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中国本土会计师事务所合并与客户企业可控应计*

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摘要

先前关于会计师事务所合并的会计学文献大多关注的是国际大型会计事务所合并行为，而忽视了新兴市场本土会计师事务所合并行为。而且，现有的文献主要集中研究事务所合并对市场结构、审计定价和审计师独立性的影响，较少涉及对客户企业财务报告质量的影响。为此，本文以2003年至2009年在中国发生的本土会计师事务所合并案为研究对象，分析本土会计师事务所合并对客户企业可控应计数量、可控应计方向与可控应计质量三方面的影响。研究结果表明：事务所合并未对客户企业的可控应计数量产生显著性影响，但会显著降低客户企业正可控应计（调增收入）的概率，且会显著提高可控应计对股票收益、下期盈余与下期经营性现金流量的解释力，而且能降低客户企业盈余管理（以微盈利作为表征量）的概率。整体而言，事务所合并有助于提高客户企业财务报告质量。此外，与Chan and Wu（2011）类似，我们发现中国事务所之间的强强合并对客户企业财务报告质量显现出显著的积极作用，但事务所之间的强弱合并对客户企业财务报告质量的影响不明显。

关键词：事务所合并、审计质量、可控应计
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一、问题的提出

从19世纪以来的历史来看，合并是国际会计师事务所发展壮大的一个重要途径。例如，现在的“四大”会计师事务所就主要是大西洋两岸事务所不断合并、融合的产物。[1]与现实相伴，在会计学术研究中，会计师事务所的合并问题迄今已构成一条重要的文献分支。现有的文献主要关注如下与会计师事务所合并相关的两个问题：第一，事务所合并对市场结构的影响，文献基本证实事务所合并提高了市场集中度（Wootton *et al.*, 1994），但合并同时也增强了市场竞争程度（Thavapalan *et al.*, 2002）；第二，事务所合并对审计收费的影响，在这个问题上尚未有一个定论，有的研究表明事务所合并后审计收费会增加（Menon and Williams, 2001），有的研究没有证实事务所合并对审计收费有显著影响（Chan and Wu, 2011; Iyer and Iyer, 1996; Tonge and Wootton, 1991），有的研究甚至发现事务所合并后审计收费会下降（Ivancevich and Zardkoohi, 2000; Pong, 2004）。

我们注意到，迄今的研究大多关注的是国际几大所合并过程中的经济效应。且研究的对象主要是1989年致使国际“八大”变成国际“六大”的安永合并案（Arthur Young与Ernst & Whinney合并）与德勤合并案（Deloitte, Haskins & Sells与Touche Ross合并）以及1998年致使国际“六大”变成国际“五大”的普华永道合并案（Pricewaterhouse与Coopers & Lybrand合并）。而针对各国本土会计师事务所合并行为的研究则相对较少。然而，在中国这样的新兴市场，会计师事务所众多，本土所占据着较为重要的地位。在承接上市公司审计业务方面的客户数上甚至大大高于国际“四大”。对新兴市场本土会计师事务所之间合并行为的研究应该具有显著意义。

此外，迄今关于会计师事务所合并的研究大多忽略了一个重要的问题：即事务所合并对审计质量有何影响？现有的文献大多先入为主地假设规模越大的事务所审计质量越好，事务所的规模甚至直接被当作审计质量的代理变量（例如，Becker *et al.*, 1998; Krishnan, 2003）。但是，事务所合并后规模扩大是否一定就能提高审计质量这应该是一个待检验的问题（Watkins *et al.*, 2004）。此前，只有美国国家会计总署（United States General Accounting Office, GAO）在2003年7月和9月提交两份名为GAO-03-864和GAO-03-1158[2]的报告涉及到会计师事务所合并对审计质量有何影响的问题。这两份报告主要通过访谈和问卷调查的形式进行。受访者大多不认为事务所合并会对审计质量产生影响。不过，调查访问的形式受到受访者的主观判断影响比较大，那么在实践中事务所合并对审计师提供的审计服务质量有何影响呢？这需要实证研究方法的检验。迄今可能唯一一篇涉及事务所合并对审计质量潜在影响的经验研究是Chan and Wu（2011）。他们证实中国会计师事务所合并有助于提高审计

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[1] 德勤与普华永道的主要合并史：1952年英国的William W. Deloitte和美国的Haskins & Sells 合并成Deloitte, Haskins & Sells；1957年英国的Cooper Brothers与美国的Lybrand, Ross Brothers and Montgomery合并为Coopers & Lybrand；1975年美国的Touche Niven 与日本的Tohmatsu Awoki & Co 合并成为Touche Ross。1989年，Deloitte, Haskins & Sells的英国部分与Coopers & Lybrand合并成为Coopers & Lybrand Deloitte；Deloitte, Haskins & Sells的美国部分与Touche Ross合并成为Deloitte & Touche（德勤）。1998年Coopers & Lybrand Deloitte又与Price, Waterhouse & Co.合并成为PricewaterhouseCoopers（普华永道）。毕马威的主要合并史：1987年Peat Marwick与KMG (Klynveld Main Goerdeler)合并成为KPMG（毕马威）；安永的主要合并史：1979年Whinney Smith & Whinney与Ernst & Ernst合并成为Ernst & Whinney，1989年Ernst & Whinney又与Arthur Young International合并成Ernst & Young（安永）。

[2] 分别参见www.gao.gov/cgi-bin/getrpt?GAO-03-864和www.gao.gov/new.items/d031158.pdf。

师的独立性。然而，审计质量更直接显现在客户企业的财务报告质量上，因此，事务所合并是否会对客户财务报告质量发生影响是一个需要进一步验证的问题。

本文以2003年至2009年在中国大陆发生的会计师事务所合并案为研究对象，分析中国本土会计师事务所合并对客户企业可控应计数量、可控应计方向与可控应计质量三方面的影响。以中国作为研究对像是因为自1998年中国会计师事务所实行脱钩改制改革12年以来，通过合并重组的方式做大做强是中国会计师行业来的一个显著特点，期间发生了几十起事务所之间的合并行为。几乎所有中国本土大型的会计师事务所在此期间都发生过合并行为。这为新兴市场事务所合并行为的研究提供了较为理想的实验环境。我们的研究发现：事务所合并未对客户企业的可控应计数量产生显著性影响；但由两个或两个以上证券资格事务所实施的合并（强强合并）会显著降低客户企业报告正可控应计（调增收入）的概率，且会显著提高可控应计对股票收益、下期盈余与下期经营性现金流量的解释力。整体而言，事务所合并有助于提高客户企业财务报告质量，事务所之间的强强合并对客户企业财务报告质量显现出显著的积极作用，但事务所之间的强弱合并对客户企业财务报告质量的影响不明显。

本文与Chan and Wu（2011）的区别在于：第一，Chan and Wu（2011）研究的是中国事务所合并对审计师出具非标审计意见的影响，以此来判断事务所合并对审计师独立性的作用；本文认为事务所合并还可能对客户企业财务报告质量产生影响。为此，本文分析了事务所合并对客户企业可控应计数量、方向和质量三个维度的作用。这对现有文献具有一定的边际贡献；第二，Chan and Wu（2011）研究的时间段始于中国事务所改制初始的1998年终于旧新会计准则出台前一年的2006年。这个时间段包含了早期的事务所高峰期的2000年。本文则将研究时间段放在新准则出来之前的2003-2006年和新准则出台之后的2008-2009年。后者是中国会计师事务所合并的另一个高峰期，在这个时间段里的2007年5月13日，中国注册会计师协会印发了《中国注册会计师协会关于推动会计师事务所做大做强的意见》。《意见》明确表示“积极支持事务所在依法、自愿、协商的基础上进行合并”。2009年10月3日，国务院办公厅转发财政部《关于加快发展我国注册会计师行业的若干意见》（国办发【2009】56号）。该文件再次明确鼓励会计师事务所“优化组合、兼并重组、强强联合，促进行业走跨越式发展道路”。与政策支持相一致，天健、天健正信、北京京都天华、信永中和、国富浩华等一批行业中具有代表性的会计师事务所纷纷在2008年之后通过合并的方式组建完成。

本文余下的结构安排如下：第二部分是研究假设；第三部分是研究设计，第四部分是实证结果分析与讨论，最后一部分是本文的结论。

二、研究假设

（一）会计师事务所合并与客户企业可控应计数量

三十年前，DeAngelo（1981）就提出事务所规模是决定审计质量的一个重要因素。具体而言，第一，规模大的事务所可以在培训与审计技术上投入更多，从而提升审计能力；第二，大规模的事务所可以较少地依赖某个特定的客户，从而抵御客户要求发表清洁审计意见的压力，能更有效地约束客户的盈余管理行为。而且，

DeAngelo（1981）认为，审计师的价值取决于未来准租金（quasi rents）的现值。所谓准租金是指审计费超过边际成本的量。相应地，大规模的事务所一旦因为客户财务造假而被发现，将会引起高额的诉讼成本和声誉损失（Palmrose, 1988），进而导致事务所损失大量的准租金。这会促使规模大的事务所提高审计质量，进而增强客户企业财务报告的可信度。

事务所合并对客户企业财务报告质量的作用最直接的来源恰恰是合并带来的规模效应。现有经验研究方面文献也表明，事务所合并的确带来了上述DeAngelo（1981）所认为的规模价值。例如，Lawrence and Glover（1998）发现事务所合并后，财报最后一日至审计报告发布日之间的所谓"审计滞延期"（audit delay）明显下降，他们认为这表明事务所合并有助于提高审计效率。Ivancevich and Zardkoohi（2000）以及Sullivan（2002）都证实"八大"合并成"六大"后，事务所的成本下降，审计效率提高。Chan and Wu（2011）对中国事务所合并的数据分析表明，事务所合并后其独立性得到增强。

然而，事务所合并对客户企业财务报告质量的影响还有待经验研究的进一步分析。在现有的审计质量文献中，以客户企业的可控应计规模作为财务报告质量的表征量是一种主要的方法。Becker *et al.*（1998）、Francis *et al.*（1999）均发现事务所规模与客户企业可控应计之间存在着负相关关系，这与DeAngelo（1981）、Palmrose（1988）的理论一致，即规模大的会计师事务所能更有效地约束客户盈余管理行为。相应地提高财务报告的可靠性，具体表现在客户企业财务报表的可控应计更低。然而，Boone *et al.*（2010）以2003-2006年的数据分析表明，"四大"与第二梯队会计师事务所之间在审计质量上相差无几。他们的客户企业报表的可控应计没有显著差别。Boone *et al.*（2010）认为两类事务所在约束激进和机会主义的报表行为方面同等有效。具体到中国市场，刘峰和周福源（2007）、刘峰等（2009）、王良成和韩洪灵（2009）都发现，大规模事务所并不一定意味着高审计质量，事务所规模与客户企业的可控应计数量之间不存在必然的联系。因此，事务所合并带来规模的扩大对客户企业可控应计的影响仍是个待检验的经验问题。为此，本文提出第一个研究原假设：

H1：会计师事务所合并不会显著影响客户企业的可控应计数量。

（二）会计师事务所合并与客户企业可控应计方向

国际上的会计学文献证实，会计师事务所对可控应计的忍受存在不对称的行为。审计师可以默许客户企业负的可控应计，即调低报告利润，但是对正向可控应计较为严格（Carcello and Palmrose, 1994; St. Pierre and Anderson, 1984）。这可能是因为规模大的事务所家底殷实（deep pockets）并在声誉培养上花费了大量财力，它们会极力降低诉讼风险和保护声誉资本。而客户企业调增收入的行为通常意味着更高的风险。因此，会计师事务所不仅关注客户的可控应计的数量，而且关注可控应计的方向（DeFond and Jiambalvo, 1993; Nelson *et al.*, 2002; Caramanis and Lennox, 2008）。这是因为正值的可控应计意味着客户企业上调会计盈余的可能性较大，而负值的可控应计则相反。在实证研究方面，Braun（2001）的实验研究以及Nelson *et al.*（2002）

的田野研究都证实，对客户企业提高当期盈余的盈余管理行为，审计师更可能要求其进行调整。Becker *et al.*（1998）和Caramanis and Lennox（2008）的档案式研究则发现，国际“六大”或国际“五大”审计的财务报告，正的可控应计明显要比非“六大”或“五大”审计的财务报告的少。这证实了事务所规模与可控应计方向之间存在著负相关关系。但是，刘峰等（2009）对中国的数据分析表明，国际四大对那些能够高估当期报告收益的正的可控应计表现出更大的容忍度。因此，中国本土会计师事务所合并后带来规模的增加对客户企业可控应计的方向影响如何仍是一个待检验的问题，为此我们提出第二个原假设：

H2：会计师事务所合并不会显著影响客户的可控应计的方向。

（三）事务所合并与可控应计质量

虽然以可控应计数量或方向作为审计质量的表示量是会计学文献中的一种主要方法，但这种方法也有明显的弊端。这种方法实际假设现金流量是可靠的，根据权责发生制记录的应计盈余与现金流量的差别越小，财务报表的盈余质量就越高，相应地审计质量就越高。但是，现代企业会计采用的是权责发生制恰恰是因为应计盈余在收入配比上优于现金流量。而且，由于信息不对称的存在，应计可以被企业的管理者等内部人当作向外部投资者传递信号的一种工具（Louis and Robinson, 2005），而这恰好能提高会计盈余反映经济实质的能力。Subramanyam（1996）基于美国的数据证实，可控应计的确能对企业的市场收益、未来会计盈余以及股利具有显著的解释力。Barth *et al.*（2001）也证实应计对未来现金流量具有显著解释能力。Chung *et al.*（2004）以日本的数据做的研究也表明，可控应计能提高盈余的价值相关性。Choi *et al.*（2011）对9个亚洲国家的数据分析发现，亚洲金融危机期间可控应计的价值相关性显著下降。这意味着特定事件的发生会影响可控应计的质量。因此，我们不仅应当关注事务所合并对可控应计的数量和方向的影响，而且还要关注事务所合并对可控应计质量的作用，即可控应计的价值相关性以及对企业未来财务指标的解释力。

Krishnan（2003）研究了事务所规模与可控应计质量的关系。他以六大会计师事务所作为优质审计质量的表征量，研究结果发现“六大”审计的企业的可控应计质量会更高，具体表现在六大审计的企业的股票收益与可控应计之间的关系更为紧密，而且可控应计预测企业未来的盈利能力更强。然而，中国本土会计师事务所合并对客户企业可控应计质量到底是什么影响还未知，相应地我们提出第三个原假设：

H3：会计师事务所合并不显著影响客户的可控应计质量。

三、研究设计

（一）事务所合并事件的选取

本文选取2003年至2009年在中国大陆发生的会计师事务所合并案作为研究对象。根据本文所能获取的资料统计，期间共有32起合并案。2007年中国开始实施与

IFRS趋同的新会计准则。从现有的会计学文献来看，IFRS的实施对企业会计质量影响较大（Barth *et al.*, 2008；陈俊和陈汉文，2007）。为了排除会计准则对企业可控应计的潜在影响，本文剔除了2007年发生的7起事务所合并事件，余下的25起合并事件成为本文的最终研究对象。这些事务所合并案的合并对象、合并后简称以及合并后审计的新年报见表1的统计。

表1 本文选取的会计师事务所合并案

合并对象	合并后简称	合并后审计的新年报
Panel A：强强合并案		
信永中和+中兴宇	信永中和	2006
厦门天健华天+华证+北京中洲光华	天健华证中洲	2006
福建闽都+立信	福建立信闽都	2006
万隆+亚洲	万隆亚洲	2008
深圳大华天诚+珠海恒信德律	广东大华德律	2008
安徽华普+辽宁天健+北京高商万达	华普天健高商	2008
北京京都+北京天华	北京京都天华	2008
浙江天健+浙江东方	浙江天健东方	2008
中准+大连华连	中准	2008
立信+天华中兴	立信（北京）	2008
中审+亚太中汇	中审亚太	2008
天健光华+中和正信	天健正信	2009
北京五联方圆+万隆亚洲+中磊（部分）	国富浩华	2009
信永中和+四川君和	信永中和	2009
开元信德+浙江天健东方	天健	2009
Panel B：强弱合并案		
信永中和+中友	信永中和	2003
云南亚太+贵州兴华	亚太中汇	2004
大信+山东振泉	大信	2005
信永中和+香港何锡麟	信永中和	2005
五联联合+北京方圆华信	北京五联方圆	2005
天华+中兴新世纪	天华中兴	2006
大信+重庆嘉润	大信	2006
天职国际+大公天华	天职国际	2009
利安达信隆+北京立信长江（原北京嘉富诚）+深圳市万隆众天	利安达	2009
中磊+陕西中庆+山西大正+广州中联+广东中晟+广州市东方+上海宏大东亚+天津中审联+湖南里程	中磊	2009

此外，Chan and Wu（2011）的研究发现，证券资格所之间的事务所合并（本文简称为强强合并）、证券资格所和非证券资格所之间的合并（本文简称为强弱合并）的效果是有显著差异的。为此，本文将这25起事务所合并案分为两组，其中Panel A列示的是15起强强合并案，即它们都是由2个或2个以上的证券资格所合并而成；Panel B列示的是10起强弱合并案，即它们是由1个证券资格所加上1个或1个以上非证券资格所合并而成。

（二）可控应计的度量

会计学文献中对可控应计的计量方法很多，例如Jones模型法、修正的Jones模型法、DD模型以及修正的DD模型等等【详见夏立军（2003）以及Dechow *et al.*（2010）的综述文章】。本文在此使用Ball and Shivakumar（2006）的方法。这种方法与传统上使用Jones类模型最大的区别在于估计正常应计时加入了现金流量的考量。Ball and Shivakumar（2006）的方法在会计学文献中得到广泛应用。使用这种方法估计可控应计之时，第一步是根据模型（1）估计出企业i在t期的正常应计：

$$\frac{ACCR_{i,t}}{TA_{i,t-1}} = \beta_1 \frac{1}{TA_{i,t-1}} + \beta_2 \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{TA_{i,t-1}} + \beta_3 \frac{PPE_{i,t}}{TA_{i,t-1}} + \beta_4 \frac{CFO_{i,t}}{TA_{i,t-1}} + \beta_5 \frac{DCFO_{i,t}}{TA_{i,t-1}} + \beta_6 \frac{CFO_{i,t}}{TA_{i,t-1}} * DCFO_{i,t} + \varepsilon_{i,t} \quad (1)$$

其中，$ACCR$表示总应计；TA表示总资产；ΔREV表示净销售收入变化额；ΔREC表示应收账款变化额；PPE表示固定资产；CFO表示经营性现金流量；$DCFO$是哑变量，当CFO为负值时，$DCFO = 1$，否则为0。估计上述等式时按每年每个行业估计出模型参数，而后根据参数计算出总应计的估计值。第二步是用应计的实际值减去估计值计算出可控应计DA，即模型（1）的残差。

（三）事务所合并与客户企业可控应计数量

在第二部分的H1中，本文提出一个原假设，即会计师事务所合并不会显著影响客户的可控应计数量。为了验证这个假设，本文构建如下回归模型反映事务所合并对可控应计数量的影响：

$$DA\text{或}ABS(DA) = \alpha + \beta_1 POST + \beta_2 SIZE + \beta_3 MTB + \beta_4 LOSS + \beta_5 LEV + \beta_6 GROWTH + \beta_7 ROA + \beta_8 NAS + \beta_9 CRISIS + \varepsilon \quad (2)$$

其中，DA表示可控应计的原值，$ABS(DA)$表示可控应计的绝对值。$POST$是一个哑变量，当会计师事务所完成合并时$POST$=1，否则为0。影响可控应计的变量很多，相应地需要加入可能影响可控应计的控制变量（Dechow *et al.*, 2010）。之前的研究表明，虽然计算可控应计考虑了规模因素，但可控应计仍可能与规模相关，为

此本文加入企业规模变量*SIZE*。现有的文章还表明企业过去的成长性及未来的成长潜力也都会影响可控应计数量，为此，本文分别加入销售收入增长率*GROWTH*值和市净率*MTB*值作为企业的成长性与成长机会的表示量。再者，企业财务杠杆亦能影响可控应计额，为此本文加入企业负债率指标控制财务杠杆对可控应计的影响。此外，企业财务状况也被证实能显著影响可控应计，根据现有文献的处理方法本文加入企业前一年的总资产收益率*ROA*和是否亏损*LOSS*作为反映企业财务状况的指标。2007年中国实施了新的会计准则，现有会计学文献证实新会计准则的实施可能会对企业财务报告质量产生影响（Barth *et al.*, 2008；陈俊和陈汉文，2007）。为此，本文加入反映新会计准则实施的变量*NAS*作为控制变量。此外，2008年至2009年全球发生了金融危机，而金融危机期间企业财务报告质量可能会发生改变（Choi *et al.*, 2011），为此本文再加入反映金融危机的哑变量*CRISIS*作为控制变量。

各控制变量的度量如下：*SIZE* =企业销售收入的自然对数；*MTB* =企业的市场价值与账面价值之比；*LEV* =企业的负债／总资产；*LOSS*是个哑变量，如果企业在前一年亏损那么*LOSS* = 1,否则=0；*GROWTH* = 企业销售收入增长率；*ROA* = 前一年总资产收益率。*NAS*是个哑变量，财务报告年度是2007、2008和2009年时*NAS*=1，否则*NAS*=0；*CRISIS*是个哑变量，当财务报告年度是2008和2009年时*CRISIS*=1，否则*CRISIS*=0。

（四）事务所合并与客户企业可控应计方向

从现有的会计学文献来看，在分析客户企业可控应计方向时通常有两种做法：第一，连续变量法。即根据计算出的可控应计量，将其分为正值组与负值组。每组中可控应计都是连续变量，这种方法可以将调增盈余的行为与调减盈余的行为分开研究，增加检验效度。第二，哑变量法（Caramanis and Lennox, 2008）。这种方法往往将正值可控应计设为1，其他为0。由于本文此处研究的是事务所合并对客户企业可控应计方向的影响，因此具有纵向时间变化的特征，此时如果按照连续变量法将因变量可控应计分为正值与负值两组，则在每组中很可能会出现合并前样本与合并后样本不同的情况。为此，本文参照Caramanis and Lennox（2008）、刘峰等（2009）的哑变量方法构建如下模型来研究事务所合并对可控应计方向的影响：

$$\begin{aligned} SIGN(DA) = {} & \alpha + \beta_1 POST + \beta_2 SIZE + \beta_3 MTB + \\ & \beta_4 LOSS + \beta_5 LEV + \beta_6 GROWTH + \\ & \beta_7 ROA + \beta_8 NAS + \beta_9 CRISIS + \varepsilon \end{aligned} \quad (3)$$

其中，*SIGN(DA)*为哑变量，当*DA*>0时，*SIGN(DA)* = 1，否则*SIGN(DA)* = 0。其他控制变量的定义如前所述。由于*SIGN(DA)*为（0, 1）变量，我们在分析时使用Logistic回归分析法（Caramanis and Lennox, 2008）。

（五）事务所合并与客户企业可控应计质量

会计信息的价值相关性是反映财务报告质量高低的一类重要指标。虽然价值相关性在实证会计文献中有多重定义，但大多以会计变量与证券价值之间的关系

（Beaver, 2002; Collins, Maydew, and Weiss, 1997）或会计变量预测未来盈余、股利和现金流量的能力（Francis and Schipper, 1999）来反映价值相关性。如前所述，现有的文献表明可控应计可控应计能对企业的市场收益、未来会计盈余（Subramanyam, 1996; Krishnan, 2003）以及现金流量（Barth *et al.*, 2001; Krishnan, 2003）具有显著的解释力。这意味着可控应计具有价值相关性，但不同企业间的可控应计存在横向或纵向差异，会受到审计师特征（Krishnan, 2003）以及经济环境（Choi *et al.*, 2011）等因素的影响。本文以可控应计的价值相关性作为其质量的表征指标。即本文所谓的可控应计的质量是指可控应计对股票收益、未来盈余与未来经营性现金流量的解释能力。可控应计对上述三个企业基本业绩指标的解释能力越强，表明企业的可控应计的信息含量越高，价值相关性越强从而质量越好。第二部分的H3也是一个原假设，即会计师事务所合并不显著影响客户的可控应计质量。为了检验这个假设，本文在Subramanyam（1996）、Krishnan（2003）等研究的基础上设计如下检验模型：

1. 事务所合并、可控应计与股票收益

$$RET_t = \alpha + \beta_1 DA + \beta_2 NDA + \beta_3 CFO + \beta_4 DA*POST + \beta_5 POST + \beta_6 DA*NAS + \beta_7 NAS + \beta_8 DA*CRISIS + \beta_9 CRISIS + \varepsilon \quad (4)$$

这个模型反映的是事务所合并、可控应计与股票收益之间的关系。其中，*RET*表示客户企业的年股票收益率（从每年5月1日至次年的4月30日）；*DA*表示可控应计，*NDA*表示非可控应计，*CFO*表示经营性现金流量，*POST*表示事务所合并与否的哑变量。

2. 事务所合并、可控应计与未来盈余

$$NI_{t+1} = \alpha + \beta_1 DA + \beta_2 NDA + \beta_3 CFO + \beta_4 DA*POST + \beta_5 POST + \beta_6 DA*NAS + \beta_7 NAS + \beta_8 DA*CRISIS + \beta_9 CRISIS + \varepsilon \quad (5)$$

这个模型反映的是事务所合并、可控应计与未来盈余之间的关系。其中，NI_{t+1}表示客户企业下一年度的会计盈余，本文用营业利润／总资产来度量。其他变量定义如前所述。

3. 事务所合并、可控应计与未来经营性现金流量

$$CFO_{t+1} = \alpha + \beta_1 DA + \beta_2 NDA + \beta_3 CFO + \beta_4 DA*POST + \beta_5 POST + \beta_6 DA*NAS + \beta_7 NAS + \beta_8 DA*CRISIS + \beta_9 CRISIS + \varepsilon \quad (6)$$

这个模型反映的是事务所合并、可控应计与未来经营性现金流量之间的关系。其中，CFO_{t+1}表示客户企业下一会计年度的经营性现金流量，本文用经营性现金流量／总资产来度量。其他变量定义如前所述。

（六）数据来源与描述性统计

出于分析的需要，为了保证合并前后样本的统一，本文选择那些在合并前由合并事务所审计、在合并后亦由合并创设的新事务所审计的公司作为本文的客户企业样本。再剔除金融行业企业与无法获得有效财务数据的企业之后，本文共得到611家上市客户企业样本。为了分析事务所合并对可控应计的影响，我们选取事务所完成合并年度（*t*年）与之前一年（*t-1*年，尚未合并）每家客户企业作为观测值，这样共有个1222个观测值。所谓*t*年是指事务所合并后客户企业的第一个财政年度。例如，北京京都与北京天华于2008年12月26日合并成为北京京都天华，客户企业审计报告中以“北京京都天华”字样出现审计师的名字是在他们的2008年年报中，相应地2008年是客户企业*POST*=1年份。与之类似，虽然，浙江天健和浙江东方是在2009年1月3日合并成浙江天健东方，自然年度已是2009年，但客户企业审计报告中以“浙江天健东方”字样出现审计师的名字是在他们的2008年年报中，相应地2008年也是客户企业哑变量*POST*=1年份。本研究所使用的财务数据及其他变量数据均来自于清华大学金融研究数据库（THFD）。表2是客户公司基本特征的描述性统计。

表2 研究变量的描述性统计

	均值	中位值	标准差	最小值	最大值
DA	0.0021	0.0017	0.0753	-0.4667	0.5982
ABS(DA)	0.0510	0.0349	0.0554	0.0002	0.5982
SIGN(DA)	0.5106	1	0.5001	0	1
CFO	0.0705	0.0643	0.1109	-0.5774	0.6781
NDA	-0.0217	-0.0336	0.0823	-0.3991	0.7045
SIZE	21.1488	21.1209	1.3221	16.5497	25.4525
MTB	3.5145	2.5896	2.9759	0.5703	26.1519
LOSS	0.1205	0	0.3256	0	1
LEV	0.5114	0.5211	0.1798	0.0351	0.9517
GROWTH	0.1916	0.1377	0.4741	-0.9843	6.5668
ROA	0.0261	0.0272	0.0761	-0.8173	0.3845
RET	0.4329	-0.0545	1.2378	-0.8579	9.1235
NI_{t+1}	0.0470	0.0344	0.0990	-0.4428	1.0040
CFO_{t+1}	0.0728	0.0629	0.1086	-0.6019	0.5893
NAS	0.7316	1	0.4433	0	1
CRISIS	0.5581	1	0.4968	0	1

注：*DA*表示可控应计原值；*ABS(DA)*表示可控应计的绝对值；*SIGN(DA)*是哑变量，当*DA*>0时，*SIGN(DA)*=1，否则*SIGN(DA)*=0；*NDA*表示非可控应计；*CFO*表示经营性现金流量除以总资产；*SIZE* =企业销售收入的自然对数；*MTB* =企业的市场价值与账面价值之比；*LEV* =企业的负债／总资产；*LOSS*是个哑变量，如果企业在前一年年亏损那么*LOSS*=1，否则=0；*GROWTH* =企业销售收入增长率；*ROA*=前一年总资产收益率；*RET*表示客户企业的年股票收益率（从每年5月1日至次年的4月30日）；NI_{t+1}表示客户企业下一年度的会计盈余，*NI*=营业利润／总资产；CFO_{t+1}表示客户企业下一会计年度的经营性现金流量／总资产。*NAS*是反映新会计准则的哑变量，财务报告年度是2007、2008和2009年时*NAS*=1，否则*NAS*=0。*CRISIS*是反映金融危机的哑变量，当财务报告年度是2008和2009年时*CRISIS*=1，否则*CRISIS*=0。

四、实证分析结果与讨论

（一）事务所合并与客户企业可控应计数量

本文首先对事务所合并前后可控应计的原值与绝对值各自进行配对检验。检验包括均值t检验和非参数检验的Wilcoxon Signed Rank Test。从表3统计的结果来看，事务所合并前后*DA*的均值分别为0.0025和0.0013，*ABS(DA)*的均值分别为0.0519和0.0501。单从数值来看，客户企业财务报告的可控应计在事务所合并后出现了下降。但是在统计意义上都不显著。非参数检验的Wilcoxon Signed Rank Test也证实事务所合并前后客户企业可控应计量没有显著的变化。Chan and Wu（2011）的研究发现，证券资格所的事务所之间的合并（本文简称为强强合并）、证券资格所和非证券资格所之间的合并（本文简称为强弱合并）会导致审计师独立性变化效果不同。为此，本文又按照事务所是强强合并还是强弱合并分为两组后，再比较客户企业可控应计的变化。其中，强强合并组合并前后的样本数各为445个，强弱合并组合并前后的样本数各为166个。均值t检验与非参数检验的Wilcoxon Signed Rank Test仍未发现合并前后可控应计有显著区别。

表3 事务所合并前后客户企业可控应计配对检验

	均值t检验			Wilcoxon Signed Rank Test的 Z值
	合并前	合并后	t值	
Panel A：*DA*				
全样本	0.0025	0.0013	0.353	0.179
强强合并组	0.0052	0.0047	0.117	0.235
强弱合并组	-0.0049	-0.0081	0.511	0.018
Panel B：*ABS(DA)*				
全样本	0.0519	0.0501	0.632	0.396
强强合并组	0.0528	0.0505	0.686	0.272
强弱合并组	0.0495	0.0491	0.071	0.370

注：强强合并是指证券资格所的事务所合并，强弱合并是指证券资格所和非证券资格所之间的合并。全样本合并前后的样本数各为611个，强强合并组合并前后的样本数各为445个，强弱合并组合并前后的样本数各为166个。

接下来，本文根据第三部分中的模型（2）进行多元回归分析。从表4所示的回归结果来看，能对可控应计原值和绝对值具有显著解释力的主要是企业的规模（*SIZE*）、市净率（*MTB*）、亏损与否（*LOSS*）、负债率（*LEV*）、成长性（*GROWTH*）和盈利能力（*ROA*）等基本财务指标。这与先前关于可控应计规模的影响因素文献类似。新会计准则哑变量*NAS*对可控应计数量原值*DA*和绝对值*ABS(DA)*都具有负向解释力，估计系数分别为 -0.011和-0.020，且分别在5%水平和1%水平显著。这种关系在事务所强强合并组中也存在。这表明新会计准则实施可能有助于降低企业盈余管理行为（Barth *et al.*, 2008）。金融危机哑变量*CRISIS*对可控应计的原值不具有显著的

影响，但是对可控应计数量绝对值*ABS(DA)*具有正向解释力，这意味着金融危机后客户企业盈余管理的幅度可能增大，既可能大幅虚增利润也可能大幅“洗大澡”（big bath）。这种关系在事务所强强合并组中也存在。对于强弱合并组样本来说，由于2006年后的合并案都发生于2009年，因此*NAS*与*CRISIS*两变量在计量上是等同的，为此本文只报告*NAS*的估计结果，从表4的结果来看，2008年后强弱合并组的可控应计原值出现下降，但无法判断是新会计准则实施还是金融危机导致的变化。

在经济意义上，*POST*对可控应计原值*DA*和可控应计绝对值*ABS(DA)*都具有负向解释力。但是，在统计意义上都不显著。将样本分为强强合并组和强弱合并组后，*POST*仍然不能通过显著性检验。这表明中国本土会计师事务所合并至少从短期来看，并不会显著影响客户企业的可控应计数量。这样的结果与王良成和韩洪灵（2009）、刘峰等（2009）的结果类似，即大规模的会计师事务所对客户企业可控应计不一定都是显著负向影响。这个结果与Becker *et al.*（1998）、Francis *et al.*（1999）观察到的事务所规模与可控应计之间存在负相关关系并不完全一致。这可能是因为Becker *et al.*（1998）、Francis *et al.*（1999）等的研究是以国际“六大”会计师事务所作为大规模所表示量，而本文研究的是本土事务所，即便它们合并短期内也很难从规模上超越国际大所。例如，2009年国际“四大”中最小的安永华明会计师事务所在中国的年收入为19.61亿元，审计收入为18.61亿元，而中国本土所最大的中瑞岳华年收入仅为8.72亿元，审计收入为7.25亿元，分别占前者的44%和39%。本土所通过合并导致的事务所规模的增加在短期内尚未对客户企业的可控应计规模产生显著性的影响。

（二）事务所合并与客户企业可控应计方向

如本文研究假设2部分所述，事务所合并可能会影响客户企业可控应计的方向。表5报告的是事务所合并与客户企业可控应计方向的联列表及 χ^2 检验。从Panel A可以看到，事务所合并前*SIGN(DA)*=1的样本数是327个，而合并后*SIGN(DA)*=1的样本数是297个；事务所合并前*SIGN(DA)*=0的样本数是284个，而合并后*SIGN(DA)*=0的样本数是314个。即可控应计大于0（可能调增收入）的样本数量在事务所合并后下降了9.17%【(297-327)／327 = -9.17%】，而可控应计小于0（可能调减收入）的样本数量在事务所合并后增加了10.56%【(314-284)／284=10.56%】。χ^2=2.947，在10%水平显著。这表明事务所合并后对客户企业调增收入的容忍度下降，这可能是事务所合并后由于规模增大而导致事务所风险规避意识增强的结果。将样本分为强强合并组和强弱合并组后则发现，只有强强合并组的结果显著，χ^2=2.817，在10%水平显著；而强弱合并组的 χ^2=0.303，不能通过显著性检验。这样的结果支持了Chan and Wu（2011）的研究，即证券资格所之间的事务所合并（强强合并）比证券资格所和非证券资格所之间的合并（强弱合并）带来的准租金的变化更显著。

表4 事务所合并对客户企业可控应计影响的多元回归结果

	因变量：*DA*			因变量：*ABS(DA)*		
	全样本	强强合并	强弱合并	全样本	强强合并	强弱合并
常数项	0.049**	0.061**	-0.006	-0.107***	-0.109***	-0.108**
	(2.019)	(2.045)	(-0.140)	(-4.321)	(-3.634)	(-2.391)
POST	-0.001	-0.002	0.003	-0.007	-0.007	-0.007
	(-0.008)	(-0.572)	(0.486)	(-1.096)	(-0.909)	(-1.355)
SIZE	-0.002**	-0.003*	0.001	0.008***	0.008***	0.008***
	(-2.521)	(-1.804)	(0.432)	(6.308)	(5.325)	(3.518)
MTB	0.002***	0.002***	0.002*	0.006***	0.005***	0.005***
	(3.535)	(2.940)	(1.783)	(10.119)	(8.610)	(4.347)
LOSS	-0.010*	-0.016**	0.001	0.062***	0.070***	0.030***
	(-1.697)	(-2.310)	(0.129)	(10.798)	(10.238)	(2.920)
LEV	-0.041***	-0.038***	-0.049***	-0.064***	-0.067***	-0.047***
	(-4.502)	(-3.358)	(-3.150)	(-6.970)	(-5.816)	(-3.042)
GROWTH	-0.026***	-0.027***	-0.022***	0.016***	0.018***	0.011*
	(-8.397)	(-7.545)	(-3.536)	(5.172)	(4.853)	(1.793)
ROA	0.715***	0.739***	0.659***	0.038	0.030*	-0.227***
	(27.236)	(23.136)	(13.927)	(1.436)	(1.814)	(-4.838)
NAS	-0.011**	-0.006*	-0.015**	-0.020***	-0.022***	0.003
	(-2.076)	(-1.960)	(-2.556)	(-3.760)	(-3.231)	(0.533)
CRISIS	0.004	0.006	–	0.021***	0.022***	–
	(0.828)	(1.178)		(4.394)	(3.976)	
调整 R^2	0.590	0.588	0.597	0.213	0.217	0.251
观察值	1222	890	332	1222	890	332

注： 括号中为t值，***表示在1%水平显著，**表示在5%水平显著，*表示在10%水平显著。*DA*表示可控应计原值；*ABS(DA)*表示可控应计的绝对值；*POST*是个哑变量，当事务所完成合并时，*POST*=1，否则*POST*=0；*SIZE* =企业销售收入的自然对数；*MTB* =企业的市场价值与账面价值之比；*LEV* =企业的负债／总资产；*LOSS*是个哑变量，如果企业在前一年年亏损那么*LOSS*=1，否则*LOSS*=0；*GROWTH* =企业销售收入增长率；*ROA*=前一年总资产收益率；财务报告年度是2007、2008和2009年时*NAS*=1，否则*NAS*=0；当财务报告年度是2008和2009年时*CRISIS*=1，否则*CRISIS*=0。由于强弱合并组的*NAS*与*CRISIS*两变量在计量上等同，因此只报告*NAS*的结果。

表5 事务所合并与客户企业可控应计方向的联列表及 χ^2 检验

Panel A：全样本

	合并前	合并后	合计
SIGN(DA)=1	327	297	624
SIGN(DA)=0	284	314	598
合计	611	611	1222

χ^2=2.947*

Panel B：强强合并

	合并前	合并后	合计
SIGN(DA)=1	247	222	469
SIGN(DA)=0	198	223	421
合计	445	445	890

χ^2=2.817*

Panel C：强弱合并

	合并前	合并后	合计
SIGN(DA)=1	80	75	155
SIGN(DA)=0	86	91	177
合计	166	166	332

χ^2=0.303

注：*表示在10%水平显著；*SIGN(DA)*是哑变量，当*DA*>0时，*SIGN(DA)*=1，否则*SIGN(DA)*=0。

表6列示的是加入控制变量后Logistic回归的结果。可以看到实验变量*POST*的估计系数在全样本中的值为 -0.518，Wald统计值为4.223（即在5%水平显著）。这意味着事务所合并后，客户企业可控应计大于0的可能性更低。与单变量检验一样，这样的效果同样是在事务所强强合并组中才显著，其*POST*估计系数为 -0.479，Wald统计值为2.893（即在10%水平显著）。而事务所强弱合并组的*POST*系数为 -0.266，但Wald统计值仅为0.859，不能通过显著性检验。多元Logistic回归结果再次表明，事务所合并尤其是证券资格所之间的合并（强强合并）能显著影响客户企业的可控应计的方向。事务所合并后，客户企业调增收入（可控应计大于0）的可能性下降。这意味着合并可能有助于增强事务所的风险意识。

在控制变量中能影响客户企业可控应计方向的主要是企业规模（*SIZE*）、亏损与否（*LOSS*）、成长性（*GROWTH*）以及盈利能力（*ROA*）等变量，新会计准则哑变量*NAS*和金融危机哑变量*CRISIS*未显示出对企业可控应计符号具有显著影响力。

表6 事务所合并对客户企业可控应计方向影响的Logistic回归结果

	因变量：*SIGN(DA)*		
	全样本	强强合并	强弱合并
常数项	-2.586**	-3.433**	0.180
	(4.036)	(5.026)	(0.004)
POST	-0.518**	-0.479*	-0.266
	(4.223)	(2.893)	(0.859)
SIZE	0.164**	0.207***	0.022
	(5.912)	(6.750)	(0.025)
MTB	0.039	0.059	-0.081
	(1.102)	(2.120)	(0.580)
LOSS	-1.327**	-1.159*	-17.301
	(4.426)	(3.197)	(0.000)
LEV	0.139	-0.282	1.323
	(0.069)	(0.188)	(1.923)
GROWTH	1.327***	1.575***	0.827**
	(30.539)	(26.438)	(4.492)
ROA	41.614***	42.678***	39.690***
	(120.918)	(89.909)	(29.640)
NAS	0.211	0.208	0.202
	(0.580)	(0.377)	(0.346)
CRISIS	-0.100	-0.005	—
	(0.370)	(0.001)	—
Nagelkerke R^2	0.452	0.442	0.487
观察值	1222	890	332

注：括号中为Wald统计值，**表示在1%水平显著，**表示在5%水平显著，*表示在10%水平显著。*SIGN(DA)*是哑变量，当*DA*>0时，*SIGN(DA)*=1，否则*SIGN(DA)*=0；*POST*是个哑变量，当事务所完成合并时，*POST*=1，否则*POST*=0；*SIZE* =企业销售收入的自然对数；*MTB* =企业的市场价值与账面价值之比；*LEV* =企业的负债／总资产；*LOSS*是个哑变量，如果企业在前一年年亏损那么*LOSS*=1,否则*LOSS*=0；*GROWTH* =企业销售收入增长率；*ROA*=前一年总资产收益率；财务报告年度是2007、2008和2009年时*NAS*=1，否则*NAS*=0；当财务报告年度是2008和2009年时*CRISIS*=1，否则*CRISIS*=0。由于强弱合并组的*NAS*与*CRISIS*两变量在计量上等同，因此只报告*NAS*的结果。

（三）事务所合并与客户企业可控应计质量

虽然，事务所合并尚未证实能显著影响客户企业可控应计的数量，但正如本文之前所述，可控应计不仅反映了企业潜在的盈余管理行为也能成为一种信号传递方式，因此其数量高低并不一定意味着财务报告质量的高低，还应考察可控应计质量的变化。接下来的内容是对H3的检验。

表7报告的是事务所合并对可控应计与股票收益、未来盈余及未来现金流量之间关系的影响。首先来看全样本的分析结果。与Subramanyam（1996）、Krishnan

(2003)一致，本文的结果也显示可控应计*DA*、非可控应计*NDA*和经营性现金流量*CFO*对股票收益、下一期盈余及下一期经营性现金流量都具有显著的正向解释力，而且全都能通过统计的显著性检验。这表明将会计盈余拆分为三部分后，各部分都具有信息含量。交乘项*DA*POST*在全样本回归中都显著为正值，对股票收益、下一期盈余及下一期经营性现金流量的回归估计系数分别为0.995、0.081和0.200，且分别在1%、1%和5%水平显著。这意味着事务所合并后，有助于增强可控应计对股票收益、下一期盈余及下一期经营性现金流量的解释力，即增强可控应计的质量。

表7 事务所合并对可控应计质量的影响

	因变量：*RET*			因变量：NI_{t+1}			因变量：CFO_{t+1}		
	全样本	强强合并	强弱合并	全样本	强强合并	强弱合并	全样本	强强合并	强弱合并
常数项	-0.156***	-0.165**	-0.145***	0.010*	0.028***	0	0.038***	0.046***	0.015
	(-3.362)	(-2.151)	(-3.004)	(1.694)	(2.867)	(-0.126)	(4.581)	(3.387)	(1.528)
DA	1.290*	1.221*	0.975	0.686***	0.724***	0.749***	0.226*	0.224	0.300**
	(1.804)	(1.951)	(1.411)	(7.571)	(4.519)	(6.905)	(1.792)	(0.988)	(2.085)
NDA	1.567***	1.609***	1.156	0.330***	0.220***	0.759***	0.329***	0.253***	0.678***
	(3.599)	(3.074)	(1.575)	(5.800)	(3.272)	(7.175)	(4.162)	(2.663)	(4.839)
CFO	1.733***	1.857***	1.052*	0.515***	0.453***	0.751***	0.507***	0.445***	0.801***
	(5.423)	(4.858)	(1.919)	(11.921)	(8.925)	(9.029)	(8.435)	(6.180)	(7.264)
*DA*POST*	0.995**	1.535*	0.376	0.081***	0.148**	0.036	0.200**	0.307*	0.122
	(2.323)	(1.861)	(0.460)	(2.747)	(2.190)	(0.218)	(2.024)	(1.943)	(0.550)
POST	0.104	0.101*	0.151	0.017	0.018**	0.012	0.010	0.002	0.039
	(1.596)	(1.668)	(0.671)	(0.918)	(1.329)	(1.307)	(1.133)	(1.154)	(0.787)
*DA*NAS*	1.394	1.473	-1.389*	-0.227	-0.264	-0.263	-0.071	-0.071	-0.34
	(1.555)	(1.045)	(-1.681)	(-1.008)	(-1.506)	(-1.641)	(-0.453)	(-0.285)	(-1.603)
NAS	0.611***	0.612***	0.306***	-0.004	-0.017	0.002	-0.017	-0.021	0.017
	(9.196)	(6.660)	(5.240)	(-0.453)	(-1.486)	(0.171)	(-1.471)	(-1.311)	(1.196)
*DA*CRISIS*	-2.583***	-2.243**	—	0.029	0.062	—	0.064	0.155	—
	(-3.425)	(-2.502)	—	(0.310)	(0.560)	—	(0.491)	(0.996)	—
CRISIS	-0.414***	-0.433***	—	0.009	0.006	—	0.028	0.032	—
	(-6.590)	(-5.811)		(1.083)	(0.700)		(1.543)	(1.489)	
调整R^2	0.121	0.114	0.113	0.273	0.247	0.399	0.093	0.077	0.199
观察值	1222	890	332	600	424	176	600	424	176

注： 括号中为t值，***表示在1%水平显著，**表示在5%水平显著，*表示在10%水平显著。*DA*表示可控应计原值；*NDA*表示非可控应计；*CFO*表示经营性现金流量除以总资产；*POST*是个哑变量，当事务所完成合并时，*POST*=1，否则*POST*=0；*RET*表示客户企业的年股票收益率(从每年5月1日至次年的4月30日)；NI_{t+1}表示客户企业下一年度的会计盈余，*NI*=营业利润／总资产；CFO_{t+1}表示客户企业下一会计年度的经营性现金流量／总资产；财务报告年度是2007、2008和2009年时*NAS*=1，否则*NAS*=0；当财务报告年度是2008和2009年时*CRISIS*=1，否则*CRISIS*=0。由于强弱合并组的*NAS*与*CRISIS*两变量在计量上等同，因此只报告*NAS*的结果。

将样本分为事务所强强合并与强弱合并两组后，我们可以看到强强合并组中的结果与全样本的回归结果基本类似，即可控应计*DA*、非可控应计*NDA*和经营性现金流量*CFO*对股票收益、下一期盈余及下一期经营性现金流量都具有显著的正向解释力，而且交乘项*DA*POST*也都显著为正值，对股票收益、下一期盈余及下一期经营性现金流量的回归估计系数分别为1.535、0.148和0.307，且分别在10%、5%和10%水平显著。但是，在强弱合并组中，将盈余分为*DA*、*NDA*和*CFO*三部分后，*DA*和*NDA*对下一期盈余NI_{t+1}和经营性现金流量CFO_{t+1}具有显著正向解释力，*CFO*则对股票收益、下一期盈余和下一期经营性现金流量能具有显著解释力。而且，本文的实验变量*DA*POST*在强弱合并的三个回归模型中虽然都为正值，但均不能通过显著性检验。

新会计准则哑变量*NAS*、金融危机哑变量*CRISIS*以及各自与可控应计*DA*的交乘项*DA*NAS*、*DA*CRISIS*均未对下一期盈余NI_{t+1}和经营性现金流量CFO_{t+1}具有显著的解释力，但在对股票收益*RET*的回归中，*NAS*估计系数为正值，这可能与2007年中国证券市场整体表现优良有关，*DA*NAS*虽也为正值，但统计上不显著，这表明新会计准则实施后并未对可控应计的价值相关性产生影响。当然，这也可能是因为2007年之后宏观经济形式变动剧烈，企业的特质信息可能在资产定价中作用减退所致。*CRISIS*估计系数为负值，*DA*CRISIS*为负值（统计上亦显著），这可能是因为2008年之后市场陷入颓势，企业盈余管理行为增多（如表4所示），企业盈余的价值相关性下降所导致的结果。

综合来看，事务所合并后，可控应计对股票收益、下一期盈余和下一期经营性现金流量的解释能力得到增强。这意味着可控应计的价值相关性提高，可控应计中机会主义的成分可能有所下降而信号传递的作用有所提升，这有助于提高客户企业财务报告质量。事务所强强合并组中也显现了此种现象，但事务所强弱合并对客户企业可控应计质量的影响效果不明显。

（四）稳健性检验

在稳健性检验中，我们主要做了如下两个内容：第一，除了本文采用Ball and Shivakumar（2006）度量可控应计的方法外，在研究过程中我们还使用了Dechow *et al.*（1995）法、Kothari *et al.*（2005）法以及McNichols（2002）在Dechow and Dichev（2002）的基础上提出的修正DD模型法[3]等三种常用方法作为替代计算可控应计的方法；第二，由于合并整合可能需要一个较长时期才能体现作用，为此我们还分析了事务所合并后第二年（t+1年）与合并前一年（t-1年）可控应计的差异，但由于审计新年报为2009年的合并样本（表1中的天健正信合并案、国富浩华合并案、信永中和合并案、天健合并案、天职国际合并案、利安达合并案以及中磊合并案）截止到本文研究时点只有少量公司披露2010年的年报，因此使该稳健检验的样本公司数从611家减至376家。研究结果与前文对t年与t-1年的数据分析基本一致，即事务所合并后可控应计数量无显著变化，但会显著降低客户企业正可控应计的概率，且会显著提

[3] 由于修正的DD模型法在估计非可控应计时需要提前一期的经营性现金流量的数据，因此会使本文研究样本缩减。

高可控应计对股票收益、下期盈余与下期经营性现金流量的解释力，上述现象在强强合并中表现显著，在事务所强弱合并组中表现不明显。第三，前文加入控制变量*NAS*和*CRISIS*，其目的是为了控制2007年出台新会计准则与2008年金融危机对企业财务报告质量可能产生的影响。然而，在表1列示的样本中，只有8起2008年完成的强强合并案合并前后时间与金融危机前后时间相同，这些合并案更可能受到金融危机的影响。而对其他合并案而言，它们的观测值均分布于新会计准则与金融危机两个事项之前或之后，并不受两个事项的系统性影响。在模型中加入*NAS*和*CRISIS*可能会得出不准确的结论。例如，从表4的结果来看，新会计准则哑变量*NAS*对可控应计原值与绝对值都具有负向影响，*CRISIS*也能显著正向影响可控应计的绝对值。此时，事务所合并哑变量*POST*不显著可能是因为加入了*NAS*和*CRISIS*所致。为此，我们在回归时考虑不加入这两个哑变量。不过，*POST*在表4中的所有的回归结果中仍不显著。与表4的处理方法类似，如果在Logistic回归中不加入*NAS*和*CRISIS*变量，表6中的*POST*估计系数的方向与统计上的显著性都不改变。在表7的全样本回归中，交乘项*DA*NAS*都不能通过显著性检验，而只有以*RET*为因变量时，交乘项*DA*CRISIS*在统计上显著且为负值，即*CRISIS*变量能降低可控应计对股票收益的解释力。因此模型加入两个宏观变量*NAS*和*CRISIS*可能会使事务所合并效应的估计结果趋于保守。如果在回归模型中不加入*NAS*和*CRISIS*及它们与*DA*的交乘项，则交乘项*DA*POST*在全样本与强强合并组中仍都为正值（在对*RET*的回归中，*DA*POST*的显著性会提高，由5%和10%提高至1%），在强弱合并组中仍不显著。

（五）关于事务所合并与财务报告质量之间关系的进一步分析

可控应计只是反映企业财务报告质量的一种常用方法，然而以可控应计衡量财务报告质量可能存在衡量误差（McNichols, 2002; Hribar and Nichols, 2007）。因此，还有其他衡量财务报告质量的方法。会计学文献中经常使用的另外一种反映财务报告质量的方法是微盈利，这是因为微盈利可以恰好高于0值这个基准盈余（beat benchmark），企业很可能会通过盈余管理等方式极力规避亏损（Burgstahler and Dichev, 1997; Hayn, 1995），因此后来的部分文献将是否微盈利作为财务报告质量的代理变量之一（Gunny, 2010）。在具体度量时，我们参照Gunny（2010）的方法将*ROA*在0-1%之间的定义为微盈利（*BEBM*）。即*BEBM*为哑变量，当客户企业的当年0<*ROA*< 1%之间时，*BEBM*=1，否则*BEBM*=0。而后构建如下回归模型：

$$\begin{aligned} BEBM = {} & \alpha + \beta_1 POST + \beta_2 SIZE + \beta_3 MTB + \\ & \beta_4 LOSS + \beta_5 LEV + \beta_6 GROWTH + \\ & \beta_7 ROA + \beta_8 NAS + \beta_9 CRISIS + \varepsilon \end{aligned} \tag{7}$$

其中，因变量的各变量的定义如前所述。由于*BEBM*为（0, 1）变量，我们在分析时使用Logistic回归分析法。

表8 事务所合并对微盈利(*BEBM*)影响的Logistic回归结果

	因变量：*BEBM*		
	全样本	强强合并	强弱合并
常数项	0.562	0.045	1.907
	(0.148)	(0.001)	(0.477)
POST	-0.770**	-1.060**	-0.867
	(4.861)	(5.630)	(1.568)
SIZE	-0.150**	-0.178**	-0.141
	(4.313)	(3.880)	(1.110)
MTB	-0.270***	-0.219***	-0.588***
	(21.462)	(12.208)	(12.928)
LOSS	-0.069	-0.751**	0.211
	(0.071)	(5.834)	(0.200)
LEV	2.336***	3.558***	0.412**
	(18.287)	(24.555)	(5.579)
GROWTH	-0.273	-0.525	0.250
	(1.214)	(2.346)	(0.432)
ROA	0.150	-0.124	0.871
	(0.145)	(0.102)	(0.423)
NAS	-0.165	-0.239	0.407
	(0.744)	(0.879)	(0.718)
CRISIS	0.448	0.557	—
	(1.979)	(2.357)	
Nagelkerke R^2	0.083	0.096	0.106
观察值	1222	890	332

注： 括号中为Wald值，***表示在1%水平显著，**表示在5%水平显著，*表示在10%水平显著。*POST*是个哑变量，当事务所完成合并时，*POST*=1，否则*POST*=0；*SIZE* =企业销售收入的自然对数；*MTB* =企业的市场价值与账面价值之比；*LEV* =企业的负债／总资产；*LOSS*是个哑变量，如果企业在前一年年亏损那么*LOSS*=1,否则*LOSS*=0；*GROWTH* =企业销售收入增长率；*ROA*=前一年总资产收益率；财务报告年度是2007、2008和2009年时*NAS*=1，否则*NAS*=0；当财务报告年度是2008和2009年时*CRISIS*=1，否则*CRISIS*=0。由于强弱合并组的*NAS*与*CRISIS*两变量在计量上等同，因此只报告*NAS*的结果。

表8报告的是事务所合并对微盈利(*BEBM*)影响的Logistic回归结果。从中可以看到，事务所合并哑变量*POST*的估计系数在全样本组中为-0.770，Wald检验值为4.861，即在5%水平显著。这意味着事务所合并可能有助于降低客户企业的盈余管理行为，提高财务报告质量。不过，事务所是强强合并还是强弱合并带来的效果可能存在差异。这是因为从表8的结果来看，强强合并组*POST*的估计系数为-1.060，且在5%水平显著，强弱合并组*POST*的估计系数为-0.867，但不能通过显著性检验。这进一步证实之前所述的事务所强弱合并对财务报告质量的影响不显著的结论。

五、总结

会计师事务所合并做大做强是中国注册会计师行业的一个特点。在政策支持下，中国近年来会计师事务所合并案日益增多。在这种背景下，本文以2003年至2009年初发生了25起会计师事务所合并案为研究对象，分析它们发生前后对客户企业可控应计的数量、方向和质量的影响。结果表明：事务所合并未对客户企业的可控应计数量产生显著性影响，但会显著降低客户企业正可控应计（调增收入）的概率，且会显著提高可控应计对股票收益、下期盈余与下期经营性现金流量的解释力，而且能降低客户企业盈余管理（以微盈利作为表征量）的概率。整体而言，事务所合并有助于提高客户企业财务报告质量。而且，与Chan and Wu（2011）类似，我们发现事务所是强强合并还是强弱合并带来的效果可能不同。由两个或两个以上证券资格所事务所实施的合并（强强合并）对客户企业财务报告质量显现出统计上显著的积极作用，但强弱事务所合并对客户企业财务报告质量的影响不明显。

我们的结果可能具有两方面潜在的意义：第一，从学术意义来看，本文分析了在中国这样的新兴市场中，本土会计师事务所的合并行为对客户企业财务报告质量的影响。丰富了现有的关于会计师事务所合并行为研究的文献。第二，从实践意义来看，本文的结果意味着中国本土事务所通过合并的方式做强、做大对提高资本市场上市企业的财务报告质量具有积极意义。尤其是事务所间的强强合并效用可能更为明显。会计师事务所的合并有助于中国资本市场的健康发展。中国应进一步积极促进会计师事务所做大做强。同时，我们还应注意到，中国国本土会计师事务所从单个所来看，市场份额都还很低。例如，2009年国际“四大”年度总收入合计额和审计收入合计额均占我国前100强事务所的44%，平均每家占据市场份额的11%左右；而国内本土所的前“六大”总收入合计额和审计收入合计额占我国前100强事务所的17%左右，平均每家不足3%。中国本土会计师事务所的成长空间还很大。

我们的研究通过分析事务所合并对客户企业可控应计数量、方向与质量三方面的影响，分析了事务所合并对财务报告质量的作用。这对会计学文献中研究事务所合并行为具有一定贡献，但此项研究还有如下潜在的不足与未来需要进一步研究的内容：第一，财务报告质量应由多维变量构成，本文主要以可控应计来反映财务报告质量，虽然在进一步分析中以客户企业是否微盈利作为盈余管理的代理变量，但没有考虑盈余信息含量、盈余激进性等特征（Dechow *et al.*, 2010）；第二，本文的研究结果显示，事务所强弱合并未对客户企业财务报表产生显著的影响，这可能与研究时间长度不够长（主检验是合并后一年，稳健性检验是合并后两年），合并效应尚未显现有关，也可能与事务所强弱合并样本偏少有关。将来的研究可以进一步完善上述内容。

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Local Audit Firm Mergers and Discretionary Accruals of Clients in China♣

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Abstract

Previous studies on audit firm mergers have focused on international audit firms, leaving mergers between smaller local audit firms largely unexamined. Moreover, although prior empirical studies have intensively investigated the effects of audit firm mergers on audit market structure, audit pricing, and auditor independence, the merger effects on a client's financial reporting quality, a surrogate for audit quality, require further studies. To fill this gap in the literature, we utilise the merger cases of Chinese local audit firms between 2003 and 2009 to analyse their influence on the size, direction, and quality of client discretionary accruals. Our data show that auditor mergers have no significant influence on the size of these accruals, but significantly lower the probability that a client firm will adjust discretionary accruals upward; they also enhance the explanatory power of discretionary accruals regarding stock returns, future earnings, and operating cash flow, and reduce the probability that client firms will manage earnings. In addition, similar to Chan and Wu (2011), we find that mergers between licensed audit firms have positive effects on the financial reporting quality of clients, but that the merger effects between a licensed and a non-licensed audit firm are less obvious.

Keywords: Audit Firm Mergers, Audit Quality, Discretionary Accruals
CLC codes: F23, F239, F830

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I. Introduction

Mergers have been an important way for international audit firms to grow since the 19th century. The Big Four are simply the result of continuous mergers between audit firms across the Atlantic.[3] So far, academic studies have mainly assessed the effects of auditor mergers on the audit market structure and audit fees, and have documented that auditor mergers enhance market concentration (Wootton *et al.,* 1994) as well as market competition (Thavapalan *et al.,* 2002). The studies on audit fees, however, are mixed. Some articles find a significant increase in audit fees following auditor mergers (Menon and Williams, 2001); others find no significant changes (Chan and Wu, 2011; Iyer and Iyer, 1996; Tonge and Wootton, 1991), while still others find a significant decrease (Ivancevich and Zardkoohi, 2000; Pong, 2004).

Prior studies are based on the mergers among the biggest international audit firms, especially those creating the Big Six from the Big Eight in 1989, and those creating the Big Five from the Big Six in 1998 – in other words, the mergers between Ernst & Whinney and Arthur Young, between Touche Ross and Deloitt Haskins & Sells, and between Pricewaterhouse and Cooper & Lybrand. Mergers among local audit firms in emerging markets, on the other hand, remain seldomly examined. But local audit firms account for a large proportion of the numerous audit firms in China and win more listed companies as clients than do the Big Four. Examining local audit firm mergers in emerging markets thus contributes to the existing literature based on data from international audit firm mergers.

Moreover, previous studies ignore one important issue: do audit firm mergers affect audit quality? Presuming that larger audit firms will offer better audit service, they treat auditor size as a surrogate for audit quality (Becker *et al.,* 1998; Krishnan, 2003). But whether audit quality is inevitably increased after an audit firm merger, which undoubtedly creates a larger auditor, is an empirical issue (Watkins *et al.,* 2004). So far, only two reports from the United States General Accounting Office (GAO-03-864 and GAO-03-1158)[4] have included some discussions of the potential effects of audit firm mergers on audit quality. These two reports were conducted through interviews and questionnaires, and concluded that most interviewees did not think that audit firm

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[3] The merger history of Deloitte and PricewaterhouseCoopers: William W. Deloitte from the UK and Haskins & Sells from the US merged into Deloitte, Haskins & Sells in 1952; Cooper Brothers from the UK and Lybrand, Ross Brothers and Montgomery from the US merged into Coopers & Lybrand in 1957; Touche Niven from the US and Tohmatsu Awoki & Co from Japan merged into Touche Ross in 1975; the UK part of Deloitte, Haskins & Sells and Coopers & Lybrand merged into Coopers & Lybrand Deloitte, and the US part of Deloitte, Haskins & Sells and Touche Ross merged into Deloitte & Touche in 1989. Coopers & Lybrand Deloitte and Price, Waterhouse & Co. merged into PricewaterhouseCoopers in 1998. The merger history of KPMG: Peat Marwick and KMG (Klynveld Main Goerdeler) merged into KPMG in 1987. The merger history of Ernst: Whinney Smith & Whinney and Ernst & Ernst merged into Ernst & Whinney in 1979; Ernst & Whinney and Arthur Young International merged into Ernst & Young in 1989.

[4] See www.gao.gov/cgi-bin/getrpt?GAO-03-864 and www.gao.gov/new.items/d031158.pdf.

mergers would affect audit quality. This result, however, is quite subjective, and the actual effects require empirical tests. The only related empirical study is Chan and Wu's (2011), which analyses the relation between audit firm mergers and auditor independence and documents a positive relationship. Nevertheless, auditor independence itself does not assure high audit quality. Audit quality is more directly related to the financial reporting quality of clients rather than auditor independence. Whether audit firm mergers influence a client's financial reporting quality needs further investigation.

To fill this gap, this study uses local audit firm mergers in mainland China from 2003 to 2009 to examine merger effects on the size, direction, and quality of client discretionary accruals. Since the audit firm reform in 1998, the audit industry has been uniquely characterised by firms becoming larger and stronger through mergers, as evidenced by the dozens of audit firm mergers. Almost every local audit firm has some merger experience. Consequently, this provides an ideal experimental setting for studying the outcomes of audit firm mergers in emerging markets. Our data show that whereas auditor mergers have no significant influence on the size of client discretionary accruals, strong-strong mergers, where both sides have licences to audit listed companies, significantly lower the probability that a client firm will adjust discretionary accruals upward; they also enhance the explanatory power of discretionary accruals regarding stock returns, earnings, and operating cash flow in the following period. Strong-weak mergers, on the other hand, where one side is an unlicensed audit firm, have no significant effect on a client's financial reporting quality.

Our study differs from Chan and Wu (2011) in several ways. First, Chan and Wu (2011) use audit opinions to proxy for auditor independence and thus audit quality, and examine the change in auditor propensity to issue modified audit opinions around the time of audit firm mergers. This paper, however, measures audit quality by a client's financial reporting quality, which in turn is indexed by three dimensions of discretionary accruals, namely, size, direction, and quality. Our new perspective for measuring audit quality thus makes a marginal contribution to the literature. Second, Chan and Wu (2011) use 59 audit firm mergers that took place between 1999 and 2006, during which the year 2000 was a merger peak. We instead use two time periods (2003-2006 and 2008-2009) and exclude 2007 to eliminate the influence of the newly enacted accounting standards. Our second time interval is also another merger peak in the audit industry. On 13 May 2007, the Chinese Institute of Certified Public Accountants (CICPA) published the *Opinions about Pushing Audit Firms to be Bigger and Stronger*, and explicitly expressed its vigorous support for "legal, voluntary, and negotiatory audit firm mergers". On 3 October 2009, the State Council forwarded the *Several Opinions of the Ministry of Finance on Accelerating the Development of the CPA Industry of China*, encouraging optimised allocation, mergers and acquisitions, win-win alliances, and bold development of the audit industry. Consistent with these policies, a number of representative audit firms, such as Tianjian, Tianjian-Zhengxin, Beijing Jingdu-Tianhua, Xinyongzhonghe, and Guofuhaohua, were built through mergers after 2008.

The remainder of this paper is organised as follows. Section II proposes the research hypotheses, Section III introduces the research design, Section IV presents the empirical results and discussion, and Section V concludes the paper.

II. Research Hypotheses

2.1 Audit Firm Mergers and the Size of Client Discretionary Accruals

Thirty years ago, DeAngelo (1981) asserted that audit quality was dependent on audit firm size. Specifically, larger audit firms invest more in training and audit technology to enhance audit capabilities. Since larger audit firms depend less on retaining any one client, they have fewer incentives to present audit opinions catering to the client's need, and are better able to efficiently restrain a client's earnings management. DeAngelo (1981) further argues that the value of an auditor is determined by the present value of future quasi-rents. Quasi-rents mean the excess of audit fees over marginal costs. Once a large audit firm is found to have financially cheating clients, it will incur huge litigation costs and reputation loss (Palmrose, 1988), ultimately reducing quasi-rents. Thus, larger audit firms have more incentives to provide high-quality audit services, and the credibility of their clients' financial reports improves.

The most direct effect of auditor mergers is making an audit firm larger. Extant studies confirm the positive size effects of auditor mergers on audit quality. For example, Lawrence and Glover (1988) document that the audit delay between the last day of financial reports and the issue day of auditing reports is significantly shortened during the post-merger period. They believe that auditor mergers thus improve audit efficiency. Ivancevich and Zardkoohi (2000) and Sullivan (2002) also find that auditor costs decrease and audit efficiency increases after auditor mergers. Using data from Chinese auditor mergers, Chan and Wu (2011) document that auditor independence improves following audit firm mergers.

But the effects of auditor mergers on the quality of a client's financial reporting require further empirical analyses. In the existing literature, a popular surrogate for corporate financial reporting quality is the size of discretionary accruals. Both Becker *et al.* (1998) and Francis *et al.* (1999) find a negative relation between auditor size and a client's discretionary accruals, consistent with the prediction of DeAngelo (1981) and Palmrose (1988) that larger auditors can restrain a client's earnings management more efficiently. Using data from 2003 to 2006, however, Boone *et al.* (2010) show that the Big Four offer no better audit services than those audit firms secondary to them, as evidenced by their clients' discretionary accruals. Boone *et al.* (2010) also find that these two groups of audit firms are equally efficient in restraining aggressive and opportunistic financial reporting. As far as the Chinese audit market is concerned, Liu and Zhou (2007), Liu *et al.* (2009), and Wang and Han (2009) find that a larger auditor size does not inevitably lead to higher audit quality. The relation between auditor size and the size of a client's

discretionary accruals is therefore not definitive and remains an empirical issue. Thus, we propose the first null hypothesis:

H1: Auditor mergers have no relation to the size of the client's discretionary accruals.

2.2 Audit Firm Mergers and the Direction of Client Discretionary Accruals

The accounting literature finds that audit firms have asymmetric tolerance for client discretionary accruals. Generally, audit firms are tolerant of negative discretionary accruals, namely clients adjusting profits downwards, but are intolerant of positive discretionary accruals (Carcello and Palmrose, 1994; St. Pierre and Anderson, 1984). The reason may be that large audit firms have deep pockets and invest much in maintaining their reputation, and so they try their best to reduce litigation risk and protect their reputation capital. The upward adjustment of discretionary accruals by a client indicates higher risk for its audit firm than a downward adjustment does. Thus, audit firms care about not only the size but also the direction of discretionary accruals (DeFond and Jiambalvo, 1993; Nelson *et al.*, 2002; Caramanis and Lennox, 2008). The experimental study of Braun (2001) and the field study of Nelson *et al.* (2002) prove that audit firms are more likely to ask clients to correct their financial reporting when clients over-report rather than under-report their current earnings. Also, the archival studies of Becker *et al.* (1998) and Caramanis and Lennox (2008) document that fewer firms have positive discretionary accruals when audited by the Big Six or Big Five, supporting the negative relation between auditor size and the direction of client discretionary accruals. Liu *et al.* (2009), however, use Chinese data and find that the Big Four are more tolerant of positive discretionary accruals, which leads to overestimating current earnings, than are other smaller audit firms. Thus, the effect of auditor size expansion following Chinese local mergers on the direction of client discretionary accruals is an empirical issue. We propose the second null hypothesis as follows:

H2: Auditor mergers have no relation to the direction of the client's discretionary accruals.

2.3 Audit Firm Mergers and the Quality of Discretionary Accruals

Although the size and direction of discretionary accruals have been widely analysed, their quality has been sparsely investigated. It is not true that the fewer the discretionary accruals the better. Discretionary accruals play a positive role in transferring signals to outside investors (Louis and Robinson, 2005). Using data from the US, Subramanyan (1996) finds that discretionary accruals provide a powerful explanation for corporate

market returns, future earnings, and dividends. Barth *et al.* (2001) also prove the relevance of discretionary accruals to future cash flow. Chung *et al.* (2004) use data from Japan and find that discretionary accruals can improve the value relevance of earnings. Using data from nine Asian countries, Choi *et al.* (2011) find that the value relevance of discretionary accruals significantly decreased during the Asian financial crisis. This suggests that specific events change the quality of corporate discretionary accruals. Considering these, we need to assess the effects of auditor mergers not only on the size and direction but also on the quality of discretionary accruals, namely the value relevance of discretionary accruals and its explanatory power for future financial indexes.

By considering whether the audit firm is among the Big Six, Krishnan (2003) finds a proxy for audit quality, and investigates the relation between auditor quality and the quality of a client's discretionary accruals. His results show that for those big audit firms, the quality of their clients' discretionary accruals is obviously higher. Specifically, these clients' stock returns are more closely related to their discretionary accruals, while their discretionary accruals are more powerful in predicting future profitability. In China, the influence of local auditor mergers on the quality of client discretionary accruals remains a virgin research area. Correspondingly, we propose the third null hypothesis as follows:

H3: Auditor mergers have no relation to the quality of the client's discretionary accruals.

III. Research Design

3.1 Sample Selection

We collect 32 cases of local auditor mergers in mainland China from 2003 to 2009. Considering that 2007 is the first year in which new accounting standards were enacted in China, and this event is confirmed to have great influence on corporate accounting quality (Barth *et al.*, 2008; Chen and Chen, 2007), we exclude the seven merger cases that occurred in that year. The remaining 25 local auditor mergers make up our final sample cases. Table 1 presents the names of the audit firms before and after the mergers, and the first year in which the merged auditors use their new names to issue audit reports.

Chan and Wu (2011) find evidence that the mergers between two CPA firms that have licences to audit listed companies ("strong-strong mergers" hereinafter) have quite different effects from those between a licensed firm and a firm without such a licence ("strong-weak mergers" hereinafter). In 25 sample cases, we identify 15 strong-strong mergers and 10 strong-weak mergers.

Table 1 Major Local Auditor Merger Cases from 2003 to 2009

Name of merged audit firms	Name of new auditor	First financial year influenced by the merger (year *t*)
Panel A: Strong-strong mergers		
ShineWing, Zhongxingyu	ShineWing	2006
Xiamen Tianjianhuatian, Beijing Zhongzhouguanghua	Tianjian-huazheng-zhongzhou	2006
Fujian Mindu, BDO	BDO Fujian	2006
Wanlong, Asia	Wanlong Asia	2008
Shenzhen Dahua-tiancheng, Zhuhai Hengxindelv	Guangdong Dahua-delv	2008
Anhui Huapu, Liaoning Tianjian, Beijing Gaoshangwanda	Huapu-Tianjian-Gaoshang	2008
Beijing Jingdu, Beijing Tianhua	Beijing Jingdu-Tianhua	2008
Zhejiang Tianjian, Zhejiang Dongfang	Zhejiang Tianjian-Dongfang	2008
Zhongzhun, Dalian Hualian	Zhongzhun	2008
BDO, Tianhuazhongxing	BDO Beijing	2008
China Audit, Asia Pacific Zhonghui	China Audit Asia Pacific	2008
Tianjanguanghua, Zhonghezhengxin	Tianjian-Zhengxin	2009
Beijing Wulianfangyuan, Wanlong Asia, Zhonglei (partly)	Crowe Horwath	2009
ShineWing, Sichuan Junhe	ShineWing	2009
Kaiyuanxinde, Zhejiang Tianjiandongfang	Tianjian	2009
Panel B: Strong-weak mergers		
ShineWing, Zhongyou	ShineWing	2003
Yunnan Asia Pacific, Guizhou Xinghua	Asia Pacific Zhonghui	2004
Daxin, Shandong Zhenquan	Daxin	2005
ShineWing, Hongkong Hexilin	ShineWing	2005
Wulianlianhe, Beijing Fangyuanhuaxin	Beijing Wulianfangyuan	2005
Tianhua, Zhongxing-Newcentury	Tianhua-Zhongxing	2006
Daxin, Chongqing Jiarun	Daxin	2006
Baker Tilly, Dagongtianhua	Baker Tilly	2009
Reanda Xinlong, Beijing Lixin Changjiang, Shenzhen Wanlongzhongtian	REANDA	2009
Zhonglei, Shanxi Zhongqing, Shanxi Dazheng, Guangzhou Zhonglian, Guangdong Zhongsheng, Guangzhou Orient, Shanghai Hongda East-Asia, Tianjin Zhongshenlian, Hunan Licheng	ZHONGLEI	2009

3.2 Measurement of Discretionary Accruals

Discretionary accruals can be measured in various ways, such as by the Jones model, the modified Jones model, the DD model, and the modified DD model (see the survey of Xia, 2003, and Dechow *et al*., 2010). We follow the approach of Ball and Shivakumar (2006), whose biggest difference from the traditional models is that they additionally consider cash flows in estimating normal accruals. This approach is popularly used in accounting literature. The first step is to estimate the parameters in the following model:

$$\frac{ACCR_{i,t}}{TA_{i,t-1}} = \beta_1 \frac{1}{TA_{i,t-1}} + \beta_2 \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{TA_{i,t-1}} + \beta_3 \frac{PPE_{i,t}}{TA_{i,t-1}} + \beta_4 \frac{CFO_{i,t}}{TA_{i,t-1}} + \beta_5 \frac{DCFO_{i,t}}{TA_{i,t-1}}$$

$$+ \beta_6 \frac{CFO_{i,t}}{TA_{i,t-1}} \times DCFO_{i,t} + \varepsilon_{i,t}, \quad (1)$$

where *ACCR* represents total accruals, *TA* is total assets, Δ*REV* is the change in net sales, Δ*REC* is the change in accounts receivable, *PPE* is fixed assets, *CFO* is operating cash flow, and *DCFO* is a dummy indicating that *CFO* is negative. Model (1) is regressed across each industry and year and ultimately yields the estimation of the parameters. We then obtain estimated total accruals using the estimated Model (1) and the model residual, namely the difference between actual and estimated total accruals, which is considered to be the discretionary accruals of firm *i*.

3.3 Auditor Mergers and the Size of Discretionary Accruals

To test H1 that auditor mergers will have no relation to the size of a client's discretionary accruals, we design the following model:

$$\begin{aligned} DA \text{ or } ABS(DA) = {} & \alpha + \beta_1 POST + \beta_2 SIZE + \beta_3 MTB + \beta_4 LOSS \\ & + \beta_5 LEV + \beta_6 GROWTH + \beta_7 ROA + \beta_8 NAS \\ & + \beta_9 CRISIS + \varepsilon, \end{aligned} \quad (2)$$

where *DA* and ABS(*DA*) are the original and absolute values of discretionary value, respectively. *POST* is a dummy indicating that auditors have finished a merger. Other variables are determinants of discretionary accruals in the existing literature (see Dechow *et al*., 2010). First, we control for corporate size (*SIZE*), since it is found to still be related to discretionary accruals although it is covered in calculating *DA*. Corporate past and future growth are also found to be influential in the size of discretionary accruals. We thus control for the rate of sales growth (*GROWTH*) and market-to-book ratio (*MTB*). Because financial leverage has potential influences on *DA*, we also control for the debt ratio (*LEV*). To control for the effect of financial conditions, we add return on assets for

the preceding year (*ROA*) and a dummy *LOSS* to indicate whether the firm has suffered a loss. Since extant studies find that new accounting standards influence the quality of corporate financial reporting (Bath *et al.*, 2008; Chen and Chen, 2007), we add a variable (*NAS*), which is equal to 1 for the period following the implementation of the new accounting standards. Lastly, considering the potential influence of the financial crisis from 2008 to 2009 (Choi *et al*., 2011), we add another dummy (*CRISIS*), which is equal to 1 for years 2008 and 2009.

Control variables are measured as follows. *SIZE* is the natural logarithm of sales, *MTB* is the ratio of market value to book value, *LEV* is the ratio of total debt over total assets, *LOSS* is a dummy indicating that the firm has suffered a loss in the preceding year, *GROWTH* is the growth rate of sales, *ROA* is the return on assets in the preceding year, *NAS* is a dummy taking the value of 1 for fiscal years 2007, 2008, and 2009, and *CRISIS* is a dummy taking the value of 1 for fiscal years 2008 and 2009.

3.4 Auditor Mergers and the Direction of Discretionary Accruals

When analysing the direction of discretionary accruals, extant studies generally use continuous indexes or dummy variables. For continuous indexes, studies divide the sample into a positive *DA* sub-sample and a negative *DA* sub-sample. This method permits parallel examination of both upward corporate earnings adjustment and the opposite to increase test efficiency. The dummy method assigns a 0-1 variable, which equals 1 for positive *DA* (Caramanis and Lennox, 2008). Since this paper compares the direction of *DA* between the pre-and post-merger periods, the first method will lead to the problem of two periods having inconsistent firms for either the positive or the negative *DA* sub-samples. So we follow the method of Caramanis and Lennox (2008) and construct the following model:

$$SIGN(DA) = \alpha + \beta_1 POST + \beta_2 SIZE + \beta_3 MTB + \beta_4 LOSS + \beta_5 LEV + \beta_6 GROWTH + \beta_7 ROA + \beta_8 NAS + \beta_9 CRISIS + \varepsilon \quad (3)$$

where *SIGN(DA)* is a dummy indicating that discretionary accruals are positive. Control variables are defined and measured as above. Since the dependent variable is a dummy, we use the logistic regression method for Model (3).

3.5 Auditor Mergers and the Quality of Discretionary Accruals

The value relevance of accounting information is a key indicator for the quality of financial reporting. Although there are a wide range of definitions for value relevance, its measurements fall into two broad categories: the relation between accounting variables and stock value (Beaver, 2002; Collins, Maydew, and Weiss, 1997), and the predictive power of accounting variables for future earnings, dividends, and cash flow (Francis and Schipper, 1999). As stated above, discretionary accruals have strong explanatory power

for corporate market returns, future earnings (Subramanyam, 1996; Krishnan, 2003), and cash flow (Barth *et al*., 2001; Krishnan, 2003), indicating that they are value-relevant. But because they also vary across firms, auditors (Krishnan, 2003), and economic environment (Choi *et al*., 2011), we use their predictive power for stock returns, future earnings, and future operating cash flow as the measure of their quality. The higher the explanatory power of the discretionary accruals for these three performance variables, the more information and the stronger the value relevance they have, and the higher the quality. Correspondingly, we design the following three models:

$$\begin{aligned} RET_t = {} & \alpha + \beta_1 DA + \beta_2 NDA + \beta_3 CFO + \beta_4 DA*POST \\ & + \beta_5 POST + \beta_6 DA*NAS + \beta_7 NAS + \beta_8 DA*CRISIS \\ & + \beta_9 CRISIS + \varepsilon , \end{aligned} \tag{4}$$

where *RET* is the annual stock return of each client firm (from 1 May to 30 April of the following year), *DA* is discretionary accruals, *NDA* is non-discretionary accruals, *CFO* is operating cash flow, and *POST* is a dummy indicating the post-merger period.

$$\begin{aligned} NI_{t+1} = {} & \alpha + \beta_1 DA + \beta_2 NDA + \beta_3 CFO + \beta_4 DA*POST \\ & + \beta_5 POST + \beta_6 DA*NAS + \beta_7 NAS + \beta_8 DA*CRISIS \\ & + \beta_9 CRISIS + \varepsilon , \end{aligned} \tag{5}$$

where NI_{t+1} is the client firm's net income in the following year, calculated by operating profit divided by total assets. Other variables are defined as above. Model (5) estimates whether the relation between a client's *DA* and future earnings is affected by auditor mergers.

$$\begin{aligned} CFO_{t+1} = {} & \alpha + \beta_1 DA + \beta_2 NDA + \beta_3 CFO + \beta_4 DA*POST \\ & + \beta_5 POST + \beta_6 DA*NAS + \beta_7 NAS + \beta_8 DA*CRISIS \\ & + \beta_9 CRISIS + \varepsilon , \end{aligned} \tag{6}$$

where CFO_{t+1} is the client firm's operating cash flow in the following year, calculated by operating cash flow divided by total assets. Other variables are defined as above. Model (6) estimates whether the relation between a client's *DA* and future cash flow is affected by auditor mergers.

3.6 Data Sources and Descriptive Statistics

We initially choose the client firms that do not switch auditors in both the pre-and post-merger periods. Then, we delete financial firms and firms without available data, and finally obtain 611 listed firms as our client sample. We then compare the client firms' discretionary accruals for the fiscal year influenced by the auditor mergers (year *t*) with those for the preceding year (year *t*-1). Thus, we have 1,222 firm observations. We define year *t* as the first fiscal year that the client's financial reports are audited by the merged audit firm. For example, Beijing Jingdu and Beijing Tianhua merged into Beijing Jingdu-Tianhua on 26 December 2008. The first fiscal year that the merged auditor issues the audit report using the new name in the client's financial reports is thus 2008. Accordingly, for the client firms in this merger case, year *t* is 2008, year *t*-1 is 2007, and *POST* in Models (2) to (6) takes the value of 1 for 2008, and 0 for 2007. Another case involves Zhejiang Tianjian and Zhejiang Dongfang, which merged into Zhejiang Tianjian-Dongfang on 3 January 2009. The first fiscal year that the merged auditor issues audit reports using the new name in their clients' financial reports remains 2008. All financial data are taken from the Tsinghua University Financial Database (THFD). Table 2 statistically describes the basic characteristics of client firms.

IV. Empirical Results and Discussion

4.1 Auditor Mergers and the Size of Discretionary Accruals

We first compare the original and absolute values of the client's discretionary accruals around mergers using the t test and non-parametric Wilcoxon signed-rank test. The results in Table 3 show that average discretionary accruals are 0.0025 before and 0.0013 after the mergers, while the average absolute discretionary accruals are 0.0519 before and 0.0501 after the mergers. The declines are not, however, statistically significant. Chan and Wu (2011) document that the influence of strong-strong mergers on auditor independence is quite different from that of strong-weak mergers. Thus, we compare the changes in client discretionary accruals for strong-strong mergers with those for strong-weak mergers. The number of client firms is 445 for the former and 166 for the latter. Either the t test or the Wilcoxon signed-rank test finds significant changes in discretionary accruals around the mergers.

Table 2 Descriptive Statistics

	Mean	Median	Std.	Min.	Max
DA	0.0021	0.0017	0.0753	-0.4667	0.5982
ABS(DA)	0.0510	0.0349	0.0554	0.0002	0.5982
SIGN(DA)	0.5106	1	0.5001	0	1
CFO	0.0705	0.0643	0.1109	-0.5774	0.6781
NDA	-0.0217	-0.0336	0.0823	-0.3991	0.7045
SIZE	21.1488	21.1209	1.3221	16.5497	25.4525
MTB	3.5145	2.5896	2.9759	0.5703	26.1519
LOSS	0.1205	0	0.3256	0	1
LEV	0.5114	0.5211	0.1798	0.0351	0.9517
GROWTH	0.1916	0.1377	0.4741	-0.9843	6.5668
ROA	0.0261	0.0272	0.0761	-0.8173	0.3845
RET	0.4329	-0.0545	1.2378	-0.8579	9.1235
NI_{t+1}	0.0470	0.0344	0.0990	-0.4428	1.0040
CFO_{t+1}	0.0728	0.0629	0.1086	-0.6019	0.5893
NAS	0.7316	1	0.4433	0	1
CRISIS	0.5581	1	0.4968	0	1

Note: *DA* is the original value of discretionary accruals; *ABS*(*DA*) is the absolute value of discretionary accruals; *SIGN(DA)* is a dummy indicating positive discretionary accruals; *NDA* is non-discretionary accruals; *CFO* is operating cash flow divided by total assets; *SIZE* is the natural logarithm of sales; *MTB* is the ratio of corporate market value to book value; *LEV* is total liabilities divided by total assets; *LOSS* is a dummy indicating negative profit in the year preceding the merger (year *t*-1); *GROWTH* is the sales growth rate; *ROA* is return on assets in year *t*-1; *RET* is the annual stock return from 1 May to next 30 April; NI_{t+1} is accounting earnings in the year following the merger (year *t*+1), which are calculated from operating profit divided by total assets; CFO_{t+1} is operating cash flow divided by total assets in year *t*+1; *NAS* is a dummy indicating new accounting standards, which is equal to 1 when the year is 2007, 2008, or 2009, and otherwise 0; *CRISIS* is a dummy indicating financial crisis, which is equal to 1 when the year is 2008 or 2009, and otherwise 0.

Next, we run a multi-variable regression on Model (2), and the results are listed in Table 4. Consistent with prior studies, we find that the basic financial indexes such as corporate size (*SIZE*), market-to-book ratio (*MTB*), *LOSS*, debt ratio (*LEV*), growth (*GROWTH*), and profitability (*ROA*) have significant explanatory power for both the original and the absolute values of discretionary accruals. The dummy *NAS*, which indicates the implementation of new accounting standards, is negatively related to discretionary accruals and absolute discretionary accruals, with the coefficients of -0.011 and -0.020 significant at the 5 per cent and 1 per cent levels, respectively. This suggests that the new accounting standards help to depress corporate earnings management (Barth *et al.*, 2008). The financial crisis dummy (*CRISIS*) is significantly related to absolute discretionary accruals rather than the original value, indicating that the client manages earnings to a larger extent after the merger, including over-estimating earnings and taking a big bath. This relation also exists in the strong-strong merger group. For strong-weak mergers, the cases taking place after 2006 (*NAS* = 1) also take place after 2008 (*CRISIS* = 1), and so we report only the results of *NAS*. The results in Table 4 show that for

strong-weak merger cases after 2008, client discretionary accruals are reduced after the mergers. But we are not sure the effect is led by the new accounting standards or the financial crisis.

Table 3 Discretionary Accruals around Auditor Mergers

	t value in mean test			Z value in Wilcoxon
	Year *t-1*	Year *t*	t value	signed-rank test
Panel A: *DA*				
Full sample	0.0025	0.0013	0.353	0.179
Strong-strong	0.0052	0.0047	0.117	0.235
Strong-weak	-0.0049	-0.0081	0.511	0.018
Panel B: *ABS(DA)*				
Full sample	0.0519	0.0501	0.632	0.396
Strong-strong	0.0528	0.0505	0.686	0.272
Strong-weak	0.0495	0.0491	0.071	0.370

Note: Strong-strong mergers are mergers where both sides are licensed to audit listed companies, while strong-weak mergers are those where one side has the licence and the other does not. For the full sample, the number of client firms is 611. For strong-strong mergers and strong-weak mergers, the numbers are 445 and 166, respectively.

Importantly, *POST* is negatively but not significantly related to *DA* or *ABS*(*DA*). When we regress for strong-strong mergers and strong-weak mergers, respectively, *POST* remains insignificant. This means that the size of the clients' discretionary accruals does not change following auditor mergers. The result is similar to Wang and Han (2009) and Liu *et al.* (2009), who find that the effect of large auditor firms on client discretionary accruals may not be significantly negative. Becker *et al*. (1998) and Francis *et al.* (*1999*), however, document that audit firm size is negatively related to client discretionary accruals. The reason may be that both studies use whether the audit firm is among the Big Six as a proxy for audit firm size, whereas we use mergers between local auditors since they are unable to surpass the international big auditors in size in the short run even after the mergers. For example, Ernst & Young Hua Ming, the smallest of the Big Four in China, realised total revenue of 1.961 billion renminbi and auditing revenue of 1.861 billion renminbi in 2009. Zhongrui-Yuehua, the biggest local audit firm in China, realised total revenue of 0.872 billion renminbi and auditing revenue of 0.725 billion renminbi in 2009, equivalent to only 44 per cent and 39 per cent of Ernst & Young Hua Ming's, respectively. The size effect from local auditor mergers thus does not influence the size of client discretionary accruals.

4.2 Auditor Mergers and the Direction of Discretionary Accruals

As stated in H2, auditor mergers may influence the direction of client discretionary accruals. Table 5 presents the χ^2 test of auditor mergers and the direction of client discretionary accruals. Before the mergers, 327 client firms have positive and 297 client firms have negative discretionary accruals. The numbers change to 284 and 314, respectively, after the mergers. This shows that the number of positive *DA* firms (who potentially adjust revenue upwards) decreases by 9.17 per cent {(297-327)/327 = -9.17%}, whereas the number of negative *DA* firms (who potentially adjust revenue

downwards) increases by 10.56 per cent {(314-284)/284 = 10.56%}. The χ^2 statistic is 2.947 and significant at the 10 per cent level, suggesting that merged audit firms are more risk-averse and less likely to tolerate clients adjusting earnings upwards. Further sub-sample analyses reveal that the effect of auditor mergers on the direction of client discretionary accruals is significant only for strong-strong mergers, with χ^2 of 2.817, significant at the 10 per cent level. For strong-weak mergers, χ^2 is only 0.303. This result supports Chan and Wu (2011), who indicate that strong-strong mergers have greater influence on the quasi-rents of audit firms than do strong-weak mergers.

Table 4 Regression Results of Client Discretionary Accruals on Auditor Mergers

	Dependent variable: *DA*			Dependent variable: ABS*(DA)*		
	Full sample	Strong-strong mergers	Strong-weak mergers	Full sample	Strong-strong mergers	Strong-weak mergers
Constant	0.049**	0.061**	-0.006	-0.107***	-0.109***	-0.108**
	(2.019)	(2.045)	(-0.140)	(-4.321)	(-3.634)	(-2.391)
POST	-0.001	-0.002	0.003	-0.007	-0.007	-0.007
	(-0.008)	(-0.572)	(0.486)	(-1.096)	(-0.909)	(-1.355)
SIZE	-0.002**	-0.003*	0.001	0.008***	0.008***	0.008***
	(-2.521)	(-1.804)	(0.432)	(6.308)	(5.325)	(3.518)
MTB	0.002***	0.002***	0.002*	0.006***	0.005***	0.005***
	(3.535)	(2.940)	(1.783)	(10.119)	(8.610)	(4.347)
LOSS	-0.010*	-0.016**	0.001	0.062***	0.070***	0.030***
	(-1.697)	(-2.310)	(0.129)	(10.798)	(10.238)	(2.920)
LEV	-0.041***	-0.038***	-0.049***	-0.064***	-0.067***	-0.047***
	(-4.502)	(-3.358)	(-3.150)	(-6.970)	(-5.816)	(-3.042)
GROWTH	-0.026***	-0.027***	-0.022***	0.016***	0.018***	0.011*
	(-8.397)	(-7.545)	(-3.536)	(5.172)	(4.853)	(1.793)
ROA	0.715***	0.739***	0.659***	0.038	0.030*	-0.227***
	(27.236)	(23.136)	(13.927)	(1.436)	(1.814)	(-4.838)
NAS	-0.011**	-0.006*	-0.015**	-0.020***	-0.022***	0.003
	(-2.076)	(-1.960)	(-2.556)	(-3.760)	(-3.231)	(0.533)
CRISIS	0.004	0.006	—	0.021***	0.022***	—
	(0.828)	(1.178)	—	(4.394)	(3.976)	—
Adjusted R^2	0.590	0.588	0.597	0.213	0.217	0.251
Number of obs.	1222	890	332	1222	890	332

Note: *DA* is the original value of discretionary accruals; *ABS(DA)* is the absolute value of discretionary accruals; *POST* is a dummy indicating the post-merger period; *SIZE* is the natural logarithm of sales; *MTB* is the ratio of corporate market value to book value; *LEV* is total liabilities divided by total assets; *LOSS* is a dummy indicating negative profit in the year preceding the merger (year *t*-1); *GROWTH* is the sales growth rate; *ROA* is return on assets in year *t*-1; NAS is a dummy indicating new accounting standards, which is equal to 1 when the year is 2007, 2008, or 2009, and otherwise 0; *CRISIS* is a dummy indicating financial crisis, which is equal to 1 when the year is 2008 or 2009, and otherwise 0. For strong-weak mergers, *NAS* is equal to *CRISIS*, so we report only the results of *NAS*.
t values are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 5 χ^2 Test between Auditor Mergers and the Direction of Client Discretionary Accruals

Panel A: Full sample

	Year *t*-1	Year *t*	Total
SIGN(DA) = 1	327	297	624
SIGN(DA) = 0	284	314	598
Total	611	611	1222
	$\chi^2 = 2.947$*		

Panel B: Strong-strong mergers

	Year *t*-1	Year *t*	Total
SIGN(DA) = 1	247	222	469
SIGN(DA) = 0	198	223	421
Total	445	445	890
	$\chi^2 = 2.817$*		

Panel C: Strong-weak mergers

	Year *t*-1	Year *t*	Total
SIGN(DA) = 1	80	75	155
SIGN(DA) = 0	86	91	177
Total	166	166	332
	$\chi^2 = 0.303$		

Note: *SIGN(DA)* is a dummy indicating positive discretionary accruals; * denotes significance at the 10% level.

Table 6 shows the logistic regression results with control variables. The explanatory variable *POST* has a coefficient of -0.518, with a Wald value of 4.223, and is significant at the 5 per cent level. This suggests that auditor mergers significantly hinder the probability that clients will make positive discretionary accruals. But this effect again exists only in strong-strong mergers. For these mergers, the coefficient of *POST* is -0.479, and the Wald value is 2.893 and significant at the 10 per cent level. For strong-weak mergers, however, the coefficient of *POST* is -0.266, and the Wald value is 0.859. Multi-variable regression shows again that auditor mergers, especially strong-strong mergers, significantly influence the direction of client discretionary accruals. After auditor mergers, clients are less likely to adjust their earnings upwards, that is, to have positive discretionary accruals. This indicates that the auditor mergers help to enhance the risk consciousness of audit firms.

Among the control variables, corporate size (*SIZE*), profit or loss (*LOSS*), growth (*GROWTH*), and profitability (*ROA*) have significant influence on the direction of client discretionary accruals. But the dummy for new accounting standards (*NAS*) and that for financial crisis (*CRISIS*) are not significantly related to this direction.

Table 6 Logistic Regression Results of the Direction of Client Discretionary Accruals on Auditor Mergers

	Dependent variable: *SIGN(DA)*		
	Full sample	Strong-strong mergers	Strong-weak mergers
Constant	-2.586**	-3.433**	0.180
	(4.036)	(5.026)	(0.004)
POST	-0.518**	-0.479*	-0.266
	(4.223)	(2.893)	(0.859)
SIZE	0.164**	0.207***	0.022
	(5.912)	(6.750)	(0.025)
MTB	0.039	0.059	-0.081
	(1.102)	(2.120)	(0.580)
LOSS	-1.327**	-1.159*	-17.301
	(4.426)	(3.197)	(0.000)
LEV	0.139	-0.282	1.323
	(0.069)	(0.188)	(1.923)
GROWTH	1.327***	1.575***	0.827**
	(30.539)	(26.438)	(4.492)
ROA	41.614***	42.678***	39.690***
	(120.918)	(89.909)	(29.640)
NAS	0.211	0.208	0.202
	(0.580)	(0.377)	(0.346)
CRISIS	-0.100	-0.005	—
	(0.370)	(0.001)	—
Nagelkerke R^2	0.452	0.442	0.487
Number of obs.	1222	890	332

Note: *SIGN(DA)* is a dummy indicating positive discretionary accruals; *POST* is a dummy indicating post-merger period; *SIZE* is the natural logarithm of sales; *MTB* is the ratio of corporate market value to book value; *LEV* is total liabilities divided by total assets; *LOSS* is a dummy indicating negative profit in the year preceding the merger (year *t*-1); *GROWTH* is the sales growth rate; *ROA* is return on assets in year *t*-1; *NAS* is a dummy indicating new accounting standards, which is equal to 1 when the year is 2007, 2008, or 2009, and otherwise 0; *CRISIS* is a dummy indicating financial crisis, which is equal to 1 when the year is 2008 or 2009, and otherwise 0. For strong-weak mergers, *NAS* is equal to *CRISIS*, so we report only the results of *NAS*.

Wald values are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

4.3 Auditor Mergers and the Quality of Discretionary Accruals

Not only the size and direction but also the quality of discretionary accruals is of interest, since these accruals may be a signal of insider management. Next we test H3.

Table 7 reports the regression results of stock returns, future earnings, and future cash flow on discretionary accruals around auditor mergers. For the full sample, discretionary accruals (*DA*), non-discretionary accruals (*NDA*), and operating cash flow

(*CFO*) all have significant and positive influence on stock returns, next-year earnings (NI_{t+1}), and next-year operating cash flow (CFO_{t+1}), consistent with Subramanyam (1996) and Krishnan (2003). This indicates that the three components of accounting earnings all have information content. The interaction between *DA* and *POST* is significantly related to stock return, next-year earnings, and next-year operating cash flow, with coefficients of 0.995, 0.081, and 0.200, and the corresponding significance at the 1 per cent, 1 per cent, and 5 per cent levels, respectively. This means that auditor mergers enhance the explanatory power of client discretionary accruals for stock returns, next-year earnings, and next-year operating cash flow. In other words, auditor mergers enhance the quality of client discretionary accruals.

Sub-sample analyses reveal that the results for strong-strong mergers are similar to those for the full sample. Specifically, discretionary accruals (*DA*), non-discretionary accruals (*NDA*), and operating cash flow (*CFO*) all have significant and positive influence on stock returns, next-year earnings, and next-year operating cash flow. Moreover, the interaction between *DA* and *POST* is significantly related to stock returns, next-year earnings (NI_{t+1}), and next-year operating cash flow (CFO_{t+1}), with coefficients of 1.535, 0.148, and 0.307, and the corresponding significance at the 10 per cent, 5 per cent, and 10 per cent levels, respectively. But for strong-weak mergers, among the three components of accounting earnings, *DA* and *NDA* are positively related to NI_{t+1} and CFO_{t+1}, while *CFO* is positively related to stock returns, NI_{t+1}, and CFO_{t+1}. More importantly, our main variable of interest, *DA*POST*, is insignificant though positive. The dummy for new accounting standards *(NAS)*, that for financial crisis (*CRISIS*), and the interaction between these two dummies and discretionary accruals (*DA*NAS*, *DA*CRISIS*) have no explanatory power for NI_{t+1} and CFO_{t+1}. In the regression of stock returns (*RET*), the coefficient of *NAS* is significantly positive, but the coefficient of *DA*NAS* is insignificant yet positive, indicating that the new accounting standards have no influence on corporate value relevance. Another potential reason may be that the macro-economic environment has changed so much since 2007 that the role of corporate-specific information in asset pricing is decreasing. The coefficients of both *CRISIS* and *DA*CRISIS* are also negative, perhaps because the market entered a period of decline during which more corporations managed earnings (see Table 4), and the value relevance of corporate earnings declined.

In sum, the explanatory power of client discretionary accruals for stock returns, next-year earnings, and next-year cash flow increases following auditor mergers. In other words, mergers improve the value relevance of discretionary accruals, and thus the financial reporting quality of clients. This effect is more obvious in strong-strong than in strong-weak mergers.

Table 7 Regression Results of the Quality of Client Discretionary Accruals on Auditor Mergers

	Dependent variable: *RET*			Dependent variable: NI_{t+1}			Dependent variable: CFO_{t+1}		
	Full sample	Strong-strong mergers	Strong-weak mergers	Full sample	Strong-strong mergers	Strong-weak mergers	Full sample	Strong-strong mergers	Strong-weak mergers
Constant	-0.156***	-0.165**	-0.145***	0.010*	0.028***	0.000	0.038***	0.046***	0.015
	(-3.362)	(-2.151)	(-3.004)	(1.694)	(2.867)	(-0.126)	(4.581)	(3.387)	(1.528)
DA	1.290*	1.221*	0.975	0.686***	0.724***	0.749***	0.226*	0.224	0.300**
	(1.804)	(1.951)	(1.411)	(7.571)	(4.519)	(6.905)	(1.792)	(0.988)	(2.085)
NDA	1.567***	1.609***	1.156	0.330***	0.220***	0.759***	0.329***	0.253***	0.678***
	(3.599)	(3.074)	(1.575)	(5.800)	(3.272)	(7.175)	(4.162)	(2.663)	(4.839)
CFO	1.733***	1.857***	1.052*	0.515***	0.453***	0.751***	0.507***	0.445***	0.801***
	(5.423)	(4.858)	(1.919)	(11.921)	(8.925)	(9.029)	(8.435)	(6.180)	(7.264)
*DA*POST*	0.995**	1.535*	0.376	0.081***	0.148**	0.036	0.200**	0.307*	0.122
	(2.323)	(1.861)	(0.460)	(2.747)	(2.190)	(0.218)	(2.024)	(1.943)	(0.550)
POST	0.104	0.101*	0.151	0.017	0.018**	0.012	0.010	0.002	0.039
	(1.596)	(1.668)	(0.671)	(0.918)	(1.329)	(1.307)	(1.133)	(1.154)	(0.787)
*DA*NAS*	1.394	1.473	-1.389*	-0.227	-0.264	-0.263	-0.071	-0.071	-0.340
	(1.555)	(1.045)	(-1.681)	(-1.008)	(-1.506)	(-1.641)	(-0.453)	(-0.285)	(-1.603)
NAS	0.611***	0.612***	0.306***	-0.004	-0.017	0.002	-0.017	-0.021	0.017
	(9.196)	(6.660)	(5.240)	(-0.453)	(-1.486)	(0.171)	(-1.471)	(-1.311)	(1.196)
*DA*CRISIS*	-2.583***	-2.243**	—	0.029	0.062	—	0.064	0.155	—
	(-3.425)	(-2.502)	—	(0.310)	(0.560)	—	(0.491)	(0.996)	—
CRISIS	-0.414***	-0.433***	—	0.009	0.006	—	0.028	0.032	—
	(-6.590)	(-5.811)	—	(1.083)	(0.700)	—	(1.543)	(1.489)	—
Adjusted R^2	0.121	0.114	0.113	0.273	0.247	0.399	0.093	0.077	0.199
N. of obs.	1222	890	332	600	424	176	600	424	176

Note: *DA* is the original value of discretionary accruals; *NDA* is non-discretionary accruals; *CFO* is operating cash flow divided by total assets; *POST* is a dummy indicating the post-merger period; *RET* is the annual stock return from 1 May to next 30 April; NI_{t+1} is accounting earnings in the year following the merger (year t+1), which are calculated from operating profit divided by total assets; CFO_{t+1} is operating cash flow divided by total assets in year t+1; *NAS* is a dummy indicating new accounting standards, which is equal to 1 when the year is 2007, 2008, or 2009, and otherwise 0; *CRISIS* is a dummy indicating financial crisis, which is equal to 1 when the year is 2008 or 2009, and otherwise 0. For strong-weak mergers, *NAS* is equal to *CRISIS*, so we report only the results of *NAS*. t values are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

4.4 Robustness Test

We run the following two robustness tests. First, we use alternative methods to measure discretionary accruals, such as those in Dechow *et al*. (2005) and Kothari *et al*. (2005), and the adjusted DD model based on McNichols (2002) and Dechow and Dichev (2002).[5] The results remain similar. Second, considering that mergers require a long integration period, we compare discretionary accruals for the second year after (year t+1) and the preceding year before the mergers (year t-1). For those merger cases where year t is 2009 (including the Tianjian-Zhengxin, Guofu-Haohua, Xinyongzhonghe, Tianjian, Tianzhi, Li'anda, and Zhonglei mergers in Table 1), only a few firms have disclosed their 2010 annual reports, reducing our sample to 376 firms from the original 611 firms. The analysis results are the same: auditor mergers do not influence the size of client discretionary accruals, but significantly decrease the probability that clients will adjust accruals upwards and significantly improve the explanatory power of discretionary accruals for stock returns, next-year earnings, and next-year cash flow. Also, these effects are obvious in strong-strong mergers rather than in strong-weak mergers. Third, we exclude the dummy for new accounting standards *NAS* and that for financial crisis *CRISIS*, since only eight mergers are influenced by these two events. The results remain unchanged. The coefficient and significance of *POST* are the same as above. *DA*POST* is significantly positive for the full sample and strong-strong mergers, and insignificant for the strong-weak mergers.

4.5 Further Analyses on the Relation between Auditor Mergers and Financial Reporting Quality

Although discretionary accruals are a widely used proxy for financial reporting quality, a potential drawback is measurement errors (McNichols, 2002; Hribar and Nichols, 2007). Another popular method to measure this quality is to use micro-profits, which just beat zero, the benchmark. Most firms use micro-profits to manage earnings so as to avoid losses (Burgstahler and Dichev, 1997; Hayn, 1995). Thus, later studies use whether a firm has a micro-profit as a proxy for financial reporting quality (Gunny, 2010). Following Gunny (2010), we define a dummy (*BEBM*), which equals 1 if *ROA* is in the range of 0 to 1 per cent, and otherwise 0. Then we construct the following model:

$$BEBM = \alpha + \beta_1 POST + \beta_2 SIZE + \beta_3 MTB + \beta_4 LOSS + \beta_5 LEV + \beta_6 GROWTH + \beta_7 ROA + \beta_8 NAS + \beta_9 CRISIS + \varepsilon , \quad (7)$$

where the independent variables are defined as above. Since *BEBM* is a 0-1 dummy, we use logistic regression.

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[5] Since the adjusted DD model needs the data of operating cash flow in the preceding year, the sample is curtailed.

Table 8 Regression Results of Micro-profits (*BEBM*) on Auditor Mergers

	Dependent variable: *BEBM*		
	Full sample	Strong-strong mergers	Strong-weak mergers
Constant	0.562	0.045	1.907
	(0.148)	(0.001)	(0.477)
POST	-0.770**	-1.060**	-0.867
	(4.861)	(5.630)	(1.568)
SIZE	-0.150**	-0.178**	-0.141
	(4.313)	(3.880)	(1.110)
MTB	-0.270***	-0.219***	-0.588***
	(21.462)	(12.208)	(12.928)
LOSS	-0.069	-0.751**	0.211
	(0.071)	(5.834)	(0.200)
LEV	2.336***	3.558***	0.412**
	(18.287)	(24.555)	(5.579)
GROWTH	-0.273	-0.525	0.250
	(1.214)	(2.346)	(0.432)
ROA	0.150	-0.124	0.871
	(0.145)	(0.102)	(0.423)
NAS	-0.165	-0.239	0.407
	(0.744)	(0.879)	(0.718)
CRISIS	0.448	0.557	—
	(1.979)	(2.357)	—
Nagelkerke R^2	0.083	0.096	0.106
Number of obs.	1222	890	332

Note: *BEBM* is a dummy indicating micro-profits; *POST* is a dummy indicating the post-merger period; *SIZE* is the natural logarithm of sales; *MTB* is the ratio of corporate market value to book value; *LEV* is total liabilities divided by total assets; *LOSS* is a dummy indicating negative profit in the year preceding the merger (year *t*-1); *GROWTH* is the sales growth rate; *ROA* is return on assets in year *t*-1; *NAS* is a dummy indicating new accounting standards, which is equal to 1 when the year is 2007, 2008, or 2009, and otherwise 0; *CRISIS* is a dummy indicating financial crisis, which is equal to 1 when the year is 2008 or 2009, and otherwise 0. For strong-weak mergers, *NAS* is equal to *CRISIS*, so we report only the results of *NAS*.

Wald values are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Table 8 reports the logistic regression results of *BEBM* on auditor mergers. The auditor merger dummy *POST* is significantly negative, with a coefficient of -0.770, Wald value of 4.861, and significance at the 5 per cent level. This suggests that auditor mergers help to restrain clients from managing earnings and improve financial reporting quality. Again, there is a difference between the two types of mergers. For strong-strong mergers, the coefficient of *POST* is -1.060 and is significant at the 5 per cent level. For strong-weak mergers, however, the coefficient of *POST* becomes -0.867 and insignificant. This confirms the conclusion that strong-weak mergers have no influence on a client's financial reporting quality.

V. Conclusion

The Chinese audit industry is uniquely characterised by firms becoming larger and stronger through mergers. With policy support, more and more audit firms have recently been merging into bigger auditors. Under this background, we use 25 merger cases from 2003 to 2009 and examine client discretionary accruals before and after the mergers. Our results show that whereas auditor mergers have no influence on the size of client discretionary accruals, they do significantly decrease the probability that clients will have positive discretionary accruals (adjusting earnings upwards), and significantly improve the explanatory power of the discretionary accruals for stock returns, next-year earnings, and next-year cash flow. To sum up, auditor mergers help to restrain a client's earnings management and improve financial reporting quality. Similar to Chan and Wu (2011), we further find that strong-strong mergers have different effects from strong-weak mergers. The former have obviously positive effects in improving the financial reporting quality of clients, whereas the latter have no such effects.

This study contributes to the literature and practice in two ways. First, we analyse the effects of local auditor mergers on the financial reporting quality of clients in China, which is an important emerging market. Our results thus enrich existing studies on audit firm mergers. Second, our results indicate that it is fairly important for local audit firms to become bigger and stronger through mergers in order to improve financial reporting quality, especially for strong-strong mergers. Auditor mergers are thus pushing the Chinese capital market to develop in a healthy direction, and this merger process should be encouraged further. At the same time, we notice that as far as single local audit firms are concerned, their market share remains small. For example, among the top 100 audit firms in China, total revenue and audit revenue of the Big Four account for 44 per cent, with each of them accounting for 11 per cent. The local "big six", however, together account for less than 17 per cent, with each accounting for less than 3 per cent. Thus, there is vast room for local audit firms to grow.

The study does have some limitations that we must acknowledge. First, financial reporting quality is a multi-dimensional concept. Although we use discretionary accruals and then micro-profits in the robustness test as proxies, we do not consider such dimensions as earnings information content or earnings aggressiveness (Dechow *et al*., 2010). Second, our results show that strong-weak mergers have no influence on client financial reporting. One reason may be that our research period covers only one year and two years in the robustness test following the mergers, and so in this short period, the merger effects may be not realised. Another reason may be that the number of strong-weak mergers is much smaller than that of strong-strong mergers. Further studies are needed to explain this finding.

References

Please refer to pp. 105-107.