

## 审计师变更时机、年报审计意见分歧与审计质量

### ——来自中国证券市场的经验证据<sup>1</sup>

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#### 摘要

本文从审计师变更时机的角度，全面考察了我国证券市场中的审计师变更问题，以2001至2008年发生审计师变更的A股上市公司为研究对象，从效率观和机会主义动机的角度，分析了影响审计师变更时机选择的因素，以及不同变更时机对审计意见收买、审计师选择和审计定价的影响。通过研究，我们发现：(1) 审计师变更时机与变更动机直接相关，出于机会主义动机发生的审计师变更，其变更时间较晚，而出于效率观动机发生的审计师变更，其变更时间较早；(2) 在财政年度结束以后变更审计师的公司，发生收买审计意见的可能性显著高于在财政年度结束以前变更审计师的公司；(3) 公司越晚变更审计师，选择高质量继任审计师的可能性越低；(4) 公司越晚变更审计师，被继任审计师收取的审计费用越高。综合本文发现，审计师变更时机是考察审计师变更事件性质及变更动机的重要视角，审计师变更时机与年报审计意见分歧、审计质量等密切相关，这需要引起证券市场参与各方更大的关注。

关键词：审计师变更时机、审计意见收买、审计师选择、审计定价

中图分类号：F239、F276、F832

<sup>1</sup> 本文得到教育部人文社会科学重点研究基地重大项目(2009JJD790031)，以及上海市社科规划一般课题(2009BJB020)和上海财经大学研究生创新基金资助项目(CXJJ-2009-339、CXJJ-2010-324)的资助。作者感谢《中国会计与财务研究》执行编辑吴东辉教授和两位匿名审稿人对本文提出的宝贵建议，以及上海财经大学会计学院陈信元教授、朱红军教授、侯青川博士、同济大学曹胜博士对本文的帮助和评论，当然文责自负。

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## 一、研究问题的提出

经由注册会计师审计的财务信息是资本市场正常运行和健康发展的重要因素之一(Watts and Zimmerman, 1983)。审计市场的发展与资本市场的运行休戚相关,高质量的审计服务能够提高财务会计信息发挥资产定价和资源配置的作用,同时能够有效降低信息不对称的程度,减轻由逆向选择和道德风险造成的效率损失,反之亦然(Jensen and Meckling, 1976)。近几年,伴随着我国社会经济的转型,新型市场环境下的独立审计面临着前所未有的挑战和困难,市场中的各利益相关主体都希望能够借由审计市场中出现的特殊现象来研究和探索我国注册会计师行业整体的现状以及出现的问题。审计师变更是外部研究者观察审计契约行为的一个最为显见和重要的窗口,同时审计师变更的目的以及经济后果等问题都是与审计独立性直接相关的核心问题。由于审计师与客户公司之间的契约具有不可观察性,再加上审计师的执业过程无法被外界获知,因此审计师变更现象成为考察利益相关方行为表现的重要实验环境,对审计师变更行为的深入分析涉及我们如何理解独立审计在公司治理和资本市场中扮演的角色以及审计市场的监管等重要问题。

上市公司频繁更换审计师的现象已经引起市场监管部门、学术界乃至社会公众的高度重视。关于审计师变更问题的研究一直是学术界讨论的热点问题,已有的研究大多是将审计师变更事件作为分割线,把变更前公司或者审计师若干维度的特征与变更后相应的特征进行比较,由此推断出变更事件涉及的相关问题,如客户公司的变更动机(Francis and Wilson, 1988; Chen *et al.*, 2010)、审计师在收益与风险之间的权衡表现、投资者对上市公司以及审计师声誉的评价(Teoh and Wong, 1993; Chaney and Philipich, 2002; Weber *et al.*, 2008)等。对于审计师变更过程中更为直接的特征变量——审计师变更时机<sup>3</sup>,则鲜有研究以此展开,仅Barton(2005)、Chen and Zhou(2007)以安达信审计失败事件为研究背景,从对审计师声誉需求的角度,考察了客户公司非自愿性审计师变更环境下的时机选择问题。审计师变更时机是考察审计师变更问题的重要切入点,它往往与变更动机以及变更决策的影响因素直接相关,研究审计师变更时机问题,对于更加全面和准确地理解审计师变更行为十分重要。

概括起来,上市公司更换审计师的原因主要有以下两类:其一是从提高效率的角度考虑,侧重满足公司业务发展的需要,如当公司规模、融资方式或者经营内容等发生变化时(Healy and Lys, 1986; Johnson and Lys, 1990; Menon and Williams, 1991);其二是出于机会主义动机的考虑,侧重于调和与审计师之间就年度财务报告相关的会计处理或者审计意见等方面的分歧(Chow and Rice, 1982; Chen *et al.*, 2010)。不同原因导致的审计师变更在时机选择上会存在一定的差异。首先,当上市公司决定在其经营范围、组织结构或者投融资计划等方面做出调整,并且他们认为现任审计师无法提供满足其需要的服务时,上市公司就会更换审计师。而且这类业务调整方面的决策通常需要较长的准备和计划时间,与之相应的审计师变更决策也会较早地做出,这样以便于继任审计师能有充足的时间执行审计业务。其次,当

<sup>3</sup> 审计师变更时机是指上市公司变更审计师的公告日期,其时间范围从上一年度年报公告日起到财政年度结束后次年的年报公告日止。

上市公司与审计师无法就年报涉及的会计方法选择,或者审计意见等事项达成共识时,审计师也很可能会被替换,而这类争议通常发生在前任审计师已经“入场”开展年报审计工作之后,并且双方起初会进行一定的协商和调整,如果仍然无法达成一致,才会变更审计师。因此,相比第一类变更原因,出于机会主义动机导致的审计师变更其变更时间通常较晚。由此可见,审计师变更时机不仅能够反映出上市公司变更动机方面的特征,同时,也能够一定程度上,揭示出上市公司和审计师在执行审计契约中各自不同的行为表现。本文以审计师变更时机为研究对象,我们的推断是,如果上市公司是出于业务调整的需要,那么,公司会较早地作出变更审计师的决策;相反,如果是出于机会主义动机的考虑,那么,公司会较晚地作出变更决策。

具体来说,本文以2001至2008年我国证券市场中发生审计师变更的上市公司为研究对象,全面而系统地分析了审计师变更时机的影响因素,以及不同变更时机下的经济后果。通过研究,我们发现:(1)审计师变更时机是反映审计师变更动机和变更事件性质的重要参考指标,出于机会主义动机发生的审计师变更时间较晚,而出于效率观动机发生的审计师变更时间较早。(2)审计师变更时间越晚,特别是在财政年度结束之后发生的变更,出现收买审计意见的可能性显著高于在财政年度结束之前发生的审计师变更。(3)越晚变更审计师的公司,越倾向于选择“国内小所”作为继任审计师,而越早变更审计师的公司,则越倾向于选择“国际四大”或者“国内大所”作为继任审计师。(4)审计师变更时机还与继任审计师的审计收费密切相关,越晚发生审计师变更的公司,被继任审计师收取的审计费用显著高于越早变更审计师的公司。上述这些研究证据表明,审计师变更时机是审视上市公司审计师变更行为的重要视角,并且能够反映出公司变更审计师的内在动机。

本文的研究具有以下三方面的贡献:首先,已有的关于审计师变更时机的文献(Chang *et al.*, 2003; Barton, 2005; Chen and Zhou, 2007),主要是以安达信审计失败的案例为研究对象,考察上市公司在外生事件影响下,非完全自愿性审计师变更的时机选择,与此不同,本文从效率观和机会主义动机的角度出发,研究了上市公司日常经营活动中自愿性审计师变更的时机选择问题;其次,我们的研究不仅提供了审计师变更时机影响因素的直接经验证据,而且还全面考察了审计师变更时机伴随的经济后果,包括审计意见收买、审计师选择以及审计定价等问题,从而丰富了相关领域的研究成果,对相关文献也具有增量贡献(Francis and Wilson, 1988; Lennox, 2000; 李爽和吴溪, 2004b; 陈杰平等, 2005; Chan *et al.*, 2006等);第三,本文的研究对我国证券市场中审计师变更行为的考察和认识提供了可供参照的视角,对于证券市场的监管者、政策制定者以及投资者都具有一定的启示意义,有助于他们根据公司变更审计师的时机采取相应的决策。

后文的结构安排如下:第二节在对相关文献进行回顾和评述的基础上,提出本文的研究假说;第三节是研究方法设计,包括样本选择、数据来源以及模型设定;第四节是实证结果和分析;最后是本文的研究结论。

## 二、文献评述与假说推演

### (一) 审计师变更时机的影响因素

自Chow and Rice(1982)的研究以来,大量文献研究了审计师变更的特征、原因及后果等,审计师变更已经成为学术界研究的一项重要课题。从研究内容来看,与审计师变更相关领域的已有文献可以分为以下两类:一类研究通过分析审计师变更以前公司的特征来判断更换审计师的动机,归纳为审计师变更的“动机研究”;另一类研究则通过分析审计师变更以后公司或继任审计师的特征来判断公司是否达到了变更的目的,以及变更产生的其他经济后果,归纳为审计师变更的“经济后果研究”。至于审计师变更的时机选择问题,目前仍然缺乏系统性的专门研究,但审计师变更时机的影响因素往往与公司更换审计师的动机(如效率观或机会主义观)直接相关,因此,诸多影响审计师变更的因素可以作为研究审计师变更时机选择问题的出发点(伍利娜和束晓辉,2006)。

首先,作为一种监督和担保机制,高质量的审计服务能够增加公司财务报告的可信性,从而有效降低企业的代理成本(Cohen *et al.*, 2002; Fan and Wong, 2005; Lennox, 2005等)。审计师与客户业务关系的维系客观上基于客户需求和审计师提供服务的最低成本契约,因此,当客户或者审计师任何一方的特征发生改变,而另一方无法或不愿意适应这种变化,也就是当公司的契约环境发生改变时,这种契约关系就可能中断或终止(DeAngelo, 1981)。一般来说,当公司由于业务发展需要或者其他重大特征发生变化时,出于提高审计效率的考虑,上市公司会调整其审计师选择的安排,进而做出变更审计师的决策。

客户公司的规模、成长性以及财务杠杆水平会显著影响公司的审计师选择行为(Palmrose, 1984; Healy and Lys, 1986; Johnson and Lys, 1990),另外,由于公司在不同的经营阶段或条件下对审计服务的需求不同,因此也会导致审计师变更。Francis and Wilson(1988)在考察了公司代理成本与审计师级差需求之间的关系后,研究发现,基于会计盈余的红利计划、股权分散程度、财务杠杆水平以及代理成本等,均显著影响公司的审计师变更决策。Johnson and Lys(1990)指出,当客户公司与经营活动相关的特征发生变化时,现任审计师原有的竞争优势将随之减弱。因此,当上市公司规模扩张或者进行多元化经营时,公司更换审计师的可能性也会增加。Healy and Lys(1986)以及Menon and Williams(1991)等人的研究还表明,当上市公司的投融资计划发生重大变化时,公司会选择能在相关方面提供更多帮助的会计师事务所。

其次,已有的研究结果显示,我国在法律和监督执行效率、政府与市场的关系、市场发育程度(沈艺峰,2005;樊纲等,2007)以及公司治理效率(李增泉,2002;李维安,2006)等方面仍然存在着很大的不足,与成熟资本市场的差距较大。因此,在我国目前的制度环境下,由于法律体系的不完善,从而降低了审计师的诉讼风险和诉讼成本,进而可能出现审计师对审计服务的独立性,以及审计质量进行妥协的现象(DeFond *et al.*, 2000; Chan *et al.*, 2006; Choi *et al.*, 2008),而且在法律体系不健全、投资者保护不足的环境下,公司的治理结构往往采用股权较为集中或者内部人控制为主导的形式(Shleifer and Vishny, 1997; La Porta *et al.*, 1999),这会大大降低公司对外部高质量审计服务的需求(Wang *et al.*, 2008),从而导致审计师难以发挥其降低代理成本或者减少信息不对称程度的治理功能。因此,机会主义动

机是影响审计师变更决策的另一个重要因素。

尽管影响审计师变更决策的因素众多(Williams, 1988; Beattie and Fearnley, 1995),但大量研究均从机会主义动机的角度给出了解释。Chow and Rice(1982), Lennox(2000), Chen *et al.*(2000)发现,当客户公司与主审会计师就年报载明的有关事项或者审计意见等,出现分歧并且协商未果时,审计师很可能被更换。Whittred and Zimmer(1984)指出,审计师与上市公司之间就会计政策变更、公司盈利状况恶化的说明等事项产生的争议,是导致审计师变更的重要原因。Kinney and McDaniel(1993)发现,若上市公司不能接受会计师事务所提出的非经常性项目披露原则,而审计师出于自身声誉方面的考虑又不肯妥协时,公司通常会选择变更审计师。另外,由于盈余管理常常被管理层当作达到市场预期的重要手段,因此,与盈余管理相关的意见分歧也会导致审计师变更(Loomis, 1999)。DeFond and Subramanyam(1998)研究发现,在审计师更换以后,公司的可操纵性应计项目的金额比更换前要高,有较强盈余管理动机的上市公司更倾向于更换审计师。陈武朝和张泓(2004)、刘伟和刘星(2007)将盈余管理动机与审计师的稳健性会计处理相联系,研究发现,公司能够通过变更审计师达到盈余操纵的目的。此外,会计师事务所是否出具标准无保留意见的审计报告,也是上市公司管理层关注的焦点。Chow and Rice(1982), Krishnan and Stephens(1995), DeFond and Subramanyam(1998), 李东平等(2001), Vanstraelen(2003), 陆正飞和童盼(2003), Chan *et al.*(2006)等均发现,审计师变更决策与非标准审计意见显著相关。

综上所述,分析上市公司变更审计师的动机或影响因素,对于更准确地把握和判断审计师变更的性质尤为重要。审计师变更时机属于审计师变更决策过程中较为直接的可观测变量,不同的变更动机直接作用在变更时间上,审计师变更时机提供了认识和探究审计师变更问题的重要视角。一些学者以安达信倒闭事件为实验环境,从对审计师声誉需求的角度,考察了客户公司改聘审计师的时机选择。Barton(2005)研究发现,受市场关注度(分析师跟踪人数、股权融资比例以及机构投资者比例等)较高的公司出于对自身声誉的保护,会在安达信审计失败以后较早地更换审计师。Chen and Zhou(2007)指出,安达信被起诉后,其声誉明显下降,内部治理越好的客户公司会选择越早地变更审计师。对客户公司而言,由于事务所方面突发的外生事件导致的审计师变更,并不完全属于自愿性审计师变更行为,本文侧重考察公司在日常经营活动中自愿性审计师变更的时机选择问题,并从审计师变更动机的角度,分析影响变更时机选择的因素。

上市公司更换审计其财务报告的会计师事务所属于公司的重大事项,证监会在《关于上市公司聘用、更换会计师事务所(审计事务所)有关问题的通知》中规定:公司解聘或者不再续聘会计师事务所由股东大会作出决定,并在有关的报刊上予以披露,必要时说明更换原因,并报中国证监会和中国注册会计师协会备案。一般来讲,上市公司出于不同的动机,会选择在不同的时间做出变更审计师的决策。审计师变更时机与变更原因密切相关,而且在不同的变更时机下,客户公司的行为表现也会存在系统性的差异(Chen and Zhou, 2007)。一方面,当公司在诸如投融资安排、经营方式或者组织形式等方面做出重大调整时,通常需要相对较长的准备和规划时间,与之相应的审计师变更决策一般会较早地作出,以便继任审计师能够更有

信心地接受审计业务，并保证有充足的时间完成审计程序。另一方面，与上市公司年度财务报告相关的审计师调整安排，如改善审计意见或者改聘执业较为宽松的审计师(Chen *et al.*, 2010)等，通常发生在前任审计师已经开展年报审计工作以后，而且双方起初会就出现争议的相关事项进行协商，最终如果仍然无法达成共识，才会选择更换审计师。因此，与之相应的审计师变更决策一般会较晚地作出，如在公司财政年度结束以后或者接近年报公告发布截止日等。综合上述分析，我们提出本文要检验的第一个研究假说：

**假说一：出于机会主义动机发生的审计师变更，其变更时间越晚；出于效率观动机发生的审计师变更，其变更时间越早。**

## (二) 审计师变更时机的经济后果

当审计结果出现不利于公司的情形时，例如财务报告被出具非标准审计意见，上市公司和管理层的利益都可能遭受一定的损失，如出现融资困难、公司和个人的声誉受损、管理层个人的福利减少，甚至生存危机等(陈杰平等，2005)。因此，管理层对于不利审计意见具有强烈的规避动机。已有的文献指出，上市公司避免被出具非标准审计意见的方法大致有以下两种：第一是收买或威胁现任审计师(陈杰平等，2005；方军雄和洪剑峭，2008)；第二是变更审计师(Chan *et al.*, 2006)。其中，变更审计师是上市公司改善审计意见的常用手段之一，这也是监管部门予以特别关注的问题。Lennox(2000)以及李爽和吴溪(2002)均发现，具有审计意见收买动机的上市公司能够通过变更审计师达到改善审计意见的目的。本文在整理上市公司更换审计师的决策公告时也发现，<sup>4</sup>部分上市公司在更换审计师的公告中甚至直接说明了更换审计师的原因，是前任审计师过分严格的执业标准或者拟出具非标准审计意见而导致协商未果。

如果公司管理层预期变更审计师之后被出具非标准审计意见的概率小于维持现任审计师获得非标意见的概率，那么，他们就会做出变更审计师的决策(Lennox, 2000)，此时公司通过更换审计师来寻求其他注册会计师的支持，以满足自身财务报告的需要，并且成功地规避了不利审计意见，实现了审计意见收买。审计意见购买动机导致的审计师变更会对变更时机选择产生重大影响。上市公司出于年报审计意见分歧而导致的审计师变更，通常发生在与现任审计师无法就年报载明的相关事项达成共识的情况下，特别是在财政年度结束以后发生的审计师变更，客户公司具有较强的改善审计意见的动机。财政年度结束日是上市公司对一个会计期间内的财务状况、经营成果等进行核算的时间界限，也是公司年报核算内容的截止时间，与本文对审计师变更时机的考察维度相对应，出于机会主义动机发生的审计师变更与公司的年度财务报告密切相关，在财政年度结束日之后发生的审计师变更，很可能

<sup>4</sup> 我国审计师变更的信息披露制度与美国证券市场存在较大差异：首先，SEC要求上市公司变更审计师时需要提交8-K格式报告，而我国并无此披露要求；其次，我国审计师变更公告缺乏实质性信息披露(李爽和吴溪，2002、2006)，关于审计师变更的发起方、变更实质原因等少有呈列。

是由于与年报相关事项的意见分歧导致的，而这也正是本文要检验的第二个研究假说：

**假说二：公司在财政年度结束以后变更审计师，发生审计意见收买行为的可能性显著大于在财政年度结束以前发生的审计师变更。**

DeFond (1992) 指出，代理冲突的程度决定了对独立审计的需求，代理成本的大小将决定上市公司对审计师的选择行为。聘请高质量的审计师能够降低公司的信息不对称的程度 (Teoh and Wong, 1993; Krishnan, 2003; Barton, 2005; Albring *et al.*, 2007)，同时高质量的外部审计师通过其治理功能的发挥能够降低公司的代理成本 (DeFond, 1992; Fan and Wong, 2005)。已有一些文献是从审计师变更以后继任审计师的选择角度，来考察审计师变更的经济后果。Francis and Wilson (1988) 研究发现，公司代理成本越高，审计师的变更方向越有可能是从小规模的事务所转向大规模的事务所。DeAngelo (1981)，Chow and Rice (1982) 则发现，如果在变更审计师以前公司被出具了非标准审计意见，那么他们通常更倾向于选择执业标准较为宽松的继任审计师。Whisenant (2003) 指出，在上市公司与审计师由于意见分歧导致审计师变更以后，公司更倾向于选择低质量的继任审计师。Blouin *et al.* (2007) 和 Chen *et al.* (2009) 则发现，在安达信倒闭之前，如果客户公司具有较高的应计水平，那么，他们会跟随安达信原有的审计团队一起转入新的会计师事务所，进而利用客户关系以寻求前任审计师在会计处理上的支持。

继任审计师的选择与审计师的变更动机直接相关，高质量审计师的执业谨慎度相对较高，出具非标准审计意见的可能性也会随之增大。与此同时，根据前文的分析，如果公司出于机会主义动机，从而较晚地变更审计师，其变更动机往往与年报的会计处理或者审计意见分歧等直接关联，因此，这类公司对高质量审计服务的需求也会明显下降，他们更倾向于选择执业谨慎度较低、对风险控制较为宽松的继任审计师，以满足其年度财务报告的需要。反之，如果公司是出于业务发展的需要或者公司内部结构调整等原因导致审计师发生变动，其变更时间相对较早，而且出于提高审计效率的角度考虑，相比机会主义动机，此时公司选择高质量继任审计师的可能性更大。由此，提出本文的研究假说三：

**假说三：公司越晚变更审计师，选择高质量继任审计师的可能性显著小于越早变更审计师的公司。**

决定审计质量的另一个重要方面是审计的收费制度。Simunic and Stein (1996) 指出，审计成本包含两个部分：投入资源成本 (如工作时间成本、人力成本等) 和预计未来的损失成本 (如面临的诉讼风险等)。由于审计风险的存在而导致预期的诉讼成本和恢复声誉的潜在成本均是审计费用的重要组成部分。理性的事务所会对不同审计风险的客户采取不同的定价策略。陈杰平等 (2005) 的研究发现，在发生审计师变更的环境下，异常审计收费会显著提高。李爽和吴溪 (2004a) 的研究指出，继任审计师对发生审计师变更的公司，在首次定价时不但没有出现显著的收费折扣现象，反

而存在着明显的审计溢价。审计定价的高低能够在一定程度上反映出审计师对不同风险水平的客户公司采取的差异化对待策略。

审计定价是上市公司和审计师建立契约关系时共同确定的，审计师变更时机对审计服务的供给方面而言，反映了对上述两方面成本——投入成本和风险成本的综合评价，投入成本与审计师变更的时间直接对应，风险成本与上市公司变更审计师的动机相关联，显然，出于机会主义动机发生的审计师变更，无论是投入成本还是风险成本均高于出于业务发展需要而导致的审计师变更，审计师变更时机能够同时将这两方面的因素考虑进来。越晚发生审计师变更的公司，越有可能是出于年报分歧的机会主义动机，这类变更会产生两方面的经济后果，一方面由于变更时间较晚，因此，完成审计程序所需要的时间和人员安排相对紧迫；另一方面这类变更公司的审计风险和审计成本显著增加，因此，继任审计师通常会通过收取更高审计费用的方式来弥补成本。反之，较早发生审计师变更的公司，则更倾向于选择更能满足自身业务发展需要、和公司更为匹配的继任审计师，因此，相比机会主义动机下的审计师变更，继任审计师对较早发生审计师变更的公司审计定价更低。据此，提出本文的研究假说四：

**假说四：公司越晚变更审计师，被继任审计师收取的审计费用显著高于越早变更审计师的公司。**

### 三、研究方法设计

#### (一) 样本选择和数据来源

为检验上文提出的研究假说，我们选取2001至2008年我国证券市场中发生审计师变更的A股上市公司为研究对象，审计师变更样本的选取过程如下：我们首先以2001至2008年所有A股上市公司的年报审计单位为起点，不重复的选取所有出现的为上市公司提供年报审计服务的会计师事务所；然后对会计师事务所的更名、合并以及重组信息进行整理，在本文的研究中，这些事项均属于事务所经营规模的调整，其经济实质并未改变，由此带来的上市公司连续年度的主审单位发生变化，并不属于本文界定的审计师变更范畴。会计师事务所的更名、合并以及重组信息来自于各事务所网站、中国注册会计师协会网站(<http://www.cicpa.org.cn>)以及中国证监会网站(<http://assdata.csrc.gov.cn>)。对于数据库中缺失审计单位的样本观测值，我们手工收集了上市公司的年度报告，年报信息来自中国证监会指定的信息披露网站——巨潮资讯网(<http://www.cninfo.com.cn>)。为上市公司担任年报审计工作的主审会计师事务所连续年度发生变化时，即定义为本文的审计师变更样本。

根据已经确定的发生审计师变更的样本公司，我们手工收集了相应的具体变更公告日期，同时通过这一步骤，也可以对审计师变更的样本进行核查。一般来说，更换会计师事务所这一重大事项，在提交给(临时)股东大会审议之前，会由董事会通过发布议案公告的形式进行说明，而且董事会的议案公告基本都经股东大会批准通过，因此，本文以载有变更审计机构事项的董事会公告的发布日期作为审计师变更的日期。



初始样本确定之后，我们依次剔除了下列样本公司以排除其他因素的干扰：1. 审计师变更公告缺失的样本；2. 金融保险行业公司<sup>5</sup>；3. 因会计师事务所被撤销或者年检未通过而取消证券从业资格导致的强制性审计师变更样本；4. 因会计师事务所达到审计服务年限要求或者母公司统一调整审计师安排而导致的非自愿性审计师变更样本<sup>6</sup>；5. 当年新上市的公司；7. 财务数据缺失的样本。经过上述程序，最终得到817个发生审计师变更的样本观测值。

审计师变更公告信息全部来自巨潮资讯网，同时，我们将其与Wind资讯系统中上市公司的公告信息进行了核对确认。本文使用的其它数据包括公司的基本信息、治理信息、财务数据以及审计数据等均来自国泰安信息技术有限公司开发的CSMAR数据库。

需要说明的是，上市公司董事会关于审计师变更的决议公告中，都会指明新任审计师执行审计业务的财政年度，当审计师变更事件发生在对应财政年度结束日之后时，变更决议公告中就会涉及两个年度概念，其一是公告里对应的执行审计业务的财政年度；其二是公告日所在的公历年份。举例来说，金花股份（股票代码：600080）于2005年4月5日公告更换新的审计师，新审计师将执行公司2004年的年度财务报告审计工作，那么，这里审计师变更的财政年度为2004年，变更日所在的公历年份为2005年；又如，长城开发（股票代码：000021）于2005年4月11日公告更换新的审计师，新审计师将执行公司2005年的年度财务报告审计工作，那么，这里审计师变更年度和变更日所在的公历年份同为2005年。为了理解和表述的方便，本文用 $ACY$ 表示审计师变更时间所在的公历年份与对应财政年度的差异，具体地，如果在对应的财政年度结束日（12月31日）之前变更审计师（即财政年度与公历年份一致），则用 $ACY = 0$ 表示；如果在对应的财政年度结束日（12月31日）之后变更审计师（即公历年份等于财政年度加1），则用 $ACY = 1$ 表示。因此，上例中金花股份的 $ACY$ 等于1；长城开发的 $ACY$ 等于0。如无特别说明，后文提及的年度均表示审计师变更公告中所针对的财政年度概念。

根据《会计法》的规定，我国统一的财政年度区间范围是从公历1月1日起至12月31日止，同时，《证券法》又规定公司需在每一财政年度结束之日起四个月内发布年度报告。因此，从理论上讲，上市公司年度报告的发布时间以及相应年度审计师的变更时间的截止日，应为财政年度结束后次年的4月30日，<sup>8</sup>审计师变更时间的最长跨度区间为当年1月初起至次年4月末止。

<sup>5</sup> 金融保险行业公司的财务特征与其他行业公司存在很大差异，而且这类公司的审计师选择决策与其他企业也存在系统性差异（Simunic, 1980），考虑到这些特殊性质，本文的研究样本中将金融保险行业的公司予以剔除。

<sup>6</sup> 因会计师事务所自身原因导致的审计师变更，变更时机由事务所被撤销或年检未过的时间而定；因国资委规定同一会计师事务所连续承办企业年度财务决算的审计业务不应超过5年、或者集团母公司统一强制性调整上市公司的会计师事务所而导致的审计师变更，由于受到集团母公司或国资委的影响和干预，这两类变更时机同样不属于自愿性选择，因此将其剔除。

<sup>7</sup> 在本文样本中有6例IPO公司上市当年便更换了会计师事务所，由于政府管制以及制度环境的影响，当年新上市的公司审计师选择与变更动机与其它公司存在显著差异（朱红军等，2004），而且获得上市资格的公司IPO当年面对的监管要求和融资对象等均发生了重大改变，所以将其在样本中剔除。

<sup>8</sup> 在本文最终的研究样本中，有4例样本发生年报延期披露的情况，其中有2例的审计师变更时间超过次年的4月30日，由于延期披露属于审计师变更的事后事项，并不影响审计师的变更动机及变更时机的选择，因此这4例样本包含在正文的检验样本中。但为了避免其它可能的潜在因素对研究结论造成影响，在稳健性检验中我们对这4例样本进行了剔除处理，结论没有改变。

表1 审计师变更样本的年(季)度分布

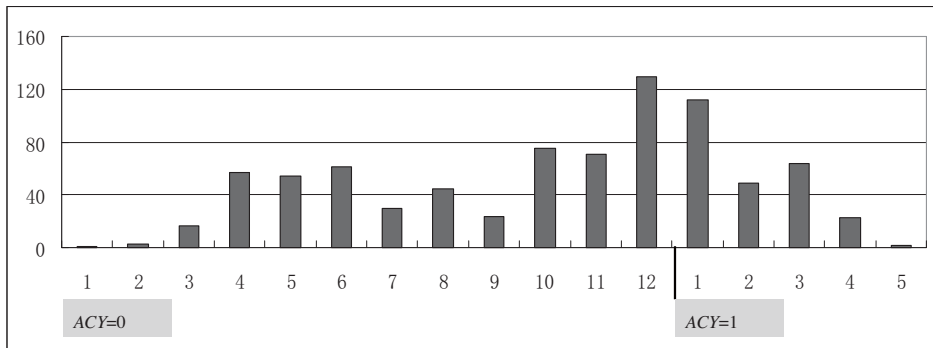
Panel A 年度分布												
财政年度	2001	2002	2003	2004	2005	2006	2007	2008	2008	2008	2009	合计
年度	84	99	77	99	110	120	127	101	101	101	817	
公历年度	2001	2002	2003	2004	2005	2006	2007	2008	2008	2008	2009	
年度	ACY=0	ACY=1	ACY=0	ACY=1	ACY=0	ACY=1	ACY=0	ACY=1	ACY=0	ACY=1	ACY=0	ACY=1
	51	33	67	32	51	26	61	38	76	34	83	37
	95	32	83	37	95	32	83	18	567	250		
Panel B 季度分布												
公历季度	ACY=0 Q1	ACY=0 Q2	ACY=0 Q3	ACY=0 Q4	ACY=1 Q1	ACY=1 Q2	ACY=1 Q3	ACY=1 Q4	合计			
季度	21	172	99	275	225	25	817					

注：财政年度指审计师变更公告中所针对的变更事件对应的财政年度。公历年度指发布审计师变更公告日所在的实际年度。

表1列示了发生审计师变更样本在各年(季)度的分布情况,图1是样本月度分布情况的描述性结果。从表1可以看出,在财政年度结束日之前( $ACY = 0$ )变更的样本观测值有567个,占全部变更样本总数的69.4%;在财政年度结束日之后( $ACY = 1$ )变更的样本观测值有250个,占全部变更样本总数的30.6%。这表明,有超过三成的审计师变更发生在财政年度结束后的前四个月内,其所占比例还是比较高的。变更比例最高的季度为 $ACY = 0$ 的第四季度和 $ACY = 1$ 的第一季度,分别有275和225个样本,而且我们还发现,有25个样本公司在 $ACY = 1$ 的第二季度变更了审计师,此时已经非常接近《证券法》规定的年报披露截止时间,更换审计师的决策在时间上已经十分仓促。进一步地,从图1审计师变更样本的月度分布描述中可以发现,审计师变更比例较高的月份为财政年度结束前的10月、11月和12月以及财政年度结束后次年的1月,其次是上年度年报公告后的4月、5月、6月以及次年的2月和3月。审计师的变更时间并不是随机分布,而是存在着一定的时机选择上的特征和差异。

总体而言,通过分析我国证券市场中上市公司变更审计师的时间分布,可以看出,存在着相当比例的样本观测值,在财政年度结束以后才相对较晚地变更审计师,样本数据满足本文进行假说检验的基本条件。

图1 审计师变更样本的月度分布



注:  $ACY=0$  表示财政年度当年;  $ACY=1$  表示财政年度结束后。

## (二) 检验模型和变量设定

1. 为检验我国上市公司审计师变更时机的影响因素,我们分别从效率观和机会主义观两个角度进行考察,<sup>9</sup>并将影响因素归于两种变更动机内,构造如下模型采用OLS回归分析对发生审计师变更的样本进行检验。

$$\begin{aligned}
 ACDAY = & \alpha_0 + \alpha_1 * SIZE + \alpha_2 * LEV + \alpha_3 * GROWTH + \alpha_4 * CAPRS + \alpha_5 * INVRAT \\
 & + \beta_1 * ROA + \beta_2 * DA + \beta_3 * ST + \beta_4 * REVRAT + \beta_5 * LAGMAO + \beta_6 * CG \\
 & + \beta_7 * MKT + YEARDUMMY + INDDUMMY + \varepsilon
 \end{aligned} \quad (1)$$

<sup>9</sup> 作者感谢吴东辉教授对本文假说一实证检验分析所提的建设性意见,但文责自负。

其中,  $\alpha_0$  为截距,  $\alpha_1 \sim \alpha_5$ 、 $\beta_1 \sim \beta_7$  为回归系数,  $\varepsilon$  为残差。模型中各变量的含义如下:

因变量:

$ACDAY$  为相应的财政年度结束日 (12月31日) 到上市公司变更审计师公告日的天数, 因此, 若  $ACDAY$  小于 0, 则表示在财政年度结束日之前 ( $ACY=0$ ) 变更审计师, 反之, 若  $ACDAY$  大于 0, 则表示在财政年度结束之后变更审计师。为了便于分析, 我们对  $ACDAY$  进行了标准化处理,<sup>10</sup> 其数值越大表示变更时间越晚, 数值越小表示变更时间越早。

解释变量:

### (1) 效率观

根据前文的分析, 我们分别从公司规模、财务杠杆、成长性、融资动机以及业务特征等方面, 来研究出于效率观考虑对审计师变更时机选择的影响。我们预期, 为了满足业务发展和提高审计服务效率的需要, 公司通常会较早地作出变更审计师的决策。

$SIZE$  表示公司的规模, 等于期末总资产的自然对数;  $LEV$  表示财务杠杆水平, 用期末总负债除以总资产;  $GROWTH$  表示公司的成长性, 用营业收入增长率来衡量;  $CAPRS$  代表是否存在融资动机, 根据《上市公司证券发行管理办法》的规定, 公司最近三个财政年度加权平均净资产收益率平均不低于百分之六则可以在本年度实行增发, 如果样本公司满足增发条件, 则  $CAPRS$  取 1, 否则取 0;  $INVRAT$  表示公司的业务特征, 用存货除以总资产。

需要作以说明的是, 本文侧重考察的是审计师变更时机的影响因素, 一方面, 公司规模越大、业务越复杂, 正常审计所需的时间越长, 为了高效地开展审计业务, 具有此类特征的公司会选择越早地变更审计师, 以便给继任审计师留出相对充足的时间, 因此, 这里存在特征变量水平值的比较; 另一方面, 在代表效率观的解释变量中,  $GROWTH$ 、 $CAPRS$  的实质是公司成长性、融资方面特征变化值的概念, 这与 Johnson and Lys (1990) 模型中特征变量的涵义类似。因此, 与之相应地, 本文在效率观下的检验中, 既考察了特征变量水平值的比较又考察了变化值的比较。

### (2) 机会主义动机

出于机会主义动机, 我们控制了盈利状况、盈余管理程度、经营方式、上期审计意见类型、公司治理以及环境治理效率等变量。我们预期, 出于机会主义动机的考虑, 与年报分歧相关的影响因素会导致审计师变更时间较晚。

$ROA$  为总资产回报率, 代表公司的盈利水平;  $DA$  表示公司的盈余管理程度, 为可操控性应计项目的绝对值, 用行业调整的 Jones 模型估算而来;  $ST$  表征公司的财务状况, 如果本年度公司被实施特别处理则取 1, 否则取 0;  $REVRAT$

<sup>10</sup> 采用 Z 标准化方法 (Z-Score Normalization), 用每一变量与其平均值之差除以该变量的标准差, 标准化之后变量的均值为 0, 标准差为 1。

代表公司的销售方式，用应收账款占总资产的比例来衡量；<sup>11</sup> *LAGMAO*控制上年度的审计意见类型，如果上年度被出具非标准无保留审计意见则取1，否则取0。*MKT*表示治理环境的代理变量，本文采用樊纲等(2007)的市场化指数来计量，<sup>12</sup>该变量数值越大代表市场化程度越高，即该地区的制度环境发展越好。*CG*为公司治理水平的代理变量，由于公司治理机制包含的内容十分广泛，任何一个维度的度量都只能反映公司治理的一个方面或某些特征，因此，近来不少学者通过构建公司治理指数的方法，来尽量全面地衡量公司治理的效率(Gompers *et al.*, 2003；白重恩等，2005；Larcker *et al.*, 2007；靳庆鲁和原红旗，2008)。因此，本文借鉴白重恩等(2005)的研究，通过主成分分析法构建出公司治理效率的指数，该变量数值越大，表明公司治理的效率越好。<sup>13</sup>用公司治理和环境治理两个维度，对出于机会主义动机的审计师变更行为的抑制作用，来检验其对变更时机选择的影响。

2. 为检验审计师变更时机与审计意见收买行为的关系，本文借鉴Lennox(2000)的研究方法，根据财政年度结束日(12月31日)，将审计师变更时间划分为较早变更组和较晚变更组。财政年度结束日是上市公司对一个会计期间内的财务状况、经营成果等进行核算的时间界限，也是公司年报核算内容的截止时间，因此，本文以财政年度结束日作为划分审计师变更时机的标准，在财政年度结束日之后，发生的审计师变更很可能是由于与年报相关事项出现分歧导致的，将其定义“较晚变更”，变量*LATE*取1，反之，在财政年度结束日之前发生的变更定义为“较早变更”，变量*LATE*取0。

我们首先用审计意见的回归模型(2)，对不同变更时机以及维持现任审计师不变条件下，获得非标准审计意见的概率进行估计，分别记作 $Q^{q1*}$ (*LATE*=1)、 $Q^{q0*}$ (*LATE*=0)和 $Q^{q*}$ (*AC*=0)；然后以 $Q^{q*}$ 为基准，将 $Q^{q1*}$ 和 $Q^{q*}$ 以及 $Q^{q0*}$ 和 $Q^{q*}$ 两组概率的差值代入对审计师变更决策的回归模型(3)中，以判断不同变更时机下审计意见收买行为的差异。需要说明的是，在对假说二进行检验时，我们用到了2001至2008年的全部A股上市公司，即包含未发生审计师变更的样本，以估计 $Q^{q*}$ 的概率，在本文的研究中，A股公司全样本观测值为9305个。具体的回归模型如下：

$$\begin{aligned} Prob(MAO=1) &= \alpha_0 + \alpha_1 * LAGMAO + \alpha_2 * LAGMAO * AC + \alpha_3 * LAGMAO * LATE \\ &+ \alpha_4 * AC + \alpha_5 * LATE + \alpha_6 * CONTROLS + \alpha_7 * CONTROLS * AC \\ &+ \alpha_8 * CONTROLS * LATE + \varepsilon \end{aligned} \quad (2)$$

$$Prob(AC=1) = \alpha_0 + \alpha_1 * (Q^{q1*} - Q^{q*}) + \alpha_2 * (Q^{q0*} - Q^{q*}) + \alpha_3 * CONTROLS + \varepsilon \quad (3)$$

<sup>11</sup> 存货和应收账款既可能影响审计师业务的复杂程度、审计业务量，也可能影响审计师的执业风险，前者体现为效率观为，后者体现为机会主义观为。基于本文的研究分析，应收账款与企业的利润更直接相关，特别是实务中存在企业通过应收账款虚增利润的情况，因此，将其划为代表机会主义动机的特征变量。而存货方面，尽管也可能出现企业通过影响营业成本进而虚增利润的情况，但是存货更可能侧重反映了企业的审计业务量、审计业务的复杂程度等内容，因此将其划分为效率观动机的特征变量。

<sup>12</sup> 由于我们所能得到的我国各省市市场化指数是从2001年至2005年，因此2005年以后的样本年度，我们以2005年的市场化指数作为替代。

<sup>13</sup> 主成份因子及相应的载荷系数为：董事长和总经理两职合一(-0.123)、独立董事比例(-0.178)、高管的持股比例(-0.079)、第一大股东的持股比例(0.615)、第二到第十大股东持股比例的平方和(-0.362)、第一大股东与第二大股东持股比例的比值(0.352)、公司是否同时发行B股或H股(-0.057)、国有控股性质(0.558)。由于预期与公司治理效率正相关的指标的载荷系数为负，因此为了改变其经济意义，我们将主成分分析得到的公司治理指数取负值。经过这一变换后，治理指数越高，则表明其公司治理效率越好。

因变量：

$MAO$ 表示公司本年度被出具的审计意见类型的虚拟变量，若为非标准无保留审计意见，则 $MAO$ 取1，否则取0； $AC$ 表示本年度是否发生审计师变更的虚拟变量，发生审计师变更则 $AC$ 取1，否则取0。

解释变量：

$Q^{qL}$ 为估计的非标准审计意见的概率，上标 $q$ 表示上一期的审计意见类型( $q=1$ 为非标意见， $q=0$ 为标准意见)，上标 $L$ 表示审计师发生变更的时间( $L=1$ 为较晚变更， $L=0$ 为较早变更)。据此， $Q^{q*}$ 代表未变更审计师条件下被出具非标意见的概率， $Q^{q1*}$ 和 $Q^{q0*}$ 分别是较晚变更和较早变更条件下被出具非标意见的概率。 $CONTROLS$ 代表模型回归中采用的控制变量，包括 $LEV$ (资产负债率)、 $ROA$ (总资产回报率)和 $ST$ (是否被实施特别处理的虚拟变量)，其它变量的定义同模型(1)。

Lennox (2000)的最大贡献在于，他将不可观察的审计结果运用一定的研究方法进行了估计，从而为比较不同环境下的审计意见的概率提供了基础。根据假说二，如果模型(3)中 $\alpha_1$ 显著为负，则表明，当财政年度结束以后变更审计师获得非标意见的概率小于维持现任审计师不变获得非标意见的概率时，公司越有可能作出变更审计师的决策，那么，此时变更审计师就能够有效地改善审计意见，即财政年度结束以后变更审计师的公司成功地收买了审计意见。

3. 为检验假说三，不同变更时机对继任审计师选择决策的影响，我们采用如下模型(4)对发生审计师变更的样本进行检验：

$$\begin{aligned} Prob(HQAUDITOR=1) &= \alpha_0 + \alpha_1 * ACDAY + \alpha_2 * SIZE + \alpha_3 * LEV + \alpha_4 * GROWTH \\ &+ \alpha_5 * INVRAT + \alpha_6 * REVRAT + \alpha_7 * LAGHQAUDITOR \\ &+ \alpha_8 * CG + \alpha_9 * MKT + \alpha_{10} * CAPRS + \alpha_{11} * LAGMAO \\ &+ YEARDUMMY + INDDUMMY + \varepsilon \end{aligned} \quad (4)$$

因变量：

$HQAUDITOR$ 代表审计师变更以后继任审计师类型的虚拟变量，若公司选择“国际四大”或者“国内十大”作为继任审计师，则 $HQAUDITOR$ 取1，否则取0。国内十大会计事务所的定义为：中国注册会计师协会网站公布的会计师事务所综合评价百家排名中2001至2008年始终处于前20位的国内会计师事务所共计10家，<sup>14</sup>在本文中将其简称为“国内十大”。我们以“国际四大”和“国内十大”作为高质量审计师的代表，除此之外，其他的国内会计师事务所简称为“国内小所”。

<sup>14</sup> 如果事务所发生合并事项，其合并主体之一也必须在2001年至合并前一年始终排名处于前20名以内，这样可以保证事务所声誉的连贯性。在本文的研究中，国内十大事务所(及前身)包括：中瑞岳华会计师事务所(岳华会计师事务所、中瑞华恒信会计师事务所)、立信会计师事务所、北京立信会计师事务所、浙江天健东方会计师事务所、信永中和会计师事务所、利安达会计师事务所、天职国际会计师事务所、北京京都天华会计师事务所、中审亚太会计师事务所。

*LAGHQAUDITOR*代表上年度的审计师类型的虚拟变量，如果上年度的审计师为“国际四大”或者“国内十大”则取1，否则取0。其它变量的定义同模型(1)。

根据假说三，公司越晚变更审计师，选择高质量继任审计师的可能性显著小于越早变更的公司，因此，我们预期*ACDAY*的系数显著为负。

另外，我们还进行了拓展性的实证分析。首先，继任审计师的选择决策与审计师变更动机直接相关，我们预期，如果是出于机会主义动机发生的审计师变更，那么，变更时机对选择高质量继任审计师可能性的负相关关系应更为明显。如果是出于提高审计效率的考虑，那么，变更时机对选择高质量继任审计师可能性的负相关关系会减弱。通过在模型(4)中添加交互项的方法对上述问题进行检验，我们以公司上一年度被出具的审计意见类型作为机会主义动机的表征变量，以是否存在融资动机作为效率观动机的表征变量。具体的回归模型如下：

$$\begin{aligned} Prob(HQAUDITOR=1) = & \alpha_0 + \alpha_1 * ACDAY + \alpha_2 * SIZE + \alpha_3 * LEV + \alpha_4 * GROWTH \\ & + \alpha_5 * INVRAT + \alpha_6 * REVRAT + \alpha_7 * LAGHQAUDITOR \\ & + \alpha_8 * CG + \alpha_9 * MKT + \alpha_{10} * CAPRS + \alpha_{11} * LAGMAO \\ & + \alpha_{12} * CAPRS * ACDAY + \alpha_{13} * LAGMAO * ACDAY \\ & + YEARDUMMY + INDDUMMY + \varepsilon \end{aligned} \quad (5)$$

如果与理论预期一致，那么交互项*CAPRS\*ACDAY*的系数应显著为正，*LAGMAO\*ACDAY*的系数应显著为负。其他变量的定义同模型(1)。

4. 为检验假说四，审计师变更时机对继任审计师定价决策的影响，我们构造如下模型(6)对发生审计师变更的样本进行检验：

$$\begin{aligned} AF = & \alpha_0 + \alpha_1 * ACDAY + \alpha_2 * SIZE + \alpha_3 * LEV + \alpha_4 * INVRAT + \alpha_5 * REVRAT \\ & + \alpha_6 * ST + \alpha_7 * LAGMAO + \alpha_8 * HQAUDITOR + \alpha_9 * CG + \alpha_{10} * MKT \\ & + YEARDUMMY + INDDUMMY + \varepsilon \end{aligned} \quad (6)$$

因变量：

*AF*为变更审计师后继任审计师收取的审计费用的自然对数。其它变量的定义同模型(1)。

根据假说四，如果越晚变更审计师的公司，被继任审计师收取的费用越高，则我们预期，*ACDAY*的系数应显著为正。

进一步地，我们以未变更审计师的公司作为对照，在假说四检验的基础上，考察晚(早)变更审计师的公司相比未变更审计师的公司审计定价上的差异，以进一步佐证本文的研究结论，并以A股公司的全样本进行如下模型(7)的检验：

$$\begin{aligned} AF = & \alpha_0 + \alpha_1 * AC + \alpha_2 * LATE + \alpha_3 * SIZE + \alpha_4 * LEV + \alpha_5 * INVRAT + \alpha_6 * REVRAT \\ & + \alpha_7 * ST + \alpha_8 * LAGMAO + \alpha_9 * HQAUDITOR + \alpha_{10} * CG + \alpha_{11} * MKT \\ & + YEARDUMMY + INDDUMMY + \varepsilon \end{aligned} \quad (7)$$

## 审计师变更时机、年报审计意见分歧与审计质量

在模型(7)中,  $AC$ 的系数表示早变更( $LATE=0$ )公司相比未变更公司的审计定价差异,  $LATE$ 的系数表示晚变更( $LATE=1$ )公司相比早变更( $LATE=0$ )公司的审计定价差异, 两者系数之和表示晚变更( $LATE=1$ )公司相比未变更公司的审计定价差异。<sup>15</sup>如果模型(7)中 $AC$ 的系数显著为正, 则表明较早发生审计师变更的公司, 其审计收费显著高于未变更审计师的公司, 反之亦然; 如果 $LATE$ 的系数显著为正, 则表明较晚发生审计师变更的公司, 其审计收费显著高于较早变更审计师的公司, 并且如果 $AC$ 的系数与 $LATE$ 的系数之和显著大于0, 则表明, 较晚发生审计师变更公司的审计收费显著高于未变更审计师的公司。其它变量的定义同模型(1)。

表2汇总了上述检验模型中所有变量的定义。另外考虑到文章篇幅的限制, 在实证结果中, 我们并未报告年度和行业哑变量的回归结果。

表2 变量定义

因变量	
$ACDAY$	相应的财政年度结束日(12月31日)到审计师变更公告日的天数, 并进行了标准化处理。
$MAO$	哑变量, 年报审计意见为非标准无保留意见时取1, 否则取0。
$AC$	哑变量, 当上市公司年报的审计师与前一财政年度不同时取1, 否则取0。
$HQAUDITOR$	哑变量, 年报审计师为“国际四大”或者“国内十大”时取1, 否则取0。
$AF$	年报审计费用的自然对数。
解释变量	
$SIZE$	公司规模, 期末账面总资产的自然对数。
$LEV$	资产负债率。
$GROWTH$	营业收入增长率。
$CAPRS$	哑变量, 若当年公司满足增发条件则取1, 否则取0。
$INVRAT$	存货比率, 用期末存货/总资产表示。
$ROA$	总资产收益率。
$DA$	根据行业调整的Jones模型计算的可操控性应计项目的绝对值。
$ST$	哑变量, 若当年公司被实施特别处理则取1, 否则取0。
$REVRAT$	应收账款比率, 用期末应收账款/总资产表示。
$LAGMAO$	哑变量, 前一年度审计意见为非标准无保留意见时取1, 否则取0。
$LAGHQAUDITOR$	哑变量, 前一年审计师为“国际四大”或者“国内十大”时取1, 否则取0。
$CG$	用主成分分析法构建的公司治理指数。
$MKT$	公司所在省级行政区划各年度的市场化指数, 数据来自樊纲等(2007)。
$YEAR$	2001至2007年年度哑变量。
$INDUSTRY$	按照证监会行业分类的20个行业哑变量。

<sup>15</sup> 因为变量 $LATE$ 只有在 $AC$ 为1的情况下才能取值为1。



## 四、实证结果和分析

### (一)描述性统计

表3是审计师变更样本相关回归变量的描述性统计。*DAY*是未经标准化处理之前、相应财政年度结束日(12月31日)距审计师变更公告日之间的天数,*DAY*小于0表示在财政年度结束以前变更审计师,大于0则表示在财政年度结束以后变更审计师。同时这个数值越大,表示变更时间越晚。我们发现,样本公司平均在财政年度截止日之前约69天发生审计师变更,变更日的中位数距12月31日相差37天,最早变更发生在财政年度当年的第25天(365-340天),最晚变更发生在财政年度结束后的第162天。

从效率观的角度来看,发生审计师变更的公司资产负债率平均为0.71,营业收入增长率约为23%,而且平均有15%的样本公司在变更审计师年度达到了增发再融资的条件,存货余额占总资产的比例约为15%。从机会主义动机的角度来看,变更审计师的公司盈利状况较差,总资产收益率均值仅为-2%,平均可操控性应计的绝对值为0.1,变更年度被实施特别处理的公司比例占到23%,应收账款余额占总资产的比例约为14%,有28%的变更公司在上一年度被出具了非标审计意见,公司治理水平较低,其均值约为-0.13。

表3 主要回归变量的描述性统计

	Mean	Median	Std.	Min	Q1	Q3	Max	N
<i>DAY</i>	-68.78	-37.00	109.83	-340.00	-169.00	13.00	162.00	817
<i>ACDAY</i>	0.00	0.29	1.00	-2.47	-0.91	0.74	2.10	817
<i>SIZE</i>	21.11	20.99	1.24	18.68	20.35	21.84	25.41	817
<i>LEV</i>	0.71	0.56	0.89	0.08	0.40	0.71	3.57	817
<i>GROWTH</i>	0.23	0.11	0.90	-0.99	-0.10	0.31	5.86	817
<i>CAPRS</i>	0.15	0.00	0.36	0.00	0.00	0.00	1.00	817
<i>INVRAT</i>	0.15	0.11	0.15	0.00	0.05	0.20	0.86	817
<i>ROA</i>	-0.02	0.02	0.20	-0.52	0.00	0.05	0.22	817
<i>DA</i>	0.10	0.05	0.14	0.00	0.03	0.12	1.33	817
<i>ST</i>	0.23	0.00	0.42	0.00	0.00	0.00	1.00	817
<i>REVRAT</i>	0.14	0.11	0.14	0.00	0.04	0.20	0.97	817
<i>LAGMAO</i>	0.28	0.00	0.45	0.00	0.00	1.00	1.00	817
<i>CG</i>	-0.13	-0.46	1.29	-2.99	-1.10	0.52	5.48	817
<i>MKT</i>	7.73	7.84	1.92	2.50	6.20	9.90	10.41	817

注:变量定义见表2。

## 审计师变更时机、年报审计意见分歧与审计质量

另外，我们在表4中按照审计师变更时间是否在财政年度结束以前，将样本划分为较早变更组 ( $LATE=0$ ) 和较晚变更组 ( $LATE=1$ )，分别对相应的回归变量的均值和中位数进行组间检验，结果发现， $LATE=0$  组代表效率观的变量均显著大于  $LATE=1$  组 ( $LEV$  除外)，说明早变更组的公司确实更可能是出于业务发展的需要，与提高公司的效率有关；反之， $LATE=1$  组代表机会主义动机的变量或变量的绝对值均显著大于  $LATE=0$  组 ( $DA$  除外)，说明晚变更组的公司出于机会主义动机的可能性更大。这些单变量检验的结果与前文的理论分析基本一致。

表4 分组描述性统计

	Mean				Median			
	$LATE=1$	$LATE=0$	t值	P值	$LATE=1$	$LATE=0$	Z值	P值
<i>SIZE</i>	20.78	21.26	-5.63***	(0.00)	20.78	21.10	-3.87***	(0.00)
<i>LEV</i>	0.83	0.66	2.19**	(0.03)	0.60	0.54	2.36**	(0.02)
<i>GROWTH</i>	0.11	0.28	-2.63***	(0.01)	0.04	0.14	-3.17***	(0.00)
<i>CAPRS</i>	0.08	0.19	-4.73***	(0.00)	0.00	0.00	-4.06***	(0.00)
<i>INVRAT</i>	0.13	0.16	-2.44**	(0.02)	0.09	0.12	-2.80***	(0.01)
<i>ROA</i>	-0.08	0.00	-4.42***	(0.00)	0.01	0.03	-5.01***	(0.00)
<i>DA</i>	0.12	0.09	1.18	(0.24)	0.07	0.05	0.88	(0.38)
<i>ST</i>	0.30	0.19	3.28***	(0.00)	0.00	0.00	3.45***	(0.00)
<i>REVRAT</i>	0.17	0.13	3.07***	(0.00)	0.12	0.10	2.44**	(0.01)
<i>LAGMAO</i>	0.37	0.24	3.40***	(0.00)	0.00	0.00	3.53***	(0.00)
<i>CG</i>	-0.26	-0.08	-1.85*	(0.06)	-0.60	-0.41	-1.67*	(0.09)
<i>MKT</i>	7.30	7.92	-4.31***	(0.00)	6.65	8.21	-4.02***	(0.00)

注：变量定义见表2，括号内为P值，\*、\*\*、\*\*\* 分别表示在0.10、0.05和0.01以下水平统计显著。

表5是审计师变更样本主要变量的相关系数检验结果，从中可以看出，代表效率观的变量中，公司规模、成长性、融资动机、存货比例与审计师变更时机显著负相关，即规模越大、成长性越强、达到增发条件、存货比重较大的上市公司会更早地变更审计师；而财务杠杆水平与审计师变更时机显著正相关，即资产负债率水平越高的公司变更审计师的时间越晚。代表机会主义动机的变量中，盈余管理程度越高、本年度被实施特别处理、应收账款比例越大、上年度被出具非标准审计意见的公司发生审计师变更的时间越晚，盈利水平越低、公司治理和地区环境治理效率越差的上市公司会越晚地变更审计师。这与本文假说一的理论预期基本一致，出于机会主义动机发生的审计师变更时间较晚，出于效率观动机发生的审计师变更时间较早。下面我们将进一步通过多元回归对本文的研究假说进行检验。

## (二) 假说一的检验结果

表6列示了审计师变更时机影响因素的回归结果，<sup>16</sup>(1)、(2)列分别是效率观和机会主义动机的角度，对审计师变更时机进行了实证检验，其结果显示，代表效率观的指标中，公司规模、成长性、融资动机以及存货比例与审计师变更时间显著负相关，即规模越大、成长性越高、有再融资动机以及存货比例越高的公司，会选择越早地变更审计师；代表机会主义动机的指标中盈利水平、公司治理和环境治理效率与审计师变更时机显著负相关，即总资产回报率越小、公司治理效率越低以及处于制度环境水平越差地区的上市公司越有可能较晚地更换审计师，而盈余管理程度、应收账款比例和上期非标审计意见与审计师变更时机显著正相关，即可操控性应计水平越高、应收账款比例越高、上期被出具非标准审计意见的公司其审计师变更时间越晚。上述结果验证了本文的研究假说一，审计师变更时机与变更动机显著相关，出于业务发展需要的公司会选择较早地变更审计师，而出于年报相关事项分歧导致的审计师变更时间通常较晚。进一步地，我们又分别将影响审计师变更时机的因素按照指标性质进行分类，分为财务指标、审计指标和治理指标，分别以及全部代入方程进行检验，所得到的结果基本一致。

## (三) 假说二的检验结果

表7列示了假说二的检验结果，(1)至(3)列是对审计意见回归的方程，(4)、(5)列是对审计师变更决策回归的方程。从中可以发现，第(1)列中LAGMAO的系数显著为正，这表明审计意见具有一定的持续性，上期获得非标意见的公司本期获得非标意见的可能性显著增加。第(2)列我们考察了审计师变更对审计意见持续性的影响，LAGMAO的系数显著为正，而交互项LAGMAO\*AC的系数显著为负，这说明审计师变更降低了非标准审计意见的持续性，即通过变更审计师能够降低本期获得非标意见的概率。第(3)列对应本文的模型(2)，我们在Lennox(2000)研究的基础上，添加了代表审计师变更时机的变量LATE，其中LAGMAO\*AC的系数表示早变更(LATE=0)审计师相比未变更审计师条件下审计意见持续性的差异，LAGMAO\*LATE的系数表示晚变更(LATE=1)审计师相比早变更审计师条件下审计意见持续性的差异。结果发现，交互项LAGMAO\*AC的系数为负但不再显著，这说明早变更审计师的公司并没有降低本期获得非标意见的概率，另外，交互项LAGMAO\*LATE的系数为负也不显著，这说明审计师的变更时机对非标准审计意见持续性的影响无显著差异。审计意见回归方程的最大的贡献在于，能够使我们获得不同状态下本期被出具非标意见的估计概率，<sup>17</sup>这为我们进一步检验审计意见收买行为提供了条件。

我们将模型(2)中得到的不同状态下非标意见的概率分别记为： $AC=0$ 不变更审计师本期获得非标意见的概率 $Q^{q*}$ 、 $LATE=0$ 早变更审计师本期获得非标意见的概率 $Q^{q0*}$ 以及 $LATE=1$ 晚变更审计师本期获得非标意见的概率 $Q^{q1*}$ 。然后，进一步将估计得到的非标意见概率，代入模型(3)对审计师变更决策进行回归，以概率的分位点 $Q$

<sup>16</sup> 多重共线性的诊断结果显示，所有方程自变量的方差膨胀因子(VIF)均小于通常认为的临界值10(最大值不超过2)。

<sup>17</sup> 通过审计意见回归模型我们可以获得非标准审计意见的概率 $P_f$ 以及对对应概率的分位点 $Q$ ，我们在结果分析时统一称其为审计意见概率。

作为解释变量的检验结果显示在第(4)列中,以非标准审计意见的估计概率 $Pr$ 作为解释变量的检验结果显示在第(5)列中。可以发现,在第(4)列中, $Q^{q1*}-Q^{q*}$ 的系数显著为负,这说明当晚变更审计师获得非标意见的概率小于不变更条件下获得非标意见的概率时,即 $Q^{q1*}-Q^{q*}$ 小于零时,公司变更审计师的概率更高,即晚变更审计师的公司通过审计师变更改善了审计意见,从而实现了审计意见收买。而 $Q^{q0*}-Q^{q*}$ 的系数显著为正,说明早变更审计师的公司并没有出现审计意见收买行为,反而这类公司被出具非标意见的可能性更大,其变更动机并不是出于改善审计意见的目的。两者相比,晚变更审计师的公司比早变更的公司收买审计意见的可能性更大。最后一列的解释变量采用 $Pr(Q^{q1}=1)-Pr(Q^{q0}=1)$ 以及 $Pr(Q^{q0}=1)-Pr(Q^{q1}=1)$ ,所得到的结果与第(4)列中一致。上述发现支持了本文的研究假说二,即在财政年度结束以后变更审计师的公司,发生收买审计意见的可能性大于在财政年度结束以前变更审计师的公司。

#### (四)假说三的检验结果

表8列示了假说三的检验结果,即审计师变更时机对继任审计师选择的影响。回归结果显示, $ACDAY$ 的系数显著为负,表明变更时间越早,选择高质量继任审计师的可能性越大,变更时机越晚的公司选择高质量继任审计师的可能性显著小于早变更的公司,从而验证了本文的研究假说三。由于晚变更审计师的公司出于机会主义的动机较强,因此这类公司对高质量审计服务的需求会随之降低。另外,在控制变量方面,我们发现, $SIZE$ 、 $LEV$ 、 $CG$ 和 $MKT$ 的系数显著为正,这说明规模越大、财务杠杆水平越高、公司治理效率越好、所在地区的化程度越高的公司,选择高质量继任审计师的可能性越大,这与已有的研究发现基本一致。

进一步地,我们添加了 $ACDAY$ 与 $CAPRS$ 和 $LAGMAO$ 的交互项,以检验不同时机下的变更时机对审计师选择的影响差异,结果发现, $ACDAY*CAPRS$ 的系数显著为正,这表明较晚变更审计师的公司如果存在融资动机,那么,该公司选择高质量继任审计师的可能性显著大于较晚变更同时没有融资动机的公司,出于效率观的考虑公司更倾向于选择“国际四大”或“国内大所”作为继任审计师; $ACDAY*LAGMAO$ 的系数显著为负,这表明较晚变更审计师的公司如果上年度被出具了非标准审计意见,那么,该公司选择低质量继任审计师的可能性显著大于较晚变更、同时上年度获得标准意见的公司,出于机会主义动机的考虑,公司更倾向于选择“国内小所”作为继任审计师。上述拓展性分析的检验结果,进一步印证了本文的理论分析和主要假说的研究发现。

#### (五)假说四的检验结果

表9是审计师变更时机对继任审计师定价影响的回归结果。从中可以看出,在第(1)列中 $ACDAY$ 的系数显著为正,这表明,变更审计师时间与审计费用显著正相关,越晚变更的公司,被继任审计师收取的审计费用显著高于越早变更的公司,晚变更审计师的公司出于机会主义动机的可能性更大,对继任审计师而言,这类公司既增加了其执业的时间成本同时也增加了与审计风险相关的成本,因此审计师在定价时会通过收取溢价的方式予以弥补。从而验证了本文的研究假说四。

表5 主要变量的相关性检验

	ACDAY	SIZE	LEV	GROWTH	CAPRS	INVRAT	ROA	DA	ST	REVRAT	LAGMAO	CG	MKT	
ACDAY	1	-0.19*** (0.00)	0.13*** (0.00)	-0.21*** (0.00)	-0.15*** (0.00)	-0.13*** (0.00)	-0.22*** (0.00)	0.10*** (0.00)	0.14*** (0.00)	0.12*** (0.00)	0.17*** (0.00)	-0.09*** (0.00)	-0.16*** (0.00)	
SIZE		1	-0.02 (0.65)	0.25*** (0.00)	0.25*** (0.00)	0.15*** (0.00)	0.26*** (0.00)	-0.10*** (0.00)	-0.40*** (0.00)	-0.27*** (0.00)	-0.22*** (0.00)	0.23*** (0.00)	0.10*** (0.00)	
LEV			1	-0.13*** (0.00)	-0.12*** (0.00)	0.06* (0.10)	-0.21*** (0.00)	0.12*** (0.00)	0.42*** (0.00)	0.13*** (0.00)	0.20*** (0.00)	-0.12*** (0.00)	0.01 (0.76)	
GROWTH				1	0.13*** (0.00)	0.14*** (0.00)	0.20*** (0.00)	-0.02 (0.65)	-0.19*** (0.00)	-0.08** (0.02)	-0.22*** (0.00)	0.10*** (0.00)	0.02 (0.62)	
CAPRS					1	0.03 (0.38)	0.21*** (0.00)	0.04 (0.26)	-0.21*** (0.00)	-0.23*** (0.00)	-0.21*** (0.00)	0.05 (0.15)	0.03 (0.47)	
INVRAT						1	0.04 (0.28)	0.04 (0.27)	-0.13*** (0.00)	0.01 (0.82)	-0.21*** (0.00)	0.05 (0.18)	0.03 (0.41)	
ROA							1	0.01 (0.89)	-0.26*** (0.00)	-0.25*** (0.00)	-0.22*** (0.00)	0.14*** (0.00)	0.06* (0.07)	
DA								1	0.07** (0.04)	-0.09*** (0.01)	0.07* (0.06)	-0.09** (0.01)	0.02 (0.50)	
ST									1	0.19*** (0.00)	0.57*** (0.00)	-0.14*** (0.00)	-0.02 (0.56)	
REVRAT										1	0.15*** (0.00)	-0.10*** (0.01)	0.02 (0.65)	
LAGMAO											1	-0.12*** (0.00)	0.01 (0.71)	
CG												1	0.01 (0.79)	
MKT													1	
														(0.85)

注：左下角是Pearson相关系数检验结果，右上角是Spearman相关系数检验结果，变量定义见表2，括号内为P值。\*、\*\*、\*\*\* 分别表示在0.10、0.05和0.01以下水平统计显著。

表6 审计师变更时机影响因素的回归分析

		Eq.(1) <i>ACDAY</i>											
符号		(1)		(2)		(3)		(4)		(5)		(6)	
预测		系数	P值	系数	P值	系数	P值	系数	P值	系数	P值	系数	P值
Constant		1.98***	(0.01)	0.17	(0.44)	1.50**	(0.04)	-0.13	(0.43)	0.29	(0.19)	1.12	(0.16)
<i>SIZE</i>	-	-0.09***	(0.01)			-0.07**	(0.04)					-0.04	(0.33)
<i>LEV</i>	-	0.01	(0.73)			-0.08	(0.14)					-0.08	(0.12)
<i>GROWTH</i>	-	-0.12***	(0.00)			-0.10***	(0.01)					-0.14***	(0.00)
<i>CAPRS</i>	-	-0.26**	(0.02)			-0.22*	(0.06)					-0.14*	(0.05)
<i>INVRAT</i>	-	-0.79***	(0.00)					-0.89***	(0.00)			-0.71**	(0.01)
<i>ROA</i>	-			-0.45**	(0.03)	-0.71***	(0.00)					-0.44*	(0.07)
<i>DA</i>	+			1.01**	(0.01)			1.14***	(0.00)			1.44***	(0.00)
<i>ST</i>	+			0.03	(0.78)	0.10	(0.30)					0.05	(0.63)
<i>REVRAT</i>	+			0.49*	(0.09)			0.54*	(0.06)			0.36	(0.24)
<i>LAGMAO</i>	+			0.18*	(0.08)			0.24***	(0.00)			0.13*	(0.09)
<i>CG</i>	-			-0.05*	(0.09)					-0.07**	(0.02)	-0.04	(0.12)
<i>MKT</i>	-			-0.06***	(0.00)					-0.06***	(0.00)	-0.05***	(0.00)
<i>YEAR</i>		控制		控制		控制		控制		控制		控制	
<i>INDUSTRY</i>		控制		控制		控制		控制		控制		控制	
Adj-R <sup>2</sup>		0.0651		0.0672		0.0623		0.0555		0.0362		0.0883	
F值		3.53***		3.27***		3.34***		3.17***		2.58***		3.53***	
N		817		817		817		817		817		817	

注：变量定义见表2，括号内为P值。\*、\*\*、\*\*\* 分别表示在0.10、0.05和0.01以下水平统计显著。

表7 假说二的检验结果

	Eq.(2) OPINION			Eq.(3) AC								
	系数	P值	(2)	系数	P值	(3)	系数	P值	(4)	系数	P值	(5)
$Q^{01} - Q^0$												
$Q^{00} - Q^0$												
$\Pr(Q^{01}=1) - \Pr(Q^0=1)$												
$\Pr(Q^{00}=1) - \Pr(Q^0=1)$												
LAGMAO	2.85***	(0.00)		2.92***	(0.00)	2.92***	(0.00)					
LAGMAO*AC				-0.53*	(0.06)	-0.12	(0.74)					-6.77*** (0.01)
LAGMAO*LATE				0.45	(0.31)	-0.83	(0.14)					8.74*** (0.01)
AC						0.80	(0.15)					
LATE						-0.82	(0.34)					
LEV	1.93***	(0.00)		1.87***	(0.00)	1.87***	(0.00)					1.21*** (0.00)
ROA	-16.49***	(0.00)		-17.19***	(0.00)	-17.19***	(0.00)					-1.39*** (0.00)
ST	0.83***	(0.00)		0.90***	(0.00)	0.90***	(0.00)					1.00*** (0.00)
Constant	-4.20***	(0.00)		-4.23***	(0.00)	-4.23***	(0.00)					-2.99*** (0.00)
LEV*AC				0.31	(0.66)	-0.98	(0.27)					
ROA*AC				4.90***	(0.01)	6.03***	(0.01)					
ST*AC				-0.40	(0.20)	-0.46	(0.23)					
LEV*LATE						3.06**	(0.02)					
ROA*LATE						-0.40	(0.91)					
ST*LATE						-0.02	(0.97)					
Pseudo-R <sup>2</sup>	0.5512		0.5537			0.5596			0.0324			0.0317
Wald Chi <sup>2</sup>	150.30		154.57			155.52			134.64			137.52
N	9305		9305			9305			9305			9305

注：变量定义见表2，括号内为P值。\*、\*\*、\*\*\* 分别表示在0.10、0.05和0.01以下水平统计显著。

表 8 假说三的检验结果

符号 预测	Eq.(4) <i>HQAUDITOR</i>		Eq.(5) <i>HQAUDITOR</i>			
	(1)		(2)		(3)	
	系数	P 值	系数	P 值	系数	P 值
Constant	-12.60***	(0.00)	-12.75***	(0.00)	-12.81***	(0.00)
<i>ACDAY</i>	-	-0.22*** (0.01)	-0.27***	(0.00)	-0.13*	(0.07)
<i>SIZE</i>	+	0.50*** (0.00)	0.51***	(0.00)	0.51***	(0.00)
<i>LEV</i>	+	0.19* (0.07)	0.19*	(0.08)	0.20*	(0.06)
<i>GROWTH</i>	+	0.03 (0.80)	0.02	(0.85)	0.00	(0.96)
<i>INVRAT</i>	+	-0.77 (0.25)	-0.72	(0.29)	-0.87	(0.20)
<i>REVRAT</i>	-	0.62 (0.39)	0.71	(0.33)	0.72	(0.32)
<i>LAGHQAUDITOR</i>	+	0.31* (0.08)	0.30*	(0.08)	0.31*	(0.07)
<i>CG</i>	+	0.10* (0.08)	0.11*	(0.10)	0.11*	(0.10)
<i>MKT</i>	+	0.16*** (0.00)	0.16***	(0.00)	0.17***	(0.00)
<i>CAPRS</i>	+	0.27 (0.32)	0.34	(0.22)	0.26	(0.33)
<i>LAGMAO</i>	-	-0.29 (0.19)	-0.28	(0.22)	-0.28	(0.21)
<i>ACDAY*CAPRS</i>	+		0.30*	(0.08)		
<i>ACDAY*LAGMAO</i>	-				-0.45**	(0.03)
<i>YEAR</i>		控制		控制		控制
<i>INDUSTRY</i>		控制		控制		控制
Pseudo-R <sup>2</sup>		0.2158		0.2183		0.2230
Wald Chi <sup>2</sup>		103.06		104.17		105.04
N		817		817		817

注：变量定义见表 2，括号内为 P 值。\*、\*\*、\*\*\* 分别表示在 0.10、0.05 和 0.01 以下水平统计显著。

进一步的拓展性检验结果显示在第 (2) 列中，*LATE* 的系数同样显著为正，与代表审计师变更时机的连续变量的检验结果是一致的。另外，与未变更审计师的样本公司进行比较的拓展性检验结果显示在第 (3) 列中，我们发现，*AC* 的系数显著为负，即较早变更审计师的公司，被继任审计师收取的费用显著低于未发生审计师变更的公司，这进一步印证了审计师变更时机与变更动机直接相关的分析，对继任审计师而言，变更时间较早的公司允许其有较为宽松的审计执业时间，同时与出于效率观的动机相对应，发生审计失败的诉讼成本也较低，因此，这类公司非但没有被收取溢价，反而存在著一定程度的定价折扣，这一发现也证实了低价揽客 (*Lowballing*) 现象的存在 (DeAngelo, 1981; Simon and Francis, 1988 等)。而 *LATE* 的系数显著为正，这表明较晚变更审计师的公司被继任审计师收取的费用显著高于较早变更的公司，而且相比未发生审计师变更的公司，这类公司存在著定价上的溢价现象 (*LATE* 系数与 *AC* 系数之和为正)，<sup>18</sup> 这与晚变更公司很可能是出于机会主义动机的研究发现一致。

<sup>18</sup> 统计检验结果显示两者系数之和在 1% 水平下显著。



表9 假说四的检验结果

符号 预测	Eq.(6) <i>AF</i>				Eq.(7) <i>AF</i>		
	(1)		(2)		(3)		
	系数	P值	系数	P值	系数	P值	
Constant	5.80***	(0.00)	5.76***	(0.00)	6.19***	(0.00)	
<i>AC</i>	?				-0.08***	(0.00)	
<i>ACDAY</i>	+	0.04**	(0.03)				
<i>LATE</i>	+			0.09**	(0.02)	0.09***	(0.01)
<i>SIZE</i>	+	0.32***	(0.00)	0.32***	(0.00)	0.30***	(0.00)
<i>LEV</i>	+	0.09***	(0.00)	0.09***	(0.00)	0.15***	(0.00)
<i>INVRAT</i>	+	0.22	(0.13)	0.23	(0.11)	0.17***	(0.00)
<i>REVRAT</i>	+	0.06	(0.69)	0.07	(0.67)	0.14***	(0.00)
<i>ST</i>	+	0.13**	(0.03)	0.13**	(0.03)	0.12***	(0.00)
<i>LAGMAO</i>	+	0.08	(0.13)	0.08	(0.13)	0.08***	(0.00)
<i>HQAUDITOR</i>	+	0.18***	(0.00)	0.18***	(0.00)	0.17***	(0.00)
<i>CG</i>	-	-0.04***	(0.00)	-0.04***	(0.00)	-0.02***	(0.00)
<i>MKT</i>	?	0.03***	(0.00)	0.03***	(0.00)	0.03***	(0.00)
<i>YEAR</i>		控制		控制		控制	
<i>INDUSTRY</i>		控制		控制		控制	
Adj-R <sup>2</sup>		0.4154		0.4163		0.4333	
F值		17.26***		17.32***		214.90***	
N		817		817		9305	

注：变量定义见表2，括号内为P值。\*、\*\*、\*\*\* 分别表示在0.10、0.05和0.01以下水平统计显著。

## (六) 稳健性分析

为了保证研究结果的稳健性，本文尝试了如下敏感性检验。但是由于篇幅所限，本文并没有把敏感性检验的结果编制成正式表格，但留存备案。

1. 改变审计师变更时机的定义。本文对审计师变更时机重新定义如下，以（临时）股东大会公告日作为审计师变更日的标准，重新检验本文的研究假说，结论没有改变。
2. 在假说二中，改变审计师变更时间早晚的划分标准。我们以 *ACDAY* 的中位数作为划分标准，小于中位数水平发生的审计师变更定义为“早变更”，*LATEI* 取0，大于中位数水平发生的审计师变更定义为“晚变更”，*LATEI* 取1，按此分类重新检验假说二，结论一致。
3. 本文在检验假说四时可能存在一定的内生性问题，即由于公司本身较高的审计风险导致其选择较晚地变更审计师，而同时公司本身较高的审计风险导致了继任审计师的高收费。因此，在稳健性检验中我们采用 Inverse Mill's Ratio 解决内生性的方法进行控制，结果发现，在控制了潜在的内生性问题以后，本文的研究结论并未改变。

4. 由于2006年我国颁布了新的会计准则和审计准则，可能会对上市公司审计师选择和变更行为产生重大影响，在假说一中我们采取虚拟变量  $NEWCAS=1$  代表2006年新准则实施当年及实施以后的年份， $NEWCAS=0$  代表新准则实施之前，加入模型(1)中重新对假说一进行检验，研究结论没有改变。
5. 剔除了年度财务报告延期披露的审计师变更样本重新进行检验，结论没有发生变化。
6. 改变高质量审计师的定义。本文对高质量审计师重新定义如下， $AUDITOR$  为三元变量，如果审计师为“国际四大”则取1，为国内“十大”则取0，其他“国内小所”则取-1。另外对国内高质量的审计师重新定义如下，以2001至2008年按事务所每年的审计收费总额进行排名，位列前10名的国内会计师事务所定义为对应年度的“国内大所”，重新回归假说三，结论基本一致。
7. 改变审计意见的定义。一般来说，带强调事项段的无保留意见在性质上仍属于无保留意见，且往往是上市公司与注册会计师通过谈判实现审计意见变通的表现(陈杰平等，2005)，因此我们将  $MAOI$  重新定义如下，如果审计意见为保留意见或无法表示意见，则  $MAOI$  取1，否则取0，重新进行检验，结论基本一致。
8. 极值处理。对所有连续变量上下两边各1%的观测值进行极值处理(Winsorize)；或者采用删除双侧各1%观测值的极值处理>Delete)，重新检验上述假说，结论没有改变。

## 六、研究结论

本文系统而全面地分析了我国审计师变更时机的相关问题，以2001至2008年发生审计师变更的样本公司为研究对象，我们考察了审计师变更时机的影响因素以及变更时机的经济后果。通过研究，我们发现：首先，出于机会主义动机发生的审计师变更，其变更时间越晚；而出于效率观动机发生的审计师变更，其变更时间越早。其次，在财政年度结束以后变更审计师的公司，发生收买审计意见的可能性大于在财政年度结束以前变更审计师的公司。第三，审计师变更时间与高质量继任审计师的选择显著负相关，即变更时间越晚，选择高质量审计师的可能性越小，变更时间越早，越有可能选择高质量的继任审计师。第四，审计师变更时间与继任审计师的水平定价显著正相关，越晚变更审计师的公司被继任审计师收取的审计费用显著高于越早变更的公司。

审计独立性问题是审计研究领域的核心问题，审计师变更现象涉及的诸多问题与审计独立性紧密相关，因此，审计师变更问题是证券审计市场中的重要现象，同时也是一个较为传统的审计研究领域。上市公司变更审计师的动机以及经济后果一直是学术界和实务界关注的热点问题。本文的研究发现证实，审计师变更时机的选择能够在一定程度上反映出审计师变更的内在动机，并与审计师变更的经济后果显著相关。本文以审计师变更过程中更具代表性的特征变量作为切入点，对不可观察的审计变量(如变更动机、审计质量等)以及审计行为进行了透析，不仅为研究审计

师变更、审计独立性问题提供了新的研究视角,丰富了相关领域的研究成果,而且本文的研究结论有助于证券市场相关方更好地评判和理解审计师变更行为,有助于监管者更有针对性地制定政策法规,以约束出于机会主义动机发生的审计师变更行为,规范审计服务供求双方的行为表现,从而能够更好地保护投资者的利益,提高审计市场的整体运行效率。

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## Timing of Auditor Changes, Divergence of Audit Opinions, and Audit Quality — Empirical Evidence from the Securities Markets of China<sup>1</sup>

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### Abstract

This paper comprehensively studies the issue of auditor changes in the securities market of China from the perspective of timing. Taking A-share listed companies that changed auditors from 2001 to 2008 as our research sample, we analyse the factors affecting the timing of auditor changes as well as the influence of different timings on audit opinion shopping, auditor choice, and audit pricing from the view of efficiency and opportunistic motives. We discover that (1) the timing of auditor changes is directly related to the motives for switching auditors – the timing will be relatively later when due to opportunistic motives, and earlier when due to motives of efficiency; (2) companies that change auditors after the fiscal year end are significantly more likely to be opinion shopping than those that do so before the fiscal year end; (3) the later a company changes its auditor, the less likely it is to select a new auditor of high quality; and (4) the later a company changes its auditor, the higher the fees the new auditor will charge. From our overall findings, we conclude that the timing of auditor changes is an important perspective from which to observe and study the nature of and the motives for switching auditors, and that it is closely related to the divergence of audit opinion and audit quality, which require more extensive attention from the relevant parties in the Chinese securities market.

**Keywords:** Timing of Auditor Changes, Audit Opinion Shopping, Auditor Choice, Audit pricing

**CLC codes:** F239, F276, F832

<sup>1</sup> This paper is sponsored by the Major Research Project of the Humanities and Social Sciences of the Ministry of Education (2009JJD790031), the Shanghai Project of Social Science (2009BJB020), and the Graduate Fund of the Shanghai University of Finance and Economics (CXJJ-2009-339, CXJJ-2010-324). We would like to thank Dr Donghui Wu (Executive Editor) and the two anonymous referees for their valuable suggestions and instructions. We would also like to thank Prof Xinyuan Chen, Prof Hongjun Zhu, and Dr Qingchuan Hou at the Shanghai University of Finance and Economics, and Dr Sheng Cao at Tongji University for their help and comments. The authors take sole responsibility for the views expressed herein.

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## I. Introduction

The financial information audited by certified public accountants (CPAs) is an important element in the normal operation and healthy development of capital markets (Watts and Zimmerman, 1983). The development of the audit market is closely related to the operation of the capital market. A high-quality audit service can improve the role of financial and accounting information in asset pricing and resource allocation. Moreover, such an audit service can effectively reduce the degree of information asymmetry and mitigate efficiency loss resulting from adverse selection and moral hazards, whereas a low-quality service will increase the same (Jensen and Meckling, 1976). In recent years, as China has undergone a socio-economic transformation, audit independence in an emerging market environment has faced unprecedented challenges and difficulties. All stakeholders in the market want to study and explore the overall status quo and problems of the CPA industry in China with respect to special phenomena in the auditing market. Auditor change is the most obvious and important window through which external researchers can observe audit engagement; also, the purpose and economic consequences of auditor changes are core issues directly related to audit independence. Since the contractual relationships between auditors and client companies are non-observable, and since the practices of auditors are unknown to outsiders, the phenomenon of auditor change becomes an important experimental environment for observing and studying the behaviour of stakeholders. An in-depth analysis of auditor switches includes examining the role of audit independence in corporate governance and capital markets, and emphasising the regulation of auditing markets.

The phenomenon of frequent auditor changes in listed companies has already drawn much attention from the market regulatory department, academia, and even the public. Auditor change has always been a popular research topic in academia. Most existing studies take the event of an auditor change as the dividing line and use it to compare several dimensional characteristics of the companies or auditors before and after the change in order to infer the relevant problems related to the change event; these include the motives of the client companies in changing auditors (Francis and Wilson, 1988; Chen *et al.*, 2010), auditor trade-offs between returns and risks, and investor assessment of the reputation of both listed companies and auditors (Teoh and Wong, 1993; Chaney and Philipich, 2002; Weber *et al.*, 2008). Few studies, however, focus on a more direct characteristic variable in the process of switching auditors, namely the timing of auditor changes<sup>3</sup>. Only two studies, by Barton (2005) and Chen and Zhou (2007), take the audit failure event of Andersen as the research background to study the issue of timing

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<sup>3</sup> The timing of auditor changes means the notice date of changing auditors as announced by the listed company. The time range is from the annual report announcement date of the previous year to the annual report announcement date of the following year after the fiscal year end.



selection by client companies under an involuntary auditor change, which they do from the perspective of demand for an auditor with a better reputation. The timing of auditor changes is an important breakthrough point for studying the issue of auditor switches and is directly related to the factors influencing the motives and decisions to make such a change. It is thus important to examine the issue of the timing of auditor changes so as to obtain a more comprehensive and accurate understanding of the behaviour involved.

There are two main reasons for listed companies to change auditors: first, to meet the needs of business development from the perspective of improving efficiency when changes occur in company scale, financing methods, or business scope (Healy and Lys, 1986; Johnson and Lys, 1990; Menon and Williams, 1991); and second, to reconcile the disagreement between auditors and companies over audit opinions and annual reports out of opportunistic motives (Chow and Rice, 1982; Chen *et al.*, 2010). Auditor changes as a result of different causes will differ in terms of timing selection. With respect to the first cause, when a listed company decides to make adjustments with respect to business scope, organisational structure, or investment and financing plans, and if it believes that the incumbent auditor cannot provide the services to meet its needs, it will decide to change auditors. Moreover, the listed company usually needs much time to prepare and plan such decisions, and accordingly the decision to change auditors will be made even earlier, so that the new auditor can have sufficient time to carry out the auditing services. In terms of the second cause, when the listed company fails to reach a consensus with the incumbent auditor over accounting methods or audit opinions relating to the annual report, it might then decide to change auditors. Such disputes usually occur after the former auditor has already begun the audit service, but when both parties have failed to reach a consensus even after mutual consultation, and thus the auditor is changed. Therefore, compared with the first reason for changing auditors, doing so out of opportunistic motives will usually occur at a later time. Thus, the timing of auditor changes not only reflects the characteristics of the listed companies' motives for making the change, but also reveals differences in behaviour between the companies and auditors when implementing an audit engagement. We take the timing of auditor changes as our research object; our inference is that a listed company will decide to change auditors earlier if it is out of need to make business adjustments, and later if done for opportunistic motives.

More specifically, taking those listed companies that changed auditors from 2001 to 2008 as the research sample, this paper comprehensively and systematically analyses the factors influencing the timing of auditor changes and the economic consequences under different timings. It finds that firstly the timing of auditor changes is an important referential index reflecting the motives for switching and the nature of the change event. Auditor changes occur at a relatively later time when done out of opportunistic motives, and earlier when done for efficiency purposes. Secondly, the later the auditor change, especially after the fiscal year end, the likelier the company is to be shopping for audit

opinions than if the change occurs before the fiscal year end. Thirdly, the later the auditor change, the likelier the company is to choose a small local firm as the new auditor, whereas the earlier the change, the likelier the company will choose an international Big Four firm or a local firm among the top 10 in China. Finally, the timing of auditor changes is also closely related to the audit fees charged by the new auditor: the later the company changes its auditor, the higher the fees the new auditor will charge. The above evidence proves that the timing of auditor changes is an important perspective for reviewing the behaviour of changing auditors, while it could also reflect the company's internal motives for making such a change.

This paper contributes to the literature in the following three respects. First, the existing literature relating to the timing of auditor changes (Chang *et al.*, 2003; Barton, 2005; Chen and Zhou, 2007) primarily takes the audit failure case of Andersen as the research object in order to study the issue of timing selection by a listed company under involuntary auditor change. In contrast, this paper examines the issue of timing selection by a listed company under a voluntary auditor change during routine business activities from the perspectives of either efficiency or opportunistic motives. Second, our research not only provides direct empirical evidence of the factors influencing auditor changes, but also fully examines the accompanying economic consequences of the timing of such a change. These consequences include audit opinion shopping, auditor choice, and audit pricing, and thus this paper enriches the research findings of the relevant fields while also making incremental contributions to the relevant literature (Francis and Wilson, 1988; Lennox, 2000; Li and Wu, 2004b; Chen *et al.*, 2005; Chan *et al.*, 2006). And finally, our research provides a referential perspective for exploring and understanding the behaviour of auditor changes in the securities market of China so as to help regulators, policy makers, and investors in the stock market in making corresponding decisions in accordance with the timing of auditor changes.

The structure of the rest of the paper is as follows: Section II proposes the research hypothesis on the basis of reviewing and commenting on the relevant literature; Section III presents the research design, including sample selection, data sources, and model specifications; Section IV provides the empirical results and analysis; and the last section concludes this paper.

## **II. Literature Review and Hypothesis Inferences**

### **(1) Factors Influencing the Timing of Auditor Changes**

Since the research by Chow and Rice (1982), a great deal of literature has discussed the characteristics, causes, and consequences of auditor changes, which have become an important issue in academia. From the research content, the existing literature can be classified into two categories. The first focuses on motives for changing auditors – it analyses the characteristics of companies before making such a change in order to judge

the motives. The other focuses on the economic consequences of changing auditors, including analysing the characteristics of companies or of new auditors after the change to judge whether a company has fulfilled its purposes. Currently there is no systematically specialised research on the timing chosen to change auditors, but the factors influencing timing are usually directly related to a company's motives (for efficiency or opportunistic purposes). Therefore, we can initiate the study of the timing of auditor changes with the factors influencing such changes (Wu and Shu, 2006).

First, as a monitoring and guarantee mechanism, high-quality audit services can improve the credibility of corporate financial reports, and thus effectively reduce a company's agency costs (Cohen *et al.*, 2002; Fan and Wong, 2005; Lennox, 2005). The business relationship between an auditor and a client is objectively maintained on the basis of customer needs and the minimum engagement costs of the audit services. Therefore, when either the client or the auditor changes its characteristics but the other party cannot or is unwilling to adapt to such change – that is, when the engagement environment of the company changes – the engagement relationship might be interrupted or terminated (DeAngelo, 1981). Generally, when business development needs arise or other important changes in characteristics occur, the listed company will adjust the arrangements for auditor choice and make further decisions on auditor changes in order to improve audit efficiency.

The scale, growth, and financial leverage of the client company will also dramatically influence its behaviour in selecting an auditor (Palmrose, 1984; Healy and Lys, 1986; Johnson and Lys, 1990). In addition, a change in auditor can also occur when a company's needs change under different operational stages or conditions. Through studying the relation between a company's agency costs and the demand for auditors, Francis and Wilson (1988) find that a bonus plan based on accounting earnings, the degree of equity dispersion, the level of financial leverage, and agency costs greatly influences a company's decision about changing auditors. Johnson and Lys (1990) point out that when the characteristics relating to the business activities of a client company change, the original competitiveness of the incumbent auditor will be weakened accordingly. Therefore, when a listed company expands in size or carries out diversified operations, the company will be more likely to replace its auditor. Healy and Lys (1986) and Menon and Williams (1991) also find that when a listed company makes great changes in its investment and financing plans, it will choose an accounting firm that provides more help in matters related to the plans.

Second, the existing research findings show that with respect to the enforcement efficiency of laws and supervision, the relation between the government and the market, market development (Shen, 2005; Fan *et al.*, 2007), and corporate governance efficiency (Li, 2002; Li, 2006), China still falls short of the mature capital markets. Thus, under the current environment in China, the imperfect legal system reduces auditors' litigation risks and costs, and so auditors might compromise themselves on audit independence

and audit quality (DeFond *et al.*, 2000; Chan *et al.*, 2006; Choi *et al.*, 2008). Under the environment of an imperfect legal system and inadequate protection for investors, the corporate governance structure usually takes the form of relatively centralised ownership or internal control (Shleifer and Vishny, 1997; La Porta *et al.*, 1999), which greatly reduces the demand for high-quality external audit services (Wang *et al.*, 2008); this in turn results in the auditors' failure to be involved in the governance mechanism of reducing agency costs or the degree of information asymmetry. As a result, opportunistic motives become another important factor influencing the decision to change auditors.

Although many factors influence this decision (Williams, 1988; Beattie and Fearnley, 1995), much research finds explanations from the perspective of opportunistic motives. Chow and Rice (1982), Lennox (2000), and Chen *et al.* (2000) report that when a client company disagrees with the auditor over relevant matters or audit opinions as stated in the annual report, and if their negotiation fails, the company is likely to change auditors. Whittred and Zimmer (1984) point out that disputes between the auditor and the listed company over changes in accounting policy or the description of a deterioration in corporate profits are significant causes for changing auditors. Kinney and McDaniel (1993) find that when a listed company cannot accept the disclosure principle for non-recurring items proposed by the accounting firm, and the auditor makes no compromise in consideration of its reputation, the company will usually change auditors. Moreover, since management usually considers earnings management an important means for reaching market expectations, a divergence of opinions over this will also lead to an auditor change (Loomis, 1999). DeFond and Subramanyam (1998) find that the sum of a company's discretionary accruals after changing auditors is higher than before the change. As a result, a listed company with strong motives to manage earnings will be more likely to replace its auditor. Chen and Zhang (2004) and Liu and Liu (2007) associate motives for managing earnings with conservative accounting treatments by auditors, and find that companies can realise their goal of manipulating earnings by changing auditors. In addition, the management of listed companies will be concerned over whether the auditor will issue an unqualified audit report. Chow and Rice (1982), Krishnan and Stephens (1995), DeFond and Subramanyam (1998), Li *et al.* (2001), Vanstraelen (2003), Lu and Tong (2003), and Chan *et al.* (2006) all find that decisions to change auditors are significantly related to modified audit opinions.

In summary, it is particularly important to analyse the motives or factors influencing auditor changes by listed companies in order to understand and determine more accurately the nature of the change. Timing in particular is a relatively more direct and observable variable in the decision to change auditors. Different motives for changing auditors will directly affect the timing of the change, which in turn provides an important perspective for understanding and exploring the whole issue. Some scholars take the failure of Andersen as an experimental environment for examining a client company's selection of timing in changing auditors from the perspective of the demand for an auditor with

a better reputation. Barton (2005) finds that after Andersen's audit failure, companies receiving much attention from the market (in terms of the number of tracking analysts, the proportion of equity financing, and the proportion of institutional investors) replaced auditors earlier to protect their reputations. According to Chen and Zhou (2007), after Andersen was prosecuted, its reputation declined dramatically, while the better the internal control of its client companies, the sooner the companies chose to replace their auditors. For client companies, however, changing auditors in consequence of exogenous events on the part of the accounting firm is not entirely considered to be voluntary behaviour. This paper instead focuses on the issue of the timing selected to make voluntary auditor changes during a company's routine business activities, and analyses the factors influencing the selection of timing from the perspective of the motives for making such a change.

It is considered to be a material matter when a listed company changes the auditor of its financial reports; thus, in its *Notice on Relevant Issues of Employing and Changing Accounting Firms (Audit Firms)*, the China Securities Regulatory Commission (CSRC) stipulates that the dismissal or non-reemployment of an accounting firm should be decided through the general meetings of shareholders, be disclosed in the relevant press with indications of the reasons for replacing the accounting firm if necessary, and be filed with the CSRC and the Chinese Institute of Certified Public Accountants (CICPA). Generally, listed companies will decide to change auditors at different times owing to different motives. The timing of an auditor change is closely related to why the change is being made; also, the behaviours of client companies making different timing decisions show systematic differences (Chen and Zhou, 2007). On the one hand, when a company makes major adjustments in its investment and financing plans, mode of operation, and organisational structure, it will usually take a long time to make preparations and plans, and so the decision to change auditors will accordingly be made earlier to allow the new auditor to have more confidence in taking over the audit job as well as sufficient time to complete the audit procedures. On the other hand, an adjustment plan relating to the annual financial reports, such as improving audit opinions or employing an auditor with more relaxed practices (Chen *et al.*, 2010), will usually occur after the incumbent auditor has begun work. At first, both parties will consult each other on matters relevant to any disputes. If both parties fail to reach a consensus, the company will decide to change auditors, and therefore this decision will usually be made later, possibly after the company's fiscal year end or close to the deadline for making public announcements. We thus propose the first research hypothesis for testing according to the above analysis:

**Hypothesis 1: The timing of an auditor change will be later when done from opportunistic motives, and earlier when done for efficiency.**

## (2) Economic Consequences of the Timing of Auditor Changes

When the audit result is to the disadvantage of the company – for example, the financial report is given a modified audit opinion – the listed company and management might suffer certain loss, such as financing difficulties, corporate or individual disrepute, a decrease in the welfare of management, and even a subsistence crisis (Chen *et al.*, 2005). Hence, management has strong motives to avoid an adverse audit opinion. The existing literature points out that listed companies can generally use one of two methods to avoid a modified audit opinion: either bribe or threaten the incumbent auditor (Chen *et al.*, 2005; Fang and Hong, 2008), or change auditors (Chan *et al.*, 2006). Changing auditors is one of the most common ways for a listed company to improve an audit opinion, and is also the issue that has drawn much attention from the regulatory department. Lennox (2000) and Li and Wu (2002) both find that a listed company with the motive to shop for audit opinions can improve the opinion by changing auditors. After sorting out the decision notices for auditor changes, we find that some listed companies even make it clear in the notice that the reason they are making such a change is the overly strict practice standards of the preceding auditors or the issue of modified audit opinions, resulting in unsuccessful negotiations.<sup>4</sup>

If a company's management expects that the likelihood of receiving a modified audit opinion after changing auditors will be smaller than receiving such an opinion from the incumbent auditor, it will decide to change auditors (Lennox, 2000). The company seeks support from the new audit firm to meet the needs of the financial reports, and succeeds in avoiding an adverse audit opinion while realising audit opinion shopping. A change in auditor resulting from audit opinion shopping will in turn greatly influence the timing selected for the change. A listed company will change auditors when it cannot reach a consensus with the incumbent auditor on relevant matters stated in the annual report; in particular, the change will occur after the fiscal year end, when the client company has strong motives to improve the audit opinion. The fiscal year end of listed companies is the deadline for auditing the financial conditions and operating results during the accounting period as well as the contents of the annual report, thus corresponding to the observation dimension of the timing of auditor changes. Changing auditors for opportunistic motives is thus closely related to the company's annual financial report. A change after the fiscal year end will more likely be the result of a divergence of opinion over relevant matters in the annual report. Hence, we propose the second hypothesis as follows:

**Hypothesis 2: If a company changes auditors after instead of before the fiscal year end, it will be significantly more likely to be shopping for audit opinions.**

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<sup>4</sup> There is a big difference between the information disclosure system for auditor changes in China and in the US. First, the US Securities and Exchange Commission requires that listed companies submit reports in 8-K format when changing auditors, while China does not have such a disclosure requirement. Second, notices of auditor changes in China lack the disclosure of material information (Li and Wu, 2002, 2006), and there are few representations about the initiator or the substantial causes for changing auditors.

DeFond (1992) points out that the extent of agency conflict decides the demand for independent auditing services, while agency costs determine the behaviour of a listed company in selecting an auditor. Employing high-quality auditors can reduce a company's information asymmetry (Teoh and Wong, 1993; Krishnan, 2003; Barton, 2005; Albring *et al.*, 2007), while high-quality external auditors can reduce agency costs by giving play to their governance function (DeFond, 1992; Fan and Wong, 2005). The existing literature has studied the economic consequences of auditor changes from the perspective of selecting new auditors. Francis and Wilson (1988) find that the higher a company's agency costs, the more it is likely to switch from a small-scale to a large-scale audit firm. DeAngelo (1981) and Chow and Rice (1982), however, find that if a company is given a modified audit opinion before changing auditors, it is more likely to choose a new auditor with more relaxed practice standards. Whisenant (2003) points out that after a listed company changes auditors because of a divergence of opinion between the two, the company will be more likely to choose a low-quality new auditor. Blouin *et al.* (2007) and Chen *et al.* (2009) find that if before Andersen's failure a client company already had a higher level of accruals, it would choose a new accounting firm that had hired Andersen's original audit team in order to seek the support of these audit staff in accounting treatment through their established customer relationships.

The selection of new auditors is directly related to the motives for changing auditors. High-quality auditors are relatively more prudent in practice, thus making them more likely to issue a modified audit opinion. At the same time, according to the foregoing analysis, if a company chooses to change auditors later out of opportunistic motives, such motives will usually be related directly to the divergence of opinion in the accounting treatment of annual reports or audit opinions. Therefore, the demand of this kind of company for high-quality audit services will significantly decrease, and the company will be more likely to choose a new auditor that is less prudent in practice and more relaxed in risk control. In contrast, if the change in auditor results from the needs of business development or internal restructuring, the timing of the change will be relatively earlier, and its purpose will be to improve audit efficiency. Compared with opportunistic motives, the likelihood that the company will choose a high-quality successor auditor will be much higher. In view of the above, we propose the third research hypothesis as follows:

**Hypothesis 3: The later a company changes auditors, the less likely it is to choose a high-quality new auditor.**

Another important aspect in deciding audit quality is the system for charging for audits. Simunic and Stein (1996) point out that auditing costs include two parts: the input cost (such as work-time costs and labour costs) and the expected loss cost (such as litigation risks). The expected litigation costs and potential costs for restoring reputation

resulting from audit risk make up the integral parts of audit fees. Rational accounting firms will adopt different pricing strategies for customers with different auditing risks. Chen *et al.* (2005) find that when a change in auditors occurs, exceptional audit fees will increase significantly. Li and Wu (2004a) find that while new auditors do not give any discounts, there is an obvious audit premium during the initial pricing against companies that have changed auditors. The level of audit pricing reflects to some extent the auditors' differentiated strategies against client companies with different risk levels.

Audit pricing is jointly determined by the listed company and the auditor when they establish an engagement relationship. For auditing service providers, the timing of an auditor change reflects a comprehensive assessment of the above two types of cost, that is, input cost and risk cost. The input cost directly coincides with the timing of the auditor change, while the risk cost is related to the listed company's motives for changing auditors. Obviously, either the input cost or the risk cost of changing auditors for opportunistic motives is higher than it is for the needs of business development. The timing of an auditor change, however, can take both factors into consideration at the same time. The later a company changes its auditor, the more likely the change is to result from opportunistic motives, including divergence in opinion over the annual report. Such changes will have two economic consequences. Because of the later change, it will be a relatively pressing matter to complete the audit procedures and arrange personnel; at the same time, the audit risks and costs of such a company will significantly increase. As a result, the new auditors will usually charge higher fees to cover the cost. In contrast, a company that changes auditors earlier will be more likely to choose a new auditor that is more suitable for facilitating its business development. Hence, compared with changing auditors out of opportunistic motives, the new auditors will charge less to companies that changed auditors earlier. Therefore, we propose the fourth research hypothesis as follows:

**Hypothesis 4: The later a company changes auditors, the higher the new auditor charges will be.**

### III. Research Design

#### (1) Sample Selection and Data Sources

To test the above research hypotheses, we select A-share listed companies in the securities market of China that changed auditors between 2001 and 2008 as the research sample. The process of selecting samples for changes in auditors is as follows. From the annual reports of all A-share listed companies between 2001 and 2008, we select the accounting firms that have provided auditing services and eliminate repeated observations. We then sort out the information with respect to the renaming, merger, and restructuring of accounting firms, which are considered to be adjustments of the



firm's operating scale, the economic nature of which remains unchanged. As a result, a change in audit institutions by listed companies for consecutive years for such reasons does not lie in the category of auditor change as defined by this paper. Information on the renaming, merger, and restructuring of accounting firms is taken from the websites of various accounting firms and of the CICPA and the CSRC. For observations missing information on auditing entities in the database, we collect this information by hand from the listed companies' annual reports, which are taken from the information disclosure website designated by the CSRC (<http://www.cninfo.com.cn>). When the main accounting firm that assumes the audit work on the annual report of a listed company changes in consecutive years, it is defined as a sample for auditor change in this paper.

From the sample companies that change auditors, we collect the corresponding specific dates of the notice for the change in auditor by hand, while at the same time verifying the samples through this step. Generally, major issues such as changes in accounting firms will be made public in the form of a resolution notice issued by the board of directors before submitting the issue to the (provisional) general meeting of shareholders for deliberation. The resolution notice of the board is basically examined and approved by the general meeting. Therefore, we specify the issuance date of the board's notice on the change in audit institutions as the date for auditor change.

After determining the initial samples, we exclude the following to eliminate the interference of other factors: (1) samples without a notice for an auditor change, (2) companies in the finance and insurance industries,<sup>5</sup> (3) samples with a mandatory change in auditors because the accounting firm had its licence revoked or was disqualified from practising in the securities business by failing to pass the annual inspection, (4) samples with an involuntary change in auditors because either the accounting firm had reached the limit for the length of audit service or the parent company had unified the arrangement of auditors,<sup>6</sup> (5) companies newly listed in the current year,<sup>7</sup> and (6) samples without financial data. Through the above steps, we finally obtain 817 sample observations with a change in auditor.

We take the information for the notice of a change in auditor from the website

<sup>5</sup> The financial characteristics of companies in the finance and insurance industries differ greatly from those in other industries. Moreover, there is a systematic difference between their decisions in selecting auditors and those of other enterprises (Simunic, 1980). Given these special characteristics, we eliminate companies in these industries during the sample period.

<sup>6</sup> The timing of auditor changes owing to reasons pertaining to the accounting firm itself is determined by the date when the firm's qualifications are revoked or it fails the annual inspection. The timing of auditor changes stemming from the requirement of the State Asset Regulatory Commission that the same accounting firm should not audit the annual financial statements of an enterprise more than five consecutive years, or from the fact that the parent company mandatorily unifies arrangements with accounting firms for member companies of the group, does not belong to voluntary selection because of the influence and interference from the parent company or the State Asset Regulatory Commission. Therefore, we eliminate such samples.

<sup>7</sup> There are six cases of IPO companies that changed auditors in the current year among the samples of this paper. Owing to government regulations and influence of the institutional environment, auditor choice and motives for switching by newly listed companies differ greatly from those of other companies (Zhu *et al.*, 2004). Moreover, companies satisfying the listing requirements have material changes in their regulatory requirements and financing objects for the IPO year, and thus we eliminate them from the sample.

<http://www.cninfo.com.cn>, while we also verify and confirm the notice information with data from the Wind Information System. Other data applied in this paper, including basic information, management information, financial data, and audit data, are sourced from the CSMAR database developed by the GTA Information Technology Co. Ltd.

The resolution notice relating to an auditor change by a listed company's board of directors will specify the fiscal year for the newly employed auditor to practise audit services. When a change in auditor occurs after the end of the corresponding fiscal year, the notice of change will include two concepts of year: one is the corresponding fiscal year for practising the audit business, and the other the calendar year of the notice date. For example, Jinwa Enterprise (stock code: 600080) made public on 5 April 2005 the hiring of a new auditor to audit the company's annual financial reports for 2004. Thus, the fiscal year for the auditor change is 2004, while the calendar year of the notice date is 2005. Taking Kaifa Technology (stock code: 000021) as another example, the company made public on 11 April 2005 the hiring of a new auditor to audit the annual financial reports for 2005. Thus, the fiscal year for the auditor change and the calendar year of the notice date are both 2005. To facilitate understanding and description, we use *ACY* to indicate the difference between the calendar year for a change in auditor and the corresponding fiscal year. Specifically, if the auditor is changed before the end of the corresponding fiscal year (31 December) – that is, the fiscal year coincides with the calendar year – then  $ACY = 0$ ; if the auditor is changed after the end of the corresponding fiscal year (31 December) – that is, the calendar year is equivalent to the fiscal year plus 1 – then  $ACY = 1$ . As a result, the *ACY* of the Jinwa Enterprise is 1, and that of Kaifa Technology is 0. Except as stated herein, the year mentioned below indicates the fiscal year corresponding to the notice of an auditor change.

According to the provisions in the Accounting Law, the uniform range of the fiscal year interval in China is from 1 January to 31 December in the Gregorian calendar. Meanwhile, the Securities Law requires companies to issue annual reports within four months of the end of each fiscal year. Therefore, theoretically the deadline for issuing annual reports by listed companies and the corresponding change in annual auditors should be 30 April of the year following the fiscal year end.<sup>8</sup> The longest span for auditor change is therefore from the beginning of January in the current year to the end of April in the following year.

Table 1 lists the yearly (quarterly) distribution of the samples with an auditor change, while Figure 1 presents the descriptive results of the monthly distribution of the samples. As Table 1 shows, for samples that changed auditors before the fiscal year end

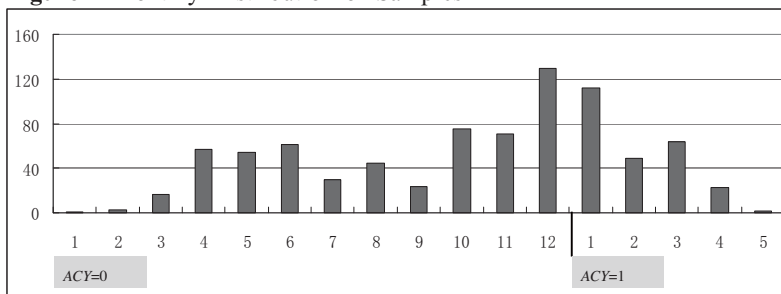
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<sup>8</sup> In the final research samples there are four cases of delaying the disclosure of annual reports, of which two involve auditor changes after 30 April of the following year. Since delayed disclosure is considered to be a matter after the change in auditor, the motives for changing auditors and selecting the timing of the change will not be affected. Therefore, the foregoing cases are included in the samples for this paper. To avoid the influence of potential factors on the research conclusions, we eliminate these four cases in the robustness test, and the conclusions still hold.

( $ACY = 0$ ), there are 567 observations, accounting for 69.4 per cent of the total sample of auditor changes; for samples that changed auditors after the fiscal year end ( $ACY = 1$ ), there are 250 observations, accounting for 30.6 per cent of the total sample of auditor changes. This shows that more than 30 per cent of auditor changes occur within the first four months after the fiscal year end; such a proportion is very high. The fourth quarter of  $ACY = 0$  and the first quarter of  $ACY = 1$  post the highest proportion, with the number of samples as 275 and 225, respectively. Moreover, we find that 25 sample companies change auditors in the second quarter with  $ACY = 1$ ; this quarter is already close to the deadline for the annual report disclosure, and so the decision to change auditors is pretty hasty. Furthermore, from the description of the monthly distribution of the samples with an auditor change, we find that the months with a higher proportion of changes are October, November, and December before the fiscal year end and January of the following year after the fiscal year end, followed by April, May, and June after the annual reports for the previous year are published, and February and March of the following year. The timing of auditor changes is therefore not randomly distributed, and the selection of timing shows certain characteristics and differences.

In general, through analysing the timing distribution of auditor changes in the securities market of China, we find that a considerable proportion of sample observations change auditors after the fiscal year end. The sample data thus satisfy the basic conditions for testing the hypotheses.

**Figure 1** Monthly Distribution of Samples



Notes:  $ACY = 0$  means during the current fiscal year;  $ACY = 1$  means after the fiscal year end.

## (2) Test Models and Variable Specifications

To test the factors influencing the timing of the changes in auditors by listed companies in China, we study them from both the efficiency view and the opportunistic view, and attribute the influencing factors to the two motives for making an auditor change.<sup>9</sup> Thus, we construct the following model and test the samples with auditor changes through an ordinary least squares (OLS) regression:

<sup>9</sup> We thank Dr Donghui Wu for his constructive suggestions for the empirical test analysis of Hypothesis 1.

**Table 1 Yearly (Quarterly) Distribution of Samples**  
**Panel A Yearly**

Fiscal year	2001	2002	2003	2004	2005	2006	2007	2008	Total
	84	99	77	99	110	120	127	101	817
Calendar year	2001	2002	2003	2004	2005	2006	2007	2008	2009
	ACY=0	ACY=0	ACY=0	ACY=1	ACY=0	ACY=0	ACY=0	ACY=0	ACY=1
	ACY=1	ACY=1	ACY=1	ACY=0	ACY=1	ACY=1	ACY=1	ACY=1	ACY=0
	ACY=1	ACY=0	ACY=0	ACY=1	ACY=0	ACY=0	ACY=1	ACY=0	ACY=1
	51	33	67	32	51	26	61	38	76
	32	38	76	34	83	37	95	32	83
	18	567	250						

**Panel B Quarterly**

Calendar quarter	ACY=0 Q1	ACY=0 Q2	ACY=0 Q3	ACY=0 Q4	ACY=1 Q1	ACY=1 Q2	Total
	21	172	99	275	225	25	817

Notes: The fiscal year means the financial year corresponding to the auditor changes as stated in the notice for such changes. The calendar year means the actual year in which the notice of auditor changes is published.

$$\begin{aligned}
 ACDAY = & \alpha_0 + \alpha_1 * SIZE + \alpha_2 * LEV + \alpha_3 * GROWTH + \alpha_4 * CAPRS + \alpha_5 * INVRAT \\
 & + \beta_1 * ROA + \beta_2 * DA + \beta_3 * ST + \beta_4 * REVRAT + \beta_5 * LAGMAO + \beta_6 * CG \\
 & + \beta_7 * MKT + YEARDUMMY + INDDUMMY + \varepsilon, \quad (1)
 \end{aligned}$$

where  $\alpha_0$  is the intercept,  $\alpha_1 \sim \alpha_5$  and  $\beta_1 \sim \beta_7$  are the regression coefficients, and  $\varepsilon$  is the residual. The meanings of the various variables in the model are as follows. With respect to the dependent variable, *ACDAY* is the number of days from the corresponding fiscal year end (31 December) to the notice day of the auditor change by the listed company. Therefore, if *ACDAY* is less than 0, the auditor change occurs before the fiscal year end ( $ACY = 0$ ), and if larger than 0, then after the fiscal year end. To facilitate our analysis, we standardise the *ACDAY* variable.<sup>10</sup> The larger the value, the later the change takes place; the smaller the value, the earlier the change.

With respect to the explanatory variables, we first concentrate on efficiency motives. According to the foregoing analysis, we study the influence of company size, financial leverage, growth, motives for financing, and business characteristics on selecting the timing of change for efficiency purposes. We expect that to meet the needs of business development and improve the auditing service's efficiency, companies will usually make earlier decisions to change auditors.

*SIZE* means the scale of the company and is equal to the natural logarithm of total assets at the end of the period; *LEV* means the level of financial leverage and is the result of total assets divided by total liabilities at the end of the period; *GROWTH* means the growth potential of the company and is measured as the growth rate of operating income; and *CAPRS* represents whether there are financing motives. According to the provisions of the *Administrative Measures for the Issuance of Securities of Listed Companies*, if the annual weighted average return on net assets of a company is not less than 6 per cent for the latest three years, the company may launch seasoned equity offerings (SEOs) in the current year. If the sample company satisfies the conditions for SEOs, then *CAPRS* takes the value of 1, and otherwise 0. *INVRAT* represents the business characteristics of a company and is equal to inventory divided by total assets.

This paper focuses on examining the factors influencing the timing of auditor changes. On the one hand, the larger a company, the more complicated its business, and the longer it will take an auditor to provide audit services. To allow the audit be conducted efficiently, companies with such characteristics will change auditors earlier in order to leave relatively sufficient time for the new auditor to do its job. The level value of the characteristic variables can thus be compared. On the other hand, among the explanatory variables representing efficiency motives, *GROWTH* and *CAPRS* indicate the value of change in characteristics with respect to growth and financing, similar to the connotation of the characteristic variables in the model of Johnson and Lys (1990).

<sup>10</sup> We adopt Z standardisation: the difference between each variable and the mean value is divided by the standard deviation of the variable. The mean value of the variable after standardisation is 0, and the standard deviation is 1.

Accordingly, the test in connection with efficiency motives in this paper compares not only the level but also the change values of the characteristic variables.

As for opportunistic motives, we control for variables including earnings performance, earnings management, mode of operation, audit opinion type of the previous period, corporate governance, and the efficiency of institutional governance. We expect that for opportunistic motives, the timing of auditor changes will be later because of the influencing factors related to the divergence in audit opinion.

*ROA* is the return on total assets, representing profitability. *DA* is the absolute value of discretionary accruals, representing the company's level of earnings management, and is estimated through the Jones model adjusted by industry. *ST* means the company's financial condition and takes the value of 1 if the company is specially treated in the current year, and 0 otherwise. *REVRAT* is the mode of sales, which is measured as the percentage of accounts receivable in total assets.<sup>11</sup> *LAGMAO* is used to control for the audit opinion type of the previous year; if the company is given a modified audit opinion, *LAGMAO* takes the value of 1, and otherwise 0. *MKT* means the proxy variable for institutional governance. Here we adopt the marketisation indices of Fan *et al.* (2007).<sup>12</sup> The larger the value of the variable, the higher the degree of marketisation, and the better the system environment of this region. *CG* is the proxy variable for the level of corporate governance. The contents included under corporate governance are extensive. Because the measurement of any dimension is able to reflect only one aspect or some characteristic of corporate governance, many scholars have recently tried to measure its efficiency by constructing governance indices for a company (Gompers *et al.*, 2003; Bai *et al.*, 2005; Larcker, 2007; Jin and Yuan, 2008). Hence, we construct indices of corporate governance efficiency by analysing principal components and following the research of Bai *et al.* (2005). The larger the value of the variable, the higher the efficiency of corporate governance.<sup>13</sup> Because corporate governance and institutional governance have an inhibiting effect on auditor changes stemming from opportunistic motives, we

<sup>11</sup> The inventory and accounts receivable might affect the complexity of the audit business and the auditor's workload. They can also affect the auditor's practice risk. The former is shown as 'efficiency motives', and the latter as 'opportunistic motives'. From the research and analysis of this paper, accounts receivable are even directly related to corporate profits, especially when an enterprise in practice uses them to inflate its profits. Therefore, accounts receivable are classified as a characteristic variable representing opportunistic motives. In respect of inventory, although it is possible for an enterprise to inflate profits by changing operating costs, inventory is more likely to reflect the auditor's workload and complexity of the audit business. Therefore, we define inventory as a characteristic variable representing efficiency motives.

<sup>12</sup> Since the marketisation indices of all provinces in China are from 2001 to 2005, we use the 2005 marketisation index for samples after 2005.

<sup>13</sup> The principal component factors and the corresponding load coefficients are (1) concurrent holding of the posts of board chairman and general manager (-0.123), (2) the proportion of independent directors (-0.178), (3) the percentage of shares held by senior executives (-0.079), (4) the percentage of shares held by the first largest shareholder (0.615), (5) the sum of squares of the percentages of shares held by the second to the 10th largest shareholders (-0.362), (6) the ratio of the percentage of shares held by the first largest shareholder to that held by the second largest (0.352), (7) whether the company issues B shares or H shares simultaneously (-0.057), and (8) the nature of state-owned holdings (0.558). Since it is expected that the load coefficient of the indicator positively related to corporate-governance efficiency will be negative, to change the economic significance we take a negative value for the corporate-governance exponent obtained through analysing principal components. After this change, the higher the governance index, the better the corporate-governance efficiency.

use these two dimensions to test the influence of the effect on selecting the timing of such a change.

To test the relation between the timing of the auditor change and audit opinion shopping, we divide the samples into the earlier group and the later group based on whether the timing of the change comes before or after the fiscal year end (31 December), following the research methods of Lennox (2000). The fiscal year end is the deadline for auditing the financial condition and operating results of a company during an accounting period, as well as for auditing the accounting contents of a company's annual report. Therefore, we take the fiscal year end as the standard for dividing the sample. An auditor change occurring after the fiscal year end possibly results from the divergence in opinion over matters relating to the annual report; such a change is defined as 'the later change', where the variable *LATE* takes the value of 1. In contrast, an auditor change before the fiscal year end is defined as 'the earlier change', where the variable *LATE* takes the value of 0.

Firstly, we estimate the probability of obtaining a modified audit opinion under the two timings for changing auditors, as well as for when the same incumbent auditor is re-hired, using regression Model (2). These are marked as  $Q^{q1*}(LATE = 1)$ ,  $Q^{q0*}(LATE = 0)$ , and  $Q^{q*}(AC = 0)$ ; then, taking  $Q^{q*}$  as the datum, we substitute regression Model (3) of the decision to change auditors with the difference between probabilities  $Q^{q1*}$  and  $Q^{q*}$ , and  $Q^{q0*}$  and  $Q^{q*}$ , to determine the difference in the behaviour of audit opinion shopping between the two timings. When testing Hypothesis 2, we apply all A-share listed companies from 2001 to 2008, including samples without an auditor change, to estimate the probability of  $Q^{q*}$ . In our research, the number of observations for the full sample is 9305, and the specific regression model is as follows:

$$\begin{aligned} Prob(MAO=1) &= \alpha_0 + \alpha_1 * LAGMAO + \alpha_2 * LAGMAO * AC + \alpha_3 * LAGMAO * LATE \\ &\quad + \alpha_4 * AC + \alpha_5 * LATE + \alpha_6 * CONTROLS + \alpha_7 * CONTROLS * AC \\ &\quad + \alpha_8 * CONTROLS * LATE + \varepsilon \end{aligned} \quad (2)$$

$$Prob(AC=1) = \alpha_0 + \alpha_1 * (Q^{q1*} - Q^{q*}) + \alpha_2 * (Q^{q0*} - Q^{q*}) + \alpha_3 * CONTROLS + \varepsilon \quad (3)$$

With respect to the dependent variable, *MAO* is the dummy variable for the type of audit opinion issued to the company in the current year. If it is a modified opinion, then *MAO* equals 1, and otherwise 0. *AC* is the dummy variable indicating whether an auditor change occurs in the current year; if so, then *AC* equals 1, and otherwise 0.

As for the explanatory variables,  $Q^{qL*}$  is the estimated probability of a modified audit opinion. Subscript q means the type of audit opinion for the previous period (if  $q = 1$ , it is a modified opinion, or a standard opinion if  $q = 0$ ). Subscript L means the timing of the auditor change (if  $L = 1$ , it is later, or earlier if  $L = 0$ ). Accordingly,  $Q^{q*}$  represents the probability that a company will be given a modified audit opinion when the auditor is not changed.  $Q^{q1*}$  and  $Q^{q0*}$  are the probabilities that a company will be

given a modified audit opinion when a later change and earlier change occur, respectively. *CONTROLS* represents the control variables adopted in the regression model, including *LEV* (asset-liability ratio), *ROA* (return on total assets), and *ST* (dummy variable to indicate whether the company has been specially treated). The definitions of the other variables are the same as in Model (1).

The largest contribution of Lennox (2000) is that he estimates the unobservable audit results by applying certain research methods, thereby providing a basis for comparing the likelihoods of audit opinions under different situations. According to Hypothesis 2, if  $\alpha_i$  in Model (3) is significantly negative, this indicates that when a company is less likely to receive a modified opinion by changing auditors after the fiscal year end than by retaining the incumbent auditor, it will be more likely to change auditors. In this case, changing the auditor could effectively improve the audit opinion; in other words, the company that changes auditors after the fiscal year end has successfully engaged in audit opinion shopping.

To test Hypothesis 3 – the influence of the different timings of the change on the selection of a new auditor – we adopt the following Model (4) to test the samples of auditor changes:

$$\begin{aligned} Prob(HQAUDITOR=1) = & \alpha_0 + \alpha_1 * ACDAY + \alpha_2 * SIZE + \alpha_3 * LEV + \alpha_4 * GROWTH \\ & + \alpha_5 * INVRAT + \alpha_6 * REVRAT + \alpha_7 * LAGHQAUDITOR \\ & + \alpha_8 * CG + \alpha_9 * MKT + \alpha_{10} * CAPRS + \alpha_{11} * LAGMAO \\ & + YEARDUMMY + INDDUMMY + \varepsilon \end{aligned} \quad (4)$$

With respect to the dependent variable, *HQAUDITOR* represents the dummy variable for the type of new auditor after a change. If the company chooses a firm among the Big Four or the local top 10 in China as the new auditor, *HQAUDITOR* takes the value of 1, and otherwise 0. The top 10 accounting firms in China are those among the top 20 in the ranking of 100 accounting firms published by the CICPA from 2001 to 2008.<sup>14</sup> Here we call them the ‘Top Ten in China’ for short. We take the Big Four and the local Top Ten as the representatives of high-quality auditors. The remaining domestic accounting firms are termed ‘local small audit firms’ for short.

*LAGHQAUDITOR* represents the dummy variable for the type of auditor in the previous year, which takes the value of 1 if the auditor is among the Big Four or local Top Ten, and 0 otherwise. The definitions of the other variables are the same as in

<sup>14</sup> If a merger occurs in an accounting firm, one of the merger subjects must always be among the top 20 from 2001 to the year before the merger to ensure consistency in the reputation of the accounting firms. In this study, the top 10 audit firms in China (including their predecessors) include RSM China Certified Public Accountants Co. Ltd. (Yuehua Certified Public Accountant Co. Ltd. and China Rightson Certified Public Accountants Co. Ltd.), BDO China SHU LUN PAN CPAS, Beijing BDO China SHU LUN PAN CPAS, Zhejiang Tianjian Oriental Certified Public Accountants Co. Ltd., Shinewing Certified Public Accountants Co. Ltd., Reanda Certified Public Accountants Co. Ltd., Baker Tilly China Certified Public Accountant Co. Ltd., and China Audit Asia Pacific Certified Public Accountants Co. Ltd..



Model (1).

According to Hypothesis 3, the later a company changes its auditor, the less likely it is to choose a high-quality new auditor. As a result, we expect the coefficient of *ACDAY* in Model (4) to be significantly negative.

In addition, we also carry out an extended empirical analysis. First, the choice of a new auditor is directly linked with the opportunistic motive for changing auditors. We expect that if the auditor change is done out of opportunistic motives, a negative correlation between the timing of the change and the likelihood of choosing a high-quality successor will be more obvious. If the change is to improve auditing efficiency, the negative correlation between the two will be weakened. To test the above questions, we add an interaction term to Model (4). We take the audit opinion type issued in the previous year as the variable for opportunistic motives, and take the financing motives as the variable for efficiency motives. The specific regression model is as follows:

$$\begin{aligned}
 Prob(HQAUDITOR=1) = & \alpha_0 + \alpha_1 * ACDAY + \alpha_2 * SIZE + \alpha_3 * LEV + \alpha_4 * GROWTH \\
 & + \alpha_5 * INVRAT + \alpha_6 * REVRAT + \alpha_7 * LAGHQAUDITOR \\
 & + \alpha_8 * CG + \alpha_9 * MKT + \alpha_{10} * CAPRS + \alpha_{11} * LAGMAO \\
 & + \alpha_{12} * CAPRS * ACDAY + \alpha_{13} * LAGMAO * ACDAY \\
 & + YEARDUMMY + INDDUMMY + \varepsilon
 \end{aligned} \tag{5}$$

If the model is consistent with the theoretical expectation, the coefficient of the interaction term *CAPRS\*ACDAY* will be significantly positive, and that of *LAGMAO\*ACDAY* significantly negative. The definitions of the other variables are the same as in Model (1).

To test Hypothesis 4 – the influence of the timing of the auditor change on decisions about audit pricing – we construct the following Model (6) and test the samples that have changed auditors:

$$\begin{aligned}
 AF = & \alpha_0 + \alpha_1 * ACDAY + \alpha_2 * SIZE + \alpha_3 * LEV + \alpha_4 * INVRAT \\
 & + \alpha_5 * REVRAT + \alpha_6 * ST + \alpha_7 * LAGMAO + \alpha_8 * HQAUDITOR \\
 & + \alpha_9 * CG + \alpha_{10} * MKT + YEARDUMMY + INDDUMMY + \varepsilon
 \end{aligned} \tag{6}$$

With respect to the dependent variable, *AF* is the natural logarithm of the audit fee charged by the new auditor; the definitions of the other variables are the same as in Model (1).

In accordance with Hypothesis 4, if a company that changes auditors later is charged higher fees by the new auditor, the coefficient of *ACDAY* should be significantly positive.

Furthermore, we take the companies without an auditor change as the control sample to observe the difference in audit pricing between those with a later (earlier) auditor change and those without an auditor change on the basis of Hypothesis 4 to further prove

the research conclusion of this paper. We test the full sample of A-share companies with the following Model (7):

$$\begin{aligned}
 AF = & \alpha_0 + \alpha_1 * AC + \alpha_2 * LATE + \alpha_3 * SIZE + \alpha_4 * LEV + \alpha_5 * INVRAT + \alpha_6 * REVRAT \\
 & + \alpha_7 * ST + \alpha_8 * LAGMAO + \alpha_9 * HQAUDITOR + \alpha_{10} * CG \\
 & + \alpha_{11} * MKT + YEARDUMMY + INDDUMMY + \varepsilon
 \end{aligned} \tag{7}$$

In Model (7), the coefficient of *AC* means the difference in audit pricing between the companies with an earlier change (*LATE* = 0) and those without a change. The coefficient of *LATE* means the difference in pricing between those companies with a later change (*LATE* = 1) and those with an earlier change (*LATE* = 0). The sum of the two coefficients means the difference in pricing between the companies with a later change (*LATE* = 1) and those without a change.<sup>15</sup> If the coefficient of *AC* in Model (7) is significantly positive, this means that the audit fee of a company with an earlier auditor change is significantly higher than of a company without a change, and vice versa. If the coefficient of *LATE* is significantly positive, the audit fee of a company with a later auditor change is significantly higher than of a company with an earlier change. Moreover, when the sum of the coefficients of *AC* and *LATE* is significantly larger than 0, the audit fee of a company with a later auditor change is significantly higher than of a company without a change. The definitions of the other variables are the same as in Model (1).

Table 2 summarises the definitions of all variables used in the above test models. For simplicity, the regression results of the annual and industrial dummy variables are not reported in the empirical results.

**Table 2 Variable Definitions**

<b>Dependent variables</b>	
<i>ACDAY</i>	The number of days from the corresponding fiscal year end (31 December) to the notice day of auditor change by the listed company.
<i>MAO</i>	Dummy variable; if the company is given a modified unqualified audit opinion in the current year, <i>MAO</i> takes the value of 1, and otherwise 0.
<i>AC</i>	Dummy variable; if the company changes auditors in the current year, <i>AC</i> takes the value of 1, and otherwise 0.
<i>HQAUDITOR</i>	Dummy variable; if the company chooses a Big Four or local Top Ten as the new auditor, <i>HQAUDITOR</i> takes the value of 1, and otherwise 0.
<i>AF</i>	The natural logarithm of the audit fee charged by the new auditor.

<sup>15</sup> This is because the variable *LATE* can equal 1 only when *AC* equals 1.

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**Explanatory variables**


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<i>SIZE</i>	The natural logarithm of total assets at the end of the period.
<i>LEV</i>	Total assets divided by total liabilities at the end of the period.
<i>GROWTH</i>	The growth rate of operating income.
<i>CAPRS</i>	Dummy variable; if the company satisfies the conditions for SEOs, then <i>CAPRS</i> takes the value of 1, and otherwise 0.
<i>INVRAT</i>	Total assets divided by inventory at the end of the period.
<i>ROA</i>	Total assets divided by net income at the end of the period.
<i>DA</i>	The absolute value of discretionary accruals calculated through the Jones model adjusted by industry.
<i>ST</i>	Dummy variable; if the company is specially treated in the current year, <i>ST</i> takes the value of 1, and otherwise 0.
<i>REVRAT</i>	Total assets divided by accounts receivable at the end of the period.
<i>LAGMAO</i>	Dummy variable; if the company is given a modified unqualified audit opinion in the previous year, <i>LAGMAO</i> takes the value of 1, and otherwise 0.
<i>LAGHQAUDITOR</i>	Dummy variable; if the auditor of the previous year is among the Big Four or local Top Ten, <i>LAGHQAUDITOR</i> takes the value of 1, and otherwise 0.
<i>CG</i>	The proxy variable for the level of corporate governance.
<i>MKT</i>	The proxy variable for the level of marketisation in the provincial region where the company operates in various years; the data are taken from Fan <i>et al.</i> (2007).
<i>YEAR</i>	Year dummies from 2001 to 2007.
<i>INDUSTRY</i>	20 industry dummies sorted by the CSRC.

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## IV. Empirical Results and Analysis

### (1) Descriptive Statistics

Table 3 provides the descriptive statistics of the regression variables relating to samples with an auditor change. *DAY* is the actual number of days from the end date of the corresponding fiscal year (31 December) to the date of notice of an auditor change before standardisation. If *DAY* is less than 0, this means that the auditor change occurs before the fiscal year end; if larger than 0, the change occurs after the fiscal year end. Moreover, the larger the value, the later the timing of the change. We find that on average, sample companies change auditors about 69 days before the deadline of the fiscal year. The median of the change date is 37 days from 31 December. The earliest change occurs on the 25th day of the current fiscal year (365 minus 340), and the latest on the 162nd day after the fiscal year end.

With respect to efficiency motives, on average the debt ratio of a company with an auditor change is 0.71, the revenue growth rate is about 23 per cent, and the inventory balance accounts for about 15 per cent of total assets. On average, 15 per cent of the sample companies meet the conditions for an SEO in the year of auditor change. With respect to opportunistic motives, the earnings status of companies that change auditors is relatively poor; the mean value of *ROA* is only -2 per cent, and the absolute value of average discretionary accruals is 0.1. The companies that have been specially treated in the year of change account for 23 per cent, and the ratio of the balance of accounts receivable to total assets is about 14 per cent. Moreover, 28 per cent of the sample companies are given a modified audit opinion in the previous year. Also, the level of corporate governance of the sample companies is low in that the mean value is nearly -0.13.

**Table 3 Descriptive Statistics of the Main Regression Variables**

	Mean	Median	Std.	Min	Q1	Q3	Max	N
<i>DAY</i>	-68.78	-37.00	109.83	-340.00	-169.00	13.00	162.00	817
<i>ACDAY</i>	0.00	0.29	1.00	-2.47	-0.91	0.74	2.10	817
<i>SIZE</i>	21.11	20.99	1.24	18.68	20.35	21.84	25.41	817
<i>LEV</i>	0.71	0.56	0.89	0.08	0.40	0.71	3.57	817
<i>GROWTH</i>	0.23	0.11	0.90	-0.99	-0.10	0.31	5.86	817
<i>CAPRS</i>	0.15	0.00	0.36	0.00	0.00	0.00	1.00	817
<i>INVRAT</i>	0.15	0.11	0.15	0.00	0.05	0.20	0.86	817
<i>ROA</i>	-0.02	0.02	0.20	-0.52	0.00	0.05	0.22	817
<i>DA</i>	0.10	0.05	0.14	0.00	0.03	0.12	1.33	817
<i>ST</i>	0.23	0.00	0.42	0.00	0.00	0.00	1.00	817
<i>REVRAT</i>	0.14	0.11	0.14	0.00	0.04	0.20	0.97	817
<i>LAGMAO</i>	0.28	0.00	0.45	0.00	0.00	1.00	1.00	817
<i>CG</i>	-0.13	-0.46	1.29	-2.99	-1.10	0.52	5.48	817
<i>MKT</i>	7.73	7.84	1.92	2.50	6.20	9.90	10.41	817

Note: See Table 2 for definitions of variables.

Additionally, in Table 4 we divide the samples into the earlier (*LATE* = 0) and the later (*LATE* = 1) group according to the timing of the auditor change, and test the mean and median values of the corresponding regression variables in both groups. We find that the variables of the group representing the efficiency motives (*LATE* = 0) are significantly larger than those of the *LATE* = 1 group (*LEV* excluded), meaning that the companies in the earlier group are more likely to make the change for business development purposes so as to improve efficiency. In contrast, the variables or the absolute values of the variables of the group representing the opportunistic motives (*LATE* = 1) are significantly larger than those of the *LATE* = 0 group (*DA* excluded), meaning that those companies that make a later change are more likely to do so out of opportunistic motives. The test results of these single variables are consistent with the theoretical analysis in the previous section.

**Table 4 Descriptive Statistics by Group**

	Mean				Median			
	<i>LATE</i> = 1	<i>LATE</i> = 0	T-Value	P-Value	<i>LATE</i> = 1	<i>LATE</i> = 0	Z-Value	P-Value
<i>SIZE</i>	20.78	21.26	-5.63***	(0.00)	20.78	21.10	-3.87***	(0.00)
<i>LEV</i>	0.83	0.66	2.19**	(0.03)	0.60	0.54	2.36**	(0.02)
<i>GROWTH</i>	0.11	0.28	-2.63***	(0.01)	0.04	0.14	-3.17***	(0.00)
<i>CAPRS</i>	0.08	0.19	-4.73***	(0.00)	0.00	0.00	-4.06***	(0.00)
<i>INVRAT</i>	0.13	0.16	-2.44**	(0.02)	0.09	0.12	-2.80***	(0.01)
<i>ROA</i>	-0.08	0.00	-4.42***	(0.00)	0.01	0.03	-5.01***	(0.00)
<i>DA</i>	0.12	0.09	1.18	(0.24)	0.07	0.05	0.88	(0.38)
<i>ST</i>	0.30	0.19	3.28***	(0.00)	0.00	0.00	3.45***	(0.00)
<i>REVRAT</i>	0.17	0.13	3.07***	(0.00)	0.12	0.10	2.44**	(0.01)
<i>LAGMAO</i>	0.37	0.24	3.40***	(0.00)	0.00	0.00	3.53***	(0.00)
<i>CG</i>	-0.26	-0.08	-1.85*	(0.06)	-0.60	-0.41	-1.67*	(0.09)
<i>MKT</i>	7.30	7.92	-4.31***	(0.00)	6.65	8.21	-4.02***	(0.00)

Notes: See Table 2 for definitions of variables. Figures in brackets are P values. \*, \*\*, and \*\*\* represent significance at the 0.10, 0.05, and 0.01 levels, respectively.

Table 5 displays the results of the correlation coefficients of the main variables for the auditor change samples. The variables representing the efficiency motives, such as size, growth, motives for financing, and the inventory ratio of the company, are significantly and negatively related to the timing of the auditor change; in other words, listed companies that are larger with a stronger growth potential and larger ratios of inventory, and that satisfy the conditions for SEOs, are more likely to change auditors. Also, the level of financial leverage is significantly and positively related to the timing of the auditor change; that is, the higher the debt ratio, the later the company will change auditors. Among the variables representing opportunistic motives, companies with a higher level of earnings management and a larger proportion of accounts receivable, and companies that are specially treated in the current year and were given a modified audit opinion in the previous year tend to change auditors later. Companies with low profitability and corporate governance or in a region with low governance efficiency also tend to change auditors later. This is basically consistent with the theoretic expectations of Hypothesis 1 in this paper – an auditor change done out of opportunistic (efficiency) motives will occur relatively later (earlier). We then further test the research hypotheses of this paper through multiple regressions.

## (2) Test Results of Hypothesis 1

Table 6 lists the regression results for the factors influencing a change in auditor.<sup>16</sup>

<sup>16</sup> The diagnosis result of multi-collinearity shows that the values of the variance inflation factor (VIF) for all explanatory variables are less than the critical value 10 (the maximum value is less than 2).

Columns (1) and (2) present the empirical tests for the timing of the auditor change from the perspectives of efficiency and opportunistic motives, respectively. The results show that among the indicators representing the efficiency motives, size, growth, motives for financing, and the inventory ratio of a company are significantly and negatively related to the timing of the auditor change; that is to say, larger companies with a stronger growth potential, motives for refinancing, and a higher inventory ratio are more likely to change auditors earlier. Among the indicators representing the opportunistic motive, profitability levels, corporate governance, and institutional governance efficiency are significantly and negatively related to the timing of auditor change; in other words, listed companies with a smaller return on assets, low corporate governance efficiency, and poor institutional governance are more likely to change auditors later. But the level of earnings management, the proportion of accounts receivable, and whether a modified audit opinion is issued in the previous year are significantly and positively related to the timing of the auditor change; that is, companies that have higher levels of discretionary accruals and higher proportions of accounts receivable and that were given a modified audit opinion in the previous period are more likely to change auditors later. The above results thus verify Hypothesis 1 that the timing of an auditor change is significantly related to the motives for the change. Companies that change auditors out of a need for business development tend to change auditors earlier, while auditor changes resulting from a divergence of opinion in relevant matters usually occur later. We further classify the factors influencing the timing of the change into financial, auditing, and governance indicators according to their nature and then substitute them in the equations separately and collectively for testing, the results of which are basically consistent.

### (3) Test Results of Hypothesis 2

Table 7 lists the test results of Hypothesis 2. Columns (1) to (3) indicate the results of the equations for the regression of audit opinions, and Columns (4) and (5) for the regression of the decision to change auditors. The coefficient of *LAGMAO* in Column (1) is significantly positive, signifying that the audit opinion shows a certain degree of continuity, and that the likelihood that a company given a modified audit opinion in the previous period will again receive a modified audit opinion dramatically increases. Column (2) examines the influence of an auditor change on the continuity in audit opinion. The coefficient of *LAGMAO* is significantly positive, while the coefficient of the interaction term *LAGMAO\*AC* is significantly negative, meaning that the auditor change has reduced the continuity of a modified audit opinion; in other words, the likelihood of receiving a modified audit opinion in the current period is likely to be reduced by changing auditors.

Column (3) corresponds to Model (2). Following Lennox (2000), we add the variable *LATE* representing the timing of the auditor change, where the coefficient of *LAGMAO\*AC* represents the difference in the continuity of audit opinions between

the condition of an earlier auditor change ( $LATE = 0$ ) and that where auditors are not changed. The coefficient  $LAGMAO*LATE$  represents the difference in the continuity of audit opinions between the conditions of a later auditor change ( $LATE = 1$ ) and an earlier change. The results show that the coefficient of the interaction term  $LAGMAO*AC$  is negative but not significant, meaning that for companies with an earlier auditor change, the likelihood of obtaining a modified audit opinion in the current period is not reduced. Moreover, the coefficient of the interaction term  $LAGMAO*LATE$  is also negative but not significant, meaning that there is no significant difference in the influence of timing on the continuity of modified audit opinions. The regression equation for audit opinions enables us to obtain the estimated probabilities that a company will be given a modified audit opinion under different conditions, providing a basis for further testing audit opinion shopping.<sup>17</sup>

We mark the probabilities of obtaining a modified audit opinion in Model (2) under different situations as follows:  $AC = 0$ , and  $Q^{q*}$  is the probability of obtaining a modified audit opinion in the current period when the auditor is not changed;  $LATE = 0$ ,  $Q^{q0*}$  is the probability of obtaining a modified audit opinion in the current period when the auditor is changed earlier; and  $LATE = 1$ ,  $Q^{q1*}$  that of obtaining a modified audit opinion in the current period when the change happens later. We then substitute the likelihood of a modified audit opinion into Model (3) to carry out the regression on the decision to change auditors. Column (4) displays the test results of the explanatory variables with  $Q$ , the quantile of the probability, and Column (5) the test results of the explanatory variables with  $Pr$ , the estimated probability of a modified audit opinion. Column (4) shows that the coefficient of  $Q^{q1*}-Q^{q*}$  is significantly negative, meaning that when the probability of obtaining a modified audit opinion with a later auditor change is smaller than that of obtaining one without an auditor change – that is, when  $Q^{q1*}-Q^{q*}$  is less than 0 – the probability of an auditor change is higher. In other words, companies with a later auditor change receive an improved audit opinion by changing auditors and so realise audit opinion shopping. The coefficient of  $Q^{q0*}-Q^{q*}$ , however, is significantly positive, meaning that companies with an earlier auditor change do not engage in audit opinion shopping. In contrast, the likelihood of obtaining a modified audit opinion is greater for these companies, and their motives for changing are not to improve the audit opinion. By comparison, the probability of audit opinion shopping by a company with a later auditor change is greater than that for a company with an earlier change. The last column of explanatory variables adopt  $Pr(Q^{q1}=1)-Pr(Q^q=1)$  and  $Pr(Q^{q0}=1)-Pr(Q^q=1)$ , and the results obtained are consistent with those in Column (4). The above findings thus support Hypothesis 2, that is, after the fiscal year end, a company that changes auditors later is more likely to be opinion shopping than a company that does so earlier.

<sup>17</sup> Through the regression model of audit opinions, we are able to obtain the probability of modified audit opinions  $Pr$  and the corresponding quantile  $Q$ , which are collectively defined as the probability of an audit opinion during results analysis.

**Table 5 Correlation Tests of the Main Variables**

	<i>ACDAY</i>	<i>SIZE</i>	<i>LEV</i>	<i>GROWTH</i>	<i>CAPRS</i>	<i>INVRAT</i>	<i>ROA</i>	<i>DA</i>	<i>ST</i>	<i>REVRAT</i>	<i>LAGMAO</i>	<i>CG</i>	<i>MKT</i>
<i>ACDAY</i>	1												
<i>SIZE</i>	-0.19*** (0.00)	1											
<i>LEV</i>	0.09*** (0.01)	-0.36*** (0.00)	1										
<i>GROWTH</i>	-0.12*** (0.00)	0.16*** (0.00)	-0.12*** (0.00)	1									
<i>CAPRS</i>	-0.14*** (0.00)	0.28*** (0.00)	-0.07** (0.04)	0.02 (0.62)	1 (0.38)								
<i>INVRAT</i>	-0.11*** (0.00)	0.13*** (0.00)	-0.10*** (0.00)	0.17*** (0.00)	0.01 (0.72)	1 (0.28)							
<i>ROA</i>	-0.18*** (0.00)	0.27*** (0.00)	-0.24*** (0.00)	0.20*** (0.00)	0.14*** (0.00)	0.13*** (0.00)	1 (0.89)						
<i>DA</i>	0.09*** (0.01)	-0.03 (0.40)	0.09** (0.02)	0.21*** (0.00)	0.03 (0.37)	0.16*** (0.00)	-0.06* (0.08)	1 (0.08)					
<i>ST</i>	0.12*** (0.00)	-0.41*** (0.00)	0.42*** (0.00)	0.03 (0.47)	-0.21*** (0.00)	-0.06* (0.08)	-0.33*** (0.00)	0.08** (0.02)	1 (0.07)**				
<i>REVRAT</i>	0.15*** (0.00)	-0.21*** (0.00)	0.21*** (0.00)	-0.05 (0.15)	-0.20*** (0.00)	-0.15*** (0.00)	-0.22*** (0.00)	-0.08** (0.03)	0.07** (0.03)	1 (0.00)			
<i>LAGMAO</i>	0.15*** (0.00)	-0.25*** (0.00)	0.27*** (0.04)	-0.07** (0.06)	-0.21*** (0.00)	-0.13*** (0.00)	-0.23*** (0.00)	0.05 (0.18)	0.57*** (0.00)	0.26*** (0.00)	1 (0.00)		
<i>CG</i>	-0.08** (0.02)	0.20*** (0.00)	-0.12*** (0.00)	0.06 (0.11)	0.02 (0.50)	0.02 (0.53)	0.11*** (0.00)	-0.03 (0.40)	-0.14*** (0.00)	-0.08** (0.02)	-0.11*** (0.00)	1 (0.00)	
<i>MKT</i>	-0.13*** (0.00)	0.09*** (0.01)	0.05 (0.15)	0.03 (0.45)	0.03 (0.43)	0.07** (0.05)	0.01 (0.74)	0.05 (0.19)	-0.02 (0.61)	0.02 (0.51)	0.01 (0.68)	-0.01 (0.85)	1

Notes: The lower left half shows the Pearson test results, and the upper right half the Spearman test results. See Table 2 for definitions of variables. Figures in brackets are P values. \*, \*\*, and \*\*\* represent significance at the 0.10, 0.05, and 0.01 levels, respectively.



Table 6 Regression Analysis of Factors Influencing the Timing of Auditor Changes

	Eq.(1) <i>ACDAY</i>												
	Expected sign	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
		Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value
Constant		1.98***	(0.01)	0.17	(0.44)	1.50**	(0.04)	-0.13	(0.43)	0.29	(0.19)	1.12	(0.16)
<i>SIZE</i>	-	-0.09***	(0.01)			-0.07**	(0.04)					-0.04	(0.33)
<i>LEV</i>	-	0.01	(0.73)			-0.08	(0.14)					-0.08	(0.12)
<i>GROWTH</i>	-	-0.12***	(0.00)			-0.10***	(0.01)					-0.14***	(0.00)
<i>CAPRS</i>	-	-0.26**	(0.02)			-0.22*	(0.06)					-0.14*	(0.05)
<i>INVRAT</i>	-	-0.79***	(0.00)									-0.71**	(0.01)
<i>ROA</i>	-			-0.45**	(0.03)	-0.71***	(0.00)					-0.44*	(0.07)
<i>DA</i>	+			1.01**	(0.01)			1.14***	(0.00)			1.44***	(0.00)
<i>ST</i>	+			0.03	(0.78)	0.10	(0.30)					0.05	(0.63)
<i>REVRAT</i>	+			0.49*	(0.09)			0.54*	(0.06)			0.36	(0.24)
<i>LAGMAO</i>	+			0.18*	(0.08)			0.24***	(0.00)			0.13*	(0.09)
<i>CG</i>	-			-0.05*	(0.09)							-0.07**	(0.02)
<i>MKT</i>	-			-0.06***	(0.00)							-0.06***	(0.00)
<i>YEAR</i>		Control		Control		Control		Control		Control		Control	
<i>INDUSTRY</i>		Control		Control		Control		Control		Control		Control	
Adj-R <sup>2</sup>		0.0651		0.0672		0.0623		0.0555		0.0362		0.0883	
F Value		3.53***		3.27***		3.34***		3.17***		2.58***		3.53***	
N		817		817		817		817		817		817	

Notes: See Table 2 for definitions of variables. Figures in brackets are P values. \*, \*\*, and \*\*\* represent significance at the 0.10, 0.05, and 0.01 levels, respectively.

**Table 7 Test Results of Hypothesis 2**

	Eq.(2) <i>OPINION</i>			Eq.(3) <i>AC</i>		
	(1)	(2)	(3)	(4)	(5)	(5)
	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value
$Q^{q1} - Q^{q0}$						
$Q^{q0} - Q^{q1}$						
$\Pr(Q^{q1}=1) - \Pr(Q^{q0}=1)$						
$\Pr(Q^{q0}=1) - \Pr(Q^{q1}=1)$						
<i>LAGMAO</i>	2.85***	(0.00)	2.92***	(0.00)	-2.50***	(0.00)
<i>LAGMAO*AC</i>			-0.12	(0.74)	2.78**	(0.03)
<i>LAGMAO*LATE</i>			-0.83	(0.14)		
<i>AC</i>			0.80	(0.15)		
<i>LATE</i>			-0.82	(0.34)		
<i>LEV</i>	1.93***	(0.00)	1.87***	(0.00)	1.19***	(0.00)
<i>ROA</i>	-16.49***	(0.00)	-17.19***	(0.00)	-1.34***	(0.00)
<i>ST</i>	0.83***	(0.00)	0.90***	(0.00)	1.00***	(0.00)
Constant	-4.20***	(0.00)	-4.23***	(0.00)	-2.98***	(0.00)
<i>LEV*AC</i>			0.31	(0.66)		
<i>ROA*AC</i>			4.90***	(0.01)		
<i>ST*AC</i>			-0.40	(0.20)		
<i>LEV*LATE</i>			3.06**	(0.02)		
<i>ROA*LATE</i>			-0.40	(0.91)		
<i>ST*LATE</i>			-0.02	(0.97)		
Pseudo-R <sup>2</sup>	0.5512		0.5537		0.0324	
Wald Chi <sup>2</sup>	150.30		154.57		134.64	
N	9305		9305		9305	

Notes: See Table 2 for definitions of variables. Figures in brackets are P values. \*, \*\*, and \*\*\* represent significance at the 0.10, 0.05, and 0.01 levels, respectively.

#### (4) Test Results of Hypothesis 3

Table 8 lists the test results of Hypothesis 3 – the influence of the timing of auditor change on the choice of a new auditor. The regression results show that the coefficient of *ACDAY* is significantly negative, meaning that the earlier the change occurs, the greater the likelihood of choosing a high-quality new auditor, while the later the change occurs, the smaller the likelihood. Thus, Hypothesis 3 is verified. Because companies with a later auditor change have a strong opportunistic motive, their demand for high-quality auditing service decreases accordingly. In addition, with respect to the control variables we find that the coefficients of *SIZE*, *LEV*, *CG*, and *MKT* are significantly positive, meaning that larger companies with higher levels of financial leverage and better corporate governance efficiency, and that operate in a region with higher marketisation, are more likely to choose a high-quality new auditor. These findings are basically consistent with the existing research findings.

**Table 8 Test Results of Hypothesis 3**

	Eq.(4) <i>HQAUDITOR</i>				Eq.(5) <i>HQAUDITOR</i>			
	Expected	(1)		(2)		(3)		
	Sign	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value	
Constant		-12.60***	(0.00)	-12.75***	(0.00)	-12.81***	(0.00)	
<i>ACDAY</i>	-	-0.22***	(0.01)	-0.27***	(0.00)	-0.13*	(0.07)	
<i>SIZE</i>	+	0.50***	(0.00)	0.51***	(0.00)	0.51***	(0.00)	
<i>LEV</i>	+	0.19*	(0.07)	0.19*	(0.08)	0.20*	(0.06)	
<i>GROWTH</i>	+	0.03	(0.80)	0.02	(0.85)	0.00	(0.96)	
<i>INVRAT</i>	+	-0.77	(0.25)	-0.72	(0.29)	-0.87	(0.20)	
<i>REVRAT</i>	-	0.62	(0.39)	0.71	(0.33)	0.72	(0.32)	
<i>LAGHQAUDITOR</i>	+	0.31*	(0.08)	0.30*	(0.08)	0.31*	(0.07)	
<i>CG</i>	+	0.10*	(0.08)	0.11*	(0.10)	0.11*	(0.10)	
<i>MKT</i>	+	0.16***	(0.00)	0.16***	(0.00)	0.17***	(0.00)	
<i>CAPRS</i>	+	0.27	(0.32)	0.34	(0.22)	0.26	(0.33)	
<i>LAGMAO</i>	-	-0.29	(0.19)	-0.28	(0.22)	-0.28	(0.21)	
<i>ACDAY*CAPRS</i>	+			0.30*	(0.08)			
<i>ACDAY*LAGMAO</i>	-					-0.45**	(0.03)	
<i>YEAR</i>			Control		Control		Control	
<i>INDUSTRY</i>			Control		Control		Control	
Pseudo-R <sup>2</sup>			0.2158		0.2183		0.2230	
Wald Chi <sup>2</sup>			103.06		104.17		105.04	
N			817		817		817	

Notes: See Table 2 for definitions of variables. Figures in brackets are P values. \*, \*\*, and \*\*\* represent significance at the 0.10, 0.05, and 0.01 levels, respectively.

We further add the interaction terms between *ACDAY*, *CAPRS*, and *LAGMAO* to test the different influences of timing on auditor choice under different motives. We find that the coefficient of *ACDAY\*CAPRS* is significantly positive, meaning that if a company that changes auditors later does so out of financing motives, such a company is dramatically more likely to choose a high-quality new auditor than one that changes auditors later but without a financing motive. A company with efficiency motives is thus more likely to choose a firm among the Big Four or local Top Ten as its new auditor. Moreover, the coefficient of *ACDAY\*LAGMAO* is significantly negative, meaning that if a company that changes auditors later was given a modified audit opinion in the previous year, it is significantly more likely to choose a low-quality new auditor than a company that also changes auditors later but was given a standard audit opinion in the previous year. Such a company is thus more likely to choose a local small audit firm as its new auditor out of opportunistic motives. The above test results thus extend the analysis further, and prove the theoretical analysis and research findings of the main hypotheses in this paper.

#### **(5) Test Results of Hypothesis 4**

Table 9 displays the regression results of the influence of the timing of auditor change on the new auditor's fees. The coefficient of *ACDAY* in Column (1) is significantly positive, meaning that the timing of the change is significantly and positively related to audit fees. The fees that the new auditor charges a company that changes auditors later are significantly higher than those of a company that makes the change earlier. Because the companies that change auditors later are more likely to do so out of opportunistic motives, the new auditors will charge higher audit fees owing to the higher input and risk costs of these companies. The results thus prove Hypothesis 4.

The further extended test results show that the coefficient of *LATE* in Column (2) is also significantly positive, and the result is consistent with that of the continuous variable representing the timing of the auditor change. Column (3) shows the extended test result after comparison with the sample companies without an auditor change. Here the coefficient of *AC* is significantly negative, that is, the audit fee charged by the new auditor to a company with an earlier auditor change is significantly lower than that charged to a company without a change. This further proves that the timing of the auditor change is directly linked to the motives for the change. For new auditors, companies that change auditors earlier provide them with more time to practise audit services, while the litigation costs for audit failure are low since the change comes out of efficiency motives. As a result, instead of an audit premium, such companies enjoy a certain pricing discount. This finding also proves the low-balling phenomenon (DeAngelo, 1981; Simon and Francis, 1988). The coefficient of *LATE*, however, is significantly positive, meaning that the new auditor charges a company that makes a later change significantly higher fees than a company that makes an earlier change. When compared with the companies

that do not change auditors, such companies face a premium (the sum of the coefficients of *LATE* and of *AC* is positive),<sup>18</sup> which is consistent with the research finding that companies that make later auditor changes do so out of opportunistic motives.

**Table 9 Test Results of Hypothesis 4**

	Expected Sign	Eq.(6) <i>AF</i>				Eq.(7) <i>AF</i>	
		(1)		(2)		(3)	
		Coefficient	P value	Coefficient	P value	Coefficient	P value
Constant		5.80***	(0.00)	5.76***	(0.00)	6.19***	(0.00)
<i>AC</i>	?					-0.08***	(0.00)
<i>ACDAY</i>	+	0.04**	(0.03)				
<i>LATE</i>	+			0.09**	(0.02)	0.09***	(0.01)
<i>SIZE</i>	+	0.32***	(0.00)	0.32***	(0.00)	0.30***	(0.00)
<i>LEV</i>	+	0.09***	(0.00)	0.09***	(0.00)	0.15***	(0.00)
<i>INVRAT</i>	+	0.22	(0.13)	0.23	(0.11)	0.17***	(0.00)
<i>REVRAT</i>	+	0.06	(0.69)	0.07	(0.67)	0.14***	(0.00)
<i>ST</i>	+	0.13**	(0.03)	0.13**	(0.03)	0.12***	(0.00)
<i>LAGMAO</i>	+	0.08	(0.13)	0.08	(0.13)	0.08***	(0.00)
<i>HQAUDITOR</i>	+	0.18***	(0.00)	0.18***	(0.00)	0.17***	(0.00)
<i>CG</i>	-	-0.04***	(0.00)	-0.04***	(0.00)	-0.02***	(0.00)
<i>MKT</i>	?	0.03***	(0.00)	0.03***	(0.00)	0.03***	(0.00)
<i>YEAR</i>		Control		Control		Control	
<i>INDUSTRY</i>		Control		Control		Control	
Adj-R <sup>2</sup>		0.4154		0.4163		0.4333	
F		17.26***		17.32***		214.90***	
N		817		817		9305	

Notes: See Table 2 for the definitions of variables. Figures in brackets are P values. \*, \*\*, and \*\*\* represent significance at the 0.10, 0.05, and 0.01 levels, respectively.

## (6) Sensitivity Tests

To ensure the conservatism of our research findings, we carry out the following sensitivity tests. For simplicity, we do not tabulate the results, which may be provided on request.

1. Change the definition of the timing of an auditor change. We redefine the timing of an auditor change, and take the day of notice of the (provisional) general meeting of shareholders as the standard for the day of the change in auditor. We then retest the research hypotheses. The conclusions still hold.
2. In Hypothesis 2, change the standard for dividing the time frame for auditor

<sup>18</sup> The statistical test result shows that the sum of the two coefficients is significant at the 1 per cent level.

changes. We take the median of *ACDAY* as the division standard, and define auditor changes occurring earlier than the median level as ‘earlier changes’, with *LATE1* = 0, and those occurring later than the median level as ‘later changes’, with *LATE1* = 1. According to the above classification, we retest Hypothesis 2, and the conclusion is consistent.

3. When testing Hypothesis 4, problems of endogeneity may occur, that is, companies who change auditors later because of higher audit risks, while these audit risks result in higher audit fees charged by the new auditors. As a result, we adopt the inverse Mill’s ratio to control for the problem of endogeneity in the robustness test. The result shows that after controlling for the potential problem of endogeneity, the conclusion of this paper still holds.
4. The new accounting and auditing standards launched by the government in 2006 might have a strong influence on a listed company’s choice of auditor and change in auditor. In Hypothesis 1, we adopt the dummy variable *NEWCAS* = 1 to represent the years 2006 (when the new standards were implemented) and after, while *NEWCAS* = 0 represents the years before the new standards were implemented. These variables are added into Model (1) to retest Hypothesis 1, and the conclusion does not change.
5. We retest after eliminating samples with auditor changes and with delayed disclosure of annual financial reports, and the conclusion still holds.
6. Change the definition of high-quality auditors. We redefine high-quality auditors as follows: *AUDITOR* is a tri-variable. If the auditor is a Big Four firm, *AUDITOR* takes the value of 1; if it is among the local Top Ten, *AUDITOR* takes the value of 0; if it is a local small audit firm, *AUDITOR* takes the value of -1. Moreover, we redefine high-quality auditors in China as being among the top 10 local accounting firms ranked by the amount of total annual audit fees from 2001 to 2008. These top 10 local audit firms are defined as ‘local large audit firms’ of the year. We then carry out a regression of Hypothesis 3, and the conclusion is basically consistent.
7. Change the definition of audit opinions. Generally speaking, an unqualified opinion with an explanatory paragraph still belongs to an unqualified opinion by nature; it is usually an alternative expression of audit opinion through negotiations between the listed company and the certified public accountant (Chen *et al.*, 2005). Therefore, we redefine *MAOI* as follows: if the audit opinion is a qualified opinion or a disclaimer of opinion, *MAOI* takes the value of 1, and otherwise 0. We conduct retesting, and the conclusion is basically consistent.
8. Extreme value treatment. We carry out extreme value treatment by winsorising observations at the 1 per cent level of the top and bottom sides of all continuous variables, or else by deleting observations at the 1 per cent level on both sides. We conduct retesting, and the conclusion still holds.

## VI. Conclusions

Taking listed companies that changed auditors from 2001 to 2008 as the research sample, we comprehensively and systematically analyse the factors influencing the timing of auditor changes and the economic consequences under the different timings of such changes. We find firstly that the timing of an auditor change is an important referential index reflecting the motives for switching auditors and the nature of the change event. Companies change auditors relatively later when done out of opportunistic motives, but earlier out of efficiency motives. Secondly, the later the auditor change occurs, especially after the fiscal year end, the higher the probability that audit opinion shopping will take place than when the change occurs before the fiscal year end. Thirdly, the later the change occurs, the more likely a company is to choose a local small audit firm as the new auditor, while the earlier it occurs, the more likely the company is to choose a Big Four or local Top Ten firm. And finally, the timing of an auditor change is also closely related to the audit fees charged by the new auditor. The later the company changes auditors, the more the new auditor will charge.

The independence of auditors is a core issue in the field of auditing research. Auditor change involves many issues, which are closely related to auditor independence. It is thus an important phenomenon in the securities and auditing market, as well as a traditional auditing research field. The motives for a listed company to change auditors and the economic consequences thereof have always been actively discussed in both academia and practitioner circles. The research findings of this paper prove that the timing of an auditor change reflects to some extent the intrinsic motives for switching auditors, and is significantly related to the economic consequences of the change. Considering the representative characteristic variables in the auditor change process, we analyse unobservable audit variables (such as motives for change and audit quality) as well as audit behaviour, not only to provide new research perspectives for studying the problems of auditor changes and auditor independence, but also to enrich the research findings in relevant fields. Moreover, the research conclusions of this paper will facilitate better judgment and understanding of the behaviour of auditor changes by the relevant parties in the securities market, while helping regulators to establish better targeted laws and regulations in order to restrict auditor changes out of opportunistic motives, and to regulate the behaviour of the supply-and-demand sides of auditing services. Thereby they may better protect the interests of investors and improve the overall operating efficiency of the auditing market.

## References

Please refer to pp. 71-74.