Audit Pricing, Accruals and Firm Value: A Legal Origins Perspective

Jun Zhan

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By: Jun Zhan

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Dr. S. Audousset-Coulier

_____ Examiner
Dr. D. Cormier

_____ Examiner
Dr. S. Fortin

_____ Thesis Supervisor
Dr. M. Magnan

Approved by _____

Dr. H. Bhabra, Graduate Program Director

February 11, 2013_____

Dr. S. Harvey, Dean

John Molson School of Business

ABSTRACT

Audit Pricing, Accruals and Firm Value: A Legal Origins Perspective

Jun Zhan, Ph.D. in Business Administration

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Relying on an conceptual approach that mixes economics and law, La Porta, Lopez-de-Silanes, Shleifer and Vishny (1997, 1998) and *La Porta, Lopez-de-Silanes and Shleifer* (2008) document that legal rules and regulations protecting investors vary systematically among legal origins and related institutions. They further argue and show that such differences do affect various economic outcomes. Relying of the ground-breaking work of LLSV, many studies find extensive evidence on how a country`s legal system affects, among other things, its capital market development, the governance of firms and the properties of accounting information. In that context, the quality of external auditing, which does encompass the pricing of such services, are widely perceived to underlie capital market development, corporate governance and accounting information. However, prior empirical research pays scant attention to the interface between country-level legal systems or macro-economic factors and audit pricing. Thus, whether and how audit pricing is influenced by a country's legal system remain open questions.

Hence, this dissertation purports to shed further light on the pricing of audit services and on the effect of such pricing on the quality of financial reporting, as proxied by accounting accruals, across different legal regimes. I measure accruals as either total accruals or discretionary accruals. In addition, I adopt multiple measures to proxy for a

country's legal institutions, such as rules of law, strength of legal enforcement and investor protection. Using a sample of 23,398 observations on audit fees from 13 countries for the period 1996-2006, I find the following results. Firstly, I find that audit fees are associated with higher accruals across countries. Additional analysis reveals that the fees-accruals association is more likely to be driven by the "Risk pricing" argument, which argues that auditors charge higher fees to compensate for additional engagement risks that are reflected in higher accruals. Secondly, I find that a country's legal regime plays a significant role in audit pricing. Specifically, the positive fees-accruals association is more pronounced for firms from weak legal environments.

In the next stage of analysis, I proceed to investigate the impact of large audit fees on investors' perceived audit independence. I find a significant positive association between audit fees and a firm`s Tobin's Q, and this association is more pronounced under weak legal environment than under strong legal environment. I further test whether excessive audit fees help to predict future profitability or not. My analyses show that audit fees are significantly and positively associated with CFO of next year. These results suggest that abnormally large audit fees are priced by the stock market because they help predict a firm's future profitability, thus providing valuable information to investors.

Overall, my findings lead to the conclusion that auditors charge higher fees to clients with larger accruals for risk-pricing purposes. My analyses do not suggest that such large fees compromise auditor independence. Moreover, the evidence suggests that legal institutions play critical roles in terms of accrual choices and of audit pricing.

Key Words: Audit Fees; Audit independence; Accruals; Firm Value; Investor Protection

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I. INTRODUCTION

Why do accounting and auditing practices vary across countries? The origins of a country's legal system, its institutions, cultural environment, politics, along with historical factors are frequently noted as the primary factors that have led to the wide range of accounting and auditing practices among nations. The law and finance literatures have documented the important role of legal institutions in determining a country's market corporate and governance practices. Recently, accounting research has begun to rigorously test the impact of legal origins on properties of accounting numbers, auditing practices, governance mechanisms, and other issues.

La Porta, Lopez-de-Silanes, Shleifer and Vishny (1997, 1998) and La Porta, Lopez-de-Silanes and Shleifer (2008) document that legal rules and regulations protecting investors vary systematically among legal origins and related institutions, and these differences affect economic outcomes as indicated below:

"Compared to French civil law, common law is associated with (a) better investor protection, which in turn is associated with improved financial development, better access to finance, and higher ownership dispersion, (b) lighter government ownership and regulation, which are in turn associated with less corruption, better functioning labor markets, and smaller unofficial economies, and (c) less formalized and more independent judicial systems, which are in turn associated with more secure property rights and better contract enforcement" (La Porta et al. 2008).

Relying of the ground-breaking work of La Porta, Lopez-de-Silanes, Shleifer and Vishny, many studies show that properties of accounting information are a product of the different legal systems prevalent around the world. In addition, other research shows that

legal origins are important in explaining the variations in specific auditing and governance practices across countries. In the context of audit pricing, the importance of macroeconomic and institutional factors for assessing audit risks and audit pricing has been widely emphasized by classic auditing textbooks and practice guidelines. However, empirical research has paid little attention to examining the role of country-level legal systems or macro-economic factors in audit pricing.

Beginning with Simunic (1980), an extant body of literature has tested cross-sectional audit fee determinants using single-country samples from different countries. Choi, Kim, Liu and Simunic (2008) firstly extended this stream of research by using international data from 15 countries around the world. Choi et al. (2008) point out that "[n]ational-level legal environment are likely to influence clients' reporting incentives and auditors' assessments of audit risks, which in turn affect the auditors' effort choices and audit fees." They find that the significant variances in legal regimes between nations drive the cross-country differences in audit fees, suggesting a country's legal regime is a critical determinant of audit fees. In their study, Choi et al. (2008) use a single measure, the litigation risk, to proxy for legal environment of a country.

Although Choi et al. (2008) has moved the audit fees study one step forward, the role of legal environment in audit pricing still largely remains unknown: does a country's other legal institutions (e.g., rule of law, strength of legal enforcement, investor rights protection) influence audit pricing? And how do legal institutions influence audit pricing? This dissertation aims to shed light on these questions.

To examine the role of legal institutions in the process of audit pricing, I specifically developed three following research questions: (1) Do auditors take into

account clients' accruals when pricing their services? (2) Does a country's legal institution influence the association between audit fees and accruals? (3) Do investors view large audit fees as implying impaired audit independence and lower audit quality? The first research question examines the link between an auditor's assessments of risk and client's accrual level. The second research question explores the role of legal institutions in the process of audit pricing. This is because a nation's legal environment provides different reporting incentives to managers, which transpose into a firm's accruals.[1] Auditors thus assign different audit risk multiples to accruals reported by firms from different legal environments, which in turn affect audit pricing. Finally, the third question investigates the economic outcomes of audit pricing.

Stated another way, this study explores an auditor's pricing behavior with cross-country data, and tests whether and how strength of legal institutions appears to be an important determinant of audit fees. Therefore, Legal Origins Theory is an appropriate and fundamental theoretical basis for the study. I propose a theoretical framework of the study as following, illustrated in FIGURE 1 below.

[INSERT FIGURE 1 HERE]

I briefly introduce motivations, hypothesis development, research design, main findings and contributions of the dissertation below.

Motivations and research questions

As discussed above, prior research finds extensive evidence on how legal systems impact capital market development, corporate governance, accounting information

[1] For example, Huang (2001) and Leuz (2003) both find that managers are more likely to use accounting discretion opportunistically in weak legal regimes. Then auditors may assess accruals with higher possibilities of earnings manipulation as greater audit risk.

properties etc., and little empirical evidence is found on the role of legal institutions on auditing practices. Thus, whether and how audit pricing is influenced by a country's legal system remain to be open empirical questions. One purpose of this dissertation is to fill this gap by exploring the fees-accruals association across different legal regimes.

Another motivation of this dissertation is to enhance understanding of audit services by reexamining the association between audit fees and accruals. As early as the 1980s, both Simunic and DeAngelo pointed out that one impediment to understanding audit service is the ambiguity of the relationship between auditors, audited firms and external financial statement users. On the one hand, to comply with codes of ethics, auditors must uphold their independence and objectivity. On the other hand, auditors are hired and compensated by their clients. Such a relationship between auditor and client creates an inborn problem of independence to auditors. In response, many users appear to misunderstand the role of auditor and the nature of audit service.

In practice, audit independence has been perceived as threatened by economic dependence of auditors on clients. After a series of high-profile financial scandals around the year 2000, audit independence and audit quality have been widely doubted by the market. The Securities Exchange Commission ("SEC") stated its concern that additional fees obtained by auditors through excessive high audit fees and provision of non-audit service may further increase the auditor-client economic bond and erode audit independence (both in-fact and in-appearance).[2] In order to rebuild investors' confidence on audit quality and capital market, Congress enacted the Sarbanes-Oxley Act of 2002

[2] The SEC issued Final Rule S7-13-00, Revision of the Commission's Auditor Independence Requirements in November 2000 ("SEC 2000"), which requires firms to disclose amount and types of audit fees paid to auditors.

("SOX 2002") to impose mandatory restrictions on auditors providing non-audit services to clients.

Along with this concern, a long line of accounting research looks into the relationship between audit fees and financial reporting quality by examining whether the potential fee-induced economic bond erode audit independence. Theoretically, audit fees are linked to earnings quality through their association with audit independence. Auditing services are believed to provide assurance to reliability and faithfulness of financial statements, which lend additional credibility to a firm's financial reporting. Thus, the higher level of audit independence, the higher level of audit quality, and the higher level is the earnings quality (Becker et al. 1998). Prior studies testing fees-quality association use audit fees to proxy for audit independence. Most of these studies adopt the long-standing "economic bonding" theory, which argues that audit independence is threatened by economic dependence of an auditor on client fees. Auditors with excessive audit fees have great economic dependence on clients and may have greater propensity to compromise audit independence, which consequently leading to lower earnings quality. Therefore, in prior studies, high level of audit fees was used to proxy for great economic bond and low audit independence.

Nevertheless, empirical studies over the past several decades fail to provide consistent results on the perspective that audit fees are related to impaired audit independence. On the one hand, a number of studies document a significant negative association between audit fees and different measures of earnings quality, supporting the perspective that audit independence is impaired through fee dependence (e.g., Frankel et al. (2002), Sengupta and Shen (2007), Choi et al. (2010), etc.). On the other hand, another

stream of studies documents opposing results and finds a significant positive association between audit pricing and earnings quality. For example, Srinidhi and Gul (2007) argue that higher audit fees should represent more audit effort and show a significant positive association between audit fees and accruals quality. In addition, there still exists a few studies which fail to find any significant relationship between the two, such as DeFond et al. (2002), Ashbaugh et al. (2003) and Larker and Richardson (2004).

With regard to the mixed findings on the association between audit fees and earnings quality, this study is to revisit the relationship between audit fees and accruals and contribute to the literature in this arena. To enhance understanding of auditor pricing behavior, this study further explores two subsidiary questions: what is the association between audit fees and accruals? If there exists a significant relationship, why are audit fees associated with accruals?

To sum up, this dissertation is motivated by two goals. One goal is to meet research gap in which there is a lacking of research concerning the role of legal institutions on audit pricing. The other goal is to enhance our understanding on audit service by re-investigating the association between audit fees and accruals, and to add new evidence to mixed results in most previous research. Specifically, I investigate the following research questions:

(1) Do auditors take into account clients' accruals when pricing their services?

---- What is the association between audit fees and accruals?

---- Why are audit fees related with accruals?

(2) Do a country's legal institutions influence the fees-accruals association?

(3) Is audit independence in-appearance, as assessed by investors, impaired by large audit fees?

Hypotheses development

The link between audit fees and accruals can be explained by two alternative ways: the "economic bonding" theory and "risk pricing" reasoning. Economic bonding theory argues that audit independence is threatened by economic dependence of an auditor on client fees. Excessive audit fees provide auditors incentives to acquiesce to client's pressure and compromise audit independence, which in turn lower earnings quality. The economic bonding theory suggests that the positive fees-accruals association is due to impaired audit independence.

In this study, I adopt the "risk pricing" reasoning, which argues that auditors assign higher audit risk to firms with higher accruals and thus charge a higher fees. Along with "risk pricing" reasoning, there are at least four reasons that explain why audit fees are expected to positively related with accruals. First, different from other accounting items, accruals are hard to detect and audit (Gul et al. 2003, Francis and Krishnan 1999) and may need more hours and effort. Second, increased levels of accruals represent increased engagement uncertainty and risk (Simunic and Stein 1996). For example, auditors may plan increased effort and billing rates (audit specialization) for clients with earnings manipulation risk (Bedard and Johnstone 2004). As a result, auditors charge larger fees to conduct more hours of audit to decrease detection risk to an acceptable level and /or simply charge a higher fee premium to compensate for potential future litigation. Third, abnormal accruals increase the likelihood of firm-level litigation risk

(Boone et al. 2011). Auditors may therefore pass the cost of higher risk to their clients by charging higher fees. Fourth, some companies use accounting discretion for legitimate reasons while other companies may misuse their discretion to manipulate earnings, and it's up to auditors to distinguish accounting discretion from management opportunism. This decision requires additional work and thus greater fees (Schelleman et al. 2010). Based on these arguments, I make my first prediction, which is audit fees are positively associated with accruals.

The role of legal institutions on the fees-accruals association could be understood by looking at the impacts of a nation's legal system on a manager's reporting incentives and an auditor's assessment of risks. The same magnitude of accruals could be reflective of two different types of reporting incentives. Managers have certain degree of discretion and flexibility in reporting their financial performance, which is allowed and encouraged by accrual-basis accounting.[3] Managers may opportunistically use these flexibilities to manipulate earnings, or they may choose to communicate private value-relevant information to stakeholders. As a result, accruals may be reflective of earnings manipulation or accounting discretion with legitimate reasons. Accruals used for opportunistic reasons are more likely to be assessed with higher inherent risk by auditors and thus higher audit fees than accruals used with legitimate reasons. This is because opportunistic accruals are less likely than informational accruals to be subsequently realized into cash flows. One way of capturing these two different types of accruals is to investigate a manager's reporting incentives which influence the likelihood that accruals will be subsequently realized (Gul et al. 2003).

[3] Accrual basis accounting increases the relevance and timeliness of accounting to better capture business essence than cash basis accounting.

In this dissertation, I use country-level legal institutions to capture a manager's different incentives on earnings management across countries. In their international studies, Huang (2001) and Leuz (2003) both find that managers are more likely to behave opportunistically in an environment with weak investor protection rights. This is because under such an environment, managers have more incentives to expropriate interests from outsiders and to mask firm performance.

As such, in countries with weak legal regimes, managers have more incentives and possibilities to opportunistically manipulate earnings. This type of earnings is less likely to be consequently realized, which is assessed by auditors with higher inherent risk and thus result in larger audit fees. Thus, my second prediction is that country-level legal institutions have impacts on the association between audit fees and accruals. Specifically, the positive fees-accruals association becomes more pronounced for firms from weak legal regimes.

Main results

Given the above background, this study aims to test the association between audit fees and accruals, and how the fees-accruals association varies when legal regime shifts across countries. Following prior studies examining the linkage between audit fees and earnings quality, I use two alternative ways to measure accruals, the total accruals and discretionary accruals. In addition, I use multiple measures to proxy for a country's legal institutions, such as rules of law, strength of legal enforcement and investor protection. Using a sample of 23,398 observations on audit fees from 13 countries for the period 1996-2006, I find the following results:

First, I find that audit fees are significantly and positively associated with measures of accruals for the full sample across countries. This result strongly supports my first hypothesis, suggesting that the magnitude of accruals is positively associated with audit fees. In addition, this finding adds additional evidence to the mixed results of previous research examining the association between audit fees and accruals, by documenting a positive fees-accruals association (e.g., Frankel, Johnson and Nelson 2002, Kinney, Palmrose and Scholz 2004). Second, I find the positive association between audit fees and accruals are further magnified when firms are from weak legal regimes. This is consistent with my second hypothesis, implying that the fee premium associated with increased level of accruals is stronger for firms in countries with weak legal institutions. This finding is also consistent with the "risk pricing" reasoning for my first hypothesis. This is because, if the positive fees-accruals association is due to economic bond between auditor and client, then clients from counties with strong legal regimes need to pay greater additional fees to "bribe" auditors since auditors have higher possibilities to be caught and once being caught the penalties will be much more expensive under such legal environments. If this is the case, the positive fees-accruals association should be further strengthened under strong legal environments other than from weak legal regimes.

In addition to testing the relationship between audit fees and accruals, I further investigate the causality for the association: why are audit fees positively associated with accruals? Is it due to "economic bonding" between auditor and client? Or is it mainly driven by "risk pricing" reasoning? To disentangle these two theories, I run an additional test. I partition the full sample into two sub-groups based on the sign of discretionary accruals: positive discretionary accruals sample (income increasing) and negative

discretionary accruals sample (income decreasing). If the fees-accruals association is driven by lack of audit independence, then firms with income increasing accruals may have greater incentives to "bribe" auditors compared to firms with income decreasing accruals. In response, I should observe the following: (a) stronger association with the positive accrual sample and/or (b) little or insignificant association with the negative accruals sample. I find significant and positive association between audit fees and accruals for both groups and the association is not statistically smaller for the negative accruals sub-sample. These results do not support the view that lack of independence is the source of higher magnitude of accruals. Based on this analysis, I argue that the positive association between audit fees and accruals is more likely driven by the "risk pricing" reasoning, which posits that auditors charge higher fees to conduct more audits or to compensate for greater risk for clients with higher level of discretionary accruals. In other words, my findings do not support the view that independence in-fact is impaired by excessive audit fees.

I also investigate the impacts of the Big 4 auditors on the fees-accruals association across different legal regimes. As in many previous studies, the Big 4 auditors are found to play a critical role in audit pricing (e.g., Choi et al. 2008, Francis and Taylor 1995, DeFond et al. 2000) and exert significant impacts on accruals (e.g., Becker et al. 1998, Choi et al. 2003). My results show that the Big 4 auditors charge a greater fee premium to firms with high accrual levels than non-Big 4 auditors do. More interestingly, I find that the Big 4 auditors charge greater fee premiums to firms with higher accruals, and these premiums are even bigger for firms from countries with weak investor protections.

Further, I conduct a variety of robustness checks to see whether my results are sensitive to alternative fee metrics used, alternative measures of legal institutions employed and potential endogeneity bias. I find that these results are largely consistent with my major findings and lend additional support to my hypotheses.

Additional results

In my first stage of analysis, I use magnitude of accruals to proxy for audit independence in-fact and test its association with audit fees. I find a positive association between audit fees and accruals, and further analysis suggests this association is more inclined to be driven by "risk pricing" reasoning rather than "economic bonding" arguments. In practice, audit independence has been perceived as threatened by economic dependence of audit fees on clients. Contrary to common belief, my results do not suggest that excessive audit fees reduce audit independence in-fact.

In my second stage of analysis, I extend the previous analysis by examining whether audit independence in-appearance is impaired by large audit fees. Stated another way, do investors view large audit fees as impairing audit independence and lowering audit quality? Examining the economic consequences of audit fees in the context of firm valuation, I use Tobin's Q to proxy for investor's perception on audit independence (or audit independence in-appearance). Following the common belief, if investors view large audit fees as greater economic bond between auditor and client, bigger possibilities for auditors to succumb to client pressure (Nelson et al. 2002) and thus impaired audit independence, then credibility of financial reporting will decrease, information risk will

increase and firm valuation will be discounted. I therefore predict a negative association between excessive audit fees and firm value.

I find firms with large audit fees actually enjoy higher firm valuation. Stated other way, investors attach a positive value to firms with higher audit fees. In addition, I find the country-level legal regime plays an important role in the association between audit pricing and firm value. Specifically, the valuation premium assigned to large audit fees is bigger for firms from countries with weak legal institutions. This result can also be interpreted in such a way that firm-level governance mechanisms, such as audits with high quality, and country-level governance mechanisms, such as rule of law or investor protection strength, play a substitutive role (other than a complementary role) in firm valuation.

This evidence of the market attaching higher value to firms with large audit fees can be interpreted with two scenarios. Firstly, investors are misled and the finding of pricing of large audit fees (measured by unexpected audit fees, or UAF) is the evidence of market mispricing. Secondly, on average, managers may legitimately use their accounting discretion to convey private information about future profitability to investors, and accruals thus capture managers' incentive to communicate proprietary information. As such, the fee premium charged by auditors for clients with higher level of accruals may actually reflect value relevant information to investors. And this explains why investors attach a positive value to UAF.

To distinguish between the two alternative explanations, I further test whether UAF helps to predict future profitability. My finding shows that UAF is significantly associated with a firm's future CFO, which is consistent with the second scenario. In

addition, I also find that the ability of UAF to predict future CFO is more pronounced for firms from countries with civil law or weak legal enforcement and investor protections. Taken together, my results do not support the market mispricing view.

Taken as a whole, I find the primary results as following: (1) Audit fees are positively associated with accruals. (2) The fees-accruals association varies when legal regimes shift across countries. Specifically, the positive fees-accruals association is more pronounced when firms are from weak legal regimes. (3) The market attaches positive value to firms with large audit fees. (4) The valuation premium associated with large audit fees is further magnified when firms are from weak legal regimes. (5) Excessive audit fees help to predict future cash flows. (6) The Big 4 charge bigger fee premium for clients with large accruals. (7) The Big 4's fee premium assigned to clients with large accruals is further magnified when clients are from weak legal regimes.

Contributions

This dissertation contributes to literature in the several notable ways. First, this study contributes to the literature on the role of legal institutions on audit pricing. As noted by Choi et al. (2008), there is a great lack of research concerning the impacts of legal regimes on audit pricing behavior. Choi et al. (2008) investigate determinants of audit fees with international data. In addition to the common fee determinants (such as client size, client complexity and risk) documented in extant auditing literature, they firstly show that the significant differences of legal environments can help explain the variances of audit fees across countries, and they further point out that legal regime is another key determinant of audit fees. In their study, Choi et al. (2008) use only the

single proxy to measure the strength of legal environment, which is the litigation risk of a country (Wingate Litigation Index 1997).[4] Although Choi et al. (2008) move the audit fees studies one step forward, the way through which legal institutions affect audit pricing largely remains unknown: Do other legal institutions (litigation risk captures only one aspect of legal regimes) impact audit fees? And how? To fill this gap and to extend Choi et al. (2008), I use three alternative measures to proxy for legal institutions. I not only consider the impact of rule of law, but also take into account the strength of investor protection rights and legal enforcement. In addition, I include another measure that is CLUSTER, which summarizes a country's legal institutional characteristics in different dimensions, to proxy for equity market development, ownership structures, strength of investor rights and legal enforcement. I argue that I measure legal environments in a more comprehensive way and therefore my results yield greater reliability and generalization.

More importantly, to enhance our understanding of auditor pricing behavior, I examine whether auditors take account magnitude of accruals into pricing decisions across countries. To the best of my knowledge, this is the first study to test the fees-accruals association under an international environment. With data from 13 countries, I am able to investigate how the fees-accruals association varies when legal and institutional environment changes significantly across countries. Prior studies in this area typically use single country samples from countries that maintain strong legal regimes, such as the United States, United Kingdom and Australia. My data considers legal regimes varying from weak (such as Malaysia) to strong (such as US), and thus provides

[4] The Wingate Litigation Index (1997) is a risk rating across countries developed by an international insurance underwriter for one of the Big 4 accounting firms. The rating represents the "risk of doing business as an auditor" in a specific country.

better opportunity to observe the audit pricing behavior under different legal regimes. My study shows that when making pricing decisions, auditors include country-level legal regime into consideration, and the strength of legal institutions tend to influence the way that auditors price accruals.

Secondly, this study contributes to the line of research examining the association between audit fees and earnings quality. Most previous research fails to yield a consistent result on the association between audit pricing and earnings quality. My findings add to the mixed results and suggest there is a positive association between audit fees and accruals. In addition, I extend my analysis to explore the causality between audit fees and accruals. In particular, why audit fees are positively associated with accruals? My results shed light on the unresolved causality issue in most previous studies, and do not the support the view that the positive association between audit fees and accruals is driven by impaired audit independence. Taken together, findings of this study may provide useful insight into contradictory literature and current regulatory debates on auditor's economic dependence on clients.

Thirdly, evidence in this study may enhance understanding in the nature of audit service. The results are inconsistent with several pervasive views on audit fees and audit independence. I find that (1) the observed positive association between audit fees and accruals should be interpreted with an alternative explanation other than the longstanding "economic bonding" theory. My results support the view that auditors assign higher fees to clients with large accruals because they perceive greater audit risk with such clients. As a response, an auditor may charge additional fees to cover additional work needed or to compensate for increased potential risk. This finding adds to the recent emerging

literature, showing that auditors are responsive to increased level of accruals (e.g., Schelleman et al. 2010). I also find that (2) large audit fees have been attached with market value, which is contradictory to SEC's concern and argument that excessive audit fees may erode an auditor's independence-in-appearance. Additionally, I find the fact that large audit fees are priced by the market is because audit fees can improve value relevance of reported earnings and help predict future profitability.

Finally, findings of this study may be interesting to government policy makers and standard setters. The turbulent events of global financial crisis have highlighted the critical importance of credible, high-quality financial reporting throughout the world. To enhance the quality and uniformity of accounting and auditing practice across the world and strengthen the public confidence in global financial reporting, the International Accounting Standard Board ("IASB") and International Auditing and Assurance Standards Board ("IAASB") are working to develop a single set of high-quality globally accepted international financial reporting standards ("IFRS") and international standards on auditing ("ISA"). Recent studies show evidence of improved financial reporting quality and reduced cost of equity capital with implementing IFRS (Li 2010).

Despite the great incentives of IASB and IAASB, the goal of harmonizing accounting and auditing standards internationally may be hard to achieve in a world of diverse legal systems, considering the impacts of local legal systems, practice and enforcement. As a result, even introducing the same accounting and auditing standards around the globe would not guarantee the same level of financial reporting quality across countries because each country's legal system may have different enforcement power and implementation processes. Along with other studies, this study provides new evidence on

the significant impacts of a nation's legal regime on auditor behavior. Specifically, this study shows how a country's legal and institutional environment influence managers' financial reporting incentive and thus auditors' assessments of audit risks, which consequently affect audit fees.

To sum up, my findings have following implications: different from prior research, most of which use accrual measures to identify "bad behavior" of managers, this study shows that managers can choose to convey value-relevant information to investors through discretionary accruals with the given flexibility of GAAP. Accounting accruals are hard to audit and raise higher engagement risk to auditors. Auditors have the best position to access proprietary information and assess client's accrual level, and thus incorporate their assessment into additional audit fees. As a result, these additional fees actually capture managers' value-relevant information, which is value relevant and helps predict future profitability. Investors can see through this phenomenon and finally price it.

With regard to different audit pricing mechanism across countries, a country's litigation risk is a key determinant of audit fees. In addition, a country's legal environment may influence a manager's reporting incentive and accrual choices. This is reflected into an auditor's assessment of audit risks and thus affects audit fees. Therefore, country-level legal regimes play a critical role on the association between audit fees and accruals.

Referring to the economic consequences of large audit fees in the context of firm value, large audit fees are attached with value by the market and the valuation premium is further magnified when firms are from weak legal regimes. This could also be interpreted as the firm-level governance mechanisms, such as high quality audit, and country-level

governance mechanism, such as rule of law or legal regimes, play a substitutive role (other than a complementary role) in firm valuation.

II. THEORETICAL FRAMEWORK:

Legal Origins, Accounting Information and Corporate Governance

The theoretical basis of this thesis is based on Legal Origins Theory. Thus, in this section, I summarize the main studies in this area and the research linking the legal origins to accounting information properties, auditing practices and corporate governance as well.

2.1 Legal Origins Theory

About a decade ago, La Porta, Looez-de-Silanes, Shleifer and Vishny published a series of papers investigating legal origins and its economic consequences. Their studies document that legal rules protecting investors vary systematically among legal origins (i.e., common law vs. civil law), and these differences matter to economic outcomes (such as financial development, ownership structure, firm valuations, etc.).[5]

Most legal scholars identify two primary secular legal traditions: common law and civil law, with the latter having four sub-traditions: French, German, Socialist, and Scandinavian. Through conquest and colonization, common and civil law were transplanted into much of the world. Countries using common law include England and its former colonies, including the United States, Canada, Australia, South Africa and India. According to Mahoney (2001), "English common law developed because landed aristocrats and merchants wanted a system of law that would provide strong protections for property and contract rights, and limit the crown's ability to interfere in markets." The civil law legal tradition, however, originates in Roman law, which employs statutes and

[5] More specifically, La Porta et al. (1997, 1999, 2000) find that stronger investor protection laws lead to more developed financial markets. More developed financial markets are more likely to have greater external financing needs and opportunities, and more widespread ownership structure.

comprehensive codes, and relies heavily on legal scholars to determine the formulate rules. Contrary to common law, "French civil law developed as it did… to use state power to alter property rights and attempted to insure that judges did not interfere" (Mahoney 2001).

Generally speaking, the fundamental differences between common and civil law origins are that common law tends to favor private control outcomes, while civil law leads to state-desired allocations. In addition, common law is "dispute resolving", while civil law is "policy implementing." Finally, common law stands for "unconditioned private contracting", while civil law stands for "socially-conditioned private contracting."

La Porta, Lopez-de-Silanes, Shleifer and Vishny show how the different legal systems have survived and developed, and how the legal origins of countries and jurisdictions have pervasively influenced various aspects of their laws and regulations, which have greatly influenced their economic growth. In their review of their own paper and related research on the effects of the legal origins on institutions (laws and regulations) and institutions' impact on economic outcomes, La Porta, Looez-de-Silanes and Shleifer (2008) find that the economic consequences of legal origins are pervasive and substantial. They argue that compared with French civil law, "common law is associated with (a) better investor protection, which in turn is associated with improved financial development, better access to finance, and higher ownership dispersion, (b) lighter government ownership and regulation, which are in turn associated with less corruption, better functioning labor markets, and smaller unofficial economies, and (c) less formalized and more independent judicial systems, which are in turn associated with

more secure property rights and better contract enforcement" (La Porta, Looez-de-Silanes and Shleifer 2008).

There are, however, two main criticisms against Legal Origins Theory. First, there may be reverse causality of the impacts of legal origins on financial development: under political pressure from those investors, countries improve their investor protection laws when their financial markets develop. Second, there might be omitted variables, which mean that legal origins' influence on financial development may not be through legal rules but other channels, such as contract enforcement and the quality of the judiciary. Despite these objections, La Porta, Looez-de-Silanes and Shleifer (2008) believe that legal rules and regulations differ systematically across countries and the differences are largely due to legal origins; legal origins explain well why legal rules differ; and the measured differences in legal rules have substantial economic outcomes.

2.2 Legal Origins and Accounting Information Properties

With respect to Legal Origins Theory and the availability of La Porta et al. (1997)'s legal variable data, a substantial volume of literature has investigated the properties of accounting information in a cross-country setting. Overall, these studies support that legal origin and its related institutions play an important role in explaining different accounting properties across countries. Previous studies mainly examine the following aspect of accounting information properties: (1) earnings management; (2) accounting conservatism; (3) value relevance of accounting information; and (4) corporate disclosure practices.

Earnings management

According to Healy and Wahlen (1999), reporting flexibility allows managers to convey their private information about business prospects to stakeholders. And GAAP of any country provides a range of discretion in accounting choices to managers. Nevertheless, managers may take advantage of reporting flexibility and discretion to manipulate earnings for their own self-interest. Studies show that earning management occurs across countries and investor protection plays an important role in constraining earnings management around the world.

An example of how legal regimes can influence accounting practices is shown in work of Leuz, Nanda and Wysocki (2003), who document that earnings management behavior is more pervasive in weak legal regimes. They argue that strong and well-enforced outsider rights limit insider's possession of private control benefits and thus reduce insider's incentive to mask firm performance. In their analysis of systematic differences of earnings management behavior across 31 countries, they find that firms in countries with stronger investor rights and legal enforcements, tend to have more developed stock markets and dispersed ownership structure appear to have lower level of earnings management. However, Bhattacharya, Daouk and Welker (2003) fail to find any significant association between legal origin and earnings opacity measures, in contrast to Leuz et al. (2003)'s finding that earnings management measures are significantly and positively correlated with investor rights.

Using a comprehensive sample of both public and private European firms, Burgstahler, Hail and Leuz (2006) find that earnings management is more pervasive in private firms than in public ones and in countries with French and German legal

traditions, which originated from civil law, a legal system that is considered to provide weaker investor protection. Lang, Raedy and Wilson (2006) find that cross-listed non-US firms from weaker legal regimes tend to have greater tendency to manage earnings and reduced value relevance of accounting information. Haw et al. (2004) find a significant and negative association between control-cash flow divergence measures, such as voting rights vs. cash flow rights, and income management proxy in common law countries with stronger investor protection. They also observe that it is not just legal institutions that constrain earnings management, but that it can be reduced by extra-legal institutions, such as tax compliance.

Generally speaking, prior research shows that investor protection plays an important role in mitigating earnings management behavior around the world.

Accounting conservatism

According to Basu (1997)'s interpretation of conservatism, earnings reflect bad news more quickly than good news, since accountants are more likely to require a higher degree of verification for recognizing good news than bad news. Watts (2003a, 2003b) reviews the empirical evidence concerning accounting conservatism and proposes four possible explanations for prevalence of conservatism, which are contracting, litigation, taxation and regulation.

Influenced by these studies, there is a growing literature investigating the role of legal protection on accounting conservatism. For example, Ball et al. (2000) find that accounting is conservative in all their sample countries, while the magnitude of conservatism is higher in common law countries. Common law countries are

characterized with more dispersed ownership, and information asymmetry in these countries solved through publicly disclosed accounting information. Thus stakeholders demand more conservative accounting to protect themselves. On the other hand, civil law countries with more concentrated ownership resolve information asymmetry by developing a closer relationship with stakeholders, which reduces the demand for both public accounting information and accounting conservatism. Ball et al. (2007) investigates the primary reasons for accounting conservatism. Their results find a significant and positive relation between debt market size and timely loss recognition measures, which support the perspective that accounting conservatism is mainly driven by contracting motivation.

Generally speaking, primary findings of literature in this stream show that firms in common law countries incorporate economic losses earlier than firms in civil law countries.

Value relevance

There is a growing literature investigating the role of legal institutions on value relevance of accounting. For example, Ali and Hwang (2000) investigate the relationship between the value relevance of accounting information and country-level institutional factors. They find that value relevance of financial reporting is lower for countries with bank dominated economy, with high tax-book conformity, with low spending on auditing, with private sector bodies are excluded in accounting standard, with accounting practices following continental model. Hung (2001) investigates the role of investor protection on value relevance of accrual accounting. She argues that the use of accruals provides

managers the opportunity to manage earnings, which is exacerbated by weak investor protection. And she finds in countries with weak investor protection, accrual choices are negatively associated with value relevance of accounting information. Furthermore, this negative association is alleviated in strong investor protection regime. Her findings support that investor protection improves the effectiveness of accrual accounting.

DeFond, Hung and Trezevant (2007) examine the cross-country differences in market reaction to earnings announcements, and thus find that annual earnings announcements have greater information content in countries with stronger investor protection.

Young and Guenther (2003) propose that information disclosure will make acquiring a company's specific information less costly and thus result in increased foreign investment, and thus find support for this proposition: a significant positive association between legal origins and disclosure level. Thus, the strong legal protection offered to foreign investors may drive the international capital mobility.

To sum up, international studies concerning value relevance of accounting show that accounting information is more value relevant in countries with strong investor protection.

Corporate disclosure

Jensen and Meckling (1976) propose that due to the dispersion of ownership, it is costly for each shareholder to monitor the managers who have a tendency to become entrenched and expropriate investors' benefits. In order to solve this agency problem, optimal contracts between managers and investors require disclosure of relevant

information to help investors evaluate managers' performance. Healy and Palepu (2001) point out as well that public disclosure plays a critical role in the efficient functioning of capital market by mitigating agency conflicts between managers and dispersed investors. Bushman et al. (2004) document that corporate transparency, defined as the availability of firm specific information to the outside publicly traded firms, is higher in countries with a legal system based on common law combined with a highly efficient judiciary.

Shi, Magnan and Kim (2012) employ a costs-and-benefits framework to investigate the determinants and consequences of voluntary disclosure practices by foreign firms cross-listed in the US. The results show that a firm's home-country legal institutions play a key role in determining its voluntary disclosure and governance practices when the firm transfers into US capital market. Specifically, likelihood of voluntary disclosure increases as cross-listed firms are from stronger home-country institutions, lower home-country-level ownership concentrations, and greater levels of product internationalization.

Overall, cross country evidence show that legal origins are important in explaining the variation in disclosure levels.

2.3 Legal Origins and Audit Practices

In the line of international auditing research, a number of emerging studies test the issue how auditing practices, such as audit quality, audit pricing and audit demand, differ based on different legal systems. For example, Choi et al. (2008) provide cross country evidence on audit pricing. In their analysis, they use the Wingate Litigation Index as a proxy for legal regime. They find a country's litigation risk is important to audit

pricing and they find that audit fees increases as the country-level litigation risk strengthens. They also point out the Big 4 auditors charge a fee premium in a given legal environment and the Big 4 fee premium decreases as the legal regime becomes stronger.

Jaggi and Low (2009) revisit the issue regarding the association between institutional environment and audit fees. They argue not only investor protection rights can impact audit fees, securities regulation shall also be taken into consideration. Similar to Choi et al. (2008), they find that audit fees is positively associated with investor protection, which is captured by La Porta et al. (1998)'s anti-director rights index. Furthermore, they document that stricter securities regulation is associated with higher audit fees, especially in countries with lower investor protection. And they do not find such an association in countries with high investor protection.

Focusing on earnings quality, Francis et al. (2008) investigate Big 4 audit quality based on country-level investor protection regimes. This paper mainly tests whether the role of the Big 4 vs. non-Big 4 in improving earnings quality varies with the different investor protection regimes of various countries. It shows that only the Big 4 increase their audit quality as legal and regulatory regime becomes stronger. Non-Big 4 auditors, however, do not change their quality significantly whether or not a country has a weaker or stronger legal system.

With regard to auditor industry specialization, Kwon, Lim and Tan (2007) find that industry specialist auditors impose higher accrual quality and earnings response coefficient to their clients around the world. They show the impact of auditor industry specialization on earnings quality depends on the strength of legal environments, and the effect of industry specialization is more salient in weaker legal regime.

In their study of private demand of audit in both developed and developing countries, Francis, Khurana, Martin and Pereira (2008) document that country-level institutional factors are important to explain the differences in voluntary audits.

2.4 Legal Origins and Corporate Governance

A number of studies document cross-country variations in accounting practices and that the effects of accounting and corporate governance are associated with country-level institutional factors (e.g., La Porta et al. 1998, 2000; Hung 2000; Leuz et al. 2003; Francis et al. 2003). In addition, some finance research find that legal institutions matter a lot to corporate governance practices. For example, Durnev and Kim (2005) and Doidge, Karolyi and Stulz (2007) both investigate the role of country-level factors and firm-level incentives in determining a firm's governance structure.

Durnev and Kim (2005) argue that firm-level governance mechanisms and country-level institutions are substitutes. Firm-level incentive is more important to firms in countries with weak investor protection, and voluntary improvement in governance can serve as a substitute for weak institutions. On the other hand, in countries with strong investor protection, country-level institutions can provide sufficient protection for contracting parties (i.e., bankruptcy protection), and thus investors have less to gain from voluntary governance improvement. Durnev and Kim (2005) find that firms with greater growth opportunities and greater financing needs have higher-quality governance and disclose more in weak legal regimes. Similarly, Fan and Wong (2004) find that in the low investor protection regimes of the emerging economy, firms with more agency problems and financing needs are more likely to employ Big 4 auditors. Choi and Wong (2007)

examine whether the governance role of auditors is based on the strength of a country's legal system and conclude that external auditors generally play a more important governance function in countries with weak legal institutions.

Doidge, Karolyi and Stulz (2007) support the notion that firm-level incentives and country factors are more likely to be complements. They argue the net payoff of governance structure improvement is lower in weak legal regime countries due to lack of credibility. Doidge, Karolyi and Stulz (2007) find that firm factors are more important in developed economies with strong institutions.

2.5 Conclusion

Based on numerous prior studies, there exists great impacts of legal origins and related legal institutions on the properties of accounting information (e.g., earnings management, accounting conservatism, value relevance, and corporate disclosure), auditing and corporate governance practices. This dissertation aims to investigate the role of legal origins and related institutions on audit pricing. Therefore, in an international study context, the country-level institutions and their impacts should be taken into consideration.

In their review of how the economic effects of financial accounting information vary with other factors, Bushman and Smith (2001)[6] propose a theoretical framework to link the financial accounting regime and other institutional characteristics. These institutional characteristics include the auditing regime, the communication infrastructure, analyst following, the financial architecture, the legal environment, corporate control

[6] Bushman and Smith (2001) propose that cross-country analyses are one promising way to assess the effects of financial accounting information on economic performance.

mechanisms, industry concentration, political influence over business activities and human capital.

Among all the above-mentioned institutional characteristics, this dissertation focuses on specifically audit fees and legal institutions, investigating how they jointly affect financial reporting quality and firm valuation. Based on Bushman and Smith (2001)'s framework, I explore the conceptual model for this study, as depicted in FIGURE 1.

The conceptual model illustrates the relationship among audit pricing, legal institutions and a manager's accrual choices. A country's legal institutions influence a manager's reporting incentives and thus auditor assessment of risks, which in turn affects audit fees and the fees-accruals association. In addition, with regard to the economic consequences of large audit fees in the context of firm value, this study jointly examines the roles of a nation's legal institutions and audit fees in market valuation.

[INSERT FIGURE 1 HERE]

III. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

In this section, I review prior studies related to the dissertation topic and categorize literature review with following four streams of research: (1) determinants of audit fees; (2) unexpected audit fees; (3) audit fees and earnings quality; and (4) legal regime and auditing. Using the exhaustive review on prior studies as conceptual foundations, I put forward research hypotheses at the end of this section.

3.1 Audit Fee Determinants

In this section, focusing on a number of milestone audit fee studies, I review the development of audit fee model and the history of increasing population of audit fee determinants.

Over the past three decades, a large body of research has examined the determinants of audit fees mostly following original work by Simunic (1980). Simunic (1980) hypothesized that certain determinants would be related to cross-sectional differences in the level of audit fees, since such determinants drive an auditor to carry out more or less work when conducting the audit. After discussing with representatives of Big 8 accounting firms and representatives of a few liability issuer for accountants, Simunic (1980) presented a positive model of process by which audit fees were determined. He proposed a number of general factors as possible determinants of audit fees as following: (a) size of the auditee, (b) operation complexity of the auditee, (c) auditing problems related to specific financial statement components, (d) industry of the

auditee, and (e) form of ownership (specifically, whether the auditee is a publicly or closely held company).

Following Simunic (1980), hundreds of published and working papers have examined a variety of factors associated with higher or lower levels of audit fees. Much of this research has provided abundant evidence that audit fees are generally determined by measures of client size, client complexity and client risk. These papers typically develop a model by regressing audit fees on a number of measures of possible fee drivers as following:

$$Ln\,AF = a_0 + \sum a_i D_i + \sum a_k D_k + \varepsilon$$

LnAF is the natural logarithm of audit fees, and D_i and D_k are two groups of potential fee determinants. Typically, the regression model includes one or a few new added testing variables D_k, plus a group of control variables D_i which have been tested to be significant fee determinants in prior studies.

Hay, Knechel and Wong (2006) conduct a meta-analysis on research published from 1977 to 2003, highlighting well over 100 audit fees. Their meta-analysis helps to test the pervasiveness of independent variables (fee determinants) included in prior audit fees studies and helps to identify common fee drivers across studies, samples and countries. Hay, Knechel and Wong (2006) document that the population of explanatory variables in audit fee models has increased significantly since 1980. The average number of testing variables in the fee model pre-1990 was 7.7 and increased to 9.5 post-1990. They proceed to categorize the determinants of audit fees into the following categories: client attributes (size, complexity, inherent risk, profitability, leverage, form of ownership, internal control, governance, industry), auditor attributes (auditor quality, auditor tenure,

auditor location) and engagement attributes (report lag, busy seasons, audit problems and non-audit fees).

Based on the meta-analysis of Hay, Knechel and Wong (2006), the most common and significant determinants of audit fees across studies, samples and countries are as following:

(1) Client size. Size is a significant explanatory variable for audit fees across most published studies. Size is typically measured as total assets or total revenues.[7] The meta-analysis supports the positive association of size with audit fees.

(2) Client complexity. A positive relationship between client complexity and audit fees is expected: The more complex the client, the harder it is to audit, the more hours needed to conduct the audit and the higher the audit fees. Empirical studies find significant results support the positive relationship between measures of client complexity and audit fees. Typical surrogates for client complexity are the number of subsidiaries (this measurement has the strongest result), the number of foreign subsidiaries, the proportion of foreign assets, the number of business segments (this measurement is with the weakest result), etc.

(3) Inherent risk. Inherent risk is expected to be positively related to audit fees since certain parts of audit may incur higher risk of error and need specialized audit procedures, such as the audit of inventories and receivables (Simunic 1980; Newton and Ashton 1989; Stice 1991). The analysis shows that inherent risk is a critical fee driver and the sum of inventories and receivables is a good proxy for inherent risk.

[7] Most studies take the natural logarithm of total assets (or revenues) to improve the linearity with audit fees.

(4) Profitability. Profitability is a measure of risk as well and represents the extent of loss liability that auditor face when clients have bad financial conditions. It is expected to have a negative association with audit fees: the worse the client financial performance, the higher risk auditor bear and the higher the audit fees. Typical measures for profitability are a dummy variable indicating the existence of a loss and a profitability ratio (ROA). Post-1990 studies indicate that the loss variable has become an important determinant of audit fees.

(5) Leverage. Leverage is another measure of risk and captures the liability loss that auditor is expose to. The meta-analysis supports the positive association between leverage ratio (total liability to total assets ratio) and audit fees.

Beginning with Simunic (1980), a variety of studies has tested the determinants of audit fees with single-country samples across countries. Different from prior studies, Choi, Kim, Liu and Simunic (2008) conduct a cross-country research to test how the legal regime of a country affects cross-country variations of audit fees. Audit fees are expected to have a positive relationship with the strength of a country's legal regime. This is because, within a stronger legal environment, auditors are exposed to higher litigation liability in case of an audit failure, which leads to a higher fee premiums to compensate for additional risk or greater motivations for auditors to expend more effort. Based on prior audit fee models, Choi, Kim, Liu and Simunic (2008) regress audit fees on a series of control variables which are mostly proved to be significant fee determinants in prior studies, plus a new country-level explanatory variable *REGIME.*[8] Controlling for other possible audit fee drivers that include the client-specific risk measures (such as, *LOSS,*

[8] Choi, Kim, Liu and Simunic (2008) use the country-level litigation risk index from Wingate (1997) as their measure of REGIME.

ROA, and *LEVERAGE*), regression results show that country-specific litigation risk is significantly and positively related to audit fees. This finding supports the view that the strength of a country's legal environment is a substantially critical driver to determine the differences in levels of audit fees across countries.

Based on the results of over 30 years' extant audit fee research and the crucial meta- analysis, taken as a whole, the differences in audit fees across firms and countries may be largely explained by measures of client size, client complexity, client risk and country-level litigation risk.

Following the large body of prior studies on audit fee determinants, I use different measures of client size, client complexity and client risk to capture common factors that are deemed to explain audit pricing. In addition, because this study is international in scope, I include country-level factors, such as litigation risks and GDP per capita, to capture variances in audit fees across countries.

3.2 Unexpected Audit Fees

Audit fees may be divided into two components, as shown in the following equation: expected audit fees (or normal level of audit fees) and unexpected audit fees (or abnormal audit fees). Cross-sectional differences in expected audit fees are driven by differences in audit cost, which mainly include effort cost and expected legal cost (Simunic 1980; Choi, Kim, Liu and Simunic 2008). Therefore, unexpected audit fees are the difference between total level of audit fees and expected level of audit fees.

$$Audit\ fee_{it} = (Expected\ audit\ fees_{it}) + (Unexpected\ audit\ fees_{it})$$

$$= (Effort\ cost_{it}) + (Expected\ legal\ cost_{it}) + (Unexpected\ audit\ fees_{it})$$

As indicated in prior literature, effort cost and expected legal cost are determined by following common factors across firms: client size, client complexity, client risk and legal regime. Typically, an estimation model is developed by regressing total level of audit fees on a set of above-mentioned common factors which are deemed to be associated with audit fees. The model takes the form as following:

$$Ln\ AF = b_0 + b_1 Client\ Size + b_2 Clent\ Complexity + b_3 Client\ Risk + b_4 Legal\ Regime + \varepsilon$$

UAF is measured by the residual term ε taken from the model. Specifically, UAF is the portion of audit fees that cannot be explained by the common types of fee determinants. Controlling the impacts of these known determinants, UAF are expected to capture idiosyncratic contractual relationships between auditors and clients. Recently, increasingly more papers begin to use UAF to proxy for audit independence (e.g., Hope and Langli 2010, Kanagaretnam, Krishnan, and Lobo 2010). A few studies have tested the relation between UAF and earnings quality and find consistent positive association between positive unexpected audit fees and accruals (e.g., Hope et al. 2008; Hribar et al. 2010; Choi et al. 2010). [9]

The UAF metric is a better surrogate to audit independence than total audit fees. Total audit fees may include other innate firm characters, such as size and complexity, which are determined by common factors across clients, while unexpected audit fees are determined by specific contractual relationship between auditor and client, which avoid the above-mentioned noises (e.g., Hribar et al. 2010, Choi et al. 2010).

The UAF metric may better capture threats to auditor independence than non-audit fee measures, if there exists any. In their discussion of Frankel et al. (2002), Kinney

[9] Hope, Kang, Thomas, and Yoo (2008) employ cost of equity capital (implied rate of return) as a measure of perceived earnings quality. They find in strong investor protection countries, IRR is increasing with excess unexpected audit fees.

and Libby (2002) doubt whether non-audit fees can properly capture the lack of auditor independence and posit that "unexpected non-audit fees and audit fees may more accurately be likened by attempted bribes" and "unexpected fees may also better capture the profitability of the services provided." Similarly, in the discussion paper of Choi et al. (2008), Magnan (2008) argues that audit fees should consist of legal cost, effort cost and partner's profits.[10] The unexpected audit fees might be more associated with partner's profits. In addition, some studies argue that fee dependence is inherent in audit-client contracting, and thus audit and non-audit fees should provide similar incentives to auditors (e.g., Hansen and Watts 1997, Reynolds and Francis 2001). Therefore, the economic bond tends to be irrelevant concerning whether fees are from audit service or non-audit service. Even if auditors are inhibited from providing certain non-audit services to the same client after passing of SOX 2002, auditor independence still faces threats from excessively high levels of audit fees.

Based on existing research on unexplained audit fees, I expect unexplained audit fees as a better indicator to capture idiosyncratic auditor-client relation. Thus, I include the UAF as an alternative audit fee metric and use it in my robustness check analysis.

3.3 Audit Fees and Earnings Quality

In this section, I first summarize the main findings of prior extant literature examining the relationship between the amount (and type) of audit fees and earnings quality (hereafter the fee-quality association). Second, I proceed to discuss possible explanations for the reasons why prior studies fail to yield conclusive results on the fee-

[10] $Audit\ fee_{it} = f\ [(Effort\ cost_{it}) + (Expected\ legal\ cost_{it}) + (Partner's\ profit_{it})]$

quality association. Finally, I discuss the causality issue existing between audit fees and accruals.

3.3.1 Mixed results: Audit Fees and Earnings Quality

Auditors lend credibility to clients' prepared financial statements and auditors collect fees from their clients, which obviously create a potential threat for audit independence. A series of high profile financial scandals involving Enron and WorldCom and the collapse of Arthur Andersen have cast doubt on audit quality on ensuring the credibility of financial reporting. In response, the relationship between audit fees and earnings quality has received considerable attention by regulators, practitioners and academics. For example, the SEC stated its concern that auditors' providing non-audit service and charging excessive high audit fees to clients may erode audit independence. In order to rebuild investors' confidence on audit quality and capital market, Congress enacted SOX 2002 to prohibit auditors from providing certain non-audit services to clients. Along with this concern, a flood of accounting studies examine the relationship between audit fees and earnings quality by investigating whether fee-induced economic bond impair audit independence or not. However, prior studies provided insignificant or at best mixed results on the view that audit fees are associated with impaired audit independence.

First of all, a long line of research finds a negative association between audit fees / non-audit fees and different measures of earnings quality, supporting the perspective that audit independence is impaired through fee dependence. Frankel et al. (2002) document audit fees to be positively associated with discretionary accruals (which have

the opposite sign to earnings quality). Sengupta and Shen (2007), Hribar et al. (2010) and Choi et al. (2010) document a significant association between auditors charging higher audit fees and clients with poor accruals quality. Kenney et al. (2004) show that firms with higher audit fees generally have greater likelihood of accounting restatements. Secondly, another stream of studies documents opposing results and finds a positive association between audit pricing and earnings quality, implying that high audit fees do not necessarily impair audit independence. For example, Srinidhi and Gul (2007) argue that higher audit fees should represent more audit effort and document a significant positive association between audit fees and accruals quality. Finally, a few studies fail to find any significant relationship between the two. Craswell et al. (2002) find that level of auditor fee dependence does not affect an auditor's propensity to qualify their audit opinions. DeFond et al. (2002) find no association between non-audit fees and an auditor's propensity to issue going concern audit opinions. Ashbaugh et al. (2003) and Larker and Richardson (2004) do not document any significant link either.

Prior studies on non-audit fees and financial reporting quality provide mixed results, implying that the non-audit fees metric may not be a good proxy for auditor independence. Most studies use non-audit fees to capture economic bond or auditor independence, and thus audit quality. Simunic (1984) theoretically shows that when an auditor provides both audit and non-audit services to a client, the auditor can save a portion of the costs from "knowledge spillover" effects and be economically bonded to the client. An auditor who is concerned about the loss of non-audit fee revenue is less likely to object to a manager's accounting choices and more likely to go along with client's earnings management behavior. An opposing hypothesis argues that the provision

of non-audit services will not impair audit independence. Since it increases an auditor's investment in reputational capital, the auditor is less likely to take the risk to satisfy one specific client's demands (e.g., Dopuch, King and Schwartz 2003).

According to these competing hypotheses, the empirical results as to whether or not the provision of non-audit fees impairs auditor independence and financial reporting quality are mixed. These studies use various measures to capture reporting quality which include the magnitude of earnings management (accruals quality) (e.g., Frankel, Johnson and Nelson 2002, Antle et al. 2002, Ashbaugh, Lafond and Mayhew 2003, Chung and Kallapur 2003, Francis and Ke 2003, Lacker and Richardson 2004), restatements (e.g., Kinney, Palmrose and Scholz 2004), the propensity of auditors to issue going-concern opinions (e.g., Craswell, Stokes and Laughton 2002, DeFond, Raghunandan and Subramanyam 2002), and accounting conservatism (Ruddock, Taylor and Taylor 2006). In the context of **earnings management**, Frankel, Johnson and Nelson (2002) report a significant and positive association between the ratio of non-audit fees to total fees and the magnitude of discretionary accruals and interpret the results as evidence that provision of non-audit services reduces auditor independence and lowers earnings quality. Ashbaugh, Lafond and Mayhew (2003) find that after controlling for performance, the non-audit fee metric is insignificantly associated with discretionary accruals. Lacker and Richardson (2004) also find that the results of Frankel, Johnson and Nelson (2002) are limited to a subset of smaller, management-controlled firms. With respect to **audit opinions**, Craswell, Stokes and Laughton (2002) find that the level of auditor fee dependence does not affect auditor propensity to qualify their audit opinions; DeFond,

Raghunandan and Subramanyam (2002) find no association between non-audit fees and an auditor's propensity to issue going concern audit opinions.

3.3.2 Why No Conclusive Result?

Why do most prior studies fail to yield a conclusive result on the fee-quality association? There are at least three explanations for these conflicting evidences. First of all, theoretical background for the association between fees and audit independence is ambiguous (see Larcker and Richardson 2004). One line of research points out that excessive audit fees could increase the economic bonding between client and auditor, therefore high level of fees may provide auditors incentives to acquiesce to clients' pressure and compromise their independence (DeAngelo 1981; Watts and Zimmerman 1986). On the contrary, other research argues that costs related to litigation claim and related reputation loss may remind auditors to uphold audit independence (DeAngelo 1981; Chung and Kallapur 2003). Thus, in the cost-benefit calculus, auditors do not only pursue greater fees but also take the cost of audit failure into account. In other words, auditors would trade off between the benefits and expected costs when considering compromise their independence in return for greater fees. This represents that high litigation risks and great fees have opposing effects on audit independence. The high litigious environment in most prior studies (such as US, UK and Australia) may offset the effects of fee dependence on earnings quality. As such, the reason that most prior studies document insignificant or mixed results on fee-quality association may due to this offsetting effect other than lacking of significant underlying relationship. Thus, testing

fee-quality association with single-country sample (from strong legal regime) is an insufficient research setting.[11]

Second, fee measures used in prior studies may be inappropriate to capture audit independence. Most prior studies use total fees (or total non-audit fees) or fee ratio (i.e., non-audit fee / total audit fee) to measure fee dependence. If the research purpose is to use these fee measures to capture the economic dependence of an auditor on a specific client, then these measures may not be able to act as good surrogates for an idiosyncratic auditor-client relationship. Based on extant auditing literature on audit fee determinants, the cross-sectional differences in audit fees are determined by common factors (fee drivers) across firms and countries, such as client size, client complexity, client risk and national legal regime. Even controlling for these possible influential determinants, total fees may still not be able to explicitly capture fee dependence without the influence of firm's innate characters. As a result, the observed relation between total audit fees and earnings quality may be influenced or driven by client's characters other than the specific auditor-client relationship.

Third, most existing studies do not consider the asymmetric effects of audit fees on earnings quality. As noted by Choi et al. (2010), the association between abnormal audit fees (which is similar to the concept of UAF) and absolute discretionary accruals is asymmetric, depending on the sign of abnormal audit fees. They find a significant positive association between abnormal audit fees and the magnitude of discretionary accruals when the abnormal fees are positive. When abnormal audit fees are negative, they fail to find any significant association between the two. Choi et al. (2010) point out positive abnormal audit fees, which represent higher actual audit fees than normal level

[11] Hope et al. (2010) have similar arguments.

audit fees which, on the one hand, may create motivations for auditors to acquiesce to client pressure for substandard reporting and thus impair audit quality. On the other hand, when abnormal audit fees are zero or negative, auditors have fewer incentives to compromise audit quality. In response, if pool positive UAF and negative UAF together, the two opposing effects may cancel out each other and result in insignificant association with accruals quality.[12] These results imply that prior studies fail to find any significant results may result from this asymmetric relation.

3.3.3 Causality Issue between Audit Fees and Accruals

In addition to mixed results documented in prior literature, two recent studies, Choi et al. (2010) and Hribar et al. (2010) find similar results and support the perspective that audit fees are positively related to magnitude of accruals. Despite consistent results documented in these studies, they propose two opposite reasoning to explain the positive association between audit fees and accruals. The two competing arguments to explain the causality between audit fees and accruals are the "economic bonding" theory and the "risk pricing" argument.

Economic bonding: threat of audit independence

There exists a pervasive view that audit independence (both independence in fact and independence in appearance) is threatened by economic dependence of an auditor on client fees. For example, DeAngelo (1981) argues that an auditor is more likely to

[12] Theoretically, positive abnormal audit fees can be viewed as so called "client-specific quasi-rents", and the quasi-rents create incentives for auditors to compromise independence (DeAngelo 1981). With respect to negative abnormal audit fees, the situations are more complex. According to Choi et al. (2010), three possibilities may be expected for the association between negative abnormal audit fees and magnitude of accruals: insignificant, positive and negative.

compromise independence when the client is financially important. She states that "the existence of client-specific quasi-rents to incumbent auditors… lowers the optimal amount of auditor independence" Similarly, Magee and Tseng (1990) develop a multi-period model and observe that significant economic rents may threaten auditor independence. Dye (1991) also theoretically shows that when clients pay unusually higher fees to auditors, auditors may reduce the quality of audit service. Survey results from Nelson, Elliott and Tarley (2002) and Trompeter (1994) are consistent with these arguments: the more economic bonding between auditor and client, the greater propensity of the auditor to acquiesce to client pressure. In terms of perceived audit independence, Schmidt (2011) points out that fee dependence is often related to an audit failure by attorneys of plaintiff in audit litigation. The attorneys argue that economic pressure to retain fees may erode an auditor's independent mindset. In this case, auditors may not be objective, not be able to retain professional skepticism, and not be diligent when carrying out an audit.

A variety of studies document empirical results supporting the argument in "economic bonding" theory. To name a few, Hope et al. (2008) and Choi et al. (2010) show that auditors have stronger economic dependence on clients with higher audit fees, and responsively the excess audit fees can act as a bribe to auditors. To retain these clients, auditors would compromise their independence and allow more earnings management behavior, therefore leading to lower quality earnings.

Risk pricing: auditor's proprietary information

According to Simunic (1980)'s theoretical audit fee model, minimum audit cost is determined by:

$$E(TC) = c \times q + E(d) \times E(\theta)$$

Where *c* is an auditor's factor cost per unit of external audit resources to carry out the audit, *q* is the number of resources the auditor needs for the audit. Therefore, $c \times q$ represents audit effort cost. $E(d)$ is the expected present value of future losses which may arise from incumbent audit; $E(\theta)$ is the possibility that auditor will pay for the losses. Thus $E(d) \times E(\theta)$ captures the present value of expected future losses faced by auditor for conducting the audit. Generally, these losses are related with litigation claims and associated reputation loss. To sum up, total audit cost consists of audit effort cost and expected future loss.

Based on this model, when auditors perceive higher engagement risk through their proprietary information, on the one hand, they could choose to conduct more audit hours (increase *q*) and thus higher audit effort, which lead to higher audit fees. The higher audit fees are charged to cover additional audit cost needed to reduce the engagement risks to acceptable levels. On the other hand, higher engagement risk may bring in higher expected losses ($increase\ E(d) \times E(\theta)$). Thus, higher fees could be charged to compensate for additional risks that auditor face. In short, for firms with higher engagement risk, auditors may charge higher fees to compensate for more effort or more risk.

Among other earning's components, accruals are hard to observe and audit. Accounting accruals include a manager's subjective estimate of future outcomes, which

cannot be verified until occur (Francis and Krishnan 2003). Auditors face significant risks of reputation loss and litigation claims when clients have high level of discretionary accruals.[13] In response, when clients have higher level of discretionary accruals, auditors may charge a higher risk premium to compensate for additional risk they face. Auditors may also choose to dedicate additional time to the audit, resulting in higher audit fees to reduce their potential risk level (refer to Figure 2). Therefore, the positive fees-accruals association may not necessarily due to the impaired audit independence associated with greater fees.

[INSERT FIGURE 2 HERE]

A few studies provide empirical results for the risk pricing argument. For example, Sengupta and Shen (2007) propose that client's engagement in earnings management would increase the risk of accounting misstatements[14], which would require more audit effort. Therefore, an auditor may charge its client higher fees to compensate for greater risk of financial losses or potential reputation loss. In addition, Hribar et al. (2010) point out that since auditors have access to firms' management and be able to obtain proprietary information, they possess intimate knowledge and superior understanding of firms' financial reporting. Auditors may be in the best position to identify firms with poor accounting quality and they may pass potential business risks to clients by pricing them into audit fees. Their reasoning is opposed to economic bonding theory: the greater risks

[13] A most recent paper, Boone et al. (2011) find that firm's abnormal accruals can increase an incumbent auditor's litigation risk.

[14] For example, Dechow et al. (2007) show that firms with lower accruals quality have greater possibility to be subject to SEC enforcement actions for earnings management.

that firms with poor accounting quality face, lead to higher audit fees.[15] In other words, Hribar et al. (2010) suggest that the negative fee-quality association is not due to audit independence impairment.

Taken together, even a significant positive association between audit fees and accruals is observed, there exists two-way causality to explain the cause and effect between the two: accrual choices may be determined by fees paid to auditors and audit fees may be influenced by clients ' accruals. Therefore, in order to enhance our understanding in the nature of audit services, I not only investigate the question itself, that is, "what is the relationship between audit fees and accruals", but also I proceed to explore the causality issue underneath the question, which is, "why are audit fees associated with accruals?"

3.4 Legal Regime and Audit

In Section 2, I have reviewed extensive body of literature on substantial impacts of legal origins and related institutions on capital market development, financing, corporate governance, and properties of earning quality across countries around the world. However, research on how legal regimes influence auditor behavior is greatly lacking (Choi et al. 2008).

In recent years, increasingly more researchers began to look at the role of litigation risk on audit fees, audit independence and audit quality. For example, using data from 15 countries around the world, Choi et al. (2008) show that litigation risks have

[15] However, Srinidhi and Gul (2007) find a positive association between audit fees and accruals quality. Their argument is as follows: higher audit fees would lead to superior quality audits, which would result in more informative accruals.

been priced into audit fees. Venkataraman et al. (2008) compare the differences of audit quality and audit fees for a special group of firms prior and post-IPOs. They find auditors have higher audit quality and higher audit fees when facing higher litigation risks. Bonnie et al. (2011) and Lee & Mande (2003) examine PSLRA 1995's impact on audit quality. They both document a decrease of audit quality after the passage of the act.[16] In addition, Boone et al. (2011) show that litigation risks could increase auditor incentives to restrain abnormal accruals, and abnormal accruals increase risk may increase the likelihood of auditor litigation.[17] Schmidt (2011) find that non-audit fees are positively associated with accounting restatement that resulting in audit litigation, which implies that substantial audit fees is perceived by jurors as impaired audit independence.

3.5 Hypotheses development

Based on mixed results of previous studies, this studies aims to contribute to the literature by investigating the following question: Do audit fees price accruals? To explore this question, I further investigate two subsidiary questions: what is the association between audit fees and accruals? and are why audit fees related with accruals?

To better answer these questions, I re-examine the relationship between audit fees and accruals. In this study, I predict there is a positive association between audit fees and accruals. In addition, I argue this positive association is due to above-mentioned "risk pricing" reasoning. My prediction is based on four primary reasons: First, accruals are different from other financial statement items and they are hard to detect and audit (Gul

[16] PSLRA1995 act is perceived as decrease litigation risks that auditors face.
[17] Bonnie et al. (2011) focus on client-level litigation risk and document an endogeneity issue between accruals quality and litigation risks. This study investigates country-level litigation risk, which is an exogenous variable and may not be influenced by firm-level earnings quality.

2003, Francis and Krishnan 1999). Clients with higher level of accruals need more hours and effort to audit, and thus result in higher audit fees. Second, Simunic and Stein (1996) posit that large accruals represent more engagement uncertainty and thus increase audit risk. Auditors may charge higher fees to conduct more hours of audit to decrease detection risk to an acceptable level and /or simply charge a higher fee premium to compensate for potential future litigation. For example, Bedard and Johnstone (2004) find that auditors plan increased effort and billing rates (audit specialization) for clients with earnings manipulation risk. Third, the magnitude of accruals reflect a manager's substantial discretion in choices of accounting methods and estimates and could represent two types of a manager's reporting incentives. Some companies may use accruals for legitimate reasons, while others may misuse their discretion to manipulate earnings and mask firm performance. Schelleman and Knechel (2010) argue that it's up to the auditors to distinguish accounting discretion from management opportunism. This decision requires additional work and therefore results in higher fees. Finally, abnormal accruals increase the likelihood of firm-level litigation risk (Boone et al. 2011). William (2001) finds auditor litigation risk is positively associated with abnormal accruals and the probability of litigation increases when report more income-increasing accruals. Thus, abnormal accruals increase auditors' potential litigation risk and auditors may pass the cost of higher risk to their clients by charging higher fees.

To sum up, auditors should be responsive to clients with higher level of accruals. Specifically, auditors may charge higher fees to clients with higher level of accruals by charging higher risk premium or conducting more audit hours (higher billing rates) to

such clients.[18] Consequently, I expect that fees will increase when clients have increased level of accruals, resulting in my first hypothesis as follows:

Hypothesis 1 ("H1"): *Ceteris paribus, there is a positive association between audit fees and magnitude of accruals.*

In addition to test the association between audit pricing and accruals, this study further investigate how different legal systems influence fees-accruals association across countries. The role of legal institutions on the fees-accruals association could be understood by looking at the impacts of a country's legal system on a manager's reporting incentives and an auditor's assessment of risks.

Managers may have a certain degree of discretion and flexibility in reporting their financial performance, which is allowed and encouraged by accrual-basis accounting. Managers may opportunistically use these flexibilities to manipulate earnings, or they may choose to communicate private value-relevant information to stakeholders. As a result, accruals may be reflective of two distinct types of reporting incentives: the earnings manipulation or accounting discretion with legitimate reasons. Accruals used for opportunistic reasons are more likely to be associated with higher inherent risk by auditors and thus higher audit fees than accruals used with legitimate reasons. This is because opportunistic accruals are less likely than informational accruals to be subsequently realized into cash flows. One way of capturing these two different types of

[18] Lacking audit engagement cost data, I am hesitating to conclude that higher fees are due to more audit effort.

accruals is to investigate a manager's incentives which influence the likelihood that accruals will be subsequently realized.

In this study, I use country-level strength of legal institutions to capture managers' different incentives on earnings management across countries. According to Legal Origins Theory discussed in Chapter II, legal origins and related legal institutions (i.e., investor protection) play an important role in influencing international differences in corporate earnings management. For example, Huang (2001) and Leuz (2003) both find that managers are more likely to behave opportunistically in an environment with weak investor protection. This is because incentives to mask firm performance through earnings management arise partially from the conflict of interests between firm insiders and outsiders. In essence, managers conceal their private control benefits and decrease the possibilities of outside intervention by manipulating the level and variability of reported earnings. Therefore, strong and well-enforced outsider rights can limit insiders' acquisition of private control benefits, and consequently, mitigate insiders' incentives to manage earnings because they have little to conceal from outsiders.

Based on these arguments, I expect the positive association between audit fees and accruals association is further strengthened under weak investor protection environment. This is because weak investor protection regimes provide managers more incentives and possibilities to manipulate earnings opportunistically and to mask firm performance, which may increase an auditor's assessment of audit risks. As a result, clients with large accruals from counties with weak legal regimes may be assigned with further magnified audit risk and therefore higher audit fees. This reasoning leads to my second hypothesis:

Hypothesis 2 ("H2"): *Ceteris paribus, the positive association between audit fees and accruals will be stronger for firms from weak investor protection countries.*

IV. RESEARCH DESIGN

With data from 13 countries all over the world, I investigate whether auditors take magnitude of accruals into account when make pricing decisions, and the role of a country's legal regime in audit pricing. Specifically, I test whether audit fees are responsive to accruals, and how the fees-accruals association changes when legal regime shifts across countries. I use two alternative measures to proxy for accruals, such as total accruals and discretionary accruals. In addition, I adopt a set of country-level indexes to capture strength or strictness of legal regime in a country.

4.1 Measurements of Earnings Management

One goal of this study is to examine the relationship between audit fees and accruals. I use two alternative measures to proxy for accruals, that is, total accruals and discretionary accruals. Discretionary accruals are the most widely used proxy for earnings management in prior studies. Besides discretionary accruals, in the context of auditor pricing literatures, I include total accruals as well. I incorporate total accruals because the actual level of accruals is the main focus of audit work and adjustments in practice (DeFond and Jiambalvo 1993). In addition, auditors may be more concerned with total accruals rather than discretionary accruals when assessing risk on a specific engagement (Lys and Watts 1994).

The most prevalent cross-sectional Jones 1991 model and most recently used modified Dechow-Dichev 2002 model are not practical for the calculation of abnormal accruals with international data. These models require an industry-year group which has at least 20 observations. The number of observations per industry/country/year could be

rather small with international data, and which might result in the Jones-type discretionary accruals perform unreliably for international data (e.g., Wysocki 2004). Following Francis and Wang (2008), I use a linear expectation model adapted from DeFond and Park (2001), which uses a firm's own prior year accruals as the calculation benchmark and expected accruals are based on prior year ratio of current accruals to sales, and the prior year ratio of depreciation expense to PPE (property, plant and equipment). By using a firm as its own control to compute discretionary accruals, this model essentially controls for cross-country differences in accounting standards, which used to be a most common challenge in most previous international studies. Importantly, note in this model, accruals are assumed to have a constant linear relationship over time with sales and gross PPE that could be used to estimate current-period accruals for a specific level of sales and gross PPE. Thus, predicted accruals are computed as follows:

$$Predicted\ accruals_t = \left\{Sales_t \times \frac{Current\ accruals_{t-1}}{Sales_{t-1}} - Gross\ PPE_t \times \frac{Deprecation_{t-1}}{Gross\ PPE_{t-1}}\right\} \Big/ Total\ assets_{t-1}$$

Total accruals in year t are computed as follows:

$$Total\ accruals_t = (Earnings\ before\ extraordinary\ items - Cash\ flows\ from\ opeartions)/Total\ assets_{t-1}$$

Discretionary accruals are defined as the firm's actual total accruals minus predicted accruals for year t. Therefore, I compute the discretionary accruals (referred to herein as "|DA|") as follows:

$$DA_t = Total\ accruals_t - Predicted\ accruals_t$$

4.2 Measurement of Legal Regime

One primary goal of this dissertation is to understand the role of a nation's legal regime in audit pricing. In particular, I investigate how the relationship between audit fees and accruals varies when legal regime shifts across countries. Stated another way, I specifically test how the country-level legal institutions impact the fees-accruals associations. I use three alternative measurements from prior cross-country studies to proxy for strength or strictness of legal environments. The use of multiple measurements of legal environment may lend greater reliability to the results for cross-country studies.[19]

I adopt three measures of legal regime: LAW, ENF_PRO and CLUSTER. These proxies have been used in a series of recent studies (e.g., La Portal et al. 1998, 2006, Leuz et al. 2003, Choi and Wong 2007, Francis and Wong 2008, Choi et al. 2008). Detailed definitions of these measures and data resources are included in APPENDIX II.

I include LAW to proxy for a country's legal origin, which is classified into two general families, common law and code (or civil) law. La Porta et al. (2006) argue that legal origin of a country sets up the foundation of basic legal rights, and through which corporate law and securities law are developed. La Porta et al. (1998) find that countries with common law legal origin provide greater investor protection than countries with code law legal origin. Following Choi and Wong (2007), I include ENF_PRO to capture a country's strength of anti-director rights and legal enforcement. The ENF_PRO is a combined index of ANTI_DIR (anti-director right index) and LAW_ENF (law

[19] Francis and Wang (2008) point out that it's common to use multiple measures of legal regimes in one study because: legal environment may include multiple dimensions and one measurement is not sufficient to capture different aspects; country-level metrics may have potential measurement errors, and thus consistent results found across measures may improve confidence to the results.

enforcement index), and equals the sum of 100% of the ANTI_DIR value and 50% of LAW_ENF value.[20]

Leuz et al. (2003) identify investor protection as a key institutional factor affecting manager's financial reporting incentives and thus as a significant determinant of earnings management activities around the world. In particular, they find firms in countries with developed markets, dispersed ownership structures, strong investor rights and legal enforcement tend to engage in less earnings management. Leuz et al. (2003) make a country cluster analysis and groups countries with similar legal institutional characteristics together. They identify three distinct country groups: (1) outsider economies with large capital markets, dispersed ownership, strong investor rights, and strong legal enforcement (e.g., UK and US); (2) insider economies with less-developed capital markets, concentrated ownership, weak investor rights, but strong legal enforcement (e.g., Sweden); and (3) insider economies with weak legal enforcement (e.g., Italy). Following Leuz et al. (2003), I include the CLUSTER to proxy for a country's legal and institutional characteristic. CLUSTER equals one for firms from group 1 in Leuz et al. (2003), which represent economies with large equity markets, dispersed ownership, strong investor rights and legal enforcement. CLUSTER equals zero for firms from group 2 and 3 in Leuz et al. (2003). [21]

[20] La Porta el al. (1998) uses ANTI_DIR to measure how easily outside and minority stockholders can exercise their rights against opportunistic behavior by managers and controlling owners. LAW_ENF is an index of law enforcement equals the mean of (1) efficiency of judicial system; (2) rule of law and (3) corruption index. Higher values of this index indicate better legal enforcement.

[21] Leuz et al. (2003) document significant differences between group 1 and group 2&3. The 1st group is identified by large stock markets, low ownership concentration, extensive outsider rights, high disclosure, and strong legal enforcement. The 2nd and 3rd groups show markedly smaller stock markets, higher ownership concentration, weaker investor protection, lower disclosure levels, and weaker enforcement.

4.3 Empirical Model

To test H1 to H2, I estimate the following regression model that links audit fees to my test variables, *Accruals*, *Investor Protection* and *Accruals*Investor Protection,* as well as other control variables, which are deemed to have influences on audit pricing. Specifically, I estimate the following regression:

$$\begin{aligned} AFEE = {} & \beta_0 + \beta_1 Accruals + \beta_2 InvestorProtection + \beta_3 Accruals * Investor\ Protection + \beta_4 LNTA \\ & + \beta_5 INVREC + \beta_6 INTAN + \beta_7 FOREIGN + \beta_8 EXORD + \beta_9 LOSS + \beta_{10} LEVE \\ & + \beta_{11} ROA + \beta_{12} BTM + \beta_{13} B4 + \beta_{14} AUD\_OPN + \beta_{15} LITIGATE + \beta_{16} GDP\_PC \\ & + Industry\ and\ Year\ + \varepsilon \qquad (1) \end{aligned}$$

Where,

AFEE = natural log of fees paid to auditors for financial statement audits in thousands of US dollars

Accruals = 2 alternative measures: Absolute Total accruals; Absolute Discretionary Accruals

Investor Protection= 3 alternative measures: LAW; ENF_PRO and CLUSTER

LNTA = natural log of total assets in thousands of US dollars

INVREC = the sum of inventories and receivables divided by total assets

INTAN = intangible assets divided by total assets

FOREIGN = 1 if firm pays any foreign income tax; 0, otherwise

EXORD = 1 if firm reports any extraordinary gains or losses; 0, otherwise

LOSS = 1 if firm reports a loss during the year; 0, otherwise

LEVE = the ration of year-end total liabilities to total assets

ROA = return on assets (income before extraordinary items divided by average total assets)

B4 = 1 if firm uses one of the Big 4 (5, 6, or 8) auditors; 0, otherwise

AUD_OPN =1 if firm receives a qualified opinion; 0, otherwise

BTM = natural log of book-to-market ratio

LITIGATE = natural log of Wingate's 1997 litigation index

GDP = GDP per capita per country per year

To measure my test variable, *Accruals*, I use two distinct proxies: (1) absolute total accruals and (2) absolute discretionary accruals. Other than signed accruals, I use the absolute value of both accrual measures because interest of this study is to test the association between magnitude of accruals and audit pricing. Regardless of the direction of accruals, income increasing or income decreasing, auditors are expected to charge higher fees for large magnitude of accruals. I use these two proxies for *Accruals* when testing H1. As discussed earlier in Chapter III, I predict a positive coefficient for both these two proxies for *Accruals*.

My hypothesis H2 is concerned with whether the positive relation, if any, between *Accruals* and *AFEE* are more pronounced for firms from countries with weaker legal regimes. To test H2, I include the interaction term *Accruals*Investor Protection*, where *Investor Protection* refers to the strength or strictness of legal institutions in a country. I use three distinct ways to proxy for *Investor Protection*: (1) LAW; (2) ENF_PRO and (3) CLUSTER. As discussed earlier in Chapter III, I predict a negative coefficient for the interaction term *Accruals*Investor Protection.*

In Eq. (1), I include 13 other control variables: *LNTA, INVREC, INTAN, FOREIGN, EXORD, LOSS, LEVE, ROA, BTM, B4, AUD_OPN, LITIGATE* and *GDP_PC*. Following Simunic (1980), extant auditing literature shows that audit fees are a function of three client-specific factors: client size, client complexity, and client-specific risk. I include *LNTA* to capture client size. Audit fees are expected to be positively associated

with client size. To capture client complexity, I include *INVREC, INTAN, FOREIGN* and *EXORD*. Audit fees are expected to be higher for clients with more complex business activities and operations, and thus these variables are predicted to be positively associated with audit fees. To proxy for client-specific risk, I include *LOSS, LEVE* and *ROA*. Auditors charge higher fees for risky clients, and thus I predict a positive association with *LOSS* and *LEVE*, while a negative association with *ROA*. In addition, I include *B4* to capture Big 4 auditor fee premium.

As a control for country-level factors, following Choi et al. (2008), I include *LITIGATE* (refers to Wingate index 1997) to proxy for the extent of litigation risk auditors face in a specific economy. The Wingate Litigation Index (1997) is risk rating across countries developed by an international insurance underwriter for one of the Big 4 accounting firms. The rating represents the "risk of doing business as an auditor" in a specific country and considers various national institutions, such as legal and regulatory environments, political and economic environments, and the professional accounting environment. The index varies substantially across countries and ranges from 3.61 to 15 in my sample. In addition, the differences in audit fees may result from the different levels of consumption and pricing across countries. Thus, I include *GDP_PC* to control for cross-country differences in living and consumption standards.

To further explore the sub-question to research question 1, which is the causality issue between audit fees and accruals, I run two additional tests. First, I partition the full sample into two sub-groups based on the sign of discretionary accruals: positive discretionary accruals sample (income increasing) and negative discretionary accruals sample (income decreasing). If the fees-accruals association is driven by lack of audit

independence, then firms with income increasing accruals may have greater incentives to "bribe" auditors compared to firms with income decreasing accruals. As a result, I should observe the following: (a) stronger association with the positive accrual sample and/or (b) little or insignificant association with the negative accruals sample. Second, I use a 2 Stage Lease Square to control for the potential endogeneity between audit fees and accruals in robustness check.

4.4 Sample and Data Collection

My sample consists of all firms from 13 countries where data on audit fees, auditor identity and financial information are available from the 2006 Worldscope Database.[22] My sample period covers eleven years from 1996 to 2006.[23] Initially, I obtained a sample of 47,972 firm-year observations. After imposing the data requirement for calculating all the variables included in model 1 and 2, I obtained a sample of 23,398 firm-year observations from these 13 countries, including the United States, United Kingdom, Australia, New Zealand, Norway, Hong Kong, Ireland, Italy, South Africa, Sweden, Singapore, Denmark, and Malaysia. I winsorized the data at both 1% and 99% level to reduce the effect of a few extreme values.

Table 1 presents the descriptive statistics. Panel A shows that |DA| has a mean and median of 0.08 and 0.04 respectively. The mean Tobin's Q is 1.57, which is parallel to 1.54 for the sample of firms in Doidge et al. (2004). Big 4 has a mean of 0.73, suggesting that 73% of sample firms are Big 4's clients. Panel B in Table 1 reports the number of

[22] To be comparable with prior research, such as Choi et al. (2008), the countries I selected are the same as their selections.
[23] The US sample period mainly covers from 2002 to 2006, since the audit fee data for most US firms are not available before 2002.

observations per country and descriptive statistics for measures of country –level legal institutions: *LITIGATE, LAW, ENF_PRO* and *CLUSTER*.

[INSERT TABLE 1 HERE]

Table 2 presents descriptive statistics for *AFEE, UAF*, |*DA*|, and *Tobin's Q* across countries. Mean audit fees fall between 3.58 (Malaysia) and 8.56 (United States). The mean unexpected audit fees fall between -0.335(Hong Kong) and 1.49 (South Africa). And the mean |*DA*| fall between 0.04 (United States) and 0.10 (Hong Kong). Finally, the mean *Tobin's Q* fall between 1.21 (Singapore) and 2.15 (United States). The mean and median statistics along with their standard deviations or range suggest that the variables are distributed with wide variation.

[INSERT TABLE 2 HERE]

Table 3 reports the Pearson correlation matrix for the variables included in Equation (2). My measure of absolute discretionary accruals |DA| is significant negatively correlated to UAF.[24] Most of the control variables in Equation (2) are significantly related to |DA|, implying the need to control for their effects in the multivariate analyses. For example, clients of Big 4 auditors, bigger firms, lowly levered firms, firms with high cash flows, firms with low growth rate, firms with low PPE changes, and firms without lagged loss are associated with a low level of absolute discretionary accruals. It is worth noting that firm size (*LNTA*) is significantly correlated with *BIG4*, *LEVE*, and *CFO,* with *coefficients* = 0.282, -0.012, and 0.019, respectively. This suggests that large firms are more likely to hire Big 4 auditors, to have lower leverage and to have bigger cash flows from operations compared with small firms. Overall, in Table 3, the correlation statistics imply that the results of multivariate

[24] This result is not surprising. The negative association may due to the asymmetric effects of UAF on accruals, and this result is driven by negative UAF (see later multivariate results).

regressions are less likely to suffer from multicollinearity problems (If a correlation coefficient matrix with all independent variables indicates correlations of 0.75 or higher, then there may be a problem with multicollinearity).

[INSERT TABLE 3 HERE]

V. Main Results

5.1 Audit Pricing and Accruals

Main findings

This section addresses the central issues of the study: First, what is the relationship between audit fees and accruals? Second, are legal institutions a determinant of the fees-accruals relationship? In other words, are audit fees responsive to various levels of accruals? And how does the responsiveness of audit pricing to accruals vary across different legal regimes? These issues are investigated, with Equation (1), by regressing total audit fees on proxies of accruals, measures of legal institutions and a set of control variables for other factors that may affect audit pricing.

I estimate Equation (1) as a fixed effects model with year dummy variables to control for systematic time period effects. Industry dummies based on two-digit SIC codes, are included to control for omitted variables which may have potential effect on accruals. For brevity, year and industry dummies are not reported in tables. I estimate Equation (1) with country weighted least square ("WLS") to control for the impacts of uneven samples across countries. For example, referring to panel B of Table 1, United Kingdom has 7,688 firm-year observations, while Italy has only 66 firm-year observations. The country weighted least squares, where the weight is inversely proportional to the number of observations per country, can handle regression situations in which the data points are of varying quality and thus ensure heavily represented countries of the sample do not drive the results (Wooldridge 2009).

Table 4 presents the results of WLS regressions for Equation (1): I use absolute total accruals in panel A and absolute discretionary accruals in panel B, as alternative

measures of accruals. In columns 2 to 4 of both panel A and B, I use *LAW, ENF_PRO* and *CLUSTER*, respectively, as a proxy for country-level invertor rights protection strength. In both panel A and panel B, the coefficients of *Accruals* are highly significant (p-value< 0.00), with an expected positive sign across all eight cases. This result strongly supports H1, suggesting that the magnitude of absolute total accruals or absolute discretionary accruals are positively associated with audit fees. Stated another way, audit pricing is responsive to various levels of accruals. For example, auditors charge higher fees to firms with increased level of accruals. This result adds additional evidence to mixed findings of previous research examining the association between audit fees and accruals, by documenting a positive fees-accruals association (e.g., Frankel, Johnson and Nelson 2002; Kinney, Palmrose and Scholz 2004).

In both panel A and panel B, I find the coefficients of *LAW, ENF_PRO* and *CLUSTER* are all highly significant (p-value <0.00), with a negative sign across all cases. This result suggest that, all else being equal, auditors tend to charge lower fees to clients from common law, stronger legal enforcement and investor protection countries. More importantly, I also find the coefficients of *Accruals*LAW, Accruals*ENF_PRO,* and *Accruals*CLUSTER* are highly significant (p<0.00), with an expected negative sign in all six cases. This is consistent with H2, implying that the fee premium associated with increased level of accruals is stronger for firms from countries with weak legal institutions, particularly for those from civil law countries or countries with weaker legal enforcement and investor protection rights.

With respect to the estimated coefficients of the control variables, the following is obvious. Consistent with the literature, auditors charge higher fees for clients with bigger

size (*LNTA*), more complex operations (*INVREC, INTAN, FOREIGN, EXORD*) and greater inherent risk (*ROA, BTM, LOSS*). I find coefficients of these fee determinants are all highly significant ($p<0.00$) with expected signs across all regressions. In addition, I find the coefficient of *LITIGATE* is highly significant ($p<0.00$) with a positive sign across all cases, which is consistent with the finding of Choi, Kim, Liu and Simunic (2008) and supporting the view that country-specific litigation risk is a critical driver to determine the differences in levels of audit fees across countries. I also find the coefficient of *GDP_PC* is highly significant ($p<0.00$) and positive. This indicates that, all else being equal, auditors charge higher fees to firms from countries with higher living and consumption standards. I find the coefficient of *B4* is highly significant ($p<0.00$) and positive, supporting the view that Big 4 auditors tend to charge fee premiums to clients compared to non-Big 4 auditors. Finally, I find the coefficient of *AUD_OPN* is highly significant ($p<0.00$) and positive. This suggests that, all else being equal, firms with qualified audit opinions tend to have higher audit fees.

In Table 4, Panel C, I use absolute lag discretionary accruals as test variable and repeat the regressions in panel A and B. I find the coefficient of *LagAccruals* is highly significant ($p<0.00$) and positive through column 1, 2 and 4. I also find the coefficients of Lag*Accruals*LAW, LagAccruals*ENF_PRO,* and Lag*Accruals*CLUSTER* are highly significant ($p<0.00$), with an expected negative sign in column 2 and column 4. These results are consistent with both H1 and H2. More importantly, the findings that audit fees are positively associated with lag accruals lend additional support to the causality issue between audit fees and accruals.

[INSERT TABLE 4 HERE]

Results in Table 4 document a positive association between audit fees and accruals. There exists two alternative ways to interpret the relationship: "risk pricing" reasoning and "economic bonding" theory. In the next stage of analysis, I run an additional test to disentangle these two arguments. I partition the sample into two sub-groups based on the sign of accruals: positive discretionary accruals sample (income increasing) and negative discretionary accruals sample (income decreasing). If the fees-accruals association is driven by lack of audit independence, then firms with income increasing accruals may have greater incentives to "bribe" auditors compared to firms with income decreasing accruals. In response, I should observe the following: (a) stronger association with the positive accrual sample, and/or (b) little or insignificant association with the negative accruals sample.

I repeat the regressions in panel B of Table 4 with 2 separate sub-samples: positive accrual sub-sample vs. negative accrual sub-sample. Table 5 presents the results. I find the coefficient of *Accruals* is highly significant ($p<0.00$) and positive for both positive discretionary accrual sub-sample and negative discretionary accrual sub-sample. And the coefficient is not statistically smaller for the negative accrual sub-sample. These results suggest that audit fees are positively related to the magnitude of accruals regardless of whether it is income increasing or income decreasing. Stated another way, these results do not support the view that the positive fees-accruals association is caused by fee-induced economic bond. In addition to providing support for H1, these results can also be interpreted as lending additional support to "risk pricing" reasoning, which argues that auditors charge higher fees to conduct more audits or to compensate for greater risk

for clients with higher level of accruals. In other words, my findings do not support the view that independence in-fact is impaired by excessive audit fees.

In addition, I find the coefficients of *Accruals*LAW, Accruals*ENF_PRO, Accruals*CLUSTER* are highly significant ($p<0.00$) and negative across all regressions. This suggests that auditors tend to charge greater fee premium for increased level of accruals if firms are from countries with weak legal institutions. These results not only support H2, but also lend additional support to the "risk pricing" argument. This is because, if the positive fees-accruals association is due to economic bond between auditor and client, then clients from counties with strong legal regimes need to pay higher additional fees to "bribe" auditors since auditors have higher possibilities to be caught and once being caught the penalties will be much higher under such legal environments. If this is the case, a positive coefficient of the interaction term *Accruals*LAW* (or *Accruals*ENF_PRO, Accruals*CLUSTER*) should be observed.

[INSERT TABLE 5 HERE]

5.2 Robustness Checks and Additional Tests

5.2.1 Impacts of Big 4 Auditors

The link between the Big 4 auditors and fees-accruals association can be understood by looking at two streams of research. The first steam of research examines the fee spread between Big 4 and non-Big 4 auditors, and finds significant differences between them (Francis and Taylor 1995, DeFond et al. 2000). For example, in their international study, Choi et al. (2008) investigate the cross-sectional determinants of audit fees and document existence of significant Big 4 fee premium (the fee spread

between Big 4 and non-Big 4 auditors) across countries. In addition, they find that the Big 4 fee premium varies when legal regime shift from one to another. In the second stream, extant literature tests the association between audit size and earnings quality, and find that Big 4 auditors tend to have greater constraining impacts on magnitude of accruals than non-Big 4 auditors (e.g., Becker et al. 1998, Choi et al. 2003).

Based on these arguments and previous findings, I thus predict following two conjunctures: (1) the fee premiums charged to accruals tend to be larger for Big 4 clients, and (2) the Big 4 fee premiums charged to accruals tend to be further magnified for firms from countries with weak legal regimes. These are because Big 4 auditors act more conservative to magnitude of accruals and Big 4 may be more sensitive to possibilities of earnings manipulation under weak legal environment, where managers have greater incentives to use accounting discretion opportunistically. And thus Big 4 may charge an even greater fee premium to accruals under weak legal regimes.

Table 6 presents the results of test concerning the impacts of Big 4 auditors on the fees-accruals association. I repeat the main regressions in Eq. (1) by adding a few interaction variables. Two two-way interaction variables, *Accruals * B4* and Investor *Protection* B4*, and one three-way interaction variable, *Accruals* Investor Protection*B4*, are included. In column 3, I find the coefficient of *Accruals*B4* is highly significant (p-value <0.00) with an expected positive sign. This result is consistent with my first conjuncture, suggesting that Big 4 auditors charge a greater fee premium to firms with high accrual levels than non-Big 4 auditors do. I also find the coefficient of *Investor Protection*B4* is highly significant (p-value <0.00) with an expected positive sign. This

implies that when making pricing decisions, Big 4 auditors take the country-level legal regimes into their considerations.

More interestingly, the coefficient of the three way interaction term *Accruals* Investor Protection*B4* is highly significant (p-value <0.00) with an expected negative sign. This finding indicates that Big 4 auditors charge greater fee premium to firms with higher accruals, and this premium is even bigger for firms from countries with low strength of investor protections.

5.2.2 Alternative Measure of Audit Fees

As a further robustness check, I re-examine the fees-accruals association by using an alternative audit fee metric, the unexpected audit fees (UAF). I adopt this fee metric because of following reasons. Firstly, prior studies testing the association between total audit fees (or non-audit fees) and financial reporting quality provide insignificant or at best mixed results, implying that the total audit fees (or non-audit fees) may not act as a good proxy. Secondly, UAF may be able to capture the idiosyncratic relationship between auditor and client without the influence of client's innate firm characteristics, such as size, complexity, risk etc. For example, Kinney and Libby (2002) claim that "unexpected non-audit fees and audit fees may more accurately be likened by attempted bribes" and "unexpected fees may also better capture the profitability of the services provided." Finally, with respect to research methodology, this research is an international study. However, the non-audit fee data are not publicly available for most countries. As a result, the use of non-audit fee as fee measure is not applicable in cross-country studies.

To measure UAF, I partition the audit fees into two parts, namely, the expected (or normal) audit fees and the unexpected (or abnormal) audit fees. By isolating expected audit fees from total audit fees, UAF are the residuals exclude the known resources needed to conduct an audit. I use an expectation model with various determinants of audit fees from prior studies (Simunic 1980, Frankel, Johnson and Nelson 2002, Choi, Kim and Zang 2005, Choi et al. 2008, Hope et al. 2008), such as client size, complexity of client's operations, and liquidity or solvency of client. I also control for country-level factors and include the Wingate index (see Choi et al. 2008) to measure the litigation risk auditors face in a specific country. Building on the results of prior studies on audit fee determinants, I estimate the following model and use the error term as measure of UAF:

$$AFEE = f(LNTA, INVREC, INTAN, FOREIGN, EXORD, LOSS, LEVE, ROA\ BTM, B4, AUD\_OPN, LITIGATE, GDP\_PC, Industry, Year)$$

Therefore, in the first stage, I calculate UAF as residuals from the above equation. Specifically, I compute the fitted values of AFEE with estimated coefficients in this equation, and UAF is the difference between AFEE and predicted value of AFEE.

In the second stage of my analysis, I estimate the following regression model that links absolute discretionary accruals to UAF as well as other control variables. Specifically, I estimate the following regression:

$$|DA| = \alpha_0 + \alpha_1 UAF + \alpha_2 LNTA + \alpha_3 CFO + \alpha_4 LEV + \alpha_5 GROWTH + \alpha_6 \Delta PPE + \alpha_7 LOSS\_1 + \alpha_8 B4 + \alpha_9 AUD\_OPN + \alpha_{10} LITIGATE + Industry\ and\ Year + \varepsilon \quad (2)$$

where the dependent variable, |DA|, is absolute discretionary accruals for each firm in each year.

The accrual model is derived from prior studies such as Francis and Wang (2008), Choi et al. (2010), to name just a few. Following these studies, I control for variables which might have an influence on the magnitude of discretionary accruals. GROWTH represents the growth in sales relative to prior year sales, and ΔPPE measures growth in gross PPE over the prior year. LAG_LOSS is a dummy variable to represent firms with prior year losses. LAG_ACCR represents one-year lagged total accruals. Other variables are defined earlier.

Prior research finds that large firms tend to report lower levels of discretionary accruals than small firms. I include LNTA to control for the size effect. I control for CFO (deflated by lagged total assets) due to the well-documented inverse association between the operating cash flow and accruals. Firms with high leverage ratios have greater incentive to increase earnings for debt covenant concerns, and therefore I include LEV. I include two variables to control for firm growth, namely GROWTH and ΔPPE, which could also affect yearly accruals. A firm with financial distress and bankruptcy risk has more incentive to boost earnings in the following year, and thus including LOSS_1 can control this effect. In addition, I include BIG4, since previous studies indicate that Big 4 auditors are effective in constraining managers' earnings manipulation behavior. I include AUD_OPN due to prior studies show that firms with higher magnitude of discretionary accruals are more likely to have qualified audit opinions.

Column 1 of Table 7 reports the results of WLS regression for Eq. (2) for the full sample. The coefficient of *UAF* (p-value <0.00) is highly significant and with a positive sign. This result lends additional support to H1, suggesting that UAF is positively associated with magnitude of absolute discretionary accruals.

There is an asymmetric issue of UAF, which is largely ignored by much of the prior research. As noted by Choi et al. (2010), the association between abnormal audit fees and absolute discretionary accruals is asymmetric, depending on the sign of abnormal audit fees. Positive abnormal audit fees may create incentives for auditors to compromise audit independence for greater profits. However, negative or zero abnormal audit fees (which represents specific client may not bring bigger profit to auditor) may not be able to generate similar motivations to auditors. As a result, when positive UAF and negative UAF are pooled, the two opposing effects may offset each other and result in insignificant association with accruals.[25] Prior studies fail to find any significant results may because of their negligence of this asymmetric effect.

In addition, taking the asymmetric effect of UAF into account, I further partition the full sample into two sub-groups: sample with positive UAF vs. sample with negative UAF. Column 2 and 3 of Table 7 report the results of WLS regressions of Eq. (2) for the two sub-samples respectively. In column 2, the positive UAF subsample, the coefficient of UAF is highly significant (p-value <0.00) and positive, while in column 3, the negative UAF subsample, the coefficient of UAF is not statistically significant (p-value > 0.14). These results are consistent with the finding of Choi et al. (2010): they document a significant positive association between positive abnormal audit fees and discretionary accruals; while they fail to find any significant association between the two when abnormal audit fees are negative.

[INSERT TABLE 7 HERE]

[25] Theoretically, positive abnormal audit fees can be viewed as so called "client-specific quasi-rents", and the quasi-rents creates incentives for auditors to compromise independence (DeAngelo 1981). With respect to negative abnormal audit fees, the situations are more complex. According to Choi et al. (2010), three possibilities may be expected for the association between negative abnormal audit fees and magnitude of accruals: insignificant, positive and negative.

Next, to further explore the causality of the significant association between excessive audit fees (positive UAF) and discretionary accruals, I run an additional test and partition the sample into two sub-groups based on the sign of accruals: positive discretionary accruals sample (income increasing) and negative discretionary accruals sample (income decreasing). If the fees-accruals association is driven by lack of audit independence, then firms with income increasing accruals may have greater incentives to "bribe" auditors compared to firms with income decreasing accruals. In response, I should observe the following: (a) stronger association with the positive accrual sample, and/or (b) little or insignificant association with the negative accruals sample.

Table 8 represents the results of WLS regressions of Eq. (2) for the positive UAF sample only. I further separate the sample into two sub-groups: positive DA subsample (column 1) and negative |DA| subsample (column 2). The coefficient of UAF is highly significant ($p<0.00$) and positive for both positive DA sub-sample and negative DA sub-sample. And the coefficient is not statistically smaller for the negative accrual sub-sample. These results suggest that positive UAF is positively related to |DA| regardless of whether it is income increasing or income decreasing. In other words, these results do not support the view that the positive fees-accruals association is caused by fee-induced economic bond.

[INSERT TABLE 8 HERE]

Taken together, findings in Table 7 and Table 8 lend additional support to H1, suggesting that UAF is positively associated with absolute discretionary accruals, especially when UAF is positive. And the positive association between excessive audit

fees and accruals are more likely driven by the "risk pricing" reasoning other than impaired audit independence.

5.2.3 Alternative Measures of Legal Regime

Given the importance of the *Investor Protection* measure in my tests, I discuss results with multiple legal regime measures. I repeat the main regression by replacing *Investor Protection* with three other legal origin and legal institution measures respectively, which are LIT_STD, PUB_ENF and SEC_REG (description of variables and data resources are described in APPENDIX). In order to measure the strength of securities laws, I include LIT_STD and PUB_ENF. LIT_STD is a liability index to measure investor's liability standard to recover losses from issuers of securities, auditors and other related parties when there has existed information distortion in the securities issuance. Liability standard captures the easiness of investors to sue auditors. According to La Porta et al. (2006), PUB_ENF is the index to measure public enforcement of security laws and is based on characteristics of regulatory agency, noncriminal sanctions, criminal sanctions etc. PUB_ENF captures to what extent auditors can be penalized for audit failure. Jaggi and Low (2009) find that not only can investor protection impact audit fees, but also securities regulation, particularly in countries with low investor protection. I include the measure SEC_REG to proxy for a country's overall effectiveness of securities regulation.

For brevity reasons, untabulated results show that my inferences for H1 and H2 are unaltered. Audit fees continue to be significantly and positively associated with caarucca In all regressions, coefficient of the interaction term between legal institutional

measures and accruals are significant with an expected positive sign. These finding support that legal origins and related legal institutions are determinant of fees-accruals association and the measurements of legal regime do not drive the results.

5.2.4 Potential Endogeneity Between |DA| and Audit Fees

As discussed above, the causality between audit fees and accruals can go both ways: accrual choices may be determined by fees paid to auditors and audit fees may be influenced by a client's accrual level. I use a 2 SLS to control for the potential endogeneity between |DA| and audit fees as following:

$$\text{Audit fee} = \alpha + \beta\,|DA| + \theta\,N + \varepsilon$$

$$|DA| = \lambda + \varphi\,\text{Audit fee} + \eta\,R + \mu$$

Endogenous variables: |DA|, audit fee

Exogenous variables: R, N (R and N are all control variables in Equation (1) & (2))

Step 1: Regress endogenous variables against all exogenous variables.

$$\text{Audit fee} = a + b\,N + c\,R + e$$

$$|DA| = d + f\,N + g\,R + u$$

Get $\widehat{Audit\ fee}$ and $\widehat{|DA|}$

Step 2: Regress original regressions, replacing endogenous variables with predicted values $\widehat{Audit\ fee}$ and $\widehat{|DA|}$.

$$\text{Audit fee} = \alpha + \beta\,\widehat{|DA|} + \theta\,N + \varepsilon$$

$$|DA| = \lambda + \varphi\,\widehat{Audit\ fee} + \eta\,R + \mu$$

Panel A and panel B of Table 9 report the results of 2 SLS as discussed above. In the first-stage regressions, presented in column 1 of panel A and B, the dependent variables |DA| and AFEE are regressed on all exogenous independent variables in both models. The predicted (fitted) value of the dependent variable from this regression is used as the test variable $\widehat{|DA|}$ ($\widehat{AFEE}$) in the second-stage regressions, presented in column 2 of panel A and B.

In Table 9, Panel A, Column 2 presents the second-stage regression results for the audit fees model. I find the results of the second-stage regressions with the instrumental variable $\widehat{|DA|}$ are qualitatively identical with the results presented in Table 4. Specifically, the coefficients of $\widehat{|DA|}$ are highly significant (p-value< 0.00), with an expected positive sign, consistent with H1. These results show that the results for the second-stage do not change after controlling for this potential endogeneity. This result implies that my findings are not confounded by potential endogeneity problem between |DA| and audit fees.

[INSERT TABLE 9 HERE]

VI. Additional Results

6.1 Unexpected Audit Fees and Firm Value

Auditors, on the one hand, provide independent assurance services to clients and, on the other hand, are hired and compensated by their clients. Such an auditor-client relationship creates an inborn independence problem to auditors. In practice, audit independence has been perceived as threatened by economic dependence of audit fees on clients. For example, SEC 2000 stated its concern that additional fees obtained by auditors through excessive high audit fees and provision of non-audit service may further increase the auditor-client economic bond and erode audit independence (both in-fact and in-appearance).

In the context of financial reporting quality (accruals quality), in Sections 5.1 and 5.2, I use magnitude of accruals to proxy for audit independence in-fact and test its association with audit fees. I find a positive association between audit fees and accruals, and this association is more inclined due to "risk pricing" reasoning other than "economic bonding" argument. In other words, contrary to the common belief, my results do not suggest that excessive audit fees reduce audit independence in-fact.

In this section, I extend the previous analysis by examining whether audit independence in-appearance is impaired by high audit fees. Stated another way, do investors view high audit fees as reduced audit independence and lower audit quality? Examining the economic consequences of audit fees in the context of firm valuation, I use Tobin's Q to proxy for investor's perception on audit independence (or audit independence in-appearance).

The association between audit fees and firm value can be understood by considering the role of auditing and its impact on "information risk." Francis et al. (2005) define information risk as "the likelihood that firm-specific information that is pertinent to investor pricing decisions is of poor quality." By upholding their objectivity and independence, auditors can lend additional credibility to client's financial reporting. In his speech in 2000, the former chairman of SEC, Arthur Levitt argued that, without confidence in an auditor's objectivity and fairness, investors can hardly be expected to trust a company's financial reporting. An audit of high independence can lend credibility to accounting information, reduce the noises of information for investor's decision making, and thus reduce information risk, which in turn reduces the cost of capital (Barry and Brown, 1985) and improves firm market value. However, if investors perceive audit as with lacking audit independence, credibility of accounting information will decrease and information risk will increase, which as a response increases the cost of capital and impairs market valuation.

Taken together, if investors perceive high level of audit fees as more economic bond between auditor and client, greater possibilities for auditors to succumb to client pressure (Nelson et al. 2002) and thus impaired audit independence, then credibility of financial reporting will decrease, information risk will increase and firm valuation will be discounted. I therefore predict a negative association between audit fees and firm valuation.

To test my conjuncture, I estimate the following regression model that links Tobin's Q to my test variable UAF along with interaction variable UAF*Investor Protection, as well as other control variables. In this test, I use UAF as the fee metric

because this measure is determined by specific contractual relationship between auditor and client (Hribar et al. 2010; Choi et al. 2010) and can better surrogate for the potential economic bond if there exists. Specifically, the model takes the following form:

$$Tobin'sQ = \gamma_0 + \gamma_1 UAF + \gamma_2 Investor\ Protection + \gamma_3 UAF * Investor\ Protection + \gamma_4 LNTA + \gamma_5 LEVE + \gamma_6 PROFIT + \gamma_7 GROWTH + \gamma_8 B4 + \gamma_9 AUD\_OPN + \gamma_{10} EQUITY + \gamma_{11} GDP\_PC + Industry\ and\ Year + \epsilon \quad (3)$$

where the dependent variable is Tobin's Q for each firm in each year. As previous research (e.g., Pae et al. 2008), I compute Tobin's Q as the ratio of total assets plus the market value of common stock less the book value of equity to the book value of assets.

Table 9 presents the results of weighted least square regressions for Eq. (3): In panel A, I use UAF as the fee metric. In columns 1 to 3, I use LAW, ENF_PRO and CLUSTER, respectively as a proxy for Investor Protection. In panel B, I repeat the regressions in panel A with an alternative fee metric: AFEE. In both panel A and panel B, the coefficients of UAF (AFEE) are highly significant (p-value <0.00) and positive across all six cases. This result is contradictory to my above prediction, suggesting that firms with higher level of audit fees actually enjoy higher firm valuation. In other words, investors attach a positive value to firms with higher audit fees. My findings do not support the common belief which argues that high audit fees are perceived as lower audit independence.

In addition, I find the coefficients of LAW, ENF_PRO and CLUSTER are all highly significant (p-value <0.00), with a positive sign across all regressions. This is consistent with findings in prior literatures that the market tend to attach higher valuation multiples to firms from countries with common law or with strong legal enforcement and investor protection (Doidge et al. 2007). More interestingly, I also find that the

coefficients of UAF*LAW, UAF*ENF_PRO, AFEE*LAW, AFEE*ENF_PRO, AFEE*CLUSTER are all highly significant (p-value <0.00) with a negative sign across all regressions. The finding suggests that the valuation premium associated with audit fees is stronger for firms from countries with weak legal institutions. This result also support the view that firm-level governance mechanisms, such as audit with high quality, and country-level governance mechanism, such as rule of law or investor protection strength, play a substitutive role (other than a complementary role) in firm valuation.

In panel C, I repeat the regression in panel A with two additional control variables, |DA| and |DA|*UAF. I find the results in panel C are qualitatively identical with the results presented in panel A. Specifically, the coefficients of UAF are highly significant (p-value <0.00), with an expected positive value. The coefficients of UAF*LAW, UAF*ENF_PRO and UAF*CLUSTER are all highly significant (p-value <0.00), with a negative sign. In addition, I find the coefficient of |DA| are highly significant (p-value <0.00) and positive across 3 regressions. This finding suggests that managers may convey valuable information to investors through their accrual choices, and thus these accruals are positively priced by the market.

With respect to the estimated coefficients of other control variables, the following is obvious. I find the coefficient of LNTA is highly significant (p-value < 0.00), with an expected negative sign across all six regressions. This is consistent with the finding in previous research (for e.g., Durnev and Kim 2005) that market assigns a lower value to larger firms, which is due to larger firms tend to have more agency problems. I find the coefficient of PROFIT is highly significant (p-value < 0.00) and positive across all six regressions. This suggests that market attaches a higher value to more profitable firms.

[INSERT TABLE 10 HERE]

6.2 Alternative Explanations: Are Investors Misled?

The evidence in Section 6.1 suggests that high level of audit fees are priced positively by the market. In the context of firm valuation, examining the economic consequence of UAF is a joint test of market pricing mechanism and the nature of UAF. This suggests that finding of market attaches higher value to firms with higher audit fees can be interpreted with two scenarios. In the first scenario, investors are misled and the finding of pricing of UAF is the evidence of market mispricing. In the second scenario, investors attach a positive value to UAF because UAF captures value relevant information and helps to predict future performance. This is because auditors tend to charge larger audit fees for firms with higher level of accruals (refer to the finding in Section 5.1). The level of accruals may represent managers' incentive to use accounting information for legitimate reasons, which is to convey their private information about future profitability to investors. As such, UAF may therefore capture managers' incentive to communicate proprietary information.

The analysis in this section aims to distinguish between the above-mentioned two alternative explanations by examining whether UAF help to predict future profitability or not. I develop the model by regressing CFO of next year on UAF and a number of control variables. Specifically, the model takes the following form:

$$CFO_N = \delta_0 + \delta_1 UAF + \delta_2 Investor\ Protection + \delta_3 UAF * Investor\ Protection + \delta_4 CFO + \delta_5 LNTA + \delta_6 LEVE + \delta_7 PROFIT + \epsilon \quad (4)$$

Table 10 presents the results of weighted least square regressions for Eq. (4): I use UAF as the fee metric. In columns 1 to 3, I use LAW, ENF_PRO and CLUSTER,

respectively as a proxy for Investor Protection. The coefficients of UAF are highly significant (p-value <0.00) and positive across all regressions. This result supports the conjuncture in the second scenario, suggesting that UAF is associated with a firm's future CFO.

In addition, I also find the coefficients of UAF*LAW, UAF*ENF_PRO and UAF*CLUSTER are all highly significant (p-value <0.00) with a negative sign across all regressions. This finding suggest that the ability of UAF to predict future CFO is more pronounced for firms from countries with civil law or weak legal enforcement and investor protections.

[INSERT TABLE 11 HERE]

The findings documented in Sections 6.1 and 6.2, taken as a whole, suggest that investors attach positive value to excessive audit fees, because UAF is value relevant and can help predict future profitability. Investors are not misled.

VII. CONCLUSION AND DISCUSSION

Do auditors price accruals? What is the underlying causality to explain the association between fees and accruals? What is the role of legal institutions on the association between audit fees and accruals? This dissertation aims to shed light on these questions.

In this dissertation, first of all, I find that audit fees are significantly and positively associated with accruals across countries. This result is consistent with a variety of prior studies (such as Frankel et al. 2002 and Choi et al. 2010), and most of these studies are used to employ "economic bonding" theory to explain the causality between audit fees and accruals. According to economic bonding argument, auditor independence is impaired through great economic dependence on client. Specifically, to retain clients with high audit fees, auditors may not be objective, not be able to retain professional skepticism, and not be diligent when conduct an audit. In addition, auditors may be more likely to acquiesce to clients' pressure and allow their earnings management behavior. This provides one explanation of why high audit fees are observed to be positively related with higher level of accruals.

I propose an alternative explanation for this positive fees-accruals association as following. Among other earning's components, accruals are hard to observe and audit. For example, Francis and Krishnan (2003) point out that accruals include a manager's subjective estimate of future outcomes, which cannot be verified until they occur. Thus, auditors face significant risks of litigation claims and associated reputation loss when clients have high level of discretionary accruals. If clients present higher level of discretionary accruals, auditors may charge a higher risk premium to compensate for additional risk they face. Auditors may also choose to conduct more hours of audit and

thus result in higher audit fees to lower their potential risk to acceptable level. Taken together, the large audit fees may represent auditors' assessment of accrual level with their proprietary information on clients. My analysis shows that the fees-accruals association is more likely to be driven by the "risk pricing" argument, which argues that auditors charge higher fees to compensate for additional engagement risks reflected in higher accruals.

Secondly, I find that a country's legal regime plays a significant role in audit pricing and the fees-accruals association varies when legal regime shifts from one country to another. Specifically, the positive fees-accruals association is more pronounced for firms from weak legal environments. This finding is consistent with the "risk pricing" argument as well. This is because, if the positive fees-accruals association is due to economic bond between auditor and client, clients from counties with strong legal regimes need to pay higher additional fees to "bribe" auditors since auditors have higher possibilities to be caught and endure penalties much higher under such legal environments. If this is the case, the positive fees-accruals association should be further strengthened under strong legal environments other than from weak legal regimes.

In the next stage of analysis, I proceed to investigate the impact of large audit fees on investors' perceived audit independence. I find a significant positive association between audit fees and Tobin's Q, and this association is more profound under weak legal environment than under strong legal environment. These results imply that investors did price large audit fees, and contrary to the common belief, they did not view excessive audit fees as a threat to audit independence. Instead, investors perceive large audit fees charged by auditors as conveying more valuable information to the market, and that

information is more important to investors in weak legal regime. This result also support the view that firm-level governance mechanisms, such as audit with high quality, and country-level governance mechanism, such as rule of law or investor protection strength, play a substitutive role (other than a complementary role) in firm valuation.

To rule out the possibility that the pricing of large audit fees by the stock market due to investors being misled by an inefficient market, I further test whether excessive audit fees help to predict future profitability or not. I find excessive audit fees are significantly and positively associated with CFO of next year. These results show that excessive audit fees are priced by market because of audit fees help to predict future profitability and contain valuable information to investors. Further, these findings suggest that when managers have incentives to use their earnings discretion to convey private information to investors, they are willing to pay the additional cost (excessive audit fees).

My findings are consistent with Subramanyam (1996)'s results and arguments. In his paper, Subramanyam (1996) find discretionary accruals are priced by the market and help predict future performance. Subramanyam (1996) states that "…while opportunistic accrual manipulation undoubtedly occurs in specific instances, it is less certain that it occurs on average in the population." He argues that managers use their discretion to improve earnings ability to reflect fundamental value other than manipulate earnings opportunistically.

The findings in this dissertation have implications for both accounting research and practice. First, results reported in this study are inconsistent with several longstanding views on audit fees and audit independence. (1) Large audit fees are previously perceived to erode audit independence through the economic bonding between

auditor and client. I find no evidence of large audit fees causing a decrease of earnings quality. Instead, I document that excessive audit fees are resulted from an auditor's risk pricing on higher level of discretionary accruals rather than the impaired independence. Although corruption between auditor and client via abnormally high audit fees certainly occurs in specific instances, it is less certain that it occurs on average in the population. (2) Large audit fees are not perceived as impaired audit independence and have been attached with market value. Additionally, the fact that excessive audit fees is priced by the market is because that excessive audit fees can improve value relevance of reported earnings and help predict future profitability.

Second, the evidence that the fees-accruals association varies across countries suggest that legal institutions play critical roles on accrual choices and audit pricing. To the best of my knowledge, this is the first study to test the fees-accruals association across countries. Prior studies typically use single country sample only and most of the countries are from strong legal regimes. My data from 13 countries around the world allow the litigation systems vary from weak (such as Malaysia) to strong (such as the US), and thus provide better opportunity to observe the auditor-client relationship under different strength of legal systems. In addition, results of this study show that legal institution is a key factor to understand the manager's reporting incentives and accrual choices, an auditor's assessment of risk and audit pricing.

Third, findings of this study may be interesting to government policy makers and standard setters. Contrary to their concern that excessive audit fees may erode audit quality, I document little evidence that large abnormal audit fees cause a decline in earnings quality. Thus, the effectiveness of SOX 2002 to improve audit independence and

thus audit quality by restricting auditors on consulting services (and other non-audit services) needs further investigation. Further, my results may be especially useful to IASB and IAASB. During the process of harmonizing accounting and auditing standards across countries around the world, it is especially important to consider impacts of local legal systems, practice and enforcement on accounting and auditing practices.

My findings should be interpreted cautiously. First, although I use a set of measures of legal environments from different dimensions, these country-level proxies may still have measurement errors and proxy for some unknown country factors, which is common in international studies. Second, although I control for a number of country-level factors (such as GDP, litigation risk), there may still exist other omitting country-level factors that have impact on the fees-accruals relation. Finally, my sample size is greatly constrained by the availability of auditor fees.

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Appendix I: Legal Institution Variables Definition and Data Sources

Variable	Definition	Data source
AFEE	Natural log of fees paid to auditors for financial statement audits in thousands of US dollars	Worldscope
UAF	Unexpected audit fees, the difference between AFEE and predicted value of AFEE.	Worldscope
ACCRUALS	Accruals are measured by one of the two proxies Absolute Total Accrual and Absolute Discretionary Accruals.	Worldscope
Tobin's Q	Firm-year Tobin's Q, the ratio of total assets plus the market value of common stock less the book value of equity to the book value of assets.	Worldscope
LNTA	Natural log of total assets in thousands of US dollars	Worldscope
PROFIT	Operating income divided by total assets	Worldscope
INVREC	The sum of inventories and receivables divided by total assets.	Worldscope
INTAN	Intangible assets divided by total assets	Worldscope
FOREIGN	1 if firm pays any foreign income tax; 0, otherwise	Worldscope
EXORD	1 if firm reports any extraordinary gains or losses; 0, otherwise.	Worldscope
LOSS	1 if firm reports a loss during the year; 0, otherwise	Worldscope
LOSS_1	1 if firm repots a loss from prior year; 0, otherwise	
LEVE	The ratio of year-end total liabilities to total assets	Worldscope
ROA	Return on assets (income before extraordinary items divided by average total assets)	Worldscope
BTM	Natural log of book-to-market ratio	Worldscope
CFO	Cash flow from operating activities divided by total assets	Worldscope
CFO_N	CFO from following year divided by total assets	
GROWTH	Growth in sales relative to prior year sales	Worldscope
ΔPPE	Growth in gross PPE over the prior year	Worldscope
B4	1 if firm uses one of Big 4 (5, 6, or 8) auditors; 0, otherwise	Worldscope
AUD_OPN	1 if firm receives a qualified opinion; 0, otherwise	Worldscope

GDP_PC	GDP per capita per country per year	www.worldbank.org
EQUITY	Importance of a country's equity market, measured by the extent to which each country's firms rely on equity financing	Leuz et al. (2003)

Appendix II: Variables Definition and Data Sources

Variable	Definition	Data source
LAW	Dummy variable, equals to 1 for a common-law country; 0, for a code-law country.	La Porta et al. (2006)
LITIGATE	Natural log of the Wingate (1997) litigation index. This index is derived from an assessment of litigiousness for doing business as an auditor in each country and was developed by an international insurance underwriter for one of the Big 4 auditors. The index ranges from 1 to 15, with higher values indicate more litigation risk.	Wingate (1997)
ENF_PRO	A combined index of ANTI_DIR and LAW_ENF, equals the sum of 100% of the ANTI_DIR value and 50% of LAW_ENF value.	Choi and Wong (2007)
CLUSTER	Dummy variable, equals to 1 for firms from group 1 in Leuz et al. (2003), which represent economies with large equity markets, dispersed ownership, strong investor rights and legal enforcement. CLUSTER equals to 0 for firms from group 2 and 3 in Leuz et al. (2003).	Leuz et al. (2003)
LIT_STD	An index of liability standard, equals the mean of 1) liability standard for the issuer and directors; 2) liability standard for distributors; and 3) liability standard for accountants. This index ranges from 0 to 1; with higher values indicate less procedural difficulty in recovering losses from agents.	La Porta et al. (2006)
PUB_ENF	An index of public enforcement, equals the mean of 1) supervisor characteristic index; 2) rule-making power index; 3) investigative power index; 4) orders index; 5) criminal index. This index ranges from 0 to 1; with higher values indicate better public enforcement.	La Porta et al. (2006)
LAW_ENF	An index of law enforcement equals the mean of 1) efficiency of judicial system; 2) rule of law; 3) corruption index. This index ranges from 0 to 10; with higher values indicate better legal enforcement.	La Porta et al. (1998)
SEC_REG	A combined index for securities regulations, equals the arithmetic mean of disclosure requirements index, liability standards index (LIT_STD), and public enforcement index (PUB_ENF).	La Porta et al. (2006)

FIGURE 1: Conceptual Model

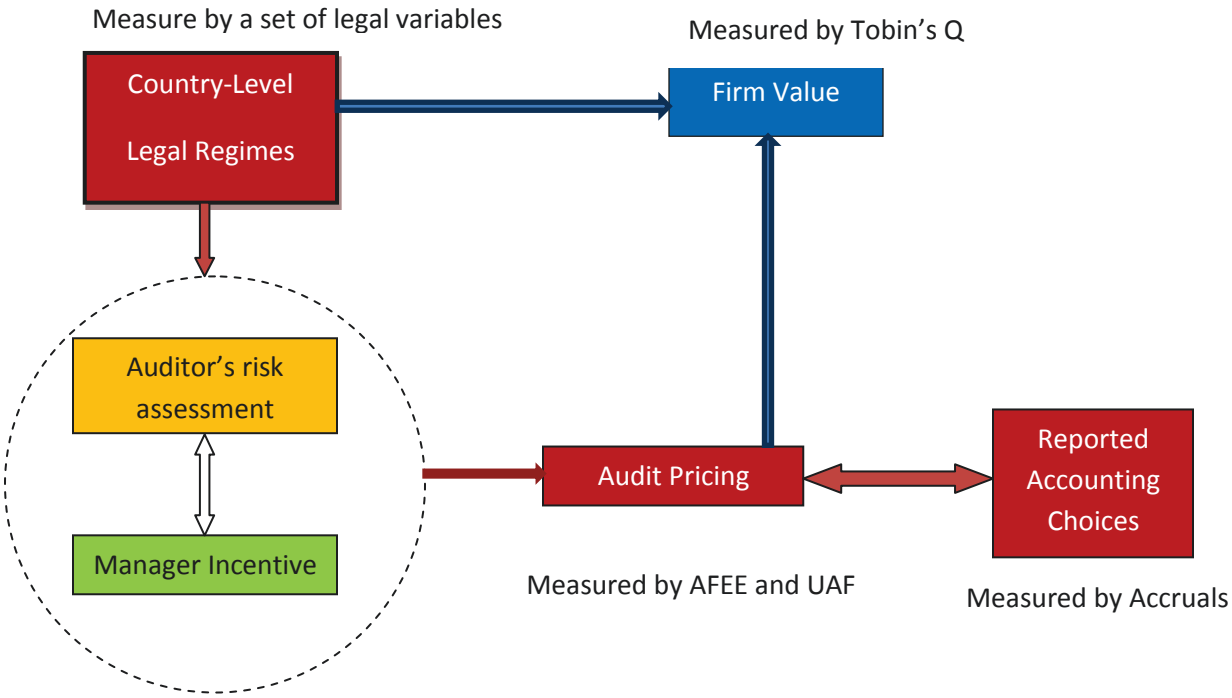
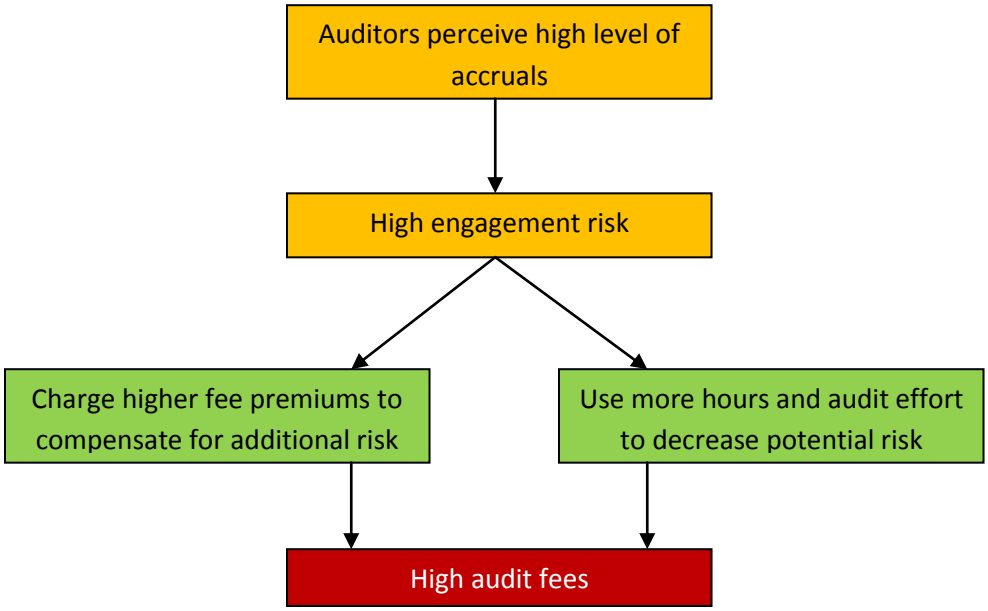


FIGURE 2: Link between Accruals and audit fees



Tables 1~11

Table 1: Descriptive Statistics

Panel A: Descriptive Statistics for Regression Variables

Variables	Mean	Quartile1	Median	Quartile3	Std. Dev.
|DA|	0.08	0.02	0.04	0.09	0.114
Tobin's Q	1.57	0.84	1.11	1.69	1.521
AFEE	5.36	4.14	5.16	6.36	1.817
UAF	0.00	-0.60	-0.011	0.579	0.999
LITIGATE	8.22	4.82	10	10	3.031
B4	0.73	0.00	1	1	0.445
LNTA	12.83	11.16	12.78	14.45	2.480
INVREC	0.29	0.09	0.26	0.44	0.224
INTAN	0.08	0.00	0.01	0.09	0.159
FOREIGN	0.24	0	0	0	0.428
EXORD	0.08	0	0	0	0.266
LEVE	0.56	0.32	0.50	0.66	0.293
ROA	1.53	-0.11	4.29	8.89	16.83
CFO	4.18E5	155.75	1.22E4	9.84E4	9.765E6
BTM	0.118	0.0358	0.0719	0.135	0.278
GROWTH	0.25	-0.08	0.06	0.23	1.199
∆PPE	-5.10E4	-0.20	0.17	1.42E4	1.587E7
LOSS	0.28	0	0	1	0.449
LOSS_1	0.27	0	0	1	0.444

(Table 1 continued on next page)

Panel B: Measures of Litigation Regime and Number of Observations per Country

Country	N	LITIGATE	LAW	ENF_PRO	CLUSTER
Australia	2,923	10	1	9	1
Denmark	690	4.82	0	7	0
Hong Kong	3,300	10	1	9.11	1
Ireland	327	6.22	1	7.9	0
Italy	66	6.22	0	5.2	0
Malaysia	3,535	3.61	1	7.39	1
New Zealand	305	10	1	9	0
Norway	534	6.22	0	9	1
Singapore	1,975	4.82	1	8.29	1
South Africa	773	4.82	1	7.21	0
Sweden	690	4.82	0	8	0
United Kingdom	7,688	10	1	9.29	1
United States	1,030	15	1	10	1

Table 2: Descriptive Statistics by Countries

Country	AFEE			UAF			|DA|			Tobin's Q		
	Mean	Med.	Sd.	Mean	Med.	Sd.	Mean	Med.	Sd.	Mean	Med.	Sd.
Australia	5.21	5.01	1.698	0.047	-0.008	1.09	0.10	0.05	0.141	2.08	1.33	2.146
Denmark	5.49	5.19	1.433	0.029	0.064	1.09	0.05	0.03	0.064	1.33	1.03	1.057
Hong Kong	5	4.93	1.014	-0.335	-0.307	0.843	0.11	0.05	0.139	1.43	0.90	1.710
Ireland	5.77	5.54	1.468	-0.303	-0.247	0.853	0.06	0.03	0.083	1.46	1.18	1.046
Italy	7.72	8.81	2.783	0.577	1.39	2.06	0.06	0.04	0.084	1.33	1.17	0.682
Malaysia	3.58	3.41	1.076	-0.295	-0.305	0.885	0.09	0.04	0.122	1.30	0.96	1.312
New Zealand	5.24	5.20	1.211	-0.202	-0.053	0.868	0.04	0.02	0.067	1.46	1.17	0.91
Norway	5.52	5.32	1.564	-0.55	-0.60	1.34	0.07	0.04	0.102	1.41	1.09	1.408
Singapore	4.76	4.79	1.24	-0.002	0.129	1.09	0.07	0.04	0.089	1.21	0.95	1.009
South Africa	6.08	6.13	1.5	1.49	1.57	0.949	0.08	0.04	0.098	1.48	1.21	1.090
Sweden	6.38	6.21	1.496	0.765	0.826	0.923	0.07	0.04	0.099	1.63	1.27	1.127
United Kingdom	5.86	5.69	1.521	0.124	0.121	0.817	0.07	0.04	0.104	1.61	1.19	1.444
United States	8.56	8.52	0.988	-0.096	-0.05	0.857	0.04	0.02	0.062	2.15	1.67	1.506

Table 3: Pearson Correlations among Regression Variables

Variables	|*DA*|	*UAF*	*LITIGATE*	*B4*	*LNTA*	*LEVE*	*CFO*	*GROWTH*	∆*PPE*	*LOSS_1*
UAF	-0.055									
	(0.000)									
LITIGATE	-0.003	-0.126								
	(0.679)	(0.000)								
B4	-0.083	-0.047	0.086							
	(0.000)	(0.000)	(0.000)							
LNTA	-0.226	0.064	-0.069	0.282						
	(0.000)	(0.000)	(0.000)	(0.000)						
LEVE	0.074	0.044	-0.009	-0.012	-0.043					
	(0.000)	(0.000)	(0.183)	(0.073)	(0.000)					
CFO	-0.015	0.053	0.000	0.019	0.103	0.002				
	(0.019)	(0.000)	(0.943)	(0.003)	(0.000)	(0.798)				
GROWTH	0.080	-0.015	0.003	-0.015	-0.003	-0.002	0.000			
	(0.000)	(0.019)	(0.645)	(0.017)	(0.608)	(0.709)	(0.923)			
∆***PPE***	0.013	0.030	-0.004	0.000	0.035	0.000	0.513	0.003		
	(0.041)	(0.000)	(0.548)	(0.092)	(0.000)	(0.991)	(0.000)	(0.697)		
LOSS_1	0.239	-0.016	0.025	-0.092	-0.039	0.061	-0.019	0.019	-0.004	
	(0.000)	(0.013)	(0.000)	(0.000)	(0.000)	(0.000)	(0.003)	(0.003)	(0.518)	1

Table 4
Empirical results on the association between audit fees and accruals conditional on different legal regime measurements

This table reports the weighted least square regression results of the effects of measures of accruals and strength of legal regimes on audit fees. The dependent variable is audit fees. All variables are defined in the Appendix. Coefficient estimates (p-values) are provided in the top (bottom) row.

Panel A: Accruals are measured by Absolute Total Accruals

		InvPro = LAW	InvPro =ENF_PRO	InvPro = CLUSTER
Intercept	-5.355	-5.131	-4.856	-5.254
	(0.00)	(0.00)	(0.00)	(0.00)
Accruals	**0.050**	**0.090**	**0.194**	**0.084**
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**
Investor Protection		-0.055	-0.051	-0.086
		(0.00)	(0.00)	(0.00)
*Accruals*Investor Protection*		**-0.050**	**-0.146**	**-0.041**
		(0.00)	**(0.00)**	**(0.00)**
B4	0.032	0.032	0.029	0.026
	(0.00)	(0.00)	(0.00)	(0.00)
LNTA	0.833	0.813	0.810	0.813
	(0.00)	(0.00)	(0.00)	(0.00)
INVREC	0.153	0.146	0.143	0.146
	(0.00)	(0.00)	(0.00)	(0.00)
INTAN	0.078	0.074	0.073	0.068
	(0.00)	(0.00)	(0.00)	(0.00)
FOREIGN	0.053	0.066	0.060	0.058
	(0.00)	(0.00)	(0.00)	(0.00)
EXORD	0.022	0.030	0.025	0.024
	(0.00)	(0.00)	(0.00)	(0.00)
LEVE	-0.027	-0.021	-0.023	-0.027
	(0.00)	(0.00)	(0.00)	(0.00)
ROA	-0.013	-0.013	-0.012	-0.019
	(0.00)	(0.00)	(0.00)	(0.00)
BTM	-0.029	-0.027	-0.027	-0.023
	(0.00)	(0.00)	(0.00)	(0.00)
LOSS	0.041	0.038	0.038	0.042
	(0.00)	(0.00)	(0.00)	(0.00)
AUD_OPN	0.016	0.015	0.013	0.018
	(0.00)	(0.00)	(0.00)	(0.00)
GDP_PC	0.093	0.043	0.103	0.093
	(0.00)	(0.00)	(0.00)	(0.00)
LITIGATE	0.099	0.139	0.141	0.132
	(0.00)	(0.00)	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes	Yes	Yes
Adjusted R^2	0.764	0.766	0.765	0.772
N	22,186	22,186	22,186	22,186

Table 4 (Continued)

Panel B: Accruals are measured by Absolute Discretionary Accruals

		InvPro = LAW	InvPro =ENF_PRO	InvPro = CLUSTER
Intercept	-5.284	-5.038	-4.822	-5.141
	(0.00)	(0.00)	(0.00)	(0.00)
Accruals	**0.033**	**0.062**	**0.213**	**0.072**
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**
Investor Protection		-0.059	-0.046	-0.086
		(0.00)	(0.00)	(0.00)
*Accruals*Investor Protection*		**-0.036**	**-0.183**	**-0.045**
		(0.00)	**(0.00)**	**(0.00)**
B4	0.033	0.033	0.030	0.027
	(0.00)	(0.00)	(0.00)	(0.00)
LNTA	0.830	0.810	0.807	0.809
	(0.00)	(0.00)	(0.00)	(0.00)
INVREC	0.152	0.144	0.142	0.143
	(0.00)	(0.00)	(0.00)	(0.00)
INTAN	0.079	0.076	0.074	0.070
	(0.00)	(0.00)	(0.00)	(0.00)
FOREIGN	0.054	0.067	0.061	0.059
	(0.00)	(0.00)	(0.00)	(0.00)
EXORD	0.022	0.029	0.025	0.024
	(0.00)	(0.00)	(0.00)	(0.00)
LEVE	- 0.027	-0.022	-0.023	-0.026
	(0.00)	(0.00)	(0.00)	(0.00)
ROA	-0.019	-0.019	-0.019	-0.026
	(0.00)	(0.00)	(0.00)	(0.00)
BTM	-0.030	-0.028	-0.028	-0.024
	(0.00)	(0.00)	(0.00)	(0.00)
LOSS	0.044	0.042	0.042	0.046
	(0.00)	(0.00)	(0.00)	(0.00)
AUD_OPN	0.016	0.015	0.013	0.018
	(0.00)	(0.00)	(0.00)	(0.00)
GDP_PC	0.092	0.045	0.103	0.092
	(0.00)	(0.00)	(0.00)	(0.00)
LITIGATE	0.100	0.139	0.140	0.134
	(0.00)	(0.00)	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes	Yes	Yes
Adjusted R^2	0.762	0.764	0.764	0.771
N	22,186	22,186	22,186	22,186

Table 4 (Continued)

Panel C: Accruals are measured by Absolute Lag Discretionary Accruals

		InvPro = LAW	InvPro =ENF_PRO	InvPro = CLUSTER
Intercept	-5.241	-4.976	-4.577	-5.0941
	(0.00)	(0.00)	(0.00)	(0.00)
LagAccruals	**0.011**	**0.028**	-0.014	**0.030**
	(0.00)	**(0.00)**	(0.61)	**(0.00)**
Investor Protection		-0.066	-0.061	-0.096
		(0.00)	(0.00)	(0.00)
*LagAccruals*Investor Protection*		**-0.020**	0.026	**-0.018**
		(0.00)	(0.35)	**(0.00)**
B4	0.032	0.033	0.030	0.026
	(0.00)	(0.00)	(0.00)	(0.00)
LNTA	0.827	0.808	0.807	0.808
	(0.00)	(0.00)	(0.00)	(0.00)
INVREC	0.154	0.147	0.144	0.146
	(0.00)	(0.00)	(0.00)	(0.00)
INTAN	0.079	0.076	0.075	0.070
	(0.00)	(0.00)	(0.00)	(0.00)
FOREIGN	0.053	0.066	0.060	0.058
	(0.00)	(0.00)	(0.00)	(0.00)
EXORD	0.021	0.029	0.024	0.023
	(0.00)	(0.00)	(0.00)	(0.00)
LEVE	- 0.026	-0.022	-0.023	-0.026
	(0.00)	(0.00)	(0.00)	(0.00)
ROA	-0.024	-0.022	-0.021	-0.028
	(0.00)	(0.00)	(0.00)	(0.00)
BTM	-0.031	-0.029	-0.029	-0.025
	(0.00)	(0.00)	(0.00)	(0.00)
LOSS	0.045	0.043	0.044	0.048
	(0.00)	(0.00)	(0.00)	(0.00)
AUD_OPN	0.016	0.015	0.013	0.017
	(0.00)	(0.00)	(0.00)	(0.00)
GDP_PC	0.091	0.043	0.099	0.090
	(0.00)	(0.00)	(0.00)	(0.00)
LITIGATE	0.102	0.140	0.139	0.135
	(0.00)	(0.00)	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes	Yes	Yes
Adjusted R^2	0.761	0.763	0.763	0.770
N	22,186	22,186	22,186	22,186

Table 5

Test of relationship between audit Fees and accruals conditional on different accrual subsamples

This table reports the weighted least square regression results of the association between audit fees and accruals for positive discretionary accrual subsample and negative discretionary accrual subsample respectively. The dependent variable is audit fees. Accruals are measured by absolute discretionary accruals and investor protection is measured by CLUSTER. All variables are defined in the Appendix. Coefficient estimates (p-values) are provided in the top (bottom) row.

	(1) Positive Discretionary Accrual Subsample		(2) Negative Discretionary Accrual Subsample	
Intercept	-5.632	-5.412	-4.767	-4.742
	(0.00)	(0.00)	(0.00)	(0.00)
Accruals	**0.016**	**0.051**	**0.056**	**0.107**
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**
Investor Protection		-0.086		-0.081
		(0.00)		(0.00)
*Accruals*Investor Protection*		**-0.039**		**-0.060**
		(0.00)		**(0.00)**
B4	0.028	0.022	0.034	0.030
	(0.00)	(0.00)	(0.00)	(0.00)
LNTA	0.822	0.800	0.833	0.813
	(0.00)	(0.00)	(0.00)	(0.00)
INVREC	0.151	0.142	0.153	0.147
	(0.00)	(0.00)	(0.00)	(0.00)
INTAN	0.086	0.076	0.071	0.063
	(0.00)	(0.00)	(0.00)	(0.00)
FOREIGN	0.046	0.052	0.060	0.065
	(0.00)	(0.00)	(0.00)	(0.00)
EXORD	0.027	0.031	0.018	0.018
	(0.00)	(0.00)	(0.00)	(0.00)
LEVE	0.008	0.003	-0.058	-0.052
	(0.12)	(0.65)	(0.00)	(0.00)
ROA	0.007	0.001	-0.021	-0.027
	(0.20)	(0.15)	(0.00)	(0.00)
BTM	-0.020	-0.014	-0.040	-0.034
	(0.00)	(0.00)	(0.00)	(0.00)
LOSS	0.048	0.048	0.032	0.036
	(0.00)	(0.00)	(0.00)	(0.00)
AUD_OPN	0.031	0.030	0.003	0.007
	(0.00)	(0.00)	(0.54)	(0.19)
GDP_PC	0.092	0.091	0.095	0.097
	(0.00)	(0.00)	(0.00)	(0.00)
LITIGATE	0.102	0.133	0.094	0.128
	(0.00)	(0.00)	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes	Yes	Yes
Adjusted R^2	0.781	0.790	0.749	0.757
N	11,663	11,663	10,522	10,522

Table 6
Test on incremental impacts of Big4 on the association between audit Fees and accruals

This table reports the weighted least square regression results of the incremental impacts of big 4 auditor on fees-accruals association. The dependent variable is audit fees. Accruals are measured by magnitude of absolute discretionary accruals and investor protection is measured by CLUSTER. All variables are defined in the Appendix. Coefficient estimates (p-values) are provided in the top (bottom) row.

	(1)	(2)	(3)
Intercept	-5.126	-5.023	-4.970
	(0.00)	(0.00)	(0.00)
Accruals	0.039	0.073	0.039
	(0.00)	(0.00)	(0.00)
Investor Protection	-0.102	-0.123	-0.140
	(0.00)	(0.00)	(0.00)
B4	0.027	0.006	-0.005
	(0.00)	(0.24)	(0.45)
*Accruals*Investor Protection*		-0.043	-0.002
		(0.00)	(0.89)
*Accruals*B4*		-0.002	**0.037**
		(0.71)	**(0.00)**
*Investor Protection *B4*		0.045	0.066
		(0.00)	(0.00)
*B4*Accruals*Investor Protection*			**-0.048**
			(0.00)
LNTA	0.812	0.808	0.808
	(0.00)	(0.00)	(0.00)
INVREC	0.143	0.143	0.143
	(0.00)	(0.00)	(0.00)
INTAN	0.070	0.070	0.070
	(0.00)	(0.00)	(0.00)
FOREIGN	0.059	0.059	0.059
	(0.00)	(0.00)	(0.00)
EXORD	0.024	0.024	0.023
	(0.00)	(0.00)	(0.00)
LEVE	-0.028	-0.026	-0.026
	(0.00)	(0.00)	(0.00)
ROA	- 0.023	-0.026	-0.026
	(0.00)	(0.00)	(0.00)
BTM	-0.024	-0.024	-0.024
	(0.00)	(0.00)	(0.00)
LOSS	0.047	0.046	0.046
	(0.00)	(0.00)	(0.00)
AUD_OPN	0.017	0.018	0.018
	(0.00)	(0.00)	(0.00)
GDP_PC	0.093	0.091	0.091
	(0.00)	(0.00)	(0.00)
LITIGATE	0.133	0.133	0.133
	(0.00)	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes	Yes
Adjusted R^2	0.771	0.771	0.772
N	22,186	22,186	22,186

Table 7

Test on the association between unexpected audit fees and discretionary accruals

This table reports the weighted least square regression results of the association between unexpected audit fees and absolute discretionary accruals. The dependent variable is absolute discretionary accruals. Accruals are measured by magnitude of absolute discretionary accruals. All variables are defined in the Appendix. Coefficient estimates (p-values) are provided in the top (bottom) row.

	(1) Full Sample	(2) Positive UAF Subsample	(3) Negative UAF Subsample
Intercept	0.138	0.154	0.145
	(0.00)	(0.00)	(0.00)
UAF	**0.064**	**0.075**	**0.014**
	(0.00)	**(0.00)**	**(0.14)**
B4	-0.003	-0.010	-0.008
	(0.64)	(0.29)	(0.41)
LNTA	- 0.261	-0.241	-0.308
	(0.00)	(0.00)	(0.00)
LEVE	0.093	0.049	0.150
	(0.00)	(0.00)	(0.00)
GROWTH	0.193	0.207	0.174
	(0.00)	(0.00)	(0.00)
C_PPE	0.011	-0.016	0.075
	(0.11)	(0.11)	(0.00)
LOSS_1	0.122	0.142	0.101
	(0.00)	(0.00)	(0.00)
CFO	0.049	0.036	0.047
	(0.00)	(0.00)	(0.00)
AUD_OPN	0.025	0.032	0.017
	(0.00)	(0.00)	(0.06)
LITIGATE	0.016	0.030	0.048
	(0.02)	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes	Yes
Adjusted R^2	0.147	0.154	0.159
N	21,891	10,895	10,995

Table 8
Test on the association between unexpected audit fees and discretionary accruals: Positive UAF Subsample only

This table reports the weighted least square regression results of the association between unexpected audit fees and absolute discretionary accruals. The dependent variable is absolute discretionary accruals. Accruals are measured by magnitude of absolute discretionary accruals. All variables are defined in the Appendix. Coefficient estimates (p-values) are provided in the top (bottom) row.

	(1) Positive DA Subsample	(2) Negative DA Subsample
Intercept	0.189	0.213
	(0.00)	(0.00)
UAF	**0.046**	**0.064**
	(0.00)	**(0.00)**
B4	0.003	-0.003
	(0.81)	(0.82)
LNTA	- 0.250	-0.366
	(0.00)	(0.00)
LEVE	0.069	0.188
	(0.00)	(0.00)
GROWTH	0.194	0.145
	(0.00)	(0.00)
C_PPE	0.052	0.015
	(0.00)	(0.23)
LOSS_1	0.089	0.162
	(0.00)	(0.00)
CFO	-0.023	0.078
	(0.12)	(0.00)
AUD_OPN	0.056	0.032
	(0.00)	(0.01)
LITIGATE	0.018	0.084
	(0.15)	(0.00)
Industry and Year Dummies	Yes	Yes
Adjusted R^2	0.147	0.233
N	5,637	5,257

Table 9
Empirical Results on Endogeneity Tests

Panel A: Analysis of Audit Fees

	(1) First-Stage (DV= |DA|)	(2) Second-Stage (DV= AFEE)
Intercept	0.115	-5.347
	(0.00)	(0.00)
Endogenous Variable		
$\widehat{\lvert DA \rvert}$		0.044
		(0.00)
Variables in Both Models		
B4	-0.003	0.034
	(0.69)	(0.00)
LNTA	-0.194	0.839
	(0.00)	(0.00)
LEVE	0.046	-0.026
	(0.00)	(0.00)
AUD_OPN	0.017	0.013
	(0.00)	(0.00)
LITIGATE	0.037	0.096
	(0.00)	(0.00)
Variables in Audit Fees Model		
INVREC	0.082	0.143
	(0.00)	(0.00)
INTAN	-0.005	0.086
	(0.45)	(0.00)
FOREIGN	-0.019	0.058
	(0.00)	(0.00)
EXORD	-0.028	0.026
	(0.00)	(0.00)
ROA	-0.126	-0.006
	(0.00)	(0.27)
BTM	-0.020	-0.031
	(0.00)	(0.00)
LOSS	0.036	0.049
	(0.00)	(0.00)
GDP_PC	-0.029	0.094
	(0.00)	(0.00)
Variables in DA Model		
Growth	0.197	
	(0.00)	
C_PPE	0.025	
	(0.00)	
LOSS_1	0.083	
	(0.00)	
CFO	0.038	
	(0.00)	
Industry and Year Dummies	Yes	Yes
Adjusted R^2	0.163	0.753
N	21,894	21,894

Table 9 (Continued)

Panel B: Analysis of Absolute Discretionary Accruals

	(1) First-Stage (DV=AFEE)	(2) Second-Stage (DV= |DA|)
Intercept	-4.548	0.186
	(0.00)	(0.00)
Endogenous Variable		
$\widehat{AFEE}$		0.177
		(0.00)
Variables in Both Models		
B4	0.038	-0.016
	(0.00)	(0.02)
LNTA	0.746	-0.414
	(0.00)	(0.00)
LEVE	-0.015	0.079
	(0.00)	(0.00)
AUD_OPN	0.010	0.026
	(0.00)	(0.00)
LITIGATE	0.108	-0.008
	(0.00)	(0.33)
Variables in Audit Fees Model		
INVREC	0.149	
	(0.00)	
INTAN	0.087	
	(0.00)	
FOREIGN	0.064	
	(0.00)	
EXORD	0.029	
	(0.00)	
ROA	-0.004	
	(0.35)	
BTM	-0.029	
	(0.00)	
LOSS	0.044	
	(0.00)	
GDP_PC	0.089	
	(0.00)	
Variables in DA Model		
Growth	- 0.012	0.197
	(0.00)	(0.00)
C_PPE	0.007	0.014
	(0.06)	(0.04)
LOSS_1	0.041	0.119
	(0.00)	(0.00)
CFO	0.114	0.037
	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes
Adjusted R^2	0.762	0.144
N	21,894	21,894

Table 10
Empirical results on the association between audit fees and firm value

This table reports the weighted least square regression results of the effects of audit fees and strength of legal regimes on firm value. The dependent variable is Tobin's Q. All variables are defined in the Appendix. Coefficient estimates (p-values) are provided in the top (bottom) row.

Panel A: Audit fees are measured by UAF

	InvPro = LAW	InvPro =ENF_PRO	InvPro = CLUSTER
Intercept	3.175	2.394	3.438
	(0.00)	(0.00)	(0.00)
UAF	**0.148**	**0.235**	**0.108**
	(0.00)	**(0.00)**	**(0.00)**
Investor Protection	**0.159**	**0.209**	**0.065**
	(0.00)	**(0.00)**	**(0.00)**
*UAF*Investor Protection*	**-0.044**	**-0.125**	0.011
	(0.00)	**(0.00)**	(0.22)
LNTA	-0.207	-0.210	-0.192
	(0.00)	(0.00)	(0.00)
LEVE	0.077	0.077	0.073
	(0.00)	(0.00)	(0.00)
PROFIT	0.057	0.057	0.057
	(0.00)	(0.00)	(0.00)
GROWTH	0.022	0.024	0.023
	(0.00)	(0.00)	(0.00)
B4	-0.007	-0.001	-0.002
	(0.27)	(0.86)	(0.81)
AUD_OPN	-0.001	0.003	0.000
	(0.83)	(0.62)	(0.98)
GDP_PC	0.197	0.051	0.116
	(0.00)	(0.00)	(0.00)
EQUITY	-0.141	-0.203	-0.098
	(0.00)	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes	Yes
Adjusted R^2	0.110	0.114	0.101
N	22,186	22,186	22,186

Table 10(Continued)

Panel B: Audit fees are measured by AFEE

	InvPro = LAW	InvPro =ENF_PRO	InvPro = CLUSTER
Intercept	2.916	1.855	3.372
	(0.00)	(0.00)	(0.00)
AFEE	**0.273**	**0.389**	**0.248**
	(0.00)	**(0.00)**	**(0.00)**
Investor Protection	**0.228**	**0.217**	**0.137**
	(0.00)	**(0.00)**	**(0.00)**
*AFEE*Investor Protection*	**-0.138**	**-0.218**	**-0.075**
	(0.00)	**(0.00)**	**(0.00)**
LNTA	-0.339	-0.327	-0.352
	(0.00)	(0.00)	(0.00)
LEVE	0.095	0.096	0.091
	(0.00)	(0.00)	(0.00)
PROFIT	0.055	0.056	0.056
	(0.00)	(0.00)	(0.00)
GROWTH	0.018	0.018	0.018
	(0.00)	(0.00)	(0.00)
B4	-0.012	-0.010	-0.011
	(0.06)	(0.13)	(0.09)
AUD_OPN	0.013	0.015	0.010
	(0.04)	(0.02)	(0.12)
GDP_PC	0.118	0.044	0.108
	(0.00)	(0.00)	(0.00)
EQUITY	-0.089	-0.147	-0.146
	(0.00)	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes	Yes
Adjusted R^2	0.106	0.109	0.107
N	23,826	23,826	23,826

Table 10 (Continued)

Panel C: Audit fees are measured by UAF (Add additional control variables)

	InvPro = LAW	InvPro =ENF_PRO	InvPro = CLUSTER
Intercept	2.999	2.212	3.213
	(0.00)	(0.00)	(0.00)
UAF	**0.133**	**0.185**	**0.096**
	(0.00)	**(0.00)**	**(0.00)**
Investor Protection	**0.161**	**0.210**	**0.052**
	(0.00)	**(0.00)**	**(0.00)**
*UAF*Investor Protection*	**-0.036**	**-0.083**	**0.018**
	(0.00)	**(0.02)**	**(0.03)**
|*DA*|	0.094	0.093	0.091
	(0.00)	(0.00)	(0.00)
|*DA*|**UAF*	0.001	0.000	-0.003
	(0.88)	(0.96)	(0.67)
LNTA	-0.183	-0.186	-0.166
	(0.00)	(0.00)	(0.00)
LEVE	0.067	0.067	0.063
	(0.00)	(0.00)	(0.00)
PROFIT	0.057	0.057	0.057
	(0.00)	(0.00)	(0.00)
GROWTH	0.002	0.004	0.003
	(0.79)	(0.56)	(0.62)
B4	-0.007	0.000	-0.001
	(0.32)	(0.98)	(0.83)
AUD_OPN	-0.005	0.000	-0.003
	(0.41)	(0.94)	(0.65)
GDP_PC	0.199	0.051	0.116
	(0.00)	(0.00)	(0.00)
EQUITY	-0.142	-0.205	-0.088
	(0.00)	(0.00)	(0.00)
Industry and Year Dummies	Yes	Yes	Yes
Adjusted R^2	0.118	0.121	0.108
N	22,186	22,186	22,186

Table 11
Empirical results on the association between UAF and future CFO

This table reports the weighted least square regression results of the effects of audit fees and strength of legal regimes on firm value. The dependent variable is CFO of the following year for a firm. All variables are defined in the Appendix. Coefficient estimates (p-values) are provided in the top (bottom) row.

	InvPro = LAW	InvPro =ENF_PRO	InvPro = CLUSTER
Intercept	-1.663E6	-1.832E6	-1.852E6
	(0.00)	(0.00)	(0.00)
UAF	**0.081**	**0.136**	**0.093**
	(0.00)	**(0.00)**	**(0.00)**
Investor Protection	-0.047	-0. 003	-0.003
	(0.00)	(0.57)	(0.63)
*UAF*Investor Protection*	**-0.028**	**-0.077**	**-0.048**
	(0.00)	**(0.02)**	**(0.00)**
CFO	0.590	0.599	0.597
	(0.00)	(0.00)	(0.00)
LNTA	0.203	0.204	0.203
	(0.00)	(0.00)	(0.00)
LEVE	-0.035	-0.033	-0.034
	(0.00)	(0.00)	(0.00)
PROFIT	0.007	0.006	0.006
	(0.19)	(0.24)	(0.22)
Industry and Year Dummies	Yes	Yes	Yes
Adjusted R^2	0.574	0.572	0.573
N	15,491	15,491	15,491