

独立董事的财务专长、公司特质信息与盈余谨慎性¹

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摘要

本文以沪深两市2003至2005年2601家A股上市公司作为研究样本,检验了独立董事的财务专长与公司特质信息和盈余谨慎性的关系。实证结果显示,具有财务专长的独立董事比例与公司披露的特质信息呈正相关关系,具有财务专业的独立董事比例越高,披露的公司特质信息越好,而且股权制衡度好的公司,独立董事财务专长与公司特质信息的关系更加明显;同时也发现,具有财务专长的独立董事比例与盈余谨慎性呈正相关关系,具有财务专长独立董事比例越高的公司,盈余谨慎性越好。这一结论表明,具有财务专长的独立董事,能有效改善公司的信息披露质量。

关键词: 独立董事、财务专长、特质信息、盈余谨慎性

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一、引言

公司信息披露对资本市场的有效运行至关重要(Healy and Palepu, 2001), 独立董事是监督公司提高信息披露质量的重要力量。早在1991年, 美国证券交易所就正式作出规定, 上市公司至少要有两名独立董事, 独立董事作为独立的第三方, 监督管理层的信息披露行为, 以客观公正的立场保护投资者利益。鉴于财务信息具有较强的专业性, 有的规定还要求一定比例的独立董事应当具有财务专长。2001年, 我国证监会发布了《关于在上市公司建立独立董事制度的指导意见》, 要求上市公司建立独立董事制度, 并且明确规定了独立董事中至少应当要有一名会计专业人士。2002年6月, 美国通过的萨班斯法案(Sarbanes-Oxley Act)也明确规定, 上市公司审计委员会中必须有一个以上的财务人员。³但是, 具有财务专长的独立董事是否更好地发挥了作用, 对信息披露质量的改进能否起到了增量贡献, 是一个值得研究的学术问题。

Xie *et al.* (2002)、Park and Shin (2004)、胡奕明, 唐松莲(2008)等对这个问题进行了研究, 他们分别研究了独立董事财务专长与盈余管理程度、盈余激进度、盈余平滑度的关系, 发现独立董事的财务专长与盈余管理程度、盈余激进度呈负相关关系, 与信息披露质量呈正相关关系, 这些研究对理解独立董事财务专长与信息披露质量的关系具有重要意义。

但公司信息披露质量是多维度的, 而上述文献的研究仅仅从独立董事财务专长与可操控应计额、总应计额、经营活动现金流量变动与利润变动的关系角度研究了独立董事的财务专长与信息披露质量的关系, 还不够全面, 要更深入地理解独立董事财务专长对信息披露质量的改进作用, 需要从更多的视角进行研究。

与上述文献不同, 本文从公司特质信息和盈余条件谨慎性角度进一步研究了独立董事财务专长与信息披露质量的关系。公司的特质信息, 是公司有别于其他公司, 与公司未来经济利益流入具有影响的信息, 是投资者在进行投资决策时最为关注的信息。至于盈余谨慎性, 尽管胡奕明, 唐松莲(2008)考察过独立董事财务专长与总应计衡量的盈余激进度的关系, 但他们采用的总应计衡量的是非条件谨慎性, 本文采用了Basu (1997)模型衡量的盈余谨慎性是条件谨慎性, 虽然衡量的都是盈余谨慎性, 但二者存在差异。条件谨慎性是指不对称的确认损失和收入, 要求确认收入时的收入可实现概率比确认损失时的损失发生概率高, 从而导致盈余反应坏消息的速度快于反应好消息的速度(Basu, 1997)。而无条件谨慎性, 是指会计上倾向于报告更低的股东权益账面价值, 在可供选择的几种会计处理方法中, 选择更能低估账面价值的会计处理方法, 比如采用加速折旧法比直线法更能低估资产。非条件谨慎性并不强调损失确认的及时性, 也与未来经济利益流入或流出的预期无关(Ball and Shivakumar, 2005)。非条件谨慎性是事先决定的, 与公司未来经济利益的消息无关, 即无条件的谨慎。但条件谨慎性是取决于事后的条件, 与公司未来经济利益的消息相关, 出现不利情形(坏消息)时才注销资产(或确认损失), 属于有条件的谨慎(Beaver and Ryan, 2005)。二者对公司契约有效性的影响不同, 条件谨慎性在提

³ 审计委员会成员是由独立董事构成, 这实质上要求独立董事中有一定比例的财务专长的独立董事。

高公司契约有效性上扮演了重要角色，对提高债务契约、管理层报酬契约和公司治理方面发挥了重要作用，但非条件谨慎性则不然(Watts, 2003; Ball and Shivakumar, 2005)。正因如此，条件谨慎性对独立董事来说更为重要，独立董事可以利用条件谨慎性监督管理层的行为，条件谨慎性的存在，将有助于独立董事监督管理层减少对自己的过度报酬支付，以及投资于净现值为负的项目等(Ahmed and Duellman, 2007)，因此，本文进一步分析独立董事财务专长与条件谨慎性的关系，也是具有其特定意义，是有别于胡奕明，唐松莲(2008)的研究。

通过本文的研究，能够更清晰地认识独立董事财务专长与信息披露质量的关系。本文的研究结论显示，具有财务专长的独立董事比例越高，公司披露的特质信息越多，盈余谨慎性也越高。这一研究结论，为独立董事财务专长对信息披露质量的改进作用提供了新的证据，更肯定地表明，独立董事的财务专长对信息披露质量具有显著的积极作用。

后面部分的安排是：第二部分进行了相关的文献回顾，并提出了相应的假说；第三部分介绍了研究模型的设计和描述；第四部分是实证检验结果和解释；第五部分对全文进行了总结。

二、文献回顾与研究假设

在现代公司治理结构中，独立董事是监督经营者的重要角色(Fama, 1980; Fama and Jensen, 1983)，人们普遍预期独立董事能够对公司的违规或不当行为提出警告(孔翔，2002)。独立董事能有效降低财务报表舞弊的概率(Beasley, 1996)，无论是来自香港、澳大利亚还是美国的经验证据都显示，董事会中独立董事比例越高，越能有效监督公司财务报告过程，降低公司的盈余管理，提高公司的财务信息披露质量(Chen and Jaggi, 2000; Klein, 2002; Davidson *et al.*, 2005)，外部独立董事确实加强了董事会对管理层行为的监督(Petra, 2005)。

我国在2001年8月，中国证监会发布了《关于在上市公司建立独立董事制度的指导意见》，建立独立董事制度。该《指导意见》规定：上市公司应当建立独立董事制度，聘任适当人员担任独立董事，其中至少包括一名会计专业人士(会计专业人士是指具有高级职称或注册会计师资格的人士)。虽然我国建立独立董事时间不长，建立这一制度也属于强制性制度安排，但独立董事仍然具有积极性参与公司治理，第一，上市公司聘请的独立董事一般都是处于各行各业的精英人物，他们已经建立了一定声誉，具有社会地位，如果不参与公司治理，公司出现信息欺诈或其他丑闻，将严重地影响其声誉和社会地位。陈艳(2008)发现，独立董事任职的上市公司业绩增长会使独立董事获得新职位的可能性增加，但如果发生违规丑闻，则会减少其获取新职位的可能性，这一研究的结论说明，中国资本市场独立董事声誉激励机制发挥了作用；第二，监管部门强化了独立董事的责任意识。独立董事任职前，要求参加监管部门组织的独立董事任职资格培训，考试合格取得任职资格，任职后每2年又必须参加继续教育，监管部门在培训班上对独立董事的法律责任等问题进行强调；第三，直接强化了独立董事的法律责任。要求独立董事对担保、关联交易、大股东占款等问题单独发表意见，强化了独立董事的责任，并对违规的独立董事进行处罚。因郑百文财务欺诈，中国证监会对其独立董事陆家豪进行严重处罚后，引

独立董事的财务专长、公司特质信息与盈余谨慎性

起了独立董事们的普遍关注，使其意识到了懈怠面临的法律风险，近年来，证监会又处罚了若干因信息披露违规公司的独立董事，如菲菲农业、ST天一、酒鬼酒、青松建化、SST亚华等公司的独立董事。所以说，我国独立董事参与公司治理具有声誉激励和法律约束两重机制。

此外，对我国证券市场的大量实证研究也发现，独立董事确实发挥了作用。比如，独立董事能有效抑制财务信息失真(程新生等，2009)，识别上市公司盈余管理行为(支晓强和童盼，2005)，显著提高财务报告的稳健性(陈少华和王利娜，2006)，确保财务信息的可靠(李维安等，2005)等。

但财务报告专业性较强，只有懂得财务会计知识的独立董事才可能对公司的信息披露行为进行更好的监控。Xie *et al.* (2002)选择了1992年、1994年和1996年六月公布的标准普尔500指数中前110名的公司作为研究对象，发现董事会和审计委员会成员具有财务专长，能有效抑制管理层进行盈余管理。Park and Shin (2004)以加拿大上市公司作为样本，同样也发现具有财务专长的独立董事能有效降低公司盈余管理的程度。

闫邹先，孙玉梅(2008)采用我国2003至2005年证监会公开处罚的制造业上市公司作为样本，研究结果表明，有专业才能的独立董事能有效抑制上市公司的合谋行为。胡奕明，唐松莲(2008)以2002至2006年我国深圳证券交易所非金融行业A股公司作为样本，研究结论显示，具有财务或会计背景的独立董事能提高上市公司盈余信息质量。王跃堂等(2008)研究也发现，具有财务专业背景的独立董事能较好地发挥监督作用，提高财务信息质量。

综上所述，独立董事的财务专长，更能保障独立董事的监督职能，有利于提高公司的信息披露质量。公司特质信息与盈余谨慎性是公司信息披露质量的两个重要维度，如果独立董事财务专长能够提高信息披露质量，那么也就是说能够帮助公司更好地披露特质信息和改进盈余谨慎性。下面对此分述之。

(一) 独立董事财务专长与公司特质信息

Coase (1937)认为，企业是促使契约成本最小化的一系列契约的联结。信息则是缔约双方缔结契约的一个重要因素。独立董事承担着监督经营者，减少信息不对称问题，降低契约成本的职责。现代资本市场高度发展，股市被认为是资源配置的场所。Tobin (1982)指出，证券市场的有效性是指市场能把有限的资源以低价格配置给最优质的企业。Ross *et al.* (2002)也认为：“有效资本市场是指资产的现有市场价格能够充分反映所有有关、可用信息的资本市场”。根据资本资产定价模型，影响证券价格的因素分为市场总体信息和公司特质信息(Firm-specific information)。公司特质信息这一概念的提出在学术界尚未形成统一的定义，但总体上指的是单个公司的区别于其他公司的特征。由于这种区别的存在，股票价格应当有所差异，以合理诱导资源配置。因此，在完善的资本市场中，股价应该是能反映企业优劣的一个信号。如果公司信息得到充分真实地披露，投资者与企业之间不存在信息不对称的状况，投资者们根据真实的信息进行理性投资，以诱使资源优化配置，股价随着公司真实价值而波动，从而导致股价能反映出公司的特质信息。换句话说，公司信息披露质量越高，股价越能反映出更多的公司特质信息。

早在1988年, Roll就发现, 回归模型的 R^2 能作为公司特质信息含量的衡量指标。Morck, Yeung, and Yu (2000)延续了对 R^2 与公司特质信息有关方面的研究, 他们的研究表明, 市场越完善, R^2 越低, 股价也越能体现出公司的特质信息, 反映出公司个股特征。同样, Durnev *et al.* (2003)和Li and Myers (2006)也发现了相同的证据。最近的文献中, Ferreira and Laux (2007)的研究发现, 公司拥有更少的反收购条款时, 体现在股价中的特质信息更多, Gul, Kim, and Qiu (2010)发现, 公司特质信息与第一大股东持股比例呈曲线关系, 而且是政府控股时, 特质信息更差, 发行外资股和由“四大”审计的公司, 其特质信息更高, Chan and Yu (2010)发现, 自从中国政府开放B股市场给内地投资者购买后, B股的股价同步性增加, 体现在股价中的公司特质信息反而下降。游家兴, 张俊生和江伟(2006)、黄波, 李湛和顾孟迪(2006)以及孔东民、申睿(2008)等也以 R^2 作为公司特质信息, 研究了股价波动、截面收益、信息成分与公司特质信息的关系。因此, 本文沿用他们的研究方法, 采用 R^2 来代表公司特质信息。

公司特质信息的披露体现在财务报告中, 财务报告信息作为资本市场上主要的信息来源, 引导着投资者的决策。但由于管理层与投资者的利益冲突, 客观上投资者迫切需要一个监督者来监督管理层披露财务报告。在履行对管理层的监督职能上, 独立董事较内部董事更能保持客观独立的立场。并且, 由于财务报告专业术语较多, 具有财务专长的独立董事能更好地履行对管理层财务信息披露的监督职能。已有的文献表明(胡奕明, 唐松莲, 2008), 具有财务专长的独立董事确实能提高公司披露的财务报告质量, 那么, 公司披露的特质信息也越多, R^2 越低。据此, 我们提出第一个假设:

H₁: 具有财务专长的独立董事比例越高, 公司披露的特质信息越多。

(二) 独立董事财务专长与盈余谨慎性

盈余谨慎性是信息披露质量的重要体现, Watts (2003)认为, 盈余谨慎性能够提高契约机制的效果。2006年2月, 财政部颁布的《企业会计准则》中规定, “企业对交易或事项进行会计确认、计量和报告应当保持应有的谨慎, 不应高估资产或者收益、低估负债或者费用”。这意味着, 谨慎性要求企业确认所有可能的损失, 不确认任何不确定的收益。这有助于抑制管理层确认收益的随意性, 防止管理层通过高估收益或资产损害债权人或股东的利益达到为自身牟利的目的。

不少文献研究表明, 独立董事能有效促进谨慎性原则的运用。Beekes *et al.* (2004)采用1993至1995年英国公司作为研究样本, 发现外部董事能更及时地识别出坏消息。Ahmed and Duellman (2007)的研究则指出, 外部董事持有公司股份比例越高, 盈余谨慎性越强。García Lara *et al.* (2007)选择1997至2002年西班牙上市公司作为样本, 采用Basu (1997)和Ball and Shivakumar (2005)的研究方法, 研究公司治理变量对盈余谨慎性的影响, 发现独立董事比例越高, 盈余谨慎性也越高。陈少华和王利娜(2006)选取2001至2003年沪深两市A股上市公司作为样本分析公司治理对稳健性财务报告动机的影响, 发现国有上市公司比非国有上市公司财务报告稳健性差, 治理结构差的公司财务报告稳健性较差, 独立董事比例较高的公司确认坏消息更为及时。由上可知, 独立董事能起到提高盈余谨慎性的作用。

独立董事有效发挥监督作用的条件有两个：一是拥有足够的动机去监督，并且确实实施了监督；二是独立董事必须了解财务会计报告系统。财务专长是独立董事监督财务报告质量的专业胜任能力(Beekes *et al.*, 2004)，鉴于财务会计信息的专业性，只有具有财务专长的独立董事，才能从专业角度更好地监督管理层对谨慎性原则的运用，确保管理层不会滥用谨慎性原则。由此，我们推断，具有独立董事的财务专长对财务报告能够提供更好的监督，对盈余谨慎性具有增量贡献。据此，本文提出第二个假设：

H₂：具有财务专长的独立董事比例越高，盈余谨慎性越强。

三、研究设计

(一)数据来源

本文选取了2003至2005年我国沪深两市上市的A股非金融、保险类公司作为初始研究样本，然后阅读公司年报获取独立董事是否具有财务专长的背景资料，其中2923个公司有完整的独立董事背景资料，在2923家具有独立董事背景资料的公司中，删去了85家净资产为负的公司，删去了237家5年总资产报酬率标准差、董事会特征、计算R²等相关变量缺失的公司，最终得到的样本公司为2601个。本文所用数据，除了独立董事财务专长通过阅读年报获得外，其他数据均来自CSMAR数据库，或通过CSMAR提供的相关数据计算获得。

(二)检验模型和变量

1. 独立董事财务专长与特质信息

为了研究独立董事财务专长与公司特质信息的关系，本文建立了如下模型：

$$\begin{aligned}
 R^2/SYNCH = & \alpha + \beta_1 ACCOUT + \beta_2 OUTSIDE + \beta_3 DIRSIZE + \beta_4 DIRMEET \\
 & + \beta_5 AUDITCOM + \beta_6 LEV + \beta_7 STDROA + \beta_8 LnTA + \beta_9 BIG4 \\
 & + \beta_{10} MB + \beta_{11} DIFFOWN + \beta_{10} TOP1 + \beta_{11} TOP1SQ + \beta_{12} BSH \\
 & + \beta_{13} HSH + \beta_{14} NGOVTOP1 + \beta_{15} VOL + \beta_{16} LnMV \\
 & + \beta_{17} LagR^2/LagSYNCH + \sum IND_i + \sum YR_j + \varepsilon
 \end{aligned} \quad (1)$$

模型(1)中，相关变量的定义如下：

(1) 因变量

R²和SYNCH为因变量，代表公司的特质信息。对R²的计算，沿用了Morck, Yeung and Yu (2000)的模型。该模型如下：

$$r_{it} = \alpha_i + \beta r_{mt} + \varepsilon_{it}$$

该模型中， r_{it} 是公司个股*i*在*t*期的周回报率； r_{mt} 是*t*期的市场周回报率； ε_{it} 为残差。

该模型中，残差越大，说明个股回报偏离市场回报越大，说明公司股价对特质信息有所反应，回归方程的拟合系数 R^2 越小，所以我们可以用 R^2 来描述公司特质信息。为了避免周末效应，我们以周三的数据为基础计算每周收益，在计算中，我们取当年度所有交易日数据与对应的市场收益率进行回归。市场收益率为深沪两市所有公司的流通市值加收益率（剔除了IPO后30天的个股收益率数据）。

另外，因 R^2 的取值范围在 $[0,1]$ ，为了扩大取值范围，回归分析时我们还对 R^2 进行变换 $SYNCH = \log(R^2/(1-R^2))$ ，该变量仍表示公司特质信息，由此得到 $SYNCH$ 。

(2) 解释变量

$ACCOU$ 为解释变量，定义为独立董事中具有财务专长的独立董事比例，等于财务专长独立董事人数除以独立董事总人数。

对于独立董事财务专长，本文把毕业于财务管理、会计学、经济学、管理学、工商管理及金融学等专业的独立董事定义为具有财务专长的独立董事。之所以把经济学、金融学、管理学、工商管理专业背景的独立董事也认定为具有财务专长的独立董事，是因为在我国大学的经济学、金融学、管理学、工商管理专业的课程设置上，会计学往往是这些专业的专业基础课程，因此，经济学、金融学、管理学、工商管理等专业的学生也学习了相关的财务会计课程，掌握了一定的会计、财务知识，故我们把毕业于这些专业背景的独立董事认定为具有财务专长。

(3) 控制变量

为了控制其他变量对公司特质信息的影响，根据相关文献，本文选取了以下控制变量：

董事会特征变量。 $OUTSIDE$ ，为独立董事比例，等于独立董事除以董事会总人数。 $DIRSIZE$ 是董事会规模，等于董事会总人数。 $AUDITCOM$ ，是审计委员会的设立情况，设立审计委员会取值为1，其他为0。 $DIRMEET$ ，为董事会会议次数，表示董事会的勤勉程度。因Chen and Jaggi (2000)研究指出，独立董事比例与信息披露质量之间存在正相关关系。Jensen (1993)认为，规模小的董事会更容易发挥监督作用，Beasley (1996)和Vafeas (2000)等研究表明董事会规模与信息披露质量之间呈负相关关系。Ho and Wong (2001)研究发现，审计委员会的设立能显著提高上市公司自愿性信息披露程度。胡奕明，唐松莲(2008)研究发现，设立了审计委员会的公司，盈余管理程度较低。Xie *et al.* (2002)发现，董事会会议次数越多，上市公司当期操控性应计项目越少。因此在模型中我们控制了上述变量。

公司特征变量。 LEV ，为资产负债率，等于负债总额除以资产总额。资产负债率越高，负债越多，管理层压力越大，进行信息操控的动机越强，胡奕明，唐松莲(2008)发现，资产负债率与盈余管理程度之间存在正相关关系，Eng and Mak (2003)还发现，公司债务水平与自愿性信息披露呈负相关关系，故我们模型中控制了此变量。 $STDROA$ ，为前5年总资产报酬率的标准差。⁴公司回报率波动的潜在原因是公

⁴ 如果上市年限不到5年，则为实际上市年限总资产报酬率的标准差。

独立董事的财务专长、公司特质信息与盈余谨慎性

司基本特征层面的波动，Ashbaugh *et al.* (2006)、Piotorski and Roulstone (2004)等都在研究控制此变量，因此，我们也把此变量纳入控制变量。 $LnTA$ 为资产总额的自然对数，是公司规模的替代变量。Roll (1988)研究指出，公司规模会影响股价对公司特质信息的反映，故也控制了此变量。Gul, Kim, and Qiu (2010)发现第一大股东持股比例及其平方($TOP1$ 、 $TOP1SQ$)、控制人性质($NGOVTOPI$)、境外投资者持股比例(BSH 、 HSH)影响公司的特质信息，此外，他们在研究时还控制了年股票交易换手率(VOL)、股票市值($LnMV$)等，因此，我们也在模型中控制了这些变量。

表1 变量定义一览表

变量	含义
因变量：	
R^2	公司特质信息
$SYNCH$	因 R^2 的取值在[0,1]，故回归分析时还对 R^2 进行变换 $SYNCH = \log(R^2/(1-R^2))$ ，以扩大取值范围，该变量仍表示公司特质信息
待检验变量：	
$ACCOUNT$	独立董事中财务独立董事的比例
控制变量：	
$OUTSIDE$	独立董事比例
$DIRSIZE$	董事会规模
$DIRMEET$	董事会会议次数
$AUDITCOM$	审计委员会设立情况，如设立审计委员会为1，其他为0
LEV	资产负债率，等于负债总额除以资产总额
$STDROA$	前5年总资产报酬率的标准差，如上市年限未满足5年，为实际上市年份总资产报酬率的标准差
$LnTA$	资产总额的自然对数
$BIG4$	审计师类型，如审计师为国际四大等于1，其他为0
MB	所有者权益的市场价值与账面价值之比
$DIFFOWN$	第一大股东与前十大股东持股比例之比
$TOP1$	第一大股东持股比例
$TOP1SQ$	第一大股东持股比例的平方
BSH	为虚拟变量，如果公司发行B股等于1，其他等于0
HSH	为虚拟变量，如果公司发行H股等于1，其他等于0
$NGOVTOPI$	为虚拟变量，如果公司控制人性质为非国有等于1，其他等于0
VOL	股票交易换手率，等于年股票交易量除以公司总股数
$LnMV$	公司流通股市值，等于年流通股市值的自然对数
$LagR^2/LagSYNCH$	等于滞后一期的 $R^2/SYNCH$

审计师变量。*BIG4*，为虚拟变量，公司聘请四大审计时为1，否则为0。通常，四大作为国际上知名的会计师事务所，无论是从规模上，还是从专业水平上，都比一般的中小型事务所要优越一些。因此，由于其声誉效果，一般公众均认为，由四大审计的公司信息披露质量更高。Eng and Mak (2003)在其研究公司治理和自愿性信息披露的文章中也把审计师声誉作为一个控制变量。故本文也纳入了这一控制变量。

此外，我们根据游家兴，张俊生，江伟(2006)、Piotorski and Roulstone (2004)等人的研究设计，在模型中控制了*MB*和*DIFDOWN*。*MB*，为所有者权益的市场价值与账面价值之比，*DIFDOWN*，为第一大股东与前十大股东持股比例之比。

同时，本文还控制了滞后一期的公司特质信息*LagR²/LagSYNCH*，以及年度(*YR*)和行业(*IND*)对信息披露质量的固定效应。

2. 独立董事财务专长与盈余谨慎性

为了研究独立董事财务专长与盈余谨慎性的关系，本文借鉴了被广泛运用的Basu (1997)模型来度量盈余谨慎性。

Basu (1997)原始模型为：

$$X/P_{t-1} = \alpha + \beta_1 D + \beta_2 R + \beta_3 R * D + \varepsilon$$

模型中，*X*为每股盈余，*P_{t-1}*为年初的股票开盘价，因我国上市公司上年度年报披露截止日期为本年度的4月30日，故年初开盘价采用的是当年5月第一个交易日的股票开盘价。*D*为虚拟变量，如果回报率为负则为1，其他为0。*R*为公司年度股票回报率，因公司的年报披露日期可截止在下年的4月底，因此，本文采用的年度股票回报率是本年5月1日至下年4月30日的回报率。

我们在Basu (1997)的模型中加入具有财务专长独立董事比例*ACCOUT*，使用的检验模型如下：

$$\begin{aligned} X/P_{t-1} = & \alpha + \beta_1 D + \beta_2 R + \beta_3 ACCOUT + \beta_4 R * D \\ & + \beta_5 R * ACCOUT + \beta_6 D * ACCOUT \\ & + \beta_7 D * R * ACCOUT + \varepsilon \end{aligned} \quad (2)$$

如此， β_7 衡量的就是财务专长的独立董事所带来的谨慎性，如果 β_7 显著为正，说明随着具有财务专长的独立董事比例的提高，公司的盈余谨慎性得到了改进。

同时，为了更好地控制其他变量对盈余谨慎性的影响，根据Khan and Watts (2009)，在模型(2)的基础上，进一步控制了公司所有者权益的市值一账面值比*MB*、财务杠杆*LEV*和规模*LnMV*。由于谨慎性主要受契约(包括债务契约和报酬契约)、诉讼、税收和监管的影响(Watts, 2003)，Khan and Watts (2009)认为，这些因素又随着投资机会的变化而变化，因而，投资机会体现了谨慎性要求，而在研究中被广泛使

独立董事的财务专长、公司特质信息与盈余谨慎性

用作为投资机会替代变量的就是市值账面值比、财务杠杆和规模，因此在模型中应控制这3个变量，控制变量后建立的模型(3)如下：

$$\begin{aligned}
 X/P_{t-1} = & \alpha + \beta_1 D + \beta_2 R + \beta_3 ACCOUT + \beta_4 R * D \\
 & + \beta_5 R * ACCOUT + \beta_6 D * ACCOUT + \beta_7 D * R * ACCOUT \\
 & + \beta_8 MB + \beta_9 R * MB + \beta_{10} D * MB + \beta_{11} D * R * MB \\
 & + \beta_{12} LEV + \beta_{13} R * LEV + \beta_{14} D * LEV + \beta_{15} D * R * LEV \\
 & + \beta_{16} LnMV + \beta_{17} R * LnMV + \beta_{18} D * LnMV + \beta_{19} D * R * LnMV + \varepsilon
 \end{aligned} \tag{3}$$

模型(3)中， MB 、 LEV 和 $LnMV$ 的含义见表1。

(三)样本的描述性统计特征

表2列示了变量的描述性统计特征。从表2可以看出， R^2 的均值为0.387，最小值为0.003，最大值为0.686，说明各个公司的特质信息存在差异。 $SYNCH$ 的取值范围明显大于 R^2 ，达到了我们对 R^2 进行转换的目的。表2中具有财务专长的独立董事人数， ACC 的均值为1.97，说明公司中具有财务专业背景的独立董事有2名左右， $ACCOUT$ 的均值为0.616，说明独立董事中具有财务背景的独立董事比例较高，占了61.6%。

控制变量中， $INDE$ 为独立董事人数，均值为3.246，最小值为1，最大值为8，说明上市公司聘请的独立董事在3人左右。而 $DIRSIZE$ 显示，董事人数在9—10之间，最小为4人，最大为19人。独立董事比例达到了33.8%，总体满足了证监会三分之一的要求。同时表2还表明，董事会每年召开7—8次会议，有45.5%的公司设立了审计委员会，上市公司资产负债率为49.2%，上市公司中由四大审计的有6.9%，所有者权益市场价值与账面价值之比为2.534，⁵说明上市公司有一定非条件谨慎性。第一大股东持股比例为42.2%，第一大股东与前十大股东持股比例之比为0.687，说明上市公司股权集中度较高，第一大股东持股比例达到前十大股东持股比例的68.7%。此外，样本公司中同时发行B股的公司占6.4%，发行H股的公司占2%，由民营控股的公司占28.1%。

四、研究结果和分析

(一)独立董事财务专长与特质信息研究的实证结果

1. 相关系数分析结果

表3列示了变量之间的Pearson相关系数，从表3可知，独立董事中财务独立董事的比例 $ACCOUT$ 与 R^2 、 $SYNCH$ 的相关系数分别为-0.053和-0.054，均1%的显著性水平上显著，二者呈负相关关系，表明具有财务专长的独立董事比例越高， R^2 、 $SYNCH$ 越低，公司特质信息越高，与假设预期相符。同时表3还表明， R^2 、 $SYNCH$ 与董事会会议次数 $DIRMEET$ 、资产负债率 LEV 、前5年总资产报酬率的标准差

⁵ 在后续的相关性和回归分析中，因采用 MB 的原始变量分析时，系数很小，不便于表述和观察，因此后续表格中的研究结果是采用 MB 原始变量缩小1000倍后的分析结果。

STDROA、所有者权益市场价值与账面价值之比 *MB*、是否发行B股 *BSH*、是否为民营控股 *NGOVTOPI*、年股票交易换手率 *VOL*、流通股市值自然对数 *LnMV* 呈显著负相关关系，而与资产总额自然对数 *LnTA*、第一大股东持股比例 *TOPI*、第一大股东持股比例的平方 *TOPISQ*、第一大股东与前十大股东持股比例之比 *DIFDOWN* 呈显著正相关关系。但是与独立董事比例 *OUTSIDE*、董事会规模 *DIRSIZE*、是否设立审计委员会 *AUDITCOM*、是否由“四大”审计以及是否发行H股 *HSH* 的相关系数不显著。

此外，表3还显示，财务专长独立董事比例与控制变量中的独立董事比例、董事会会议次数、资产负债率、是否民营控股呈显著正相关关系，与董事会规模、资产总额自然对数、第一大股东持股比例及其平方、是否发行B股呈显著负相关关系。部分控制变量之间也存在显著的相关关系。

表2 描述性统计量

Variable	Obs	Mean	Std. Dev.	Min	Max
R^2	2601	0.387	0.129	0.003	0.686
<i>SYNCH</i>	2601	-0.527	0.691	-5.692	0.782
<i>ACC</i>	2601	1.970	0.864	0.000	5.000
<i>ACCCOUT</i>	2601	0.616	0.250	0.000	1.000
<i>INDE</i>	2601	3.246	0.778	1.000	8.000
<i>OUTSIDE</i>	2601	0.338	0.052	0.071	0.600
<i>DIRSIZE</i>	2601	9.681	2.112	4.000	19.000
<i>DIRMEET</i>	2601	7.489	3.035	2.000	27.000
<i>AUDITCOM</i>	2601	0.455	0.498	0.000	1.000
<i>LEV</i>	2601	0.492	0.186	0.008	0.991
<i>STDROA</i>	2601	0.042	0.070	0.000	1.578
<i>LnTA</i>	2601	21.249	0.924	18.322	25.734
<i>BIG4</i>	2601	0.069	0.253	0.000	1.000
<i>MB</i>	2601	2.534	5.594	0.373	170.726
<i>DIFDOWN</i>	2601	0.687	0.216	0.164	0.994
<i>TOPI</i>	2601	0.422	0.165	0.006	0.850
<i>TOPISQ</i>	2601	0.205	0.146	0.000	0.722
<i>BSH</i>	2601	0.064	0.244	0.000	1.000
<i>HSH</i>	2601	0.020	0.140	0.000	1.000
<i>NGOVTOPI</i>	2601	0.281	0.449	0.000	1.000
<i>VOL</i>	2601	2.677	1.790	0.037	15.240
<i>LnMV</i>	2601	13.205	0.820	10.443	16.806
<i>LagR²</i>	2601	0.416	0.206	0.000	1.000

注：表2中 *ACC* 为具有财务专长独立董事人数，*INDE* 为独立董事人数，其他变量的含义请见表1。

表 3 Pearson 相关系数表

	<i>R</i> ²	<i>SYNCH</i>	<i>ACCONT</i>	<i>OUTSIDE</i>	<i>DIRSIZE</i>	<i>DIRMEET</i>	<i>AUDITCOM</i>	<i>LEV</i>	<i>STDROA</i>	<i>LnTA</i>
<i>R</i> ²	1.000									
<i>SYNCH</i>	0.960 (0.000)***	1.000								
<i>ACCONT</i>	-0.053 (0.007)***	-0.054 (0.006)***	1.000							
<i>OUTSIDE</i>	-0.011 (0.564)	0.004 (0.827)	0.336 (0.000)***	1.000						
<i>DIRSIZE</i>	0.007 (0.711)	0.008 (0.680)	-0.205 (0.000)***	-0.242 (0.000)***	1.000					
<i>DIRMEET</i>	-0.102 (0.000)***	-0.097 (0.000)***	0.042 (0.032)**	0.034 (0.084)*	-0.022 (0.260)	1.000				
<i>AUDITCOM</i>	-0.008 (0.675)	-0.004 (0.822)	0.023 (0.240)	0.054 (0.006)***	0.101 (0.000)***	0.031 (0.115)	1.000			
<i>LEV</i>	-0.159 (0.000)***	-0.152 (0.000)***	0.047 (0.017)**	0.053 (0.007)***	0.008 (0.691)	0.129 (0.000)***	0.001 (0.975)	1.000		
<i>STDROA</i>	-0.229 (0.000)***	-0.218 (0.000)***	0.026 (0.185)	0.019 (0.322)	-0.090 (0.000)***	0.045 (0.023)**	-0.056 (0.005)***	0.165 (0.000)***	1.000	
<i>LnTA</i>	0.134 (0.000)***	0.148 (0.000)***	-0.041 (0.039)**	-0.008 (0.684)	0.216 (0.000)***	0.036 (0.064)*	0.037 (0.059)*	0.159 (0.000)***	-0.234 (0.000)***	1.000
<i>BIG4</i>	0.022 (0.270)	0.032 (0.105)	0.009 (0.645)	0.017 (0.387)	0.118 (0.000)***	0.021 (0.279)	0.057 (0.004)***	-0.100 (0.000)***	-0.041 (0.036)**	0.306 (0.000)***

表 3 Pearson 相关系数表(续)

	R^2	SYNCH	ACCOU	OUTSIDE	DIRSIZE	DIRMEET	AUDITCOM	LEV	STDR0A	LnTA
<i>MB</i>	-0.188 (0.000)***	-0.191 (0.000)***	0.008 (0.679)	-0.014 (0.486)	-0.037 (0.061)*	0.011 (0.563)	-0.017 (0.400)	0.179 (0.000)***	0.163 (0.000)***	-0.189 (0.000)***
<i>DIFOWN</i>	0.130 (0.000)***	0.117 (0.000)***	-0.022 (0.258)	-0.021 (0.278)	-0.092 (0.000)***	-0.027 (0.173)	-0.002 (0.914)	-0.102 (0.000)***	-0.070 (0.000)***	0.193 (0.000)***
<i>TOPI</i>	0.057 (0.004)***	0.054 (0.006)***	-0.076 (0.000)***	-0.017 (0.394)	-0.033 (0.098)*	-0.050 (0.010)***	0.015 (0.440)	-0.137 (0.000)***	-0.104 (0.000)***	0.208 (0.000)***
<i>TOPI5Q</i>	0.053 (0.007)***	0.052 (0.008)***	-0.082 (0.000)***	-0.014 (0.483)	-0.034 (0.079)*	-0.046 (0.019)**	0.011 (0.588)	-0.126 (0.000)***	-0.101 (0.000)***	0.222 (0.000)***
<i>B5H</i>	-0.059 (0.003)***	-0.042 (0.034)**	-0.037 (0.063)**	0.023 (0.252)	0.048 (0.015)**	0.056 (0.004)***	-0.036 (0.064)*	0.026 (0.186)	0.102 (0.000)***	0.133 (0.000)***
<i>H5H</i>	-0.020 (0.318)	-0.009 (0.645)	0.009 (0.654)	0.021 (0.294)	0.146 (0.000)***	0.011 (0.593)	0.019 (0.346)	-0.017 (0.387)	0.004 (0.849)	0.285 (0.000)***
<i>NGOVTOPI</i>	-0.034 (0.080)*	-0.042 (0.031)**	0.041 (0.036)**	0.101 (0.000)***	-0.136 (0.000)***	0.076 (0.000)***	-0.031 (0.114)	0.079 (0.000)***	0.081 (0.000)***	-0.203 (0.000)***
<i>VOL</i>	-0.061 (0.002)***	-0.029 (0.135)	0.030 (0.132)	0.094 (0.000)***	-0.039 (0.046)**	-0.019 (0.327)	0.010 (0.605)	0.068 (0.001)***	0.059 (0.003)***	-0.236 (0.000)***
<i>LnMV</i>	-0.045 (0.023)**	-0.042 (0.031)**	-0.026 (0.193)	-0.050 (0.011)**	0.144 (0.000)***	0.014 (0.488)	0.033 (0.091)*	-0.162 (0.000)***	-0.169 (0.000)***	0.729 (0.000)***

表 3 Pearson 相关系数表 (续)

	<i>BIG4</i>	<i>MB</i>	<i>DIFFOWN</i>	<i>TOPI</i>	<i>TOPISQ</i>	<i>BSH</i>	<i>HSH</i>	<i>NGOVTOPI</i>	<i>VOL</i>	<i>LnMV</i>
<i>BIG4</i>	1.000									
<i>MB</i>	-0.031 (0.116)	1.000								
<i>DIFFOWN</i>	0.003 (0.885)	-0.070 (0.000)***	1.000							
<i>TOPI</i>	0.055 (0.005)***	-0.044 (0.026)**	0.839 (0.000)***	1.000						
<i>TOPISQ</i>	0.047 (0.017)**	-0.040 (0.044)**	0.808 (0.000)***	0.983 (0.000)***	1.000					
<i>BSH</i>	0.221 (0.000)***	-0.017 (0.394)	0.012 (0.528)	-0.073 (0.000)***	-0.070 (0.000)***	1.000				
<i>HSH</i>	0.406 (0.000)***	-0.025 (0.202)	-0.090 (0.000)***	0.042 (0.032)**	0.029 (0.136)	-0.037 (0.057)*	1.000			
<i>NGOVTOPI</i>	-0.089 (0.000)***	0.038 (0.053)*	-0.308 (0.000)***	-0.319 (0.000)***	-0.309 (0.000)***	-0.062 (0.002)***	-0.065 (0.001)***	1.000		
<i>VOL</i>	-0.134 (0.000)***	0.051 (0.009)***	-0.078 (0.000)***	-0.028 (0.160)	-0.019 (0.344)	-0.237 (0.000)***	-0.145 (0.000)***	0.073 (0.000)***	1.000	
<i>LnMV</i>	0.218 (0.000)***	-0.060 (0.002)***	0.161 (0.000)***	0.120 (0.000)***	0.135 (0.000)***	-0.060 (0.002)***	0.134 (0.000)***	-0.167 (0.000)***	-0.206 (0.000)***	1.000

2. 多元回归分析结果

表4列示了公司特质信息为因变量的回归结果。表4显示，使用 R^2 为因变量时， $ACCOUT$ 的系数为-0.026，在1%水平上显著，使用 $SYNCH$ 为因变量时， $ACCOUT$ 的系数为-0.174，也在1%水平上显著，这表明，财务专长独立董事比例越高，公司披露的特质信息越丰富，与这相关系数的分析结果一致，符合预期假设。

控制变量中，我们注意到无论是采用 R^2 还是 $SYNCH$ 作为因变量， BSH 和 HSH 的系数均显著为负，表明发行了B股或H股的公司特质信息越好，这一结果与Gul, Kim, and Qiu (2010)的结论相同，境外投资者发挥了良好的治理作用。但是 $TOPI$ 、 $TOPISQ$ 以及 $BIG4$ 的系数与Gul, Kim, and Qiu (2010)的结果不同，造成这一结果，可能是因为本文采用的模型与他们不同，本文除了采用Gul, Kim, and Qiu (2010)的控制变量外，还控制了独立董事比例、董事会规模、董事会会议次数、是否设立审计委员会、股权制衡度等变量，同时研究样本的差异也可能是原因之一，本文选取的样本区间是2003年至2005年，而Gul, Kim, and Qiu (2010)的样本区间是1996年至2003年。此外，表4还表明，董事会会议次数 $DIRMEET$ 、资产负债率 LEV 、前五年总资产报酬率的标准差 $STDROA$ 、资产总额的自然对数 $LnTA$ 、流通市值的自然对数 $LnMV$ 的系数显著为负，这表明董事会的勤勉程度、财务杠杆，业绩变化程度、以及公司规模对公司特质信息有正面作用。而第一大股东持股比例与前十大股东持股比例之比 $DIFFOWN$ 以及滞后一期的公司特质信息 $LagR^2$ 和 $LagSYNCH$ 的系数显著为正，说明公司的股权制衡越差，其特质信息越差，前一期公司的特质信息与本期公司特质信息显著正相关，前一期公司特质信息好的公司，本期的公司特质信息也较好。

股权制衡往往被认为是一个好的治理结构，可以防止大股东的“一股独霸”，Maury and Pajuste (2005)、Faccio *et al.* (2001)、Volpin (2002)、白重恩等(2005)等发现，大股东之间权力均衡时，治理机制更能有效发挥作用，包括提升公司业绩(公司价值)、减少对小股东的利益侵占，实施有效并购等。因此，表5我们进一步设置了 $ACCOUT$ 与 $DIFFOWN$ 的交互项分析股权制衡对独立董事财务专长与公司特质信息关系的影响，其中 $DIFFOWN$ 是第一大股东持股比例与前十大股东持股比例之比，代表的是股权制衡情况，该比例越高，控股股东的控制力越强，股权制衡越差。表5的回归结果表明，当以 R^2 为因变量时， $ACCOUT$ 与 $DIFFOWN$ 的交互项系数为0.112，1%水平上显著；以 $SYNCH$ 为因变量时， $ACCOUT$ 与 $DIFFOWN$ 的交互项系数为0.636，1%水平上显著。这说明，随着控股股东控制力的提高，独立董事财务专长对公司特质信息的积极作用下降，控股股东的控制力影响了独立董事财务专长与公司特质信息的关系，大股东之间的股权制衡有利于提高独立董事财务专长对公司特质信息的积极作用。

表4 独立董事财务专长与公司特质信息的回归结果

变量	R^2		$SYNCH$	
	系数	P值	系数	P值
INTERCEPT	-0.078	0.263	-3.322***	0.000
ACCOUT	-0.026***	0.003	-0.174***	0.000
OUTSIDE	0.002	0.965	0.085	0.724
DIRSIZE	-0.001	0.336	-0.010	0.107
DIRMEET	-0.003***	0.000	-0.017***	0.000
AUDITCOM	0.000	0.978	-0.004	0.851
LEV	-0.229***	0.000	-1.365***	0.000
STDROA	-0.189***	0.000	-0.942***	0.000
LnTA	0.086***	0.000	0.543***	0.000
BIG4	0.011	0.243	0.071	0.193
MB	0.018	0.964	-0.924	0.686
DIFFOWN	0.213***	0.000	1.199***	0.000
TOP1	-0.388***	0.000	-2.380***	0.000
TOP1SQ	0.102	0.207	0.759*	0.091
BSH	-0.104***	0.000	-0.573***	0.000
HSH	-0.074***	0.000	-0.423***	0.000
NGOVTOP1	0.008	0.131	0.016	0.570
VOL	0.0003	0.823	0.003	0.690
LnMV	-0.094***	0.000	-0.576***	0.000
LagR ² /LagSYNCH	0.157***	0.000	0.030***	0.000
年度	控制		控制	
行业	控制		控制	
OBS	2601		2601	
R ²	0.328		0.283	
Adj.R ²	0.311		0.271	

(二) 独立董事财务专长与盈余谨慎性的研究结果

表6列示了利用Basu (1997)模型分析独立董事财务专长对盈余谨慎性影响的回归结果。模型1列示的是Basu (1997)原始模型的结果， DR 与 R 交互项的系数显著为正，表明公司确认坏消息比确认好消息更为及时，与以前文献的结论一致。模型2在模型1基础上加入了 $ACCOUT$ ，研究结果发现 D 、 R 和 $ACCOUT$ 等3个变量的交互项系数为0.080，P值为0.040，在5%水平上显著，说明随着财务独立董事的提高，公司确认坏消息比好消息的及时性增强，这表明具有财务专长的独立董事改进了公司的盈余谨慎性。模型3加入了可能影响公司盈余谨慎性的3个变量：所有者权益的市值与账面价值比 MB 、财务杠杆 LEV 和公司规模 $LnMV$ ，重新检验财务独立董事对盈余谨慎性的影响。模型3的检验结果显示，3个变量 D 、 R 和 $ACCOUT$ 的交互项系数为0.062，P值0.090，在1%的显著性水平上显著，检验结果进一步说明，在控制了其他因素后，具有财务专长独立董事对盈余谨慎性仍具有增量贡献。上述结论与预期假设一致，财务专长独立董事因熟知财务知识，具有改进公司盈余谨慎性的作用。

表5 股权制衡对独立董事财务专长与公司特质信息关系的影响

变量	R^2		$SYNCH$	
	系数	P值	系数	P值
INTERCEPT	-0.026	0.716	-0.303***	0.000
ACCOUT	-0.104***	0.000	-0.617***	0.000
ACCOUT*DIFFOWN	0.112***	0.005	0.636***	0.004
OUTSIDE	-0.002	0.962	0.062	0.794
DIRSIZE	-0.001	0.347	-0.010	0.113
DIRMEET	-0.003***	0.000	-0.017***	0.000
AUDITCOM	0.001	0.904	-0.002	0.932
LEV	-0.228***	0.000	-1.362***	0.000
STDROA	-0.187***	0.000	-0.930***	0.000
LnTA	0.086***	0.000	0.544***	0.000
BIG4	0.013	0.193	0.078	0.151
MB	0.006	0.989	-0.989	0.665
DIFFOWN	0.143***	0.000	0.803***	0.000
TOP1	-0.405***	0.000	-2.475***	0.000
TOP1SQ	0.124	0.127	0.881*	0.051
BSH	-0.105***	0.000	-0.576***	0.000
HSH	-0.074***	0.000	-0.420***	0.000
NGOVTOP1	0.008	0.117	0.018	0.528
VOL	0.000	0.897	0.003	0.746
LnMV	-0.094***	0.000	-0.577***	0.000
LagR ² /LagSYNCH	0.155***	0.000	0.030***	0.000
年度	控制		控制	
行业	控制		控制	
OBS	2601		2601	
R ²	0.330		0.285	
Adj.R ²	0.319		0.274	

(三) 进一步测试和稳健性检验

1. 财务专长独立董事比例的其他替代变量

进一步地, 具有财务专长独立董事变量, 采用了另外两个指标进行检验。首先, 对于财务专长独立董事的定义, 更狭义地定义为具有会计、财务管理、审计专业的独立董事, 排除了其他非会计学院(系)开设的经济、金融、管理学、工商管理等专业背景的独立董事, 按此定义计算的具有财务专长独立董事的均值为1.02, 说明公司具有会计、财务管理、审计专业背景的独立董事只有一个左右, 这与证监会的要求总体是一致的。如果与前面广义的财务专长独立董事均值为1.97对比可知, 大部分上市公司除了按证监会要求聘请了一名会计专业人士外, 还聘请了一名具有财务背景的其他专业独立董事。按此定义的财务专长独立董事比例ACCOUT1的均值为0.324, 占了三分之一左右。

表6 独立董事财务专长与盈余谨慎性

变量	模型1		模型2		模型3	
	系数	P值	系数	P值	系数	P值
INTERCEPT	0.021***	0.000	0.017**	0.030	-0.180***	0.000
<i>D</i>	-0.005	0.252	-0.005	0.653	-0.040	0.559
<i>R</i>	0.036***	0.000	0.060***	0.001	0.022	0.845
<i>D</i> * <i>R</i>	0.021**	0.031	-0.030	0.255	-0.008	0.962
<i>ACCOUT</i>			0.007	0.554	0.004	0.706
<i>D</i> * <i>ACCOUT</i>			-0.001	0.975	0.005	0.753
<i>R</i> * <i>ACCOUT</i>			-0.039	0.171	-0.032	0.229
<i>D</i> * <i>R</i> * <i>ACCOUT</i>			0.080**	0.040	0.062*	0.090
<i>MB</i>					-0.507	0.628
<i>R</i> * <i>MB</i>					-0.220	0.934
<i>D</i> * <i>MB</i>					0.484	0.668
<i>D</i> * <i>R</i> * <i>MB</i>					1.162	0.690
<i>LEV</i>					-0.021	0.173
<i>R</i> * <i>LEV</i>					0.030	0.400
<i>D</i> * <i>LEV</i>					-0.030	0.166
<i>D</i> * <i>R</i> * <i>LEV</i>					0.134***	0.005
<i>LnMV</i>					0.016***	0.000
<i>R</i> * <i>LnMV</i>					0.001	0.881
<i>D</i> * <i>LnMV</i>					0.003	0.522
<i>D</i> * <i>R</i> * <i>LnMV</i>					-0.008	0.507
OBS	2061		2061		2061	
<i>R</i> ²	0.103		0.105		0.232	
Adj. <i>R</i> ²	0.102		0.102		0.227	

其次，独立董事财务专长比例变量，采用具有财务专长的独立董事除以董事会总人数计算。按此标准计算的具有财务专长独立董事比例*ACCOUT2*的均值为0.207，最小值为0，最大值为0.600。

表7、表8分别列示了采用上述两个财务专长独立董事比例的检验结果。表7列示的是两个新的财务专长独立董事比例变量与公司特质信息*R*²的回归结果，表8列示的是与盈余谨慎性的回归结果。表7显示，模型1中，*ACCOUT1*的系数为-0.023，P值为0.045，在5%水平上显著，模型2中，*ACCOUT2*的系数为-0.072，P值为0.006，在1%水平上显著，上述结果仍然显示财务专长独立董事比例的提高对公司特质信息具有改进作用，与前述研究结果一致。此外，我们也使用了*ACCOUT1*和*ACCOUT2*与*SYNCH*为因变量进行回归，发现*ACCOUT1*的系数为-0.056，不显著，*ACCOUT2*的系数为-0.422，在1%水平上显著。表8表明，采用*ACCOUT1*回归分析时，*D*、*R*、*ACCOUT1*的交互项系数符号虽然与预期一致，但不显著，采用*ACCOUT2*回归分析时，*D*、*R*、*ACCOUT2*的交互项系数为0.173，在10%水平上显著，仍然表明财务专长独立董事对盈余谨慎性具有促进作用，与前述结论一致。

此外，我们对表5也采用两个新的财务专长独立董事比例指标进行测试，回归结果表明，当因变量为 R^2 ，采用 $ACCOUT1$ 回归时， $ACCOUT1$ 与 $DIFFOWN$ 交互项的系数为0.058，符号与表5相同，但不显著；采用 $ACCOUT2$ 回归时， $ACCOUT2$ 与 $DIFFOWN$ 交互项的系数为0.240，P值为0.030，在5%水平显著。当因变量为 $SYNCH$ ，采用 $ACCOUT1$ 回归时， $ACCOUT1$ 与 $DIFFOWN$ 交互项的系数为0.366，但不显著；采用 $ACCOUT2$ 时， $ACCOUT2$ 与 $DIFFOWN$ 交互项的系数为1.091，P值为0.067，在10%水平上显著。

从表7、表8的回归结果分析可知，当采用狭义定义的财务专长独立董事比例 $ACCOUT1$ 时，解释变量的系数显著性减弱。造成这一结果，可能正如前文对独立董事财务专长定义时所说，实质上，除了会计、财务管理、审计学专业背景的独立董事具有财务专长外，其他修读了会计类课程的经济、管理等专业背景的独立董事也具有一定的财务专长，也发挥财务专长作用，从而导致会计、财务管理、审计类专业背景独立董事对公司特质信息和盈余谨慎性的边际效应相对减弱。

2. 内生性问题

如果模型存在内生性，将影响结论的可靠性，为此，我们借鉴García Lara, García Osma, and Penalva (2007)，采用代理变量法(Proxy)处理内生性问题，⁶使用模型(4)估计的残差 $RACCOUT$ 作为 $ACCOUT$ 的替代变量进入模型(1)重新进行回归分析。

模型(4)如下：

$$ACCOUT = a + \beta_1 OUTSIDE + \beta_2 DIRSIZE + \beta_3 TOP1 + \beta_4 LEV + \beta_5 MB + \beta_6 ROA + \beta_7 LnTA + \beta_{8,i} \sum_1^i YR_i + \beta_{i,j} \sum_1^i IND_j + \varepsilon, \quad (4)$$

模型(4)中， ROA 为总资产报酬率，等于利润总额除以资产总额， YR 为年度虚拟变量， IND 为行业虚拟变量，其他变量的含义与表1相同。

表9列示了考虑内生性问题后的回归分析结果。表9的结果显示，以 R^2 作为因变量时， $RACCOUT$ 的系数为-0.028，在1%水平上显著，以 $SYNCH$ 作为因变量时， $RACCOUT$ 的系数为-0.190，也在1%水平上显著，结论与模型(1)的研究结果一致，仍然表明，财务专长独立董事比例越高， $R^2/SYNCH$ 越低，公司的特质信息越好，财务专长独立董事比例与公司特质信息呈正相关关系。

⁶ 内生性引起的问题主要是参数估计的不一致，为了解决内生性引起的参数估计不一致，常用的方法有工具变量法和代理变量法。与工具变量法不同的是，本文采用的代理变量法，是从模型的残差中提取有用的信息进行第二个阶段的回归分析，并不对现有的解释变量进行处理。

表7 R^2 的回归结果

变量	$ACCOUT = ACCOUT1$		$ACCOUT = ACCOUT2$	
	系数	P值	系数	P值
INTERCEPT	-0.087	0.216	-0.095	0.174
<i>ACCOUT</i>	-0.023**	0.045	-0.072***	0.006
<i>OUTSIDE</i>	0.000	0.996	0.046	0.309
<i>DIRSIZE</i>	-0.001	0.296	-0.001	0.322
<i>DIRMEET</i>	-0.003***	0.000	-0.003***	0.000
<i>AUDITCOM</i>	0.000	0.967	0.0005	0.986
<i>LEV</i>	-0.229***	0.000	-0.228***	0.000
<i>STDROA</i>	-0.189***	0.000	-0.190***	0.000
<i>LnTA</i>	0.086***	0.000	0.086***	0.000
<i>BIG4</i>	0.011	0.243	0.012	0.234
<i>MB</i>	0.007	0.986	0.009	0.982
<i>DIFDOWN</i>	0.209***	0.000	0.212***	0.000
<i>TOP1</i>	-0.384***	0.000	-0.387***	0.000
<i>TOP1SQ</i>	0.103	0.204	0.103	0.206
<i>BSH</i>	-0.104***	0.000	-0.104***	0.000
<i>HSH</i>	-0.075***	0.000	-0.075***	0.000
<i>NGOVTOP1</i>	0.008	0.132	0.008	0.130
<i>VOL</i>	0.0003	0.827	0.00009	0.835
<i>LnMV</i>	-0.094	0.000	-0.094***	0.000
<i>LagR²</i>	0.159***	0.000	0.157***	0.000
年度	控制		控制	
行业	控制		控制	
OBS	2601		2601	
R^2	0.327		0.328	
Adj. R^2	0.316		0.317	

同时，对于表5，分析股权制衡度对独立董事财务专长与公司特质信息关系时，也使用残差*RACCOUT*替代*ACCOUT*进行回归分析，当因变量为*R²*时，*RACCOUT*与*DIFDOWN*的交互项的系数为0.114，P值为0.005，在1%水平上显著；当因变量为*SYNCH*时，*RACCOUT*与*DIFDOWN*的交互项的系数为0.545，P值为0.012，在5%水平上显著。即考虑内生性问题后，股权制衡对独立董事财务专长与公司特质信息的关系的影响仍然显著存在。

表8 盈余谨慎性的回归结果

变量	$ACCOUT = ACCOUT1$		$ACCOUT = ACCOUT2$	
	系数	P值	系数	P值
INTERCEPT	-0.175***	0.000	-0.180***	0.000
<i>D</i>	-0.040	0.561	-0.040	0.559
<i>R</i>	-0.009	0.939	0.016	0.887
<i>D</i> * <i>R</i>	0.030	0.851	-0.002	0.991
<i>ACCOUT</i>	-0.001	0.932	0.018	0.583
<i>D</i> * <i>ACCOUT</i>	0.006	0.791	0.009	0.833
<i>R</i> * <i>ACCOUT</i>	0.006	0.879	-0.075	0.316
<i>D</i> * <i>R</i> * <i>ACCOUT</i>	0.029	0.583	0.173*	0.087
<i>MB</i>	-0.521	0.619	-0.506	0.629
<i>R</i> * <i>MB</i>	-0.193	0.942	-0.231	0.931
<i>D</i> * <i>MB</i>	0.489	0.665	0.500	0.658
<i>D</i> * <i>R</i> * <i>MB</i>	1.083	0.710	1.201	0.680
<i>LEV</i>	-0.021	0.177	-0.021	0.170
<i>R</i> * <i>LEV</i>	0.029	0.405	0.030	0.387
<i>D</i> * <i>LEV</i>	-0.028	0.190	-0.030	0.160
<i>D</i> * <i>R</i> * <i>LEV</i>	0.139***	0.004	0.131***	0.006
<i>LnMV</i>	0.016***	0.000	0.016***	0.000
<i>R</i> * <i>LnMV</i>	0.002	0.816	0.001	0.869
<i>D</i> * <i>LnMV</i>	0.003	0.520	0.003	0.511
<i>D</i> * <i>R</i> * <i>LnMV</i>	-0.009	0.462	-0.008	0.495
OBS	2061		2061	
R^2	0.232		0.232	
Adj. R^2	0.226		0.227	

表10列示了控制内生性后独立董事财务专长与盈余谨慎性的回归结果，从表10可以看出，未加入其他控制变量时，模型1的结果表明，*D*、*R*和*RACCOUT3*个变量的交互项系数为0.074，P值为0.065，在10%水平上显著，在控制*MB*、*LEV*和*LnMV*后，模型2的结果显示，*D*、*R*和*RACCOUT3*个变量的交互项系数为0.062，P值为0.097，也在10%水平上显著。这些结论表明，控制内生性问题后，独立董事财务专长仍然对盈余谨慎性具有增量贡献，随着具有财务专长独立董事比例的提高，公司确认坏消息比确认好消息的及时性得到改进。

表9 使用RACCOUT的独立董事财务专长与公司特征信息

变量	R ²		SYNCH	
	系数	P值	系数	P值
INTERCEPT	0.020	0.768	-2.711***	0.000
RACCOUT	-0.028***	0.001	-0.190***	0.000
OUTSIDE	0.008	0.845	0.123	0.609
DIRSIZE	0.000	0.730	-0.005	0.378
DIRMEET	-0.003***	0.000	-0.017***	0.000
AUDITCOM	0.000	0.910	-0.009	0.705
LEV	-0.229***	0.000	-1.355***	0.000
STDROA	-0.213***	0.000	-1.099***	0.000
LnTA	0.081***	0.000	0.505***	0.000
BIG4	0.018*	0.071	0.109**	0.047
MB	0.381	0.368	1.040	0.658
DIFFOWN	0.052**	0.011	0.228**	0.048
TOP1	-0.064	0.423	-0.408	0.361
TOP1SQ	0.038	0.641	0.367	0.418
BSH	-0.043***	0.000	-0.200***	0.000
HSH	-0.036**	0.045	-0.186*	0.063
NGOVTOP1	0.006	0.227	0.007	0.798
VOL	0.000	0.951	0.001	0.903
LnMV	-0.089***	0.000	-0.538***	0.000
LagR ² /LagSYNCH	0.160***	0.000	0.030***	0.000
年度	控制		控制	
行业	控制		控制	
OBS	2601		2601	
R ²	0.319		0.267	
Adj.R ²	0.308		0.255	

3. 其他稳健性测试

本文研究中采用了连续3年研究样本，可能存在残差序列相关问题，因此，稳健性检验首先采用聚类残差分析消除残差序列相关的影响。聚类残差分析显示，与特质信息的回归结果中，R²为因变量时，ACCOUT的系数为-0.026，P值为0.006，在1%水平上显著，采用SYNCH为因变量时，ACCOUT的系数为-0.174，P值为0.002，在1%水平上显著，与前述研究结果一致。对于分析股权制衡对独立董事财务专长与公司特质信息关系模型，进行聚类残差分析时，R²为因变量时，ACCOUT与DIFFOWN交互项的系数为0.112，P值为0.007，在1%水平上显著；SYNCH为因变量，ACCOUT与DIFFOWN二者的交互项系数为0.636，在5%水平上显著。对盈余谨慎性的聚类残差分析表明，在不加入其他控制变量时，D、R和ACCOUT的交互项系数为0.080，P值为0.090，在10%水平上显著，加入其他控制变量后交互项系数不显著。

表10 使用RACCOUT的独立董事财务专长与盈余谨慎性

变量	模型1		模型2	
	系数	P值	系数	P值
INTERCEPT	0.021***	0.000	-0.177***	0.000
<i>D</i>	-0.005	0.217	-0.036	0.590
<i>R</i>	0.036***	0.000	0.001	0.992
<i>D</i> * <i>R</i>	0.020	0.041	0.035	0.828
<i>RACCOUT</i>	0.012	0.350	0.006	0.593
<i>D</i> * <i>RACCOUT</i>	0.000	0.979	0.006	0.702
<i>R</i> * <i>RACCOUT</i>	-0.042	0.162	-0.034	0.219
<i>D</i> * <i>R</i> * <i>RACCOUT</i>	0.074*	0.065	0.062*	0.097
<i>MB</i>			-0.587	0.576
<i>R</i> * <i>MB</i>			-0.002	0.999
<i>D</i> * <i>MB</i>			0.567	0.616
<i>D</i> * <i>R</i> * <i>MB</i>			0.955	0.743
<i>LEV</i>			-0.021	0.183
<i>R</i> * <i>LEV</i>			0.027	0.438
<i>D</i> * <i>LEV</i>			-0.030	0.161
<i>D</i> * <i>R</i> * <i>LEV</i>			0.137***	0.004
<i>LnMV</i>			0.016***	0.000
<i>R</i> * <i>LnMV</i>			0.001	0.868
<i>D</i> * <i>LnMV</i>			0.003	0.528
<i>D</i> * <i>R</i> * <i>LnMV</i>			-0.008	0.485
OBS	2061		2061	
R^2	0.104		0.232	
Adj. R^2	0.101		0.227	

其次，为了消除极端值的影响，对 R^2 、*SYNCH*和*ACCOUT*3个主要变量进行了前后1%的Winsor截尾处理，截尾后的公司特质信息模型的回归结果显示， R^2 为因变量时，*ACCOUT*的系数为-0.026，在1%水平显著，*SYNCH*为因变量时，*ACCOUT*的系数为-0.137，在1%水平显著，与前文的研究结果一致，排除极端值后没有改变研究结果。同时，对表5的三个变量截尾后的回归结果显示，当因变量为 R^2 时，*ACCOUT*与*DIFFOWN*交互项的系数为0.130，在1%水平显著；当因变量为*SYNCH*时，*ACCOUT*与*DIFFOWN*交互项的系数为0.664，也在1%水平显著。截尾后的Basu (1997) 谨慎性模型的回归结果显示，未加入其他控制变量时，*D*、*R*和*ACCOUT*的交互项系数为0.080，在5%水平上显著，加入*MB*、*LEV*和*LnMV*控制变量后，*D*、*R*和*ACCOUT*的交互项系数为0.062，在10%水平上显著，研究结果也与前文一致，表明研究结果具有稳定性。

五、研究结论

独立董事作用的发挥往往与其专长有关，不同专长的独立董事其发挥的治理作用不同，这也是证监会要求上市公司必须聘请一名会计专业人士的基本理由。本文研究了独立董事的财务专长与信息披露质量的两个重要维度——公司特质信息和盈余谨慎性的关系，本文的研究结果表明，从独立董事财务专长与公司特质信息上看，独立董事中财务专长的人员比例越高， R^2 、 $SYNCH$ 越低，股价中体现出更多的公司特质信息，而且在股权制衡好的公司，这一关系更加明细。对于独立董事财务专长与盈余谨慎性来说，本文采用了Basu (1997)模型进行了检验，检验结果表明，具有财务专长的独立董事比例的越高，盈余谨慎性越好。由此可见，具有财务专长的独立董事确实能起到改善公司信息披露质量的作用。

本文的贡献在于从新的视角分析了独立董事财务专长对信息披露质量的改进作用，尽管有的文献从独立董事财务专长与可操控应计额、总应计额、经营活动现金流量变动与利润变动的关系的角度分析了独立董事的财务专长与信息披露质量的关系，但这与我们深刻认识独立董事的财务专长对信息披露质量的关系还不够，本文的研究加深了对这一问题的认识，进一步证实，独立董事的财务专长，不仅能够降低盈余管理水平，并且有助于提高公司特质信息和盈余谨慎性水平，独立董事财务专长在促进公司信息披露质量上具有显著优势。本文的政策含义是，独立董事的作用与其专业背景有关，上市公司在聘请独立董事时，应该根据其需求聘请具有合理专业背景结构的独立董事。

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The Financial Expertise of Independent Directors, Firm-Specific Information, and Earnings Conservatism¹

Xiaolin Chen, Xin Lin, and Dongmin Kong²

Abstract

Using data of A-share firms listed in Chinese stock markets from 2003 to 2005, we investigate the relation between the financial expertise of independent directors and firm-specific information as well as earnings conservatism. Empirical evidence shows that (1) the proportion of independent directors with financial expertise is positively related to firm-specific information, meaning that the higher this proportion, the better the quality of firm-specific information disclosed; (2) the relation between the financial expertise of independent directors and firm-specific information is more significant in a company with a better ownership structure; and (3) the proportion of independent directors with financial expertise is positively related to earnings conservatism, meaning that the former enhances the latter. Our results suggest that independent directors with financial expertise efficiently improve the quality of information disclosed.

Keywords: Independent Directors, Financial Expertise, Firm-specific Information, Earnings Conservatism

CLC codes: F23, F270, F715

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I. Introduction

Corporate disclosure plays a critical role in the functioning of an efficient capital market (Healy and Palepu, 2001). Independent directors constitute an important force in monitoring companies so as to improve the quality of corporate disclosure. Since 1991, the American Stock Exchange has formally required that a listed company have at least two independent directors. As an independent third party, independent directors must oversee management's behaviour with respect to corporate disclosure to protect the interests of investors from an objective and impartial position. Considering that financial information is professionally oriented, some regulations also require that a certain proportion of independent directors have financial expertise. In 2001, the China Securities Regulatory Commission (CSRC) issued a guidance about establishing a system of independent directors in listed companies. It required that listed companies establish such a system and made it clear that at least one independent director should have accounting expertise. In June 2002, the Sarbanes-Oxley Act was passed in the US, which also required that at least one director on the audit committee have financial expertise.³ It is thus worth studying whether independent directors with financial expertise play a better governance role and make an incremental contribution in improving corporate information disclosure.

Some scholars have studied this issue (Xie *et al.*, 2002; Park and Shin, 2004; Hu and Tang, 2008) by examining the relation between the financial expertise of independent directors and the level of earnings management, earnings aggression, and earnings smoothness. They find that the financial expertise of independent directors is negatively related to the level of earnings management and earnings aggression and positively related to the quality of corporate disclosure. This has been very important for understanding the relation between the financial expertise of independent directors and corporate disclosure quality.

But this quality is multi-dimensional, and the research mentioned above studies the relation between it and the financial expertise of independent directors only from the angle of the relation between the latter and discretionary accruals, total accruals, changes in cash flows from operating activities, and profit. This approach is not comprehensive. Therefore, to deepen understanding of the improvement effect of the financial expertise of independent directors on the quality of corporate disclosure, research is needed from more perspectives.

Unlike the above literature, this paper chooses the angle of firm-specific information and the conditional conservatism of earnings to further study the relation between the financial expertise of independent directors and corporate disclosure quality. Firm-specific information is that information showing the inflow of a company's future economic

³ Members of the audit committee consist of independent directors, so essentially it requires a certain proportion of independent directors to have financial expertise.

interests that differs from other companies, and also the information that investors are most concerned with when making investment decisions. For earnings conservatism, Hu and Tang (2008) study the relation between the financial expertise of independent directors and earnings aggression, which they measure by total accruals, but these measure mainly unconditional conservatism. This paper chooses the Basu (1997) model to measure conditional conservatism. There are differences between conditional and unconditional conservatism. According to conditional conservatism, losses and gains are recognised asymmetrically in that the realised probability of gains is higher than that of losses, which leads to investors reacting more quickly on bad news than on good news of earnings (Basu, 1997). Unconditional conservatism, on the other hand, is defined as a tendency to report a lower book value of equity in accounting. When several alternative accounting methods are available, unconditional conservatism tends to choose the one that underestimates book value; for example, it is better to use accelerated depreciation to undervalue assets than the straight-line method. Unconditional conservatism does not emphasise the timeliness of loss recognition, and it is not related to the expectation of the inflows or outflows of future economic interests (Ball and Shivakumar, 2005). Further, it is determined by *ex ante* conditions and has no relation to the news of future economic interests. In contrast, conditional conservatism is determined by *ex post* conditions and is related to the news of future economic interests. Under conditional conservatism, a company writes off assets (or recognises losses) when it is in an adverse situation (bad news) (Beaver and Ryan, 2005). Both types of conservatism also have different impacts on the effectiveness of company contracts. Unlike unconditional conservatism, conditional conservatism plays an important governance role in raising the effectiveness of a company's contracts, debt contracts, management compensation contracts, and corporate governance (Watts, 2003; Ball and Shivakumar, 2005). For this reason, conditional conservatism means a great deal to independent directors. Independent directors can use it to monitor management behaviour, thereby reducing the chance that management will obtain excessive compensation from the company or invest in projects with negative net present value (Ahmed and Duellman, 2007). Therefore, it is especially significant for this paper to further analyse the relation between the financial expertise of independent directors and conditional conservatism, which differs from Hu and Tang's (2008) study.

Our study makes it easier to understand the relation between the financial expertise of independent directors and corporate disclosure. The empirical evidence shows that the higher the proportion of independent directors with financial expertise, the more firm-specific information is disclosed by the company, and the higher the level of earnings conservatism. This study thus offers new evidence on whether the financial expertise of independent directors improves the quality of corporate disclosure, showing more clearly that such expertise does indeed play a positive role in corporate disclosure quality.

The remainder of this paper is organised as follows. Section II presents the literature

review and hypothesis development. Section III describes the research design and descriptive statistics. Section IV provides the empirical results and explanations, and Section V concludes this paper.

II. Literature Review and Hypothesis Development

Independent directors play an important role in monitoring management in the modern corporate governance structure (Fama, 1980; Fama and Jensen, 1983). It is generally expected that independent directors can warn of violations or inappropriate behaviour (Kong, 2002). They can also effectively reduce the probability of fraud in financial statements (Beasley, 1996). Whether the evidence is from Hong Kong, Australia, or the US, all of it shows that the more independent directors who sit on the board, the more effective is the monitoring of financial reporting procedures so as to reduce earnings management and improve the quality of corporate disclosure (Chen and Jaggi, 2000; Klein, 2002; Davidson *et al.*, 2005). Hence, outside independent directors enhance the power of the board to monitor management behaviour (Petra, 2005).

In August 2001, the CSRC issued a guidance about establishing a system of independent directors in listed companies. The guidance requires that listed companies establish a system of independent directors by which appropriate people are chosen to be independent directors, at least one of whom must be an accounting professional (referring to a person who has a senior professional title or is a certified public accountant). Although the system of independent directors has only been established in China for a short time and is now mandatory, independent directors have been persistently active in corporate governance. First, the independent directors employed by listed companies are generally elites in their own professions who have built their reputations and have earned social status. If they do not participate in corporate governance, their reputation and social status will be seriously affected once knowledge of financial fraud or other company scandals spreads. Chen (2008) finds that the possibility of independent directors acquiring a new position increases when the growth of the listed company in which they serve increases, whereas the possibility decreases if scandals of violations emerge. Her conclusion reveals that the incentive of an independent director's reputation works in the Chinese capital markets. Second, the independent directors' sense of responsibility is enhanced by the regulatory authorities. These authorities require independent directors to undergo qualification training before serving on a board, and they must pass an examination to obtain the qualification. Upon serving on the board, they must also take continuing education courses every two years. In training courses, regulators emphasise such issues as the legal liability of independent directors. Third, regulators directly strengthen this liability by requiring independent directors to individually express their views on issues such as guarantees, related-party transactions, and the capital occupation of large shareholders. This requirement strengthens their responsibility, and those who

violate the rules will be punished. After the CSRC decided to impose serious punishment on independent director Jiahao Lu resulting from the Zhengbaiwen financial fraud, independent directors generally realised the legal risk triggered by laxity. Recently, the CSRC has punished some independent directors over company disclosure violations, such as the independent directors of Feifei Agriculture, ST Tianyi, Jiugujiu, Qingsongjianhua, and SST Yahua. Thus, in China reputation incentives and legal constraints have spurred independent directors to participate in corporate governance.

In addition, a large number of empirical studies on China's stock markets also find that the system of independent directors works. For example, independent directors can effectively restrain financial information distortion (Cheng *et al.*, 2009), identify the earnings management behaviour of listed companies (Zhi and Tong, 2005), significantly improve the conservatism of financial reports (Chen and Wang, 2006), and ensure the reliability of financial information (Li *et al.*, 2005).

But the interpretation of financial reports requires professional financial knowledge, and only independent directors who have such knowledge are better able to monitor the behaviour of corporate disclosure. Selecting the first 110 firms (alphabetically) from the S&P 500 index as listed in the June Standard and Poor's directory for years 1992, 1994, and 1996 as their sample, Xie *et al.* (2002) find that boards and audit committees with financial expertise are able to effectively restrain the earnings management behaviour of management. Park and Shin (2004) choose listed companies in Canada as their sample and find the same result, that independent directors with financial expertise effectively restrain such behaviour by management.

Using Chinese manufacturing listed companies punished by the CSRC between 2003 and 2005 as their sample, Yan and Sun (2008) show that independent directors with professional capabilities are able to restrain effectively the collusive behaviour of listed companies. Hu and Tang (2008) choose A-share listed companies of non-financial sectors trading in the Shenzhen Stock Exchange in China as their sample and show that independent directors with financial or accounting backgrounds improve the quality of earnings information. Wang *et al.* (2008) find that independent directors with financial expertise better fulfil the responsibility of monitoring and improve the quality of financial information.

To sum up, the financial expertise of independent directors can ensure that independent directors meet their responsibility to monitor and improve the quality of corporate disclosure. Firm-specific information and earnings conservatism are two important dimensions of corporate disclosure. If independent directors with financial expertise can improve corporate disclosure quality, then firm-specific information disclosure and earnings conservatism will both improve. We discuss these separately in the following sections.

2.1 The Financial Expertise of Independent Directors and Firm-Specific Information

Coase (1937) argues that a company is a combination of a series of contracts, which can minimise the cost of contracts. Information is an important factor in the signing of a contract by the contracting parties. Independent directors assume the responsibility of monitoring management, thereby reducing information asymmetry problems and the cost of a contract. Because modern capital markets are well developed, the stock market is considered the place for resource allocation. Tobin (1982) points out that the validity of the securities market lies in the fact that the market can allocate limited resources at a low price to the highest quality enterprise. Ross *et al.* (2002) also point out that an effective capital market is one where the current market price of assets fully reflects all relevant, useful information. According to the capital asset pricing model, factors that affect securities prices are divided into overall market information and firm-specific information. Currently, academia provides no unified definition for firm-specific information, but on the whole it means the characteristics that distinguish an individual company from others. Because of these differences, there should be some difference between stock prices to induce a reasonable allocation of resources. Thus, in a perfect capital market, the stock price is a signal that reflects the quality of a company. If company information is fully and truly disclosed, no information asymmetry occurs between investors and enterprises. Investors rationally invest according to real information so as to allocate resources optimally. The stock price fluctuates with a company's real value, resulting in the stock price reflecting firm-specific information. In other words, the higher the quality of corporate disclosure, the more firm-specific information the stock price reflects.

Roll (1988) finds that the R^2 of a regression model measures firm-specific information. Morck, Yeung, and Yu (2000) continue this investigation and prove that the more perfect the market, the lower the R^2 ; the stock price also better reflects the greater amount of firm-specific information by reflecting the characteristics of individual stocks. Similarly, Durnev *et al.* (2003) and Li and Myers (2006) find the same evidence. In recent literature, Ferreira and Laux (2007) find that when a company has fewer anti-takeover provisions, its stock price will reveal more firm-specific information. Gul, Kim, and Qiu (2010) report that firm-specific information has curvilinear relations with the proportion of stocks held by the largest shareholder; when the government controls the company, firm-specific information is even worse. In contrast, the company that issues foreign shares and is audited by the Big Four reveals more firm-specific information. Chan and Yu (2010) find that ever since the Chinese government's opening of the B-share market to mainland investors, the synchronisation of B shares has been increasing, whereas the firm-specific information reflected in stock prices has been decreasing. You, Zhang, and Jiang (2006), Huang, Li, and Gu (2006), and Kong and Shen (2008) also choose R^2 as firm-specific information to study the relation between it and the volatility of stock

prices, cross-section returns, and composition of information. This paper follows their research methods, using R^2 to stand for firm-specific information.

The disclosure of firm-specific information is reflected in financial reports. As the main source of information in capital markets, financial reports provide guidance for investors in making decisions. But because of conflicts of interest between management and investors, objectively investors need a supervisor to oversee management disclosure of these reports. With respect to the monitoring of management, independent directors are more objective and independent than inside directors. Moreover, because financial reports contain many technical terms, independent directors with financial expertise can better fulfil their responsibility of monitoring financial information disclosure by management than can other directors. The existing literature (Hu and Tang, 2008) suggests that independent directors with financial expertise do indeed increase the quality of corporate disclosure. Thus, the more firm-specific information disclosed by a company, the lower will be the R^2 . Accordingly, we propose the first hypothesis:

H₁: The higher the proportion of independent directors with financial expertise, the more firm-specific information a company will disclose.

2.2 Financial Expertise of Independent Directors and Earnings Conservatism

Earnings conservatism is an important manifestation of the quality of information disclosure. Watts (2003) argues that it can improve the effects of contract mechanisms. In February 2006, the *Accounting Standards for Business Enterprises* issued by the Ministry of Finance required enterprises to exercise due care when they recognise, measure, and report the accounting of transactions or other matters; they also should not overvalue assets or earnings or underestimate debt or expenses. That is, for conservatism, the enterprise is required to recognise all possible losses and should not recognise any uncertain gains. This helps to control the arbitrariness of recognising gains by management, preventing management from obtaining their own benefits through invading the interests of creditors or shareholders by overvaluing earnings and assets.

A great deal of literature shows that independent directors promote application of the principle of conservatism. Selecting UK companies from 1993 to 1995 as their research sample, Beekes *et al.* (2004) find that identification of bad news is more timely by outside directors. Ahmed and Duellman (2007) point out that the higher the proportion of company shares held by outside directors, the more earnings conservatism the company shows. Choosing Spanish listed companies from 1997 to 2002 as their sample, García Lara *et al.* (2007) use the research methods of Basu (1997) and Ball and Shivakumar (2005) to study the impact of corporate governance variables on earnings conservatism. They find that having more independent directors leads to more earnings conservatism.

Using A-share companies listed on the Shanghai and Shenzhen Stock Exchanges between 2001 and 2003 as their sample, Chen and Wang (2006) analyse the impact of corporate governance on the conservatism of the motivations behind financial reports. They report that state-owned listed companies show poorer financial reporting conservatism than listed companies not owned by the state, that companies with a poor governance structure also show poor financial reporting conservatism, and that companies with a higher proportion of independent directors recognise bad news more quickly. Thus, as noted above, independent directors do play a role in increasing earnings conservatism.

There are two conditions that independent directors must fulfil effectively in their responsibility for oversight. First, they should have enough motivation to supervise and they should indeed carry out the supervision. And second, they should have a good understanding of the financial and accounting reporting system. Financial expertise is the professional competence of independent directors in monitoring the quality of financial reporting (Beekes *et al.*, 2004). In view of the professionalism of financial and accounting information, only independent directors with financial expertise can oversee management's application of conservatism principles in a professional manner to ensure that management will not abuse them. As a result, we conjecture that independent directors with financial expertise provide better oversight of financial reporting, resulting in incremental contributions to earnings conservatism. Accordingly, we develop the second hypothesis as follows:

H₂: A higher proportion of independent directors with financial expertise will lead to higher earnings conservatism.

III. Research Design

3.1 Sample Selection

We select non-financial and non-insurance A-share listed companies traded on the Shanghai and Shenzhen Stock Exchanges in China as the initial sample. We then obtain background information on independent directors from company annual reports to see whether they have financial expertise. From those 2923 companies providing complete background information on independent directors, we exclude the following: 85 companies with negative net assets and 237 with missing data (including the last five-year standard deviation of returns on total assets, board characteristics, and variables used to calculate R^2). Our final sample thus consists of 2601 observations. Except for the data on the financial expertise of independent directors obtained from annual reports, the data for empirical analysis in this paper either are taken from the China Stock Market Financial Database (CSMAR) or are obtained by calculating the relevant data provided by CSMAR.

3.2 Test Model and Variables

3.2.1 The Financial Expertise of Independent Directors and Firm-Specific Information

To study the relation between the financial expertise of independent directors and firm-specific information, we develop the following model:

$$\begin{aligned}
 R^2/SYNCH = & \alpha + \beta_1 ACCOUT + \beta_2 OUTSIDE + \beta_3 DIRSIZE + \beta_4 DIRMEET \\
 & + \beta_5 AUDITCOM + \beta_6 LEV + \beta_7 STDROA + \beta_8 LnTA + \beta_9 BIG4 \\
 & + \beta_{10} MB + \beta_{11} DIFFOWN + \beta_{10} TOP1 + \beta_{11} TOP1SQ + \beta_{12} BSH \\
 & + \beta_{13} HSH + \beta_{14} NGOVTOP1 + \beta_{15} VOL + \beta_{16} LnMV \\
 & + \beta_{17} LagR^2/LagSYNCH + \sum IND_i + \sum YR_j + \varepsilon
 \end{aligned} \tag{1}$$

In Model 1, the relevant variables are defined as follows:

1. Dependent variables

R^2 and $SYNCH$ are dependent variables representing firm-specific information. We follow the model of Morck, Yeung, and Yu (2000) to calculate R^2 , which is as follows:

$$r_{it} = \alpha_i + \beta_i r_{mt} + \varepsilon_{it}$$

In the model, r_{it} is the return on stock i in week t , r_{mt} is the market index return, and ε_{it} is the residual. A larger residual means a greater deviation of the stock return from the market return, whereas the stock price shows some reactions to firm-specific information and so a smaller R^2 in the regression equation. We can thus use R^2 to describe firm-specific information. To avoid the weekend effect, we calculate the weekly return on the basis of the data on Wednesday. In the calculation, we take the data of all trading days of the year and the corresponding rates of market return to conduct the regression. The rate of market return is the market value of all listed companies on the Shanghai and Shenzhen Stock Exchanges plus the rate of return (excluding data of the returns on stocks within 30 days after initial public offerings).

In addition, since R^2 values are within the range $[0, 1]$, we transform R^2 to $SYNCH = \log(R^2/(1-R^2))$ in the regression analysis to expand the range. $SYNCH$ still represents firm-specific information.

2. Explanatory Variable

$ACCOUT$ is an explanatory variable defined as the proportion of independent directors with financial expertise among total independent directors, equalling the number of independent directors with financial expertise divided by the total number of independent directors. We define independent directors with financial expertise as those who have graduated with majors in financial management, accounting, economics,

management science, business administration, or finance. In China, accounting is a fundamental subject included in major programmes such as economics, management science, business administration, and finance. Therefore, students enrolled in these programmes also take relevant financial and accounting courses and are able to master a certain amount of accounting and financial knowledge. So, our definition includes those independent directors with these professional backgrounds.

3. Control Variables

To control for other variables having an impact on firm-specific information, we choose the following control variables according to the relevant literature.

With respect to variables for board characteristics, *OUTSIDE* is the proportion of independent directors, equal to the number of independent directors divided by the total number of directors on the board. *DIRSIZE* is the size of the board, which is the total number of directors on the board. *AUDITCOM* describes the situation with respect to the establishment of an audit committee, taking the value of 1 if the company sets one up, and 0 otherwise. *DIRMEET* is the number of board meetings, indicating the degree of board diligence. Chen and Jaggi (2000) point out the existence of a positive relation between the proportion of independent directors and corporate disclosure, while Jensen (1993) believes that a small board is more likely to fulfil its monitoring responsibility. Beasley (1996) and Vafeas (2000) suggest that a negative relation exists between board size and corporate disclosure. Ho and Wong (2001) discover that the establishment of an audit committee significantly improves the amount of voluntary information disclosed by listed companies. Hu and Tang (2008) find that companies that set up audit committees show less earnings management. Xie *et al.* (2002) find that the greater the number of board meetings, the fewer current discretionary accruals are reported by a listed company. Therefore, we control for the above variables in the model.

With respect to variables for company characteristics, *LEV* is the debt-to-total-assets ratio, which is total liabilities divided by total assets. A higher ratio suggests that management is facing more stress, and thus has stronger motivation to manipulate information. Hu and Tang (2008) discover a positive relation between the debt-to-total-assets ratio and the degree of earnings management. Eng and Mak (2003) also find that the level of corporate debt is negatively related to voluntary information disclosure. Hence, we control for this variable in our model. *STDROA* is the last five-year standard deviation of return on total assets.⁴ The volatility of the rate of return results from the volatility of the company's basic characteristics. Ashbaugh *et al.* (2006) and Piotorski and Roulstone (2004) all control for this variable, and thus we do as well. *LnTA* is the natural logarithm of total assets, which stands for the size of the company. Roll (1988) points out that company size affects the ability of stock prices to reflect firm-specific

⁴ If a company has been listed on the stock exchange for less than five years, then the actual number of years of listing is used to calculate the standard deviation of return on total assets

information; thus we also control for this variable. Gul, Kim, and Qiu (2010) find that the proportion of shares held by the largest shareholder and its square ($TOP1$, $TOP1SQ$), the nature of the controlling shareholder ($NGOVTOP1$), and the proportion of shares held by foreign investors (BSH , HSH) affect firm-specific information. In addition, they control for the annual stock turnover ratio (VOL) and the market value of tradable shares ($LnMV$), and so we do as well.

With respect to auditor variables, $BIG4$ is a dummy variable, taking the value of 1 when the company hires a Big Four auditor, and 0 otherwise. Generally, as internationally well-known accounting firms, the Big Four are superior to small-and medium-sized firms in both size and professionalism. Thus, because of their reputation, the general public share the view that the quality of corporate disclosure is higher when the company is audited by a Big Four firm. Eng and Mak (2003) take auditor reputation as a control variable in their paper, which studies corporate governance and voluntary information disclosure. Thus, we also include this control variable.

In addition, we control for MB and $DIFDOWN$ in the model according to the research design of You, Zhang, and Jiang (2006) and Piotorski and Roulstone (2004). MB is the market value of owner's equity divided by the book value of the same. $DIFDOWN$ is the proportion of shares held by the largest shareholder divided by the proportion of shares held by the top 10 shareholders.

Meanwhile, we also control for last-year firm-specific information $LagR^2/LagSYNCH$, year (YR), and industry (IND), which will have fixed effects on corporate disclosure.

Table 1 Variable Definition List

Variables	Variable Definitions
Dependent variables:	
R^2	Firm-specific information
$SYNCH$	The R^2 values are within the range [0, 1]; to expand the range, we transform R^2 to $SYNCH = \log(R^2/(1-R^2))$ in the regression analysis. $SYNCH$ still represents firm-specific information.
Explanatory variables:	
$ACCOUT$	The proportion of independent directors with financial expertise to total number of independent directors
Control variables:	
$OUTSIDE$	The proportion of independent directors
$DIRSIZE$	The size of the board
$DIRMEET$	The number of board meetings

Table 1 Variable Definition List (continued)

Variables	Variable Definitions
<i>AUDITCOM</i>	The establishment of an audit committee, taking the value of 1 if the company has set up an audit committee, and 0 otherwise.
<i>LEV</i>	The debt-to-total assets ratio, which is equal to total liabilities divided by total assets
<i>STDROA</i>	Standard deviation of the return on total assets for the last five years. If a company has been listed on the stock exchange for less than five years, we use actual years of listing to calculate the standard deviation of return on total assets
<i>LnTA</i>	The natural logarithm of total assets
<i>BIG4</i>	The type of auditor, taking the value of 1 if it is a Big Four auditor, and 0 otherwise.
<i>MB</i>	The market value of owner's equity divided by the book value of the same
<i>DIFFOWN</i>	The proportion of shares held by the largest shareholder divided by the proportion of shares held by the top 10 shareholders
<i>TOP1</i>	The proportion of shares held by the largest shareholder
<i>TOP1SQ</i>	The square of the proportion of shares held by the largest shareholder
<i>BSH</i>	Dummy variable, taking the value of 1 if the company issues B shares, and 0 otherwise.
<i>HSH</i>	Dummy variable, taking the value of 1 if the company issues H shares, and 0 otherwise.
<i>NGOVTOP1</i>	Dummy variable, taking the value of 1 if the controlling shareholder is not a state-owned enterprise, and 0 otherwise.
<i>VOL</i>	Stock turnover ratio, which is equal to the yearly stock trading volume divided by the total number of company shares
<i>LnMV</i>	Market value of tradable shares, which is equal to the natural logarithm of the yearly market value of tradable shares.
<i>LagR²/LagSYNCH</i>	Equal to last year's <i>R²/SYNCH</i>

3.2.2 The Financial Expertise of Independent Directors and Earnings Conservatism

To study the relation between the financial expertise of independent directors and earnings conservatism, we follow the widely used model of Basu (1997) to measure the latter.

The original model of Basu (1997) is as follows:

$$X/P_{t-1} = \alpha + \beta_1 D + \beta_2 R + \beta_3 R * D + \varepsilon$$

In the model, X is the earnings per share, and P_{t-1} is the price per share at the beginning of the fiscal year. Because in China the deadline for listed companies to disclose their annual reports for the previous year is 30 April of the current year, the opening price on the first trading day in May is selected as the opening price per share at the beginning of the fiscal year. D is a dummy variable, taking the value of 1 if the rate of return is negative, and 0 otherwise. R is the rate of the company's yearly stock return. Because the company does not have to disclose the annual report until 30 April of the following year, the rate of yearly stock return adopted in this paper is from 1 May of the year to 30 April of the following year.

We add the proportion of independent directors with financial expertise to total independent directors ($ACCOUT$) into the Basu (1997) model. So, the test model we use is as follows:

$$\begin{aligned} X/P_{t-1} = & \alpha + \beta_1 D + \beta_2 R + \beta_3 ACCOUT + \beta_4 R * D \\ & + \beta_5 R * ACCOUT + \beta_6 D * ACCOUT \\ & + \beta_7 D * R * ACCOUT + \varepsilon \end{aligned} \quad (2)$$

where β_7 is the conservatism brought by the independent directors with financial expertise. If β_7 is significantly positive, it means that a higher proportion of independent directors with financial expertise leads to improvement in the company's earnings conservatism.

Meanwhile, to better control for other variables having impact on earnings conservatism, we further control for the market-to-book value of the company's equity (MB), financial leverage (LEV), and size ($LnMV$) according to Khan and Watts (2009) and on the basis of Model 2. Since conservatism is affected mainly by contracts (including debt contracts and compensation contracts), litigation, tax, and regulations (Watts, 2003), Khan and Watts (2009) believe that these factors change along with investment opportunities. So, investment opportunities reflect the requirement of conservatism, and MB , LEV , and $LnMV$ are widely used as proxies for such opportunities. Therefore, we control for these three variables in the model. Model 3 containing the control variables is thus as follows:

$$\begin{aligned}
X/P_{t-1} = & \alpha + \beta_1 D + \beta_2 R + \beta_3 ACCOUT + \beta_4 R*D \\
& + \beta_5 R*ACCOUT + \beta_6 D*ACCOUT + \beta_7 D*R*ACCOUT \\
& + \beta_8 MB + \beta_9 R*MB + \beta_{10} D*MB + \beta_{11} D*R*MB \\
& + \beta_{12} LEV + \beta_{13} R*LEV + \beta_{14} D*LEV + \beta_{15} D*R*LEV \\
& + \beta_{16} LnMV + \beta_{17} R*LnMV + \beta_{18} D*LnMV + \beta_{19} D*R*LnMV + \varepsilon
\end{aligned} \tag{3}$$

Table 1 presents the definitions of *MB*, *LEV*, and *LnMV* for Model 3.

3.3 Descriptive Statistics

Table 2 presents the descriptive statistics of the variables. As it shows, the mean value of R^2 is 0.387, the minimum value 0.003, and the maximum value 0.686, meaning that there are differences within the firm-specific information disclosed by different companies. The value range of *SYNCH* is significantly greater than R^2 , and this achieves our purpose of converting R^2 . The number of independent directors with financial expertise (*ACC*) in Table 2 averages 1.97, meaning that companies have about two such directors. The mean value of *ACCOUT* is 0.616, meaning that independent directors with financial expertise account for a large proportion of the independent directors, that is, 61.6 per cent.

For control variables, the number of independent directors (*INDE*) averages 3.246; the minimum value is 1, and the maximum value is 8, meaning that about three independent directors are hired in a listed company. *DIRSIZE* shows that the number of board directors is from nine to 10; the minimum is four and the maximum is 19. The proportion of independent directors reaches 33.8 per cent, which generally meets the one-third requirement set by the CSRC. Meanwhile, Table 2 also indicates that the board holds seven to eight meetings per year; 45.5 per cent of the companies have set up audit committees; the debt-to-total assets ratio is 49.2 per cent for listed companies; 6.9 per cent of listed companies are audited by the Big Four; and *MB* is 2.534,⁵ meaning that a degree of unconditional conservatism exists in listed companies. The proportion of shares held by the largest shareholder is 42.2 per cent. *DIFDOWN* is 0.687, meaning that listed companies have a high concentration ratio of shares. The proportion of shares held by the largest shareholder accounts for 68.7 per cent of the proportion of shares held by the top 10 shareholders. Moreover, 6.4 per cent of the sample companies also issue B shares, 2 per cent also issue H shares, and 28.1 per cent are privately owned.

⁵ In the following correlation and regression analyses, the coefficients are very small when using the original variables of *MB* to do the analysis. Because the results are hard to present and observe, the research results in the following tables are the analysis results using the original variables of *MB* reduced 1000 times.

Table 2 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
R^2	2601	0.387	0.129	0.003	0.686
<i>SYNCH</i>	2601	-0.527	0.691	-5.692	0.782
<i>ACC</i>	2601	1.970	0.864	0.000	5.000
<i>ACCOU</i>	2601	0.616	0.250	0.000	1.000
<i>INDE</i>	2601	3.246	0.778	1.000	8.000
<i>OUTSIDE</i>	2601	0.338	0.052	0.071	0.600
<i>DIRSIZE</i>	2601	9.681	2.112	4.000	19.000
<i>DIRMEET</i>	2601	7.489	3.035	2.000	27.000
<i>AUDITCOM</i>	2601	0.455	0.498	0.000	1.000
<i>LEV</i>	2601	0.492	0.186	0.008	0.991
<i>STDROA</i>	2601	0.042	0.070	0.000	1.578
<i>LnTA</i>	2601	21.249	0.924	18.322	25.734
<i>BIG4</i>	2601	0.069	0.253	0.000	1.000
<i>MB</i>	2601	2.534	5.594	0.373	170.726
<i>DIFFOWN</i>	2601	0.687	0.216	0.164	0.994
<i>TOP1</i>	2601	0.422	0.165	0.006	0.850
<i>TOP1SQ</i>	2601	0.205	0.146	0.000	0.722
<i>BSH</i>	2601	0.064	0.244	0.000	1.000
<i>HSH</i>	2601	0.020	0.140	0.000	1.000
<i>NGOVTOP1</i>	2601	0.281	0.449	0.000	1.000
<i>VOL</i>	2601	2.677	1.790	0.037	15.240
<i>LnMV</i>	2601	13.205	0.820	10.443	16.806
<i>LagR²</i>	2601	0.416	0.206	0.000	1.000

Note: In Table 2, *ACC* is the number of independent directors with financial expertise, and *INDE* the number of independent directors; the definitions of other variables are presented in Table 1.

IV. Results and Analysis

4.1 Results of the Empirical Research on the Financial Expertise of Independent Directors and Firm-Specific Information

4.1.1 Correlation Coefficient Analysis Results

Table 3 lists the Pearson correlation coefficients between variables, from which we can see that the coefficient of the proportion of independent directors with financial expertise to independent directors (*ACCOU*) is -0.053 with R^2 and -0.054 with *SYNCH*, and both are significantly negative at the 1 per cent level. This means that the higher the proportion of independent directors with financial expertise, the lower the R^2 and *SYNCH*, and the more firm-specific information that is disclosed. The result is consistent with the expected direction of the hypothesis. Table 3 also indicates that there are significantly

negative correlations between R^2 , *SYNCH* and *DIRMEET*, *LEV*, *STDROA*, *MB*, *BSH*, *NGOVTOPI*, *VOL*, and *LnMV*, and there are significantly positive correlations between R^2 , *SYNCH* and *LnTA*, *TOPI*, *TOPISQ*, and *DIFFOWN*. The results, however, show no significant correlations between R^2 , *SYNCH* and *OUTSIDE*, *DIRSIZE*, *AUDITCOM*, *BIG4*, or *HSH*.

Moreover, Table 3 suggests that *ACCOUT* is significantly and positively correlated with the control variables *OUTSIDE*, *DIRMEET*, *LEV*, and *NGOVTOPI*, and that it is significantly and negatively correlated with the control variables *DIRSIZE*, *LnTA*, *TOPI*, *TOPISQ*, and *BSH*. Significant correlations also exist between some control variables.

4.1.2 Multivariate Regression Analysis Results

Table 4 presents the regression results of using firm-specific information as the dependent variable. It shows that when the dependent variable is R^2 , the coefficient of *ACCOUT* is -0.026 and significant at the 1 per cent level; when the dependent variable is *SYNCH*, the coefficient of *ACCOUT* is -0.174 and also significant at the 1 per cent level. This means that a higher proportion of independent directors with financial expertise will lead to more firm-specific information disclosed by the company. This is consistent with the analysis results of the correlation coefficients and the expectation of the hypotheses.

For control variables, we find that whether using R^2 or *SYNCH* as the dependent variable, the coefficients of *BSH* and *HSH* are all significantly negative, meaning that more firm-specific information is disclosed for companies issuing B or H shares. This result is consistent with those of Gul, Kim, and Qiu (2010), namely that foreign investors play a role in governance. But the coefficients of *TOPI*, *TOPISQ*, and *BIG4* differ from Gul, Kim, and Qiu's results, possibly because our model differs from theirs. Apart from using the same control variables they use, we also control for other variables, including the proportion of independent directors, board size, the number of board meetings, the establishment or not of an audit committee, and ownership structure. Moreover, the difference in research sample could also help explain the difference; for example, the sample interval of this paper is between years 2003 and 2005, whereas the sample interval of Gul, Kim, and Qiu is from 1996 to 2003. Table 4 also indicates that the coefficients of *DIRMEET*, *LEV*, *STDROA*, *LnTA*, and *LnMV* are significantly negative, meaning that board diligence, financial leverage, changes in business performance, and company size have positive effects on firm-specific information. But the coefficients of *DIFFOWN*, *LagR²*, and *LagSYNCH* are significantly positive, showing that a weak equity restriction mechanism in the company leads to less firm-specific information disclosed, and that if more firm-specific information is disclosed in the previous year, more firm-specific information will also be disclosed in the current year.

Table 3 Pearson Correlation Coefficients

	R^2	SYNCH	ACCOUT	OUTSIDE	DIRSIZE	DIRMEET	AUDITCOM	LEV	STDROA	$LnTA$
R^2	1.000									
SYNCH	0.960 (0.000)***	1.000								
ACCOUT	-0.054 (0.007)***	0.004	1.000							
OUTSIDE	0.564 (0.007)***	0.008	0.336 (0.000)***	1.000						
DIRSIZE	0.711 (0.000)***	0.008	-0.205 (0.000)***	-0.242 (0.000)***	1.000					
DIRMEET	-0.102 (0.000)***	-0.097 (0.000)***	0.042 (0.032)**	0.034 (0.084)*	-0.022 (0.260)	1.000				
AUDITCOM	-0.008 (0.675)	-0.004 (0.822)	0.023 (0.240)	0.054 (0.006)***	0.101 (0.000)***	0.031 (0.115)	1.000			
LEV	-0.159 (0.000)***	-0.152 (0.000)***	0.047 (0.017)**	0.053 (0.007)***	0.008 (0.691)	0.129 (0.000)***	0.001 (0.975)	1.000		
STDROA	-0.229 (0.000)***	-0.218 (0.000)***	0.026 (0.185)	0.019 (0.322)	-0.090 (0.000)***	0.045 (0.023)**	-0.056 (0.005)***	0.165 (0.000)***	1.000	
$LnTA$	0.134 (0.000)***	0.148 (0.000)***	-0.041 (0.039)**	-0.008 (0.684)	0.216 (0.000)***	0.036 (0.064)*	0.037 (0.059)*	0.159 (0.000)***	-0.234 (0.000)***	1.000
BIG4	0.022 (0.270)	0.032 (0.105)	0.009 (0.645)	0.017 (0.387)	0.118 (0.000)***	0.021 (0.279)	0.057 (0.004)***	-0.100 (0.000)***	-0.041 (0.036)**	0.306 (0.000)***
MB	-0.188 (0.000)***	-0.191 (0.000)***	0.008 (0.679)	-0.014 (0.486)	-0.037 (0.061)*	0.011 (0.563)	-0.017 (0.400)	0.179 (0.000)***	0.163 (0.000)***	-0.189 (0.000)***
DIFFOWN	0.130 (0.000)***	0.117 (0.000)***	-0.022 (0.258)	-0.021 (0.278)	-0.092 (0.000)***	-0.027 (0.173)	-0.002 (0.914)	-0.102 (0.000)***	-0.070 (0.000)***	0.193 (0.000)***
TOP1	0.057 (0.004)***	0.054 (0.006)***	-0.076 (0.000)***	-0.017 (0.394)	-0.033 (0.098)*	-0.050 (0.010)***	0.015 (0.440)	-0.137 (0.000)***	-0.104 (0.000)***	0.208 (0.000)***
TOP1SQ	0.053 (0.007)***	0.052 (0.008)***	-0.082 (0.000)***	-0.014 (0.483)	-0.034 (0.079)*	-0.046 (0.019)**	0.011 (0.588)	-0.126 (0.000)***	-0.101 (0.000)***	0.222 (0.000)***
BSH	-0.059 (0.003)***	-0.042 (0.034)**	-0.037 (0.063)**	0.023 (0.252)	0.048 (0.015)**	0.056 (0.004)***	-0.036 (0.064)*	0.026 (0.186)	0.102 (0.000)***	0.133 (0.000)***

Table 4 Regression Results on the Financial Expertise of Independent Directors and Firm-Specific Information

Variables	R^2		SYNCH	
	Coefficients	P-value	Coefficients	P-value
INTERCEPT	-0.078	0.263	-3.322***	0.000
ACCOUT	-0.026***	0.003	-0.174***	0.000
OUTSIDE	0.002	0.965	0.085	0.724
DIRSIZE	-0.001	0.336	-0.010	0.107
DIRMEET	-0.003***	0.000	-0.017***	0.000
AUDITCOM	0.000	0.978	-0.004	0.851
LEV	-0.229***	0.000	-1.365***	0.000
STDROA	-0.189***	0.000	-0.942***	0.000
LnTA	0.086***	0.000	0.543***	0.000
BIG4	0.011	0.243	0.071	0.193
MB	0.018	0.964	-0.924	0.686
DIFFOWN	0.213***	0.000	1.199***	0.000
TOP1	-0.388***	0.000	-2.380***	0.000
TOP1SQ	0.102	0.207	0.759*	0.091
BSH	-0.104***	0.000	-0.573***	0.000
HSH	-0.074***	0.000	-0.423***	0.000
NGOVTOP1	0.008	0.131	0.016	0.570
VOL	0.0003	0.823	0.003	0.690
LnMV	-0.094***	0.000	-0.576***	0.000
LagR ² /LagSYNCH	0.157***	0.000	0.030***	0.000
Year (YR)	Controlled		Controlled	
Industry (IND)	Controlled		Controlled	
OBS	2601		2601	
R ²	0.328		0.283	
Adj.R ²	0.311		0.271	

It is usually believed that equity restriction is a good governance structure through which the “lion’s share” phenomenon of large shareholders can be avoided. Maury and Pajuste (2005), Faccio *et al.* (2001), Volpin (2002), and Bai *et al.* (2005) find that the balance of power between large shareholders helps the governance mechanism to operate effectively, including promoting business performance (value of the company), reducing the opportunity of large shareholders to invade minority shareholders’ interests, and implementing effective acquisitions. So, in Table 5 we further set the interaction term between *ACCOUT* and *DIFFOWN* to analyse the impact of equity restriction on the relation between the financial expertise of independent directors and firm-specific

information. *DIFFOWN* is the proportion of shares held by the largest shareholder divided by the proportion held by the top 10 shareholders, representing the situation of equity restriction; the higher the *DIFFOWN*, the stronger the power of the controlling shareholders, and the weaker the equity restriction mechanism. The regression results in Table 5 show that when the dependent variable is R^2 , the interaction coefficient of *ACCOUT* and *DIFFOWN* is 0.112 and significant at the 1 per cent level; when the dependent variable is *SYNCH*, the interaction coefficient of *ACCOUT* and *DIFFOWN* is 0.636 and also significant at the 1 per cent level. In other words, as the controlling power of the controlling shareholders increases, the positive effects of the financial expertise of independent directors on firm-specific information decreases. Thus, the controlling power of the controlling shareholders affects the relation between the financial expertise of independent directors and firm-specific information, whereby equity restriction among large shareholders helps to improve the positive effects of such expertise on such information.

4.2 Research Results on the Financial Expertise of Independent Directors and Earnings Conservatism

Table 6 lists the regression results of the impact of independent directors' financial expertise on earnings conservatism, which we analyse using the Basu (1997) model. The column of Model 1 shows the results using this model. The interaction coefficient of *DR* and *R* is significantly positive, meaning that the company recognises bad news in a more timely manner than good news, which is consistent with previous literature. Model 2 is obtained by adding *ACCOUT* into Model 1; the results show that the interaction coefficient of *D*, *R*, and *ACCOUT* is 0.080, and the *p*-value is 0.040, which is significant at the 5 per cent level. In other words, when more independent directors have financial expertise, the timeliness of recognising bad news is better than that for good news. This shows that independent directors with financial expertise improve the company's earnings conservatism. Model 3 is added with three variables that can affect earnings conservatism—the market value of owner's equity divided by the book value of the same (*MB*), financial leverage (*LEV*), and company size (*LnMV*)—to re-examine the impact of independent directors with financial expertise on earnings conservatism. The testing results of this model show that the interaction coefficient of *D*, *R*, and *ACCOUT* is 0.062, and the *p*-value is 0.090 and significant at the 1 per cent level. The results further show that after controlling for other factors, independent directors with financial expertise still make an incremental contribution to earnings conservatism. The above conclusions are consistent with the hypothesis that independent directors with financial expertise are familiar with financial knowledge, and thus they can improve a company's earnings conservatism.

Table 5 Impact of Ownership Structure on the Relation between the Financial Expertise of Independent Directors and Firm-Specific Information

Variables	R^2		SYNCH	
	Coefficients	<i>P</i> -value	Coefficients	<i>P</i> -value
INTERCEPT	-0.026	0.716	-0.303***	0.000
ACCOUT	-0.104***	0.000	-0.617***	0.000
ACCOUT*DIFFOWN	0.112***	0.005	0.636***	0.004
OUTSIDE	-0.002	0.962	0.062	0.794
DIRSIZE	-0.001	0.347	-0.010	0.113
DIRMEET	-0.003***	0.000	-0.017***	0.000
AUDITCOM	0.001	0.904	-0.002	0.932
LEV	-0.228***	0.000	-1.362***	0.000
STDROA	-0.187***	0.000	-0.930***	0.000
LnTA	0.086***	0.000	0.544***	0.000
BIG4	0.013	0.193	0.078	0.151
MB	0.006	0.989	-0.989	0.665
DIFFOWN	0.143***	0.000	0.803***	0.000
TOP1	-0.405***	0.000	-2.475***	0.000
TOP1SQ	0.124	0.127	0.881*	0.051
BSH	-0.105***	0.000	-0.576***	0.000
HSH	-0.074***	0.000	-0.420***	0.000
NGOVTOP1	0.008	0.117	0.018	0.528
VOL	0.000	0.897	0.003	0.746
LnMV	-0.094***	0.000	-0.577***	0.000
LagR ² /LagSYNCH	0.155***	0.000	0.030***	0.000
Year (YR)	Controlled		Controlled	
Industry (IND)	Controlled		Controlled	
OBS	2601		2601	
R ²	0.330		0.285	
Adj.R ²	0.319		0.274	

4.3 Further Testing and Robustness Checks

4.3.1 Other Proxies for the Proportion of Independent Directors with Financial Expertise

Additionally, we use two more variables to represent the variable of independent directors with financial expertise. First, we narrow the definition of such directors to include only those who graduated with majors in accounting, financial management, and auditing, while excluding those who graduated with majors in economics, finance, management science, and business administration. According to this definition, the mean value of independent directors with financial expertise is 1.02, meaning that about

one independent director in the company comes from a professional background in accounting, financial management, and auditing. This generally meets the requirement of the CSRC. Compared with the mean value of 1.97 for independent directors with financial expertise as calculated according to the former definition, most listed companies hire one more independent director with a financial background but with a major in other professions, in addition to hiring a professional majoring in accounting. The mean value of the proportion of independent directors with financial expertise calculated according to the narrowed definition is 0.324, which accounts for nearly one third.

Second, we use the number of independent directors with financial expertise divided by the total number of board members to calculate the proportion of independent directors with financial expertise. The mean value of the proportion of such directors (*ACCOUT2*) calculated according to this standard is 0.207; the minimum value is 0, and the maximum value is 0.600.

Table 6 Financial Expertise of Independent Directors and Earnings Conservatism

Variables	Model 1		Model 2		Model 3	
	Coefficients	<i>P</i> -value	Coefficients	<i>P</i> -value	Coefficients	<i>P</i> -value
INTERCEPT	0.021***	0.000	0.017**	0.030	-0.180***	0.000
<i>D</i>	-0.005	0.252	-0.005	0.653	-0.040	0.559
<i>R</i>	0.036***	0.000	0.060***	0.001	0.022	0.845
<i>D</i> * <i>R</i>	0.021**	0.031	-0.030	0.255	-0.008	0.962
<i>ACCOUT</i>			0.007	0.554	0.004	0.706
<i>D</i> * <i>ACCOUT</i>			-0.001	0.975	0.005	0.753
<i>R</i> * <i>ACCOUT</i>			-0.039	0.171	-0.032	0.229
<i>D</i> * <i>R</i> * <i>ACCOUT</i>			0.080**	0.040	0.062*	0.090
<i>MB</i>					-0.507	0.628
<i>R</i> * <i>MB</i>					-0.220	0.934
<i>D</i> * <i>MB</i>					0.484	0.668
<i>D</i> * <i>R</i> * <i>MB</i>					1.162	0.690
<i>LEV</i>					-0.021	0.173
<i>R</i> * <i>LEV</i>					0.030	0.400
<i>D</i> * <i>LEV</i>					-0.030	0.166
<i>D</i> * <i>R</i> * <i>LEV</i>					0.134***	0.005
<i>LnMV</i>					0.016***	0.000
<i>R</i> * <i>LnMV</i>					0.001	0.881
<i>D</i> * <i>LnMV</i>					0.003	0.522
<i>D</i> * <i>R</i> * <i>LnMV</i>					-0.008	0.507
<i>OBS</i>	2061		2061		2061	
<i>R</i> ²	0.103		0.105		0.232	
<i>Adj.R</i> ²	0.102		0.102		0.227	

Tables 7 and 8 list the test results using *ACCOUT1* and *ACCOUT2* as the variable, respectively. Table 7 lists the regression results of *ACCOUT1*, *ACCOUT2*, and firm-specific information (R^2), while Table 8 lists the regression results of earnings conservatism. According to Table 7, for Model 1, the coefficient of *ACCOUT1* is -0.023, and the p -value is 0.045 and significant at the 5 per cent level. For Model 2, the coefficient of *ACCOUT2* is -0.072, and the p -value is 0.006 and significant at the 1 per cent level. The results still suggest that an increase in the proportion of independent directors with financial expertise improves firm-specific information, which is consistent with previous studies. Moreover, we also run the regression with *ACCOUT1*, *ACCOUT2*, and *SYNCH* (dependent variable). We find that the coefficient of *ACCOUT1* is -0.056 with no significance. The coefficient of *ACCOUT2* is -0.422 and significant at the 1 per cent level. Table 8 shows that when we use *ACCOUT1* to conduct the regression analysis, the sign of the interaction coefficient for D , R , and *ACCOUT1* is consistent with the expectation but with no significance. When we use *ACCOUT2* to run the regression analysis, the interaction coefficient for D , R , and *ACCOUT2* is 0.173 and significant at the 10 per cent level. The result again shows that independent directors with financial expertise help to improve earnings conservatism, which is consistent with the above conclusion.

In addition, we use two new indicators of the proportion of independent directors with financial expertise to conduct tests on Table 5. The regression results suggest that when the dependent variable is R^2 and the explanatory variable is *ACCOUT1*, the interaction coefficient of *ACCOUT1* and *DIFFOWN* is 0.058, and the sign is the same as in Table 5 but with no significance; when the explanatory variable is *ACCOUT2*, the interaction coefficient of *ACCOUT2* and *DIFFOWN* is 0.240, and the p -value is 0.030 and significant at the 5 per cent level. When the dependent variable is *SYNCH* and the explanatory variable is *ACCOUT1*, the interaction coefficient of *ACCOUT1* and *DIFFOWN* is 0.366, but with no significance; when the explanatory variable is *ACCOUT2*, the interaction coefficient of *ACCOUT2* and *DIFFOWN* is 1.091, and the p -value is 0.067 and significant at the 10 per cent level.

As seen from the analysis of the regression results of Tables 7 and 8, when we use the narrowed definition of *ACCOUT1* to run the regression, the significance of the explanatory variable coefficient is weakened. This result can be explained by the fact that, as mentioned in the former definition of independent directors with financial expertise, independent directors coming from professional backgrounds in economics and management science have also taken courses in accounting and so do have a certain financial expertise and do play a role in the company, apart from those independent directors with professional backgrounds in accounting, financial management, and auditing. This fact thus reduces the marginal effects of the independent directors coming from professional backgrounds in accounting, financial management, and auditing on firm-specific information and earnings conservatism.

Table 7 Regression Results of R^2

Variables	$ACCOUT = ACCOUT1$		$ACCOUT = ACCOUT2$	
	Coefficients	P-value	Coefficients	P-value
INTERCEPT	-0.087	0.216	-0.095	0.174
<i>ACCOUT</i>	-0.023**	0.045	-0.072***	0.006
<i>OUTSIDE</i>	0.000	0.996	0.046	0.309
<i>DIRSIZE</i>	-0.001	0.296	-0.001	0.322
<i>DIRMEET</i>	-0.003***	0.000	-0.003***	0.000
<i>AUDITCOM</i>	0.000	0.967	0.0005	0.986
<i>LEV</i>	-0.229***	0.000	-0.228***	0.000
<i>STDROA</i>	-0.189***	0.000	-0.190***	0.000
<i>LnTA</i>	0.086***	0.000	0.086***	0.000
<i>BIG4</i>	0.011	0.243	0.012	0.234
<i>MB</i>	0.007	0.986	0.009	0.982
<i>DIFDOWN</i>	0.209***	0.000	0.212***	0.000
<i>TOP1</i>	-0.384***	0.000	-0.387***	0.000
<i>TOP1SQ</i>	0.103	0.204	0.103	0.206
<i>BSH</i>	-0.104***	0.000	-0.104***	0.000
<i>HSH</i>	-0.075***	0.000	-0.075***	0.000
<i>NGOVTOP1</i>	0.008	0.132	0.008	0.130
<i>VOL</i>	0.0003	0.827	0.00009	0.835
<i>LnMV</i>	-0.094	0.000	-0.094***	0.000
<i>LagR²</i>	0.159***	0.000	0.157***	0.000
Year (<i>YR</i>)	Controlled		Controlled	
Industry (<i>IND</i>)	Controlled		Controlled	
OBS	2601		2601	
R^2	0.327		0.328	
Adj. R^2	0.316		0.317	

4.3.2 Endogenous Problem

If the model has an endogenous problem, the reliability of the conclusions will be weakened. So, we adopt the proxy variable method according to García Lara, García Osmá, and Penalva (2007) to deal with this problem,⁶ using the estimated residuals (*RACCOUT*) from Model 4 as a proxy for *ACCOUT* to re-run the regression for Model 1.

⁶ The main problem caused by endogeneity is the inconsistency in parameter estimation. To solve the problem, the instrumental variable method and proxy variable method are commonly used. Unlike the former method, the proxy variable method adopted in this paper extracts useful information from the residual of the model to run the second stage regression, while not processing the existing explanatory variable.

Table 8 Regression Results of Earnings Conservatism

Variables	<i>ACCOUT = ACCOUT1</i>		<i>ACCOUT = ACCOUT2</i>	
	Coefficients	<i>P</i> -value	Coefficients	<i>P</i> -value
INTERCEPT	-0.175***	0.000	-0.180***	0.000
<i>D</i>	-0.040	0.561	-0.040	0.559
<i>R</i>	-0.009	0.939	0.016	0.887
<i>D*R</i>	0.030	0.851	-0.002	0.991
<i>ACCOUT</i>	-0.001	0.932	0.018	0.583
<i>D*ACCOUT</i>	0.006	0.791	0.009	0.833
<i>R*ACCOUT</i>	0.006	0.879	-0.075	0.316
<i>D*R*ACCOUT</i>	0.029	0.583	0.173*	0.087
<i>MB</i>	-0.521	0.619	-0.506	0.629
<i>R*MB</i>	-0.193	0.942	-0.231	0.931
<i>D*MB</i>	0.489	0.665	0.500	0.658
<i>D*R*MB</i>	1.083	0.710	1.201	0.680
<i>LEV</i>	-0.021	0.177	-0.021	0.170
<i>R*LEV</i>	0.029	0.405	0.030	0.387
<i>D*LEV</i>	-0.028	0.190	-0.030	0.160
<i>D*R*LEV</i>	0.139***	0.004	0.131***	0.006
<i>LnMV</i>	0.016***	0.000	0.016***	0.000
<i>R*LnMV</i>	0.002	0.816	0.001	0.869
<i>D*LnMV</i>	0.003	0.520	0.003	0.511
<i>D*R*LnMV</i>	-0.009	0.462	-0.008	0.495
OBS	2061		2061	
<i>R</i> ²	0.232		0.232	
Adj. <i>R</i> ²	0.226		0.227	

Model 4 is as follows:

$$\begin{aligned}
 ACCOUT = & \alpha + \beta_1 OUTSIDE + \beta_2 DIRSIZE + \beta_3 TOP1 + \beta_{4T} LEV \\
 & + \beta_5 MB + \beta_6 ROA + \beta_7 LnTA + \beta_{8-i} \sum_1^i YR_i + \beta_{i-j} \sum_1^j IND_j + \varepsilon, \quad (4)
 \end{aligned}$$

For Model 4, *ROA* is the return on total assets, which is equal to profits before tax divided by total assets. *YR* is the dummy variable for the year, and *IND* is the dummy variable for industry. The definitions of other variables are the same as in Table 1.

Table 9 lists the regression results after considering the endogenous problem. It shows that when the dependent variable is *R*², the coefficient of *RACCOUT* is -0.028 and significant at the 1 per cent level; when the dependent variable is *SYNCH*, the coefficient of *RACCOUT* is -0.190 and also significant at the 1 per cent level. The conclusion supports the results of Model 1 that the higher the proportion of independent directors with financial expertise, the lower is the *R*²/*SYNCH*, and the more firm-specific information is disclosed by the company, meaning that the proportion of such directors has a positive relation to such information.

Meanwhile, when we analyse the effect of ownership structure on the relation between the financial expertise of independent directors and firm-specific information, we use the residual (*RACCOU*) as a proxy for *ACCOU* in Table 5 to run the regression. When the dependent variable is R^2 , the interaction coefficient of *RACCOU* and *DIFFOWN* is 0.114, and the p-value is 0.005 and significant at the 1 per cent level; when the dependent variable is *SYNCH*, the interaction coefficient of *RACCOU* and *DIFFOWN* is 0.545, and the p-value is 0.012 and significant at the 5 per cent level. In other words, when the endogenous problem is taken into account, the impact of ownership structure on the relation between the financial expertise of independent directors and firm-specific information remains significant.

Table 10 lists the regression results of the financial expertise of independent directors and earnings conservatism after controlling for the endogenous problem. As it shows, before other control variables are added, the results of Model 1 show that the interaction coefficient of *D*, *R*, and *RACCOU3* is 0.074, and the p-value is 0.065 and significant at the 10 per cent level; after controlling for *MB*, *LEV*, and *LnMV*, the results of Model 2 show that the interaction coefficient of *D*, *R*, and *RACCOU3* is 0.062, and the p-value is 0.097 and also significant at the 10 per cent level. These conclusions suggest that after controlling for the endogenous problem, the financial expertise of independent directors still makes an incremental contribution to earnings conservatism; increasing the proportion of independent directors with financial expertise improves the timeliness of recognising bad news versus good news.

4.3.3 Other Robustness Checks

Because the research sample of this study is a continuous three-year sample, there might be a residual serial correlation problem. So, for robustness checks, we first choose the cluster residual analysis to eliminate this problem. This analysis shows that in the regression results of firm-specific information, when the dependent variable is R^2 , the coefficient of *ACCOU* is -0.026, and the p-value is 0.006 and significant at the 1 per cent level; when the dependent variable is *SYNCH*, the coefficient of *ACCOU* is -0.174, and the p-value is 0.002 and also significant at the 1 per cent level. The result is consistent with previous studies. For the model analysing the relation between equity restriction and the financial expertise of independent directors and firm-specific information, the cluster residual analysis result is that when the dependent variable is R^2 , the interaction coefficient of *ACCOU* and *DIFFOWN* is 0.112, and the p-value is 0.007 and significant at the 1 per cent level; when the dependent variable is *SYNCH*, the interaction coefficient of *ACCOU* and *DIFFOWN* is 0.636 and significant at the 5 per cent level. The cluster residual analysis of earnings conservatism suggests that when no other control variables exist, the interaction coefficient of *D*, *R*, and *ACCOU* is 0.080, and the p-value is 0.090 and significant at the 10 per cent level; when adding other control variables, the interaction coefficient is insignificant.

Table 9 Financial Expertise of Independent Directors (*RACCOUT*) and Firm-Specific Information

Variables	R^2		<i>SYNCH</i>	
	Coefficients	<i>P</i> -value	Coefficients	<i>P</i> -value
INTERCEPT	0.020	0.768	-2.711***	0.000
<i>RACCOUT</i>	-0.028***	0.001	-0.190***	0.000
<i>OUTSIDE</i>	0.008	0.845	0.123	0.609
<i>DIRSIZE</i>	0.000	0.730	-0.005	0.378
<i>DIRMEET</i>	-0.003***	0.000	-0.017***	0.000
<i>AUDITCOM</i>	0.000	0.910	-0.009	0.705
<i>LEV</i>	-0.229***	0.000	-1.355***	0.000
<i>STDROA</i>	-0.213***	0.000	-1.099***	0.000
<i>LnTA</i>	0.081***	0.000	0.505***	0.000
<i>BIG4</i>	0.018*	0.071	0.109**	0.047
<i>MB</i>	0.381	0.368	1.040	0.658
<i>DIFFOWN</i>	0.052**	0.011	0.228**	0.048
<i>TOP1</i>	-0.064	0.423	-0.408	0.361
<i>TOP1SQ</i>	0.038	0.641	0.367	0.418
<i>BSH</i>	-0.043***	0.000	-0.200***	0.000
<i>HSH</i>	-0.036**	0.045	-0.186*	0.063
<i>NGOVTOP1</i>	0.006	0.227	0.007	0.798
<i>VOL</i>	0.000	0.951	0.001	0.903
<i>LnMV</i>	-0.089***	0.000	-0.538***	0.000
<i>LagR²/LagSYNCH</i>	0.160***	0.000	0.030***	0.000
Year (<i>YR</i>)	Controlled		Controlled	
Insuistry (<i>IND</i>)	Controlled		Controlled	
OBS	2601		2601	
R^2	0.319		0.267	
Adj. R^2	0.308		0.255	

Second, we winsorise the top and bottom 1 per cent values of the three main variables R^2 , *SYNCH*, and *ACCOUT* to mitigate the influence of extreme values. According to the regression results of the winsorised firm-specific information model, when the dependent variable is R^2 , the coefficient of *ACCOUT* is -0.026 and significant at the 1 per cent level; when the dependent variable is *SYNCH*, the coefficient of *ACCOUT* is -0.137 and significant at the 1 per cent level. This is consistent with the above research in that the results do not change after eliminating the extreme values. Meanwhile, using the three winsorised variables to run the regression of Table 5, the results show that when the dependent variable is R^2 , the interaction coefficient of *ACCOUT* and *DIFFOWN* is 0.130 and significant at the 1 per cent level; when the dependent variable is *SYNCH*,

the coefficient of *ACCOUT* is 0.664 and also significant at the 1 per cent level. The regression results of the winsorised Basu (1997) conservatism model suggests that before any other control variables are added, the interaction coefficient of *D*, *R*, and *ACCOUT* is 0.080 and significant at the 5 per cent level; after adding the control variables (*MB*, *LEV*, and *LnMV*) into the model, the interaction coefficient of *D*, *R*, and *ACCOUT* is 0.062 and significant at the 10 per cent level. This research result is consistent with prior results, meaning that it remains stable.

Table 10 Financial Expertise of Independent Directors (*RACCOUT*) and Earnings Conservatism

Variables	Model 1		Model 2	
	Coefficients	<i>P</i> -value	Coefficients	<i>P</i> -value
INTERCEPT	0.021***	0.000	-0.177***	0.000
<i>D</i>	-0.005	0.217	-0.036	0.590
<i>R</i>	0.036***	0.000	0.001	0.992
<i>D</i> * <i>R</i>	0.020	0.041	0.035	0.828
<i>RACCOUT</i>	0.012	0.350	0.006	0.593
<i>D</i> * <i>RACCOUT</i>	0.000	0.979	0.006	0.702
<i>R</i> * <i>RACCOUT</i>	-0.042	0.162	-0.034	0.219
<i>D</i> * <i>R</i> * <i>RACCOUT</i>	0.074*	0.065	0.062*	0.097
<i>MB</i>			-0.587	0.576
<i>R</i> * <i>MB</i>			-0.002	0.999
<i>D</i> * <i>MB</i>			0.567	0.616
<i>D</i> * <i>R</i> * <i>MB</i>			0.955	0.743
<i>LEV</i>			-0.021	0.183
<i>R</i> * <i>LEV</i>			0.027	0.438
<i>D</i> * <i>LEV</i>			-0.030	0.161
<i>D</i> * <i>R</i> * <i>LEV</i>			0.137***	0.004
<i>LnMV</i>			0.016***	0.000
<i>R</i> * <i>LnMV</i>			0.001	0.868
<i>D</i> * <i>LnMV</i>			0.003	0.528
<i>D</i> * <i>R</i> * <i>LnMV</i>			-0.008	0.485
OBS	2061		2061	
<i>R</i> ²	0.104		0.232	
Adj. <i>R</i> ²	0.101		0.227	

V. Conclusions

The governance role of independent directors is usually related to their expertise. Independent directors with different types of expertise play different roles in corporate governance. This is the basic reason that the CSRC requires listed companies to hire one director who is an accounting professional. This paper studies the relation between the financial expertise of independent directors and two important dimensions of corporate disclosure: firm-specific information and earnings conservatism. The research results show that, with respect to the relation between the financial expertise of independent directors and firm-specific information, a higher proportion of independent directors with financial expertise leads to lower R^2 and *SYNCH*, and more firm-specific information is reflected in the stock price; moreover, in companies with a better ownership structure, this relation is even more obvious. For the relation between the financial expertise of independent directors and earnings conservatism, we use the Basu (1997) model to perform tests, the results of which show that a higher proportion of independent directors with financial expertise leads to greater earnings conservatism. Therefore, independent directors with financial expertise do play an important role in improving the quality of corporate disclosure.

The contribution of this paper lies in our analysis from a new perspective of the effect of the financial expertise of independent directors on improving corporate disclosure quality. Although some literature analyses the relation between these from such perspectives as the financial expertise of independent directors and discretionary accruals, total accruals, changes in cash flows from operating activities, and profits, this is not sufficient for us to understand fully the relation between such expertise and corporate disclosure quality. Our study thus helps to further explore this issue. It further confirms that the financial expertise of independent directors not only reduces the level of earnings management, but also helps to raise the level of firm-specific information and earnings conservatism. In other words, independent directors with financial expertise provide significant advantages for improving the quality of corporate disclosure. The policy implication in this paper is that the effects of independent directors are related to their professional backgrounds. When listed companies hire independent directors, they should hire those coming from reasonably good professional backgrounds on the basis of their needs.

References

Please refer to pp 24-27.