA	7.238	7.512	-0.275	-3.91***	-3.89***
SQEMPLS	28.774	32.433	-3.660	-1.36	-1.27
LEV	0.602	0.571	0.030	2.94***	3.04***
ROA	0.045	0.054	-0.009	-3.08***	-3.27***
IO	0.585	0.680	-0.095	-6.00***	-5.91***
REVGRO	0.106	0.143	-0.037	-2.24***	-2.26***
BM	0.694	0.608	0.086	2.76***	2.65***
RET	0.119	0.130	-0.011	-0.58	-0.58
LAG	52.257	48.796	3.461	3.76***	3.61***
MKTSHARE	0.179	0.229	-0.050	-7.69***	-7.69***
SPREAD	0.002	0.001	0.001	5.84***	5.35***
Panel C: Comparison between REITs and their auditors Greater than 28 Miles and Less than 28 Miles					
Variable	**>= 28 Miles (N=343)**	**< 28 Miles (N=1,139)**	**Difference of the Mean Value**	**Pooled T**	**Satterthwaite T**
LNAUDIT	12.511	13.180	-0.669	-5.01***	-4.13***
LNNAF	10.103	11.173	-1.070	-4.67***	-4.42***
LNTA	7.072	7.487	-0.415	-5.02***	-5.23***
SQEMPLS	31.661	30.566	1.096	0.32	0.30
LEV	0.547	0.596	-0.050	-4.08***	-4.17***
ROA	0.051	0.049	0.002	0.51	0.54
IO	0.651	0.634	0.017	0.90	0.92
REVGRO	0.134	0.124	0.010	0.52	0.48
BM	0.569	0.669	-0.100	-2.69***	-3.65***
RET	0.137	0.122	0.015	0.70	0.68
LAG	49.405	50.609	-1.204	-1.11	-1.29
MKTSHARE	0.188	0.212	-0.024	3.13***	3.10***
SPREAD	0.002	0.001	0.001	3.12***	4.72***

Table 3: Audit Industrial Expertise, Market Transparency and Audit Fees, Non-Audit Fees and the Distance between REIT's Auditor and SEC offices (OLS)

This table presents the OLS regression results on the relationship between auditor industrial expertise and market transparency and audit fees, non-audit fees after controlling the distance between REIT's auditor and SEC office. The dependent variables are auditor industrial market share and bid-ask spread. The independent variables are audit fees, non-audit fees, the distance variables between auditor and SEC offices and other control variables. We control for both property type and year fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. Variable definitions can be found in the Appendix. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	*MKTSHARE*	*MKTSHARE*	*SPREAD*	*SPREAD*
Intercept	0.081**	0.093***	-12.231***	-12.489***
	(2.20)	(2.54)	(-7.01)	(-7.16)
LNAUDITSECDIST	-0.002**		0.188***	
	(-2.31)		(3.59)	
AUDITSECDUMMY		-0.023***		0.789***
		(-4.62)		(2.91)
LNAUDIT	-0.002	-0.002	-0.239***	-0.234***
	(-0.90)	(-1.01)	(-2.72)	(-2.68)
LNNAF	-0.001*	-0.002**	-0.060	-0.061
	(-1.77)	(-2.12)	(-1.31)	(-1.34)
LNTA	0.016***	0.017***	1.388***	1.399***
	(6.01)	(6.11)	(7.57)	(7.63)
SQEMPLS	0.000***	0.000***	-0.040***	-0.041***
	(8.03)	(7.86)	(-16.17)	(16.30)
LEV	-0.107***	-0.102***	1.607**	1.613*
	(-8.11)	(-7.84)	(1.89)	(1.88)
ROA	0.186***	0.161***	1.962	1.305
	(3.93)	(3.43)	(0.49)	(0.32)
IO	0.005	0.004	-3.488***	-3.462***
	(0.39)	(0.29)	(-4.36)	(-4.33)
INITIAL	0.004	0.002	-0.131	-0.149
	(0.51)	(0.28)	(-0.30)	(-0.34)
BIG4	0.164***	0.162***	-0.869**	-0.904**
	(19.75)	(19.20)	(-2.08)	(-2.16)
FOROPS	-0.055***	-0.055***	-2.696***	-2.597***
	(-6.59)	(-6.79)	(-4.78)	(-4.58)
LOSS	0.004	0.004	-1.136**	-1.146**
	(0.63)	(0.68)	(-2.56)	(-2.58)
REVGRO	0.030***	0.030***	-0.946*	-0.937
	(3.43)	(3.42)	(-1.63)	(-1.61)
BM	-0.008**	-0.008**	0.189	0.229
	(-2.55)	(-2.45)	(0.40)	(0.49)
XDOPS	-0.010*	-0.010*	1.221***	1.207***
	(-1.76)	(-1.77)	(3.64)	(3.59)
RESTATES	-0.010	-0.008	-0.072	-0.066
	(-1.44)	(-1.18)	(-0.16)	(-0.14)
RET	0.003	0.003	1.627**	1.663***
	(0.49)	(0.43)	(2.53)	(2.59)
LAG	-0.000	-0.000	0.014	0.015
	(-0.11)	(-0.23)	(1.09)	(1.16)
Protype	YES			
Year	YES			
N	1,482	1,482	1,482	1,482
RSQ	49.26%	49.82%	61.64%	61.57%

Table 4: Audit Fees, Non-Audit Fees, and the Distance between REIT and SEC Offices (OLS)

This table presents the OLS regression results on the effects of REIT and SEC distances on audit fees and non-audit fees. The dependent variables are audit fees or non-audit fees. The independent variables are the distance variables between REIT and SEC offices and other control variables. We control for both property type and year fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. Variable definitions can be found in the Appendix. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	Predicted Sign	*LNAUDIT*	*LNAUDIT*	*LNNAF*	*LNNAF*
Intercept	?	9.847***	9.770***	10.654***	10.483***
		(19.27)	(20.01)	(10.18)	(10.01)
LNREITSECDIST	-	-0.056***		-0.173***	
		(-3.33)		(-4.08)	
REITSECDUMMY	-		-0.187**		-0.629***
			(-2.18)		(-3.14)
LNTA	+	0.265***	0.261***	0.150	0.135
		(4.52)	(4.48)	(1.55)	(1.38)
SQEMPLS	+	0.005***	0.005***	0.008***	0.008***
		(8.74)	(8.87)	(6.23)	(6.41)
LEV	+	-0.291	-0.306	0.321	0.278
		(-1.17)	(-1.22)	(0.62)	(0.54)
ROA	-	0.648	0.519	-0.782	-1.238
		(0.76)	(0.59)	(-0.48)	(-0.74)
IO	+	1.079***	1.123***	2.204***	2.347***
		(3.93)	(4.11)	(4.55)	(4.89)
INITIAL	-	-0.357**	-0.342**	-1.349***	-1.301***
		(-2.14)	(-2.06)	(-4.24)	(-4.09)
BIG4	+	1.160***	1.166***	0.238	0.249
		(5.13)	(5.12)	(0.79)	(0.83)
FOROPS	+	0.330***	0.350***	0.875***	0.927***
		(3.27)	(3.50)	(2.70)	(2.90)
LOSS	+	0.174	0.175	-0.085	-0.084
		(1.42)	(1.43)	(-0.32)	(-0.32)
REVGRO	?	-0.546*	-0.527*	0.501**	0.563**
		(-1.79)	(-1.73)	(1.97)	(2.23)
BM	-	-0.229**	-0.231**	-0.415*	-0.428*
		(-1.98)	(-2.01)	(-1.63)	(-1.67)
XDOPS	+	-0.099	-0.101	-0.056	-0.066
		(-1.09)	(-1.12)	(-0.26)	(-0.31)
RESTATES	+	0.502***	0.495***	-0.420	-0.439
		(5.01)	(4.97)	(-1.46)	(-1.52)
RET	-	-0.087	-0.081	-0.098	-0.081
		(-0.49)	(-0.45)	(-0.27)	(-0.22)
LAG	+	-0.001	-0.002	-0.002	-0.003
		(-0.40)	(-0.49)	(-0.15)	(-0.26)
Protype		YES			
Year		YES			
N		1,482	1,482	1,482	1,482
RSQ		34.92%	34.85%	19.30%	19.13%

Table 5: Audit Fees, Non-Audit Fees, and the Distance between Auditors and SEC Offices (OLS)

This table presents the OLS regression results on the effects of auditors and SEC distances on audit fees and non-audit fees. The dependent variables are audit fees or non-audit fees. The independent variables are the distance variables between auditors and SEC offices and other control variables. We control for both property type and year fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. Variable definitions can be found in the Appendix. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	Predicted Sign	*LNAUDIT*	*LNAUDIT*	*LNNAF*	*LNNAF*
Intercept	?	9.634***	9.677***	10.272***	10.363***
		(19.08)	(18.71)	(10.00)	(10.24)
LNAUDITSECDIST	-	-0.026*		-0.134***	
		(-1.86)		(-3.91)	
AUDITSECDUMMY	-		-0.202**		-0.893***
			(-2.27)		(-5.09)
LNTA	+	0.270***	0.272***	0.164*	0.171*
		(4.61)	(4.65)	(1.68)	(1.76)
SQEMPLS	+	0.005***	0.005***	0.008***	0.007***
		(8.61)	(8.46)	(6.18)	(5.72)
LEV	+	-0.288	-0.256	0.403	0.516
		(-1.18)	(-1.07)	(0.77)	(0.99)
ROA	-	0.695	0.483	-0.739	-1.642
		(0.83)	(0.57)	(-0.46)	(-1.02)
IO	+	1.076***	1.064***	2.154***	2.116***
		(3.92)	(3.95)	(4.42)	(4.39)
INITIAL	-	-0.361**	-0.370**	-1.374***	-1.412**
		(-2.17)	(-2.23)	(-4.33)	(-4.45)
BIG4	+	1.186***	1.168***	0.300	0.229
		(5.17)	(5.05)	(1.00)	(0.76)
FOROPS	+	0.368***	0.366***	0.930***	0.945***
		(3.70)	(3.73)	(2.89)	(2.93)
LOSS	+	0.187	0.188	-0.038	-0.038
		(1.52)	(1.52)	(-0.14)	(-0.14)
REVGRO	?	-0.535*	-0.538*	0.523*	0.513*
		(-1.75)	(-1.76)	(2.07)	(2.01)
BM	-	-0.209*	-0.203*	-0.365	-0.333
		(-1.83)	(-1.80)	(-1.44)	(-1.32)
XDOPS	+	-0.093	-0.094	-0.032	-0.037
		(-1.03)	(-1.03)	(-0.15)	(-0.97)
RESTATES	+	0.492***	0.503***	-0.427	-0.385
		(4.92)	(4.99)	(-1.50)	(-1.34)
RET	-	-0.077	-0.078	-0.090	-0.085
		(-0.44)	(-0.44)	(-0.25)	(-0.24)
LAG	+	-0.001	-0.001	-0.002	-0.002
		(-0.38)	(-0.41)	(-0.21)	(-0.23)
Protype		YES			
Year		YES			
N		1,482	1,482	1,482	1,482
RSQ		34.78%	34.89%	19.28%	19.83%

Table 6: Audit Fees, Non-Audit Fees, and the Distance between REIT firms and Auditors (OLS)

This table presents the OLS regression results on the effects of REIT and auditor distances on audit fees and non-audit fees. The dependent variables are audit fees or non-audit fees. The independent variables are the distance variables between REIT and their auditor offices and other control variables. We control for both property type and year fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	Predicted Sign	*LNAUDIT*	*LNAUDIT*	*LNNAF*	*LNNAF*
Intercept	?	9.591***	9.911***	9.671***	10.225***
		(20.00)	(20.55)	(9.43)	(9.99)
LNREITAUDITDIST	?	-0.080***		-0.091***	
		(-4.78)		(-3.25)	
REITAUDITDUMMY	?		-0.516***		-0.824***
			(-4.06)		(-3.69)
LNTA	+	0.274***	0.243***	0.174*	0.126
		(4.71)	(4.13)	(1.79)	(1.28)
SQEMPLS	+	0.005***	0.006***	0.007***	0.008***
		(8.87)	(9.46)	(5.85)	(6.53)
LEV	+	-0.400*	-0.417*	0.135	0.073
		(-1.66)	(-1.72)	(0.26)	(0.14)
ROA	-	0.998	0.749	-0.187	-0.471
		(1.17)	(0.88)	(-0.11)	(-0.29)
IO	+	1.095***	1.187***	2.256***	2.402***
		(4.03)	(4.31)	(4.62)	(4.92)
INITIAL	-	-0.277*	-0.292*	-1.253***	-1.241***
		(-1.67)	(-1.77)	(-3.95)	(-3.97)
BIG4	+	1.217***	1.168***	0.372	0.305
		(5.35)	(5.20)	(1.22)	(1.01)
FOROPS	+	0.312***	0.348***	0.993***	1.010***
		(3.06)	(3.52)	(3.06)	(3.15)
LOSS	+	0.167	0.165	-0.077	-0.087
		(1.36)	(1.36)	(-0.29)	(-0.33)
REVGRO	?	-0.554*	-0.554*	0.529**	0.517**
		(-1.86)	(-1.84)	(2.11)	(2.07)
BM	-	-0.189*	-0.219*	-0.322	-0.362
		(-1.69)	(-1.95)	(-1.24)	(-1.40)
XDOPS	+	-0.116	-0.115	-0.071	-0.079
		(-1.29)	(-1.27)	(-0.34)	(-0.37)
RESTATES	+	0.497***	0.500***	-0.468*	-0.456
		(4.95)	(5.01)	(-1.63)	(-1.59)
RET	-	-0.050	-0.055	-0.012	-0.013
		(-0.28)	(-0.31)	(-0.03)	(-0.04)
LAG	+	0.001	-0.001	0.002	-0.001
		(0.36)	(-0.45)	(0.20)	(-0.09)
Protype		YES			
Year		YES			
N		1,482	1,482	1,482	1,482
RSQ		35.70%	35.60%	19.00%	19.36%

Table 7: Audit Fees and the Geographic Distances (2SLS, Non-Audit Fees as Endogenous Variable)

This table presents the 2SLS regression results on audit fees from the second-stage (Equation (3b)). In the first-stage regression, we regress LNNAF onto the exogenous fee determinants. The fitted value of LNNAF, which is independent of the error term, is used as an instrumental variable in the second stage. We control for both property type and year fixed effects in the second stage. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. T-values are reported in the parentheses. Variable definitions can be found in the Appendix. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	Predicted Sign	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*
Intercept	?	13.791***	13.355***	13.128***
		(12.99)	(13.13)	(13.59)
LNREITSECDIST	-	-0.120***		
		(-5.30)		
LNAUDITSECDIST	-		-0.075***	
			(-3.88)	
LNREITAUDITDIST	?			-0.114***
				(-6.66)
$LNNAF^{P}$	?	-0.370***	-0.362***	-0.366***
		(-3.69)	(-3.68)	(-3.63)
LNTA	+	0.321***	0.330***	0.338
		(5.14)	(5.26)	(5.37)
SQEMPLS	+	0.008***	0.008***	0.008***
		(8.46)	(8.41)	(8.39)
LEV	+	-0.172	-0.142	-0.351
		(-0.68)	(-0.57)	(-1.45)
ROA	-	0.358	0.427	0.930
		(0.42)	(0.51)	(1.09)
IO	+	1.895***	1.856***	1.920***
		(5.77)	(5.75)	(5.82)
INITIAL	-	-0.856***	-0.858***	-0.735***
		(-3.58)	(-3.59)	(-3.15)
BIG4	+	1.248***	1.294***	1.353***
		(5.67)	(5.82)	(6.18)
FOROPS	+	0.654***	0.705***	0.676***
		(4.96)	(5.38)	(4.77)
LOSS	+	0.143	0.173	0.138
		(1.15)	(1.40)	(1.12)
REVGRO	?	-0.361	-0.345	-0.360
		(-1.14)	(-1.09)	(-1.16)
BM	-	-0.382***	-0.341***	-0.307***
		(-3.28)	(-2.99)	(-2.73)
XDOPS	+	-0.120	-0.105	-0.142
		(-1.31)	(-1.16)	(-1.58)
RESTATES	+	0.346***	0.337***	0.326***
		(3.13)	(3.06)	(2.87)
RET	-	-0.124	-0.110	-0.054
		(-0.71)	(-0.63)	(-0.31)
LAG	+	-0.002	-0.002	0.002
		(-0.58)	(-0.63)	(0.61)
Protype		YES		
Year		YES		
N		1,482	1,482	1,482
RSQ		34.92%	35.79%	35.70%

Table 8: Non-Audit Fees and the Geographic Distances (2SLS, Audit Fees as Endogenous Variable)

This table presents the 2SLS regression results on non-audit fees from the second-stage (Equation (4b)). In the first-stage regression, we regress LNAUDIT onto the exogenous fee determinants. The fitted value of LNAUDIT, which is independent of the error term, is used as an instrumental variable in the second stage. We control for both property type and year fixed effects in the second stage. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. Variable definitions can be found in the Appendix. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	Predicted Sign	*LNNAF*	*LNNAF*	*LNNAF*
Intercept	?	37.256***	36.867***	35.895***
		(6.61)	(6.66)	(6.45)
LNREITSECDIST	-	-0.323***		
		(-6.15)		
LNAUDITSECDIST	-		-0.206***	
			(-5.46)	
LNREITAUDITDIST	?			-0.311***
				(-5.53)
$LNAUDIT^{p}$	?	-2.701***	-2.761***	-2.734***
		(-4.76)	(-4.84)	(-4.74)
LNTA	+	0.866***	0.910***	0.924***
		(4.68)	(4.82)	(4.79)
SQEMPLS	+	0.022***	0.022***	0.021***
		(6.67)	(6.75)	(6.55)
LEV	+	-0.465	-0.391	-0.959*
		(-0.84)	(-0.70)	(-1.63)
ROA	-	0.967	1.179	2.543
		(0.58)	(0.70)	(1.43)
IO	+	5.118***	5.124***	5.249***
		(6.03)	(6.03)	(6.04)
INITIAL	-	-2.312***	-2.370***	-2.010***
		(-6.59)	(-6.73)	(-6.05)
BIG4	+	3.372***	3.573***	3.699***
		(4.67)	(4.85)	(4.85)
FOROPS	+	1.766***	1.945***	1.847***
		(4.57)	(4.90)	(4.85)
LOSS	+	0.386	0.477	0.378
		(1.29)	(1.57)	(1.27)
REVGRO	?	-0.975**	-0.954**	-0.985**
		(-2.36)	(-2.33)	(-2.35)
BM	-	-1.032***	-0.941***	-0.839***
		(-3.40)	(-3.17)	(-2.82)
XDOPS	+	-0.323	-0.290	-0.387*
		(-1.54)	(-1.38)	(-1.84)
RESTATES	+	0.935**	0.930**	0.891**
		(2.36)	(2.38)	(2.24)
RET	-	-0.334	-0.303	-0.149
		(-0.89)	(-0.81)	(-0.40)
Protype		YES		
Year		YES		
N		1,482	1,482	1,482
RSQ		19.30%	19.28%	19.00%

Table 9: Illustration of the Distance Quadrant

This table illustrates the definitions of the four dummy variables (D1, D2, D3, and D4). D1 is a dummy variable that is equal to 1 if the distance between REIT firms and the SEC is less than 28 miles and the distance between REIT firms and their auditors is less than 28 miles, and 0 otherwise. D2 is a dummy variable that equal to 1 if the distance between REIT firms and the SEC is less than 28 miles and the distance between REIT firms and their auditors is greater or equal to 28 miles, and 0 otherwise. D3 is a dummy variable that is equal to 1 if the distance between REIT firms and the SEC is greater or equal to 28 miles and the distance between REIT firms and their auditors is less than 28 miles, and 0 otherwise. D4 is a dummy variable that is equal to 1 if the distance between REIT firms and the SEC is greater or equal to 28 miles and the distance between REIT firms and their auditors is greater or equal to 28 miles, and 0 otherwise.

REIT Firms Distance Quadrant			
	From Auditors		
From the SEC		<28 miles	>=28 miles
	<28 miles	D1 (N=720)	D2 (N=53)
	>=28 miles	D3 (N=419)	D4 (N=290)

Table 10: Audit Fees, Non-Audit Fees, and the Geographic Distance Dummies (OLS)

This table presents the OLS regression results on audit fees and non-audit fees including the dummy variables of the distance between REIT firms and their auditors and the distance between REIT firms and SEC offices. D1, D2, and D3 are defined in Table 9. D4 (i.e. a REIT firm is at least 28 miles away from the SEC and its auditor) is the reference case in the regression. We control for both property type and year fixed effects in the regressions. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. Variable definitions can be found in the Appendix. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	Predicted Sign	*LNAUDIT*	*LNNAF*
Intercept	?	9.263***	9.599***
		(18.96)	(9.29)
D1	?	0.601***	1.093***
		(3.91)	(4.22)
D2	?	0.745***	0.564
		(3.85)	(1.07)
D3	?	0.699***	0.697**
		(4.43)	(2.54)
LNTA	+	0.238***	0.110
		(4.08)	(1.12)
SQEMPLS	+	0.006***	0.008***
		(9.86)	(6.79)
LEV	+	-0.375	0.147
		(-1.51)	(0.28)
ROA	-	0.711	-0.983
		(0.80)	(-0.59)
IO	+	1.182***	2.431***
		(4.33)	(5.02)
INITIAL	-	-0.267*	-1.230***
		(-1.63)	(-3.89)
BIG4	+	1.155***	0.246
		(5.13)	(0.82)
FOROPS	+	0.369***	0.921***
		(3.69)	(2.88)
LOSS	+	0.157	-0.099
		(1.30)	(-0.38)
REVGRO	?	-0.562*	0.526**
		(-1.89)	(2.10)
BM	-	-0.224**	-0.418
		(-1.96)	(-1.62)
XDOPS	+	-0.139	-0.088
		(-1.53)	(-0.42)
RESTATES	+	0.514***	-0.427
		(5.13)	(-1.48)
RET	-	-0.060	-0.051
		(-0.34)	(-0.14)
LAG	+	-0.001	-0.003
		(-0.50)	(-0.25)
Protype		YES	
Year		YES	
N		1,482	1,482
RSQ		35.96%	19.59%

Table 11: Subgroup Analysis of High and Low BM

Panel A: High BM Group

This panel presents the OLS regression results on the effects of high BM subgroup and distance variables on audit fees. The dependent variables are audit fees. The independent variables are the distance variables among REITs, their auditor offices and their relevant distance to SEC and other control variables. We separate our sample into high and low BM groups based on the median value of BM's distribution in each year. This subgroup only includes those firm years with high BM. We control for both property type and year fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*
Intercept	9.070***	9.187***	9.136***	9.212***	9.170***	9.264***
	(23.66)	(24.73)	(22.83)	(21.46)	(24.22)	(24.55)
LNREITSECDIST	0.013					
	(0.69)					
REITSECDUMMY		-0.016				
		(-0.16)				
LNAUDITSECDIST			0.004			
			(0.28)			
AUDITSECDUMMY				-0.035		
				(-0.42)		
LNREITAUDITDIST					-0.012*	
					(-1.87)	
REITAUDITDUMMY						-0.163
						(-1.43)
LNTA	0.354***	0.351***	0.352***	0.351***	0.351***	0.342***
	(5.70)	(5.63)	(5.62)	(5.56)	(5.62)	(5.32)
SQEMPLS	0.004***	0.004***	0.004***	0.004***	0.004***	0.005***
	(7.24)	(7.29)	(7.23)	(7.24)	(7.33)	(7.40)
LEV	-0.062	-0.043	-0.051	-0.040	-0.053	-0.068
	(-0.31)	(-0.21)	(-0.27)	(-0.21)	(-0.28)	(-0.37)
ROA	0.736	0.638	0.687	0.607	0.696	0.653
	(1.22)	(0.97)	(1.17)	(1.00)	(1.20)	(1.13)
IO	0.841**	0.833**	0.841**	0.824***	0.832**	0.881***
	(2.57)	(2.58)	(2.53)	(2.59)	(2.58)	(2.59)
INITIAL	-0.461**	-0.461**	-0.460**	-0.464**	-0.448**	-0.450**
	(-2.02)	(-2.01)	(-2.02)	(-2.05)	(-1.97)	(-1.97)
BIG4	0.416**	0.409*	0.411**	0.412**	0.420**	0.405**
	(2.02)	(1.96)	(2.00)	(2.01)	(2.05)	(1.97)
FOROPS	0.363***	0.347***	0.355***	0.345***	0.340***	0.338***
	(4.30)	(4.29)	(4.10)	(4.10)	(4.13)	(4.22)
LOSS	0.019	0.021	0.019	0.026	0.018	0.025
	(0.20)	(0.23)	(0.21)	(0.29)	(0.19)	(0.27)
REVGRO	0.143	0.135	0.138	0.132	0.124	0.132
	(0.97)	(0.94)	(0.95)	(0.94)	(0.87)	(0.92)
XDOPS	-0.020	-0.024	-0.023	-0.025	-0.025	-0.034
	(-0.23)	(-0.29)	(-0.27)	(-0.28)	(-0.29)	(-0.40)
RESTATES	0.360***	0.363***	0.362***	0.364***	0.365***	0.371***
	(3.00)	(3.05)	(2.97)	(3.01)	(2.98)	(3.06)
RET	0.166	0.153	0.157	0.151	0.154	0.150
	(0.78)	(0.72)	(0.76)	(0.74)	(0.74)	(0.72)
LAG	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
	(-0.92)	(-1.01)	(-0.98)	(-1.01)	(-0.93)	(-1.01)
Protype	YES					
Year	YES					
N	744	744	744	744	744	744
RSQ	50.51%	50.49%	50.50%	50.50%	50.54%	50.67%

Panel B: Low BM Group

This panel presents the OLS regression results on the effects of low BM subgroup and distance variables on audit fees. The dependent variables are audit fees. The independent variables are the distance variables among REITs, their auditor offices and their relevant distance to SEC and other control variables. We separate our sample into high and low BM groups based on the median value of BM's distribution in each year. This subgroup only includes those firm years with low BM. We control for both property type and year fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*
Intercept	10.055***	9.869***	9.634***	9.542***	9.784***	10.181***
	(12.78)	(12.80)	(12.09)	(11.92)	(12.58)	(12.85)
LNREITSECDIST	-0.135***					
	(-4.28)					
REITSECDUMMY		-0.396***				
		(-2.97)				
LNAUDITSECDIST			-0.060**			
			(-1.96)			
AUDITSECDUMMY				-0.281		
				(-1.59)		
LNREITAUDITDIST					-0.183***	
					(-4.57)	
REITAUDITDUMMY						-0.846***
						(-3.86)
LNTA	0.128	0.121	0.141	0.155	0.176*	0.102
	(1.29)	(1.24)	(1.41)	(1.55)	(1.78)	(1.01)
SQEMPLS	0.009***	0.009***	0.008***	0.008***	0.005***	0.008***
	(5.02)	(5.36)	(4.95)	(5.01)	(2.73)	(5.03)
LEV	-0.354	-0.507	-0.327	-0.340	-0.700	-0.735
	(-0.52)	(-0.75)	(-0.49)	(-0.52)	(-1.07)	(-1.11)
ROA	3.090	2.409	2.161	1.789	3.316	2.705
	(0.80)	(0.62)	(0.56)	(0.46)	(0.81)	(0.70)
IO	0.987**	1.073**	0.979**	0.945**	1.001**	1.068**
	(2.33)	(2.52)	(2.29)	(2.26)	(2.43)	(2.55)
INITIAL	-0.245	-0.215	-0.284	-0.288	-0.155	-0.140
	(-1.05)	(-0.93)	(-1.21)	(-1.22)	(-0.66)	(-0.60)
BIG4	1.976***	2.018***	2.033***	2.007***	1.987***	2.025***
	(4.60)	(4.67)	(4.59)	(4.41)	(4.88)	(4.81)
FOROPS	0.447**	0.512**	0.554**	0.568***	0.429*	0.557**
	(2.03)	(2.32)	(2.57)	(2.64)	(1.83)	(2.55)
LOSS	0.263	0.263	0.297	0.285	0.274	0.222
	(1.34)	(1.35)	(1.50)	(1.45)	(1.42)	(1.14)
REVGRO	-0.810**	-0.787**	-0.795**	-0.790**	-0.828**	-0.849**
	(-2.15)	(-2.08)	(-2.07)	(-2.06)	(-2.30)	(-2.30)
XDOPS	-0.117	-0.120	-0.123	-0.114	-0.218	-0.162
	(-0.75)	(-0.77)	(-0.79)	(-0.73)	(-1.41)	(-1.04)
RESTATES	0.807***	0.776***	0.785***	0.778***	0.791***	0.767***
	(4.18)	(4.06)	(4.08)	(4.07)	(4.15)	(4.08)
RET	-0.170	-0.168	-0.168	-0.164	-0.085	-0.102
	(-0.69)	(-0.67)	(-0.68)	(-0.66)	(-0.35)	(-0.41)
LAG	0.003	0.003	0.003	0.006	0.005	0.002
	(0.78)	(0.61)	(0.69)	(0.79)	(1.26)	(0.42)
Protype	YES					
Year	YES					
N	738	738	738	738	738	738
RSQ	31.56%	31.23%	31.06%	31.05%	33.31%	32.44%

Table 12: Subgroup Analysis by including SOX and Dodd-Frank Dummies

This table presents the OLS regression results on the effects of regulation reforms on audit fees in REITs. The dependent variables are audit fees. The independent variables are the distance variables among REITs, their auditor offices and their relevant distance to SEC and other control variables. We separate our sample into pre SOX (before July 30th 2002) and post SOX (after July 30th 2002) period and pre Dodd-Frank (before July 21st 2010 and post Dodd-Frank (after July 21st 2010) period. We control for property type fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*	*LNAUDIT*
Intercept	9.740***	9.669***	9.533***	9.571***	9.501***	9.812***
	(19.19)	(19.93)	(19.00)	(18.57)	(20.01)	(20.05)
LNREITSECDIST	-0.053***					
	(-3.07)					
REITSECDUMMY		-0.178**				
		(-2.04)				
LNAUDITSECDIST			-0.024*			
			(-1.63)			
AUDITSECDUMMY				-0.184**		
				(-1.99)		
LNREITAUDITDIST					-0.079***	
					(-4.68)	
REITAUDITDUMMY						-0.505***
						(-3.92)
LNTA	0.270***	0.266***	0.275***	0.276***	0.278***	0.248***
	(4.66)	(4.62)	(4.76)	(4.79)	(4.84)	(4.27)
SQEMPLS	0.005***	0.005***	0.006***	0.005***	0.005***	0.005***
	(8.12)	(8.23)	(8.04)	(7.90)	(8.21)	(8.69)
LEV	-0.243	-0.257	-0.243	-0.215	-0.346	-0.362
	(-0.97)	(-1.02)	(-0.98)	(-0.89)	(-1.43)	(-1.47)
ROA	0.435	0.313	0.490	0.301	0.775	0.523
	(0.51)	(0.35)	(0.57)	(0.35)	(0.90)	(0.61)
IO	1.147***	1.187***	1.141***	1.129***	1.173***	1.262***
	(4.57)	(4.77)	(4.54)	(4.58)	(4.74)	(5.00)
INITIAL	-0.380**	-0.367**	-0.383**	-0.391**	-0.305*	-0.319*
	(-2.27)	(-2.19)	(-2.28)	(-2.33)	(-1.82)	(-1.91)
BIG4	1.162***	1.167***	1.187***	1.171***	1.213***	1.166***
	(5.13)	(5.13)	(5.18)	(5.06)	(5.34)	(5.20)
FOROPS	0.338***	0.358***	0.376***	0.374***	0.318***	0.354***
	(3.38)	(3.59)	(3.83)	(3.86)	(3.14)	(3.61)
LOSS	0.166	0.166	0.178	0.179	0.158	0.156
	(1.33)	(1.34)	(1.43)	(1.43)	(1.28)	(1.27)
REVGRO	-0.506*	-0.488*	-0.494*	-0.495*	-0.515*	-0.515*
	(-1.68)	(-1.63)	(-1.64)	(-1.64)	(-1.79)	(-1.74)
BM	-0.235**	-0.237**	-0.218*	-0.214*	-0.197*	-0.225**
	(-2.08)	(-2.10)	(-1.95)	(-1.93)	(-1.79)	(-2.04)
XDOPS	-0.087	-0.090	-0.081	-0.081	-0.104	-0.103
	(-0.92)	(-0.95)	(-0.86)	(-0.86)	(-1.12)	(-1.11)
RESTATES	0.340***	0.334***	0.332***	0.341***	0.335***	0.336***
	(3.66)	(3.62)	(3.57)	(3.62)	(3.59)	(3.61)
RET	-0.172	-0.168	-0.162	-0.161	-0.146	-0.149
	(-1.38)	(-1.35)	(-1.30)	(-1.30)	(-1.18)	(-1.20)
LAG	-0.000	-0.000	-0.000	-0.000	0.002	-0.000
	(-0.03)	(-0.13)	(-0.00)	(-0.03)	(0.72)	(-0.06)
SOX	0.147	0.145	0.143	0.145	0.123	0.136
	(0.96)	(0.94)	(0.93)	(0.94)	(0.79)	(0.88)
DODD	0.192**	0.195**	0.191**	0.187**	0.207**	0.210***
	(2.35)	(2.38)	(2.35)	(2.32)	(2.55)	(2.59)
Protype	YES					
N	1,482	1,482	1,482	1,482	1,482	1,482
RSQ	33.76%	33.69%	33.62%	33.71%	34.53%	34.42%

Table 13A: Controlling for cost of living: Audit Fees, Non-Audit Fees, and the Distance between REIT and SEC Offices

This table presents the OLS regression results on the effects of REIT and SEC distances on audit fees and non-audit fees. The dependent variables are audit fees or non-audit fees. The independent variables are the distance variables between REIT and SEC offices and other control variables. We control for both property type and year fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroscedasticity and clustered by firm. Variable definitions can be found in the Appendix. We use the ratio between median home value and median household income as a proxy for cost of living at MSA level. TOP40 is equal to 1 if the auditor city is located in the top 40 highest cost-of-living MSAs, and 0 otherwise. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	Predicted Sign	*LNAUDIT*	*LNAUDIT*	*LNNAF*	*LNNAF*
Intercept	?	11.578***	11.294***	9.820***	9.138***
		(15.50)	(15.89)	(5.13)	(4.79)
LNREITSECDIST	-	-0.050***		-0.295***	
		(-2.61)		(-4.69)	
REITSECDUMMY	-		0.0322		-0.811***
			(0.37)		(-2.74)
TOP40	+	0.145	0.190*	0.414	0.504*
		(1.33)	(1.74)	(1.49)	(1.84)
LNTA	+	0.016	0.025	0.328**	0.362**
		(0.16)	(0.26)	(1.99)	(2.18)
SQEMPLS	+	0.014***	0.013***	0.030***	0.028***
		(4.43)	(4.44)	(4.27)	(4.08)
LEV	+	-0.603**	-0.654**	-0.473	-0.549
		(-1.99)	(-2.12)	(-0.54)	(-0.62)
ROA	-	-0.696	-1.412	-0.698	-3.039
		(-0.28)	(-0.58)	(-0.12)	(-0.53)
IO	+	1.649***	1.705***	1.884**	2.099***
		(4.10)	(4.26)	(2.50)	(2.79)
INITIAL	-	-0.369	-0.404	-1.234**	-1.185**
		(-1.38)	(-1.51)	(-2.42)	(-2.27)
BIG4	+	0.538	0.574	0.828	0.933*
		(1.29)	(1.37)	(1.48)	(1.67)
FOROPS	+	0.276*	0.337**	-0.157	-0.054
		(1.73)	(2.12)	(-0.29)	(-0.10)
LOSS	+	0.257*	0.271*	-0.422	-0.398
		(1.75)	(1.86)	(-1.14)	(-1.07)
REVGRO	?	0.310	0.322	0.006	0.138
		(1.49)	(1.54)	(0.01)	(0.24)
BM	-	-0.193	-0.173	-0.685**	-0.678*
		(-1.37)	(-1.23)	(-2.01)	(-1.98)
XDOPS	+	-0.059	-0.081	-0.384	-0.472
		(-0.76)	(-1.02)	(-1.22)	(-1.49)
RESTATES	+	0.524***	0.514***	-0.459	-0.505
		(3.58)	(3.56)	(-0.99)	(-1.08)
RET	-	-0.070	-0.051	-0.314	-0.284
		(-0.24)	(-0.81)	(-0.54)	(-0.48)
LAG	+	-0.009*	-0.009*	-0.014	-0.016
		(-1.74)	(-1.69)	(-0.79)	(-0.90)
Protype		YES			
Year		YES			
N		1,112	1,112	1,112	1,112
RSQ		35.39%	35.21%	20.65%	19.74%

Table 13B: Controlling for cost of living: Audit Fees, Non-Audit Fees, and the Distance between Auditors and SEC Offices

This table presents the OLS regression results on the effects of auditors and SEC distances on audit fees and non-audit fees. The dependent variables are audit fees or non-audit fees. The independent variables are the distance variables between auditors and SEC offices and other control variables. We control for both property type and year fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. Variable definitions can be found in the Appendix. We use the ratio between median home value and median household income as a proxy for cost of living at MSA level. TOP40 is equal to 1 if the auditor city is located in the top 40 highest cost-of-living MSAs, and 0 otherwise. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	Predicted Sign	*LNAUDIT*	*LNAUDIT*	*LNNAF*	*LNNAF*
Intercept	?	10.571***	10.662***	9.330***	9.562***
		(18.12)	(17.63)	(6.19)	(6.49)
LNAUDITSECDIST	-	-0.037**		-0.095**	
		(-2.37)		(-2.08)	
AUDITSECDUMMY	-		-0.315***		-0.808***
			(-3.19)		(-3.39)
TOP40	+	-0.117	-0.168	0.504*	0.372
		(-0.95)	(-1.45)	(1.87)	(1.38)
LNTA	+	0.216***	0.222***	0.116	0.131
		(2.86)	(2.97)	(0.92)	(1.05)
SQEMPLS	+	0.005***	0.005***	0.008***	0.008***
		(8.48)	(8.28)	(4.95)	(4.72)
LEV	+	-0.368	-0.339	0.541	0.614
		(-1.32)	(-1.23)	(0.77)	(0.88)
ROA	-	0.985	0.700	-1.174	-1.905
		(0.95)	(0.67)	(-0.59)	(-0.97)
IO	+	1.177***	1.149***	2.633***	2.561***
		(3.51)	(3.51)	(3.94)	(3.87)
INITIAL	-	-0.438**	-0.445**	-1.602***	-1.621***
		(-1.93)	(-1.96)	(-3.78)	(3.82)
BIG4	+	1.241***	1.209***	-0.143	-0.225
		(4.02)	(3.89)	(-0.35)	(-0.56)
FOROPS	+	0.221**	0.209*	0.787**	0.756*
		(1.96)	(1.90)	(1.96)	(1.89)
LOSS	+	0.172	0.165	-0.031	-0.051
		(1.17)	(1.12)	(-0.10)	(-0.16)
REVGRO	?	-0.804*	-0.809*	0.497	0.485
		(-1.85)	(-1.85)	(1.36)	(1.32)
BM	-	-0.195	-0.192	-0.354	-0.346
		(-1.58)	(-1.57)	(-1.26)	(-1.23)
XDOPS	+	-0.079	-0.077	-0.037	-0.033
		(-0.75)	(-0.74)	(-0.14)	(-0.12)
RESTATES	+	0.561***	0.573***	-0.441	-0.409
		(4.38)	(4.44)	(-1.11)	(-1.02)
RET	-	-0.039	-0.036	0.026	0.033
		(-0.17)	(-0.16)	(0.06)	(0.07)
LAG	+	-0.006	-0.006	-0.007	-0.007
		(-1.39)	(-1.37)	(-0.44)	(-0.45)
Protype		YES			
Year		YES			
N		1,112	1,112	1,112	1,112
RSQ		33.37%	33.59%	17.35%	17.85%

Table 13C: Controlling for cost of living: Audit Fees, Non-Audit Fees, and the Distance between REIT firms and Auditors

This table presents the OLS regression results on the effects of REIT and auditor distances on audit fees and non-audit fees. The dependent variables are audit fees or non-audit fees. The independent variables are the distance variables between REIT and their auditor offices and other control variables. We control for both property type and year fixed effects. P-values (in parentheses) are based on robust standard errors that are adjusted for heteroskedasticity and clustered by firm. We use the ratio between median home value and median household income as a proxy for cost of living at MSA level. TOP40 is equal to 1 if the auditor city is located in the top 40 highest cost-of-living MSAs, and 0 otherwise. T-values are reported in the parentheses. *** indicates 1%-level of significance; ** indicates 5%-level of significance; * indicates 10%-level of significance.

Variable	Predicted Sign	*LNAUDIT*	*LNAUDIT*	*LNNAF*	*LNNAF*
Intercept	?	10.404***	10.812***	8.838***	9.255***
		(18.24)	(19.46)	(5.92)	(6.27)
LNREITAUDITDIST	?	-0.086***		-0.106***	
		(-4.37)		(-3.37)	
REITAUDITDUMMY	?		-0.587***		-0.612**
			(-3.87)		(-2.28)
TOP40	+	0.003	-0.033	0.746***	0.699***
		(0.02)	(-0.27)	(2.94)	(2.77)
LNTA	+	0.218***	0.186**	0.119	0.085
		(2.90)	(2.45)	(0.95)	(0.67)
SQEMPLS	+	0.005***	0.006***	0.007***	0.008***
		(8.52)	(9.53)	(4.71)	(5.24)
LEV	+	-0.419	-0.453	0.480	0.454
		(-1.52)	(-1.64)	(0.69)	(0.66)
ROA	-	1.153	0.818	-1.041	-1.431
		(1.09)	(0.77)	(-0.51)	(-0.71)
IO	+	1.204***	1.306***	2.709***	2.815***
		(3.66)	(3.88)	(4.06)	(4.22)
INITIAL	-	-0.362	-0.343	-1.501***	-1.495***
		(1.60)	(-1.52)	(-3.51)	(-3.51)
BIG4	+	1.273***	1.202***	-0.077	-0.153
		(4.17)	(4.00)	(-0.19)	(-0.38)
FOROPS	+	0.206*	0.242**	0.835**	0.884**
		(1.79)	(2.16)	(2.09)	(2.22)
LOSS	+	0.157	0.135	-0.046	-0.065
		(1.07)	(0.92)	(-0.15)	(-0.21)
REVGRO	?	-0.814*	-0.826*	0.488	0.478
		(-1.92)	(-1.92)	(1.35)	(1.32)
BM	-	-0.177	-0.208*	-0.321	-0.355
		(-1.46)	(-1.71)	(-1.13)	(-1.25)
XDOPS	+	-0.114	-0.121	-0.096	-0.098
		(-1.11)	(-1.16)	(-0.36)	(-0.38)
RESTATES	+	0.547***	0.561***	-0.487	-0.474
		(4.27)	(4.44)	(-1.22)	(-1.19)
RET	-	-0.027	-0.037	0.054	0.044
		(-0.12)	(-0.17)	(0.12)	(0.10)
LAG	+	-0.003	-0.006	-0.003	-0.007
		(-0.77)	(-1.54)	(-0.18)	(-0.41)
Protype		YES			
Year		YES			
N		1,112	1,112	1,112	1,112
RSQ		34.27%	34.26%	17.60%	17.45%