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媒体关注、稳健会计政策与市场反应1

朱松² 徐浩峰³ 姚立杰⁴

摘要

面对投机氛围浓厚以及信息中介传递偏差的局面,媒体在资本市场中发挥着何种作用受到越来越多的关注。本文研究发现:在发展中的中国资本市场,媒体关注容易造成更高的换手率,从而带来更强烈的市场反应,或者说媒体关注会起到放大企业信息的作用,这种效应对于不同盈亏状况、盈利变化以及不同产权情况都存在。也就是说,媒体在资本市场中发挥了重要作用,会严重影响投资者的财富水平。而稳健会计政策则可以抑制媒体关注导致的过度市场反应,表明会计政策能够显著影响市场投机行为,影响资本市场效率。

关键词:媒体关注、媒体效应、市场反应、稳健会计政策中图分类号:F23、F27、F83

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² 朱松:北京师范大学经济与工商管理学院讲师,博士。通信地址:北京市新街口外大街19号北京师范大学经济与工商管理学院,邮编:100875。电子邮件:zhusong@bnu.edu.cn。

³ 徐浩峰(通讯作者):中山大学管理学院讲师,博士。通信地址:广州市新港西路135号中山大学管理学院,邮编:510275。电子邮件:tunsonytz10@hotmail.com。

⁴ 姚立杰:北京交通大学经济管理学院讲师,博士。通信地址:北京交通大学经济管理学院会计系,邮编:100044。电子邮件:ljyao@bjtu.edu.cn。

一、引言

随着对于公司治理机制的深入研究,学者以及监管机构越来越关注外部治理因素,即资本市场中介机构的作用。其中,媒体作为信息传递的重要途径,对于降低企业与利益相关者之间的信息不对称,发挥外部治理功能产生了重要影响(Miller, 2006; Dyck et al., 2008; Joe et al., 2009)。在成熟市场中,媒体可以通过影响经理人的声誉而实现其治理作用(Dyck et al., 2008; 郑志刚,2007)。但是,由于资本市场完善程度、投资者构成以及理性程度的差异,媒体在我国发挥治理作用的条件不同于声誉机制。在我国,媒体关注引发了行政机构的介入,而行政机构的介入最终促使企业改正违规行为(李培功和沈艺峰,2010)。面对投机氛围浓厚、新兴市场参与者成熟度不足以及信息中介传递偏差的局面(田萌,2003;唐俊,2003;谭慧,2003),媒体在发展中的资本市场是否起到相反的作用,即加剧市场的波动呢?2007年末,"全聚德"、"金风科技"等一些中小板题材股的大幅上涨,引起了市场人士和监管部门的普遍担忧和高度重视。而市场普遍将大幅上涨的原因归结于基本面题材的过度渲染和大量散户投资者的买入(黄金滔,2008)。媒体对于企业的报道是否会在信息披露过程中放大信息效用,甚至对投机和炒作行为推波助澜?会计报告政策能否在这一过程中发挥一定作用呢?本文试图对以上问题进行初步探讨。

采用Fang and Peress (2009)以媒体报道的绝对数量衡量媒体关注程度的方法,本文研究发现:在发展中的中国资本市场,媒体关注容易造成更高的换手率,从而带来更强烈的市场反应,或者说媒体关注会起到放大企业信息的作用,这种效应对于不同盈亏状况、盈利变化以及不同产权情况都存在。而稳健会计政策可以抑制媒体关注造成的过度市场反应。本文为媒体在资本市场中发挥的作用提供了另一角度的证据,丰富了关于媒体的研究成果。采用中国资本市场数据进行的研究反映了发展中的资本市场里媒体不完善的治理功能。另外,本文将会计稳健性引入到媒体效应的研究中,表明媒体效应也受到会计政策以及会计信息的影响,为媒体方面的研究提供了更多参考。同时,本文也提供了会计稳健性对资产定价影响的经验证据,支持了有关会计稳健性定价的理论性研究成果。

本文第二部分为文献回顾,第三部分提出研究假设,第四部分为研究设计,实证分析在本文第五部分,第六部分对全文进行总结。

二、文献回顾

出于对未来就业机会和薪酬的考虑,经理人往往十分重视自身的声誉。但是,机会主义动机往往促使经理人做出对投资者不利的决策。而媒体则可以通过影响经理人的声誉而实现其治理作用(Dyck et al., 2008),因为媒体的负面报道能够伤及经理人的声誉,媒体对于企业内部较差信息的披露会导致投资者的负面评价(Joe et al., 2009),因而经理人通常会积极应对媒体报道(Joe et al., 2009)。媒体的存在,在一定程度上消除了通过提供虚假信息谋求私利的可能。较多的受到媒体关注能够改善企业的治理结构,有助于投资者利益保护(Miller, 2006; Dyck et al., 2008; Joe et al., 2009)。实际上,媒体影响经理人声誉而实现其治理作用的原因在于媒体关注能够对股票价格产生重要影响。媒体关注较多的企业往往很多信息都已经被市场所了解,

因此信息相对较为透明。Fang and Peress (2009)发现与媒体高度披露的公司相比, 没有媒体披露的公司有着更高的市场回报。因为对某些公司媒体披露程度的提高改 善了投资者能够获得的信息质量,降低了进行交易的信息风险。而具有低分析师关 注度、大量散户持股以及高股价波动率等信息风险较高的公司,将获得更高的无媒 体关注溢价(no-media premium)。因此,在其他因素不变的情况下,不论这些披露的 信息是好是坏,被媒体密集披露的公司都会由于信息风险较低而有一个较低的预期 回报。但是,媒体关注较多的企业一旦出现新的信息,那么这种信息会更加具有信 息含量,导致更高的超额收益。而且,媒体关注除了具有治理作用,在治理环境较 差的市场中,媒体往往发挥了相反的作用。Chen et al.(2009)的研究表明,对上市公 司的非正常媒体披露会显著夸大其定价偏差,也就是说,非正常媒体披露在投资者 中间产生了很强的情绪效应及过度反应,从而导致公司的股票被错误定价。以上研 究表明,媒体关注很容易造成企业披露新信息时,市场出现更加强烈的反应。而媒 体对股票价格的影响则取决于投资者的交易特征以及投资者对媒体的关注。Merton (1987)发现投资者仅会购买他们关注的股票, Lee (1992)以及Barber and Odean (2008) 认为在卖空限制下,投资者行为存在注意力集中现象;散户投资者的注意力是有限 的,在卖空限制下,散户投资者很难卖空所关注的股票,仅能买入引起他们关注 的股票。因此,吸引投资者关注的主要方式在于透过媒体曝光提高公司的可见度 (Merton, 1987)。Barber and Odean (2008)发现新闻覆盖度较高的股票有较高个人投资 者的净买入。可见,媒体关注实际上通过影响投资者行为,影响了企业股票的市场 表现,从而对经理人的行为产生约束,发挥治理作用。

国内关于媒体的研究目前还不多。郑志刚(2007)对媒体的治理职能进行了文献回顾,认为媒体公司治理角色的实施途径是通过影响声誉实现的,主要存在以下三种:首先,媒体关注将促使政治家(议员、政府官员等)修改并有效实施公司法。其次,媒体关注将迫使公司董事(经理人)维持"好"的董事(经理人)声誉。最后,媒体关注将影响公司董事(经理人)的社会声誉和公众形象。李培功和沈艺峰(2010)的实证研究支持了媒体在完善中国公司治理水平、保护投资者权益方面的积极作用,他们发现随着媒体负面报道数量的增加,上市公司改正违规行为的概率也随之提高。媒体的性质、报道方式以及报道手法等也会对企业改正违规行为产生积极影响,而且其公司治理作用主要是通过引起行政机构介入违规公司的可能性,进而显著提高上市公司改正违规行为的概率来实现的。辛宇(2010)的研究也表明,媒体在股权分置改革中发挥着非常重要的治理作用。但是,贺建刚等(2008)通过对五粮液公司2003年之后的关联交易和现金股利的追踪分析,发现媒体并没有起到抑制大股东掏空行为的作用,即在中国目前的市场结构下媒体还没有能够很好的发挥其治理作用。当然,媒体的公司治理作用往往需要通过大样本分析才能得到验证(Dyck et al., 2008;李培功和沈艺峰,2010)。

自1990年12月上海证券交易所成立起,"中国股市的发展史,特别是二级市场的运作史,就是一部庄家的史诗"(何晓晴,2002)。大量的个人投资者与少数具有资金与信息双重优势的机构投资者并存的市场结构,诱发了机构投资者操纵股票价格以获利的动机(鲁桂华和陈晓,2005)。媒体作为资本市场中独特的信息中介,是发挥了治理作用,还是扮演了其它角色呢?会计信息作为股票定价最重要的因素,

其产生与报告对股票定价产生了重要影响。那么,激进与稳健的会计政策在这一过程发挥了什么样的作用?目前鲜有相关研究。

三、研究假设

新闻媒体在中国资本市场中发挥了一定的治理作用,帮助投资者及时并更多 地了解企业信息,起到降低信息不对称的作用。媒体披露程度的提高改善了投资 者能够获得的信息质量,降低了进行交易的信息风险(李培功和沈艺峰,2010)。 Fang and Peress (2009)发现由于流动性限制(liquidity constraint)和投资者关注(investor cognition),市场会对低媒体关注度的公司进行风险补偿,进而在未来获得较高的月 度回报。Tetlock (2007)研究发现,媒体关注会对公司股价造成短期冲击,冲击后证 券价格滞后的1到5个交易日呈现超额收益反转现象。Shiller (2000)认为媒体的作用 不单纯是向投资者传递重大经济事项,媒体积极地引起大众关注,将会过度强化股 票价格对信息的反应;对于这种媒体信息的重复覆盖,交易者如果无法识别,将依 据不具有新信息含量的重复信息进行交易,这将导致正反馈效应,亦即收益回报加 强的趋势来自于媒体持续的披露。Cook et al.(2006)发现企业IPO时的媒体报道有 99%是正面和积极的,而且大都是描述性的语句,而市场会根据大多数投资者的评 价认定该报道消息的价值,而不是根据媒体的态度是否正面(Liu et al., 2008)。也就 是说,媒体报道本身就会促使一定的价格变化,另外基于不同的好消息或者坏消息 的关注,则会引起市场进一步的反应。徐永新和陈婵(2009)以中国证券报的"实力机 构荐股精选"专栏进行分析发现,荐股日前1周到荐股日后1天的事件期间有显著的 超额收益,而荐股日后的第2到5个交易日超额收益为负,表明了媒体荐股产生了正 面市场的反应与事后的证券收益反转现象,并推测原因可能来自于资本市场存在大 量的散户。

由于先验信念异质性(heterogeneous belief)的影响,投资者对公司存在不同程度的先验预期,因而定量盈余信息的披露加剧了意见分歧的程度(Hong and Stein, 2007)。媒体对于信息起到了传递与过滤的作用。而受到记者主观偏好与讨好社会大众的特性(Fang and Peress, 2009),经过媒体过滤的信息可能与信息的本源存在偏差,导致投资者意见分歧。Scheinkman and Xiong (2003)的模型指出,投资者对信息的解读差异程度(过度自信)上升时,将产生更大程度的信念分歧,导致股票价格中再出售期权价值(投机泡沫)上升。在我国大量散户参与、机构投资者频繁换手等市场投机氛围较浓厚的环境下,经过媒体过滤的信息可能与信息的本源存在偏差,大量的报道将提高投资者的意见分歧度,形成价格泡沫。

事实上,在法制环境相对不够完善,监管不到位的市场环境下,媒体关注以及媒体披露甚至会起到相反的作用。信息披露一方面取决于信息的发布主体,即企业。另一方面取决于信息的传递过程,即媒体的影响。当媒体没有对信息进行详细审核和鉴别就进行宣传,这无疑在一定程度上散播了"谣言",反而对股票定价以及市场效率有所损害,而"谣言"会影响股票定价以及投资者的购买行为(Rose, 1951)。再加上分析师如果没有尽职调查分析就通过媒体进行宣传,那么就会进一步造成媒

体关注导致更强烈的市场反应,而非较低的市场预期。,这种媒体关注会在投资者中间产生了很强的情绪效应及过度反应,从而导致公司的股票被错误定价(Chen et al., 2009)。而且,很多报道以及个案研究发现投资中介以及机构投资者通过与上市公司大股东或者管理层合谋,利用媒体进行过度渲染,从而获得更高的市场收益。中国资本市场首例"操纵证券市场"案一汪建中荐股案,汪建中被指控"先买入再推荐"的行为涉嫌操纵证券市场罪,利用公司名字在"新浪网"、"搜狐网"、上海证券报、证券时报等媒介对外推荐该证券,人为影响证券交易价格并获取个人非法利益。也就是说,媒体披露也很可能在投资者中间产生很强的情绪效应,造成更强烈的市场反应。

另一方面,即使是媒体对上市公司的关注和信息披露是出于降低信息不对称和治理动机的,市场也会因为投资者和市场结构的不成熟和不完善产生更强烈的反应。6中国资本市场发展至今20年时间,股票市场制度的不规范和不完备,使得投资者的行为无法得到良好的监督与引导。市场投机倾向明显,投资者倾向于短期炒作,部分机构投资者甚至操纵市场价格走势。加上证券谘询机构不但没有起到完善股票市场信息传导机制和提高市场效率的作用,反而加剧了股票市场的信息不对称性,助长了中小投资者短期投机的倾向(田萌,2003;唐俊,2003;谭慧,2003)。"全聚德"、"金风科技"等一些中小板题材股的大幅上涨也是出于基本面题材的过度渲染和大量散户投资者买入所造成的(黄金滔,2008)。媒体对上市公司的关注和报道容易造成投机和利润追逐动机的投资者产生很强的情绪效应,造成更强烈的市场反应。对于盈利以及未预期盈利的公司市场反应更加正面和积极,出现更好的市场表现;而亏损或者未预期亏损的企业市场反应也更加强烈,容易导致更差的市场表现。

总之,从治理角度来讲,媒体关注会降低信息不对称程度,导致较低的预期收益。而从市场结构和环境来看,中国目前的媒体关注很可能会带来相反的情况,即 媒体关注容易导致更强烈的市场反应。因此,本文假设:

假设1:媒体关注容易导致更强烈的市场反应。

及时确认损失、不高估净资产和净利润的报告政策被视为一种稳健的做法,这种报告政策能够向债权人提供更加及时的信息,可以对契约违反情况做出更加及时的反应,从而提高债务契约效率,保护债权人的利益(Watts, 2003; Ahmed et al., 2002)。而且,稳健的会计政策能够向董事会提供及时的信号从而对投资项目进行调查(Watts, 2003),因此能够激励管理层尽可能避免投资NPV为负的项目(LaFond and Roychowdhury, 2008),从而降低现金流收益权与控制权的分离在管理层与股东之间产生代理问题。稳健会计政策不仅可以通过降低薪酬和盈余管理数额,从而降低社会非效率(Chen et al., 2007),也可以降低投资扭曲程度,提高资源配置的效率(Venugopalan, 2004)。因此,尽管稳健的会计盈余不能直接增加公司价值,但稳健的会计盈余可以对公司价值的损害发挥缓冲作用,从而有利于维护和保持公司价值。

⁵ 例如2011年的中国宝安的石墨门事件。

⁶ 中国上市公司的一系列食品安全问题,媒体的关注和报道导致企业股票市场大幅下跌,如双汇 事件。

Miller (1977)认为如果由于较高的卖空成本导致投资者不能进行卖空交易,那么股票价格就会反映出较为乐观的估值情况。Diether et al.(2002)也认为乐观的需求会进一步推高股票价格,导致股票被高估。而且,负面消息的不披露也会使得股票价格被高估。而稳健的会计系统则会导致更加有效的价格,尤其是卖空受到限制时(Diether et al., 2002)。强制的会计稳健性提供了一种避免泡沫和高估的方式,因为稳健原则提前确认了"坏消息",降低了投资者的预期(Dierker, 2006)。中国资本市场在2010年以前是没有做空机制,很容易出现泡沫和股票被高估的情况。加上投资者和市场结构的不成熟和不完善,非正常媒体披露以及正常的媒体关注都很容易在投资者中间产生很强的情绪效应,导致公司股票被错误定价(Chen et al., 2009;田萌,2003;唐俊,2003)。激进的会计政策由于对"坏消息"确认不及时,高估了企业的盈利能力,因此容易被市场炒作,从而产生更强烈的反应。换言之,稳健的会计政策提前确认了"坏消息",会导致比完全披露情况下较低的预期股票价格(Dierker, 2006)。稳健原则由于存在不高估净资产和净利润的属性,7因此能够降低市场的强烈反应。因此,本文假设:

假设2:稳健会计政策能够抑制媒体关注导致的市场的强烈反应。

媒体往往更加关注企业的重大事件、盈利水平或者未预期盈余。在年度报告披露前后,媒体关注和报道较多的通常是企业的盈利水平以及未预期盈余。因此,盈利水平或者未预期盈利越高的企业更加容易受到媒体的关注。由于媒体的宣传效应,很容易造成基本面题材的过度渲染和大量散户投资者买入(黄金滔,2008)。加之投资者和市场结构的不完善,媒体关注会导致市场在对会计信息,尤其是对会计盈余的反应过度。因为信息往往被机构或者其他投机者所利用,加上投资者结构的不完善和逐利动机的驱使,在盈利水平或未预期盈余水平一定的情况下,更多的媒体关注往往会造成更强烈的市场反应。

盈利水平较高或者未预期盈余为正时,媒体关注会加强盈余与市场反应之间的正相关性;而盈利水平较差或者未预期盈余为负时,媒体关注会进一步打击市场,造成更差的市场反应。稳健的会计政策由于提前确认了"坏消息",存在不高估净资产和净利润的属性,会导致比完全披露情况下较低的预期股票价格(Dierker, 2006),能够降低媒体过多关注造成的市场对未预期盈余的过度反应,即降低未预期盈余为正时媒体关注造成的市场反应。而在盈利能力较差或者未预期盈余为负的情况下,稳健的会计政策意味着比激进会计政策具有更多的未来成长空间((Ohlson, 2009; Easton, 2009),会降低未预期盈余为负给市场带来的负面影响。因此,本文假设:

假设3:稳健会计政策能够进一步抑制媒体对未预期盈利的关注造成的市场的强烈反应。

⁷ 条件稳健性与非条件稳健性都存在这样的属性,即不高估净资产和净利润。

四、研究设计

(一)模型设定

为了检验媒体关注效应以及稳健会计政策对媒体关注效应的影响,本文模型设定如下:

$$CAR = \beta_0 + \beta_1 MEDIA + \beta_2 CONSERV \times MEDIA + \beta_3 MEDIA \times \Delta ROE$$

$$+ \beta_4 CONSERV \times MEDIA \times \Delta ROE + \beta_5 CONSERV \times \Delta ROE$$

$$+ \beta_6 CONSERV + \beta_7 \Delta ROE + \sum_i \beta_i CONTROLS + \varepsilon$$
(1)

CAR为年报披露日前后不同时间窗口下每个交易日的累计超额收益,即每个交易日作为观察值,而不是将每个公司年度的盈余公告为观察值。 8MEDIA 为媒体关注变量,CONSERV为会计稳健性指标,AROE为企业盈利能力的变化。 $CONSERV \times MEDIA$ 表示稳健会计政策对媒体效应的影响, $MEDIA \times AROE$ 表示不同盈利水平下的媒体效应, $CONSERV \times MEDIA \times AROE$ 表示在不同盈利水平下稳健会计政策对媒体效应的影响,CONTROLS为其他控制变量。根据假设,本文预期:(1) $\beta_1 > 0$,表明媒体关注会产生更强烈的市场反应;(2) $\beta_2 < 0$,意味着稳健会计原则能够在一定程度上抑制市场对于媒体关注产生的强烈反应;(3) $\beta_4 < 0$,表明稳会计原则能够进一步遏制媒体对于盈利水平关注所造成的市场的强烈反应。

(二)变量定义

被解释变量为不同时间窗口下每个交易日的累计超额收益 CAR。其中,CAR30为年报披露日前后各30个交易日的累计超额收益,CAR10为前后各10个交易日,CAR5为前后各5个交易日,CAR3为前后各3个交易日,CAR1为前后各1个交易日。其中超额收益(AR)的计算使用Fama-French (1993)三因子模型计算。本文首先使用盈余披露日前第130个交易日至盈余披露日前31个交易日共100天的日数据估计模型因子载荷,然后计算盈余披露前后不同时间窗口下每天的超额收益:

$$AR_{it} = r_{it} - \hat{\beta}_{MKT}r_{mt} - \hat{\beta}_{SMB,i}SMB_t - \hat{\beta}_{HML,i}HML_t$$
 (2)

 AR_{ii} 是股票i在相对于盈余披露日第t天的超额收益, r_{mi} 是市场报酬率在相对于盈余披露日第t天对无风险利率的溢价。 \hat{eta}_{MKT} 、 $\hat{eta}_{SMB,i}$ 、 $\hat{eta}_{HML,i}$ 是根据 Fama-French 模型估

⁸ 这是因为:(1)媒体影响具有一定的时效性,如果仅以年度作为观察,将没有办法观测到媒体具体的影响,因为以年度为事件窗期受到其他因素影响太多,将会抵消掉媒体对盈余信息披露的刺激效果。比如,投资中介以及机构投资者,所谓的"庄家"利用媒体进行大肆宣传,往往是集中在某一个时间段。前期通过这种方法会产生较高的超额收益,而等到"庄家"和机构派发完手中的筹码,中小流通股东和散户接盘时,就会出现大幅下跌的情况。综合这个期间的收益往往不能体现出媒体炒作带来的超额收益,因此本文采用了每个交易日作为一个观察值,这样能够更好的反映出在媒体集中关注的几个交易日中某只股票产生的超额收益。(2)结合资本市场与会计信息的研究,目前许多研究侧重短期的情况在于这些因素的短期变化的特性具有研究急,本文的研究窗期和现有探计媒体与会计盈余披露的研究窗期非常类似于Vega(2006)。(3)对于盈余披露的影响,若干学者采用微结构的方法进行日内的分时交易高频数据(Lee, 1992)。因此本文采用交易日作为观察值研究媒体的影响也许是一个适合的方式。

计的因子载荷,SMB₁是市场上小股票对大股票的溢价,HML₁是高账面价值/市值比率股票对低账面价值/市值比率股票的溢价。为了避免超额收益计量误差的影响,本文也采用了国内研究经常采用的指数调整超额收益计算方法,即超额收益(AR)等于个股当日收益率减去相应市场的指数收益率。为了减少异常值的影响,本文对累计超额收益变量上下1%样本进行了截断处理(winsorize)。

为了检验媒体关注造成的市场强烈反应,本文也选择了不同时间窗口下的换手率。由于中国股市的二元股权结构的安排,只有流通股在二级市场上交易,因此换手率(TURNOVER)为股票交易量与流通股市值的比例。由于不同公司股票流通量以及活跃程度本身存在较大差异,因为本文采用异常换手率(ABNTURN)来衡量媒体关注对交易的影响,异常换手率(ABNTURN)为每只股票在研究窗口期间的平均换手率除以该股票在年报披露日前130天到前31天的平均换手率(PREMTURN)。9通常情况下,异常换手率越大意味着在研究期间市场过度反应的情况可能越严重。ABNTURN30为年报披露日前后各30个交易日期间的异常换手率,ABNTURN10、ABNTURN5、ABNTURN3和ABNTURN1分别为年报披露日前后各10个交易日、5个交易日、3个交易日和1个交易日期间的异常换手率。

关于媒体关注(MEDIA),本文选择了7份报纸作为媒体的来源,分别是《中国证券报》、《证券日报》、《证券时报》、《中国经营报》、《经济观察报》、《上海证券报》和《21世纪经济报道》,收集了前述7份报纸对样本公司在本文研究期间(年报公布前后各30个交易日)的报道,数据来自《中国重要报纸全文数据库》。该数据库对这7份报纸内容的覆盖率超过99%。使用"主题查询"对样本公司的全称及简称进行搜索。10本文采用Fang and Peress (2009)的做法,以媒体报道的绝对数量为媒体关注程度的度量依据,以事件期间样本公司每个交易日当日前述7份报纸的新闻报道作为度量样本公司该交易日的媒体关注程度(MEDIA)。即事件期间媒体报道的绝对数量越高,媒体关注程度越高。为了减少异常值的影响,我们对媒体关注变量上下1%样本进行了截断处理。

关于稳健会计政策(CONSERV)的衡量,本文采用Ahmend and Duellaman (2007)、Xia and Zhu (2009)基于累计应计项的稳健性指标。稳健会计会导致负的应计项,应计项负值越大,财务报告的稳健程度越高(Givoly and Hayn,2000; Ahmend and Duellaman, 2007; Qiang, 2007; Zhang, 2008)。¹¹由于会计应计项存在反转的现象,所以本文采用三年的累计应计项(Ahmend and Duellaman, 2007; Xia and Zhu,

⁹ 采用年报披露日前-130天到-30天的平均换手率是为了进一步比较研究期间与非研究期间换手率的差异。

¹⁰ 本文没有将网站和杂志作为媒体报道的来源,主要原因有:第一,许多网络信息来自报纸杂志的转载,造成计算媒体曝光率的重复,而分离这些信息是相当困难的;第二,虽然杂志报道更有深度,但整体而言,信息覆盖面较窄,而且缺乏时效性。

基于累计应计项衡量的稳健性体现了条件稳健性与非条件稳健性的总体效应,不仅仅涵盖了对于坏消息的提前确认(条件稳健性),还包括了研发支出费用化等非条件稳健性。文献中采用较多的Basu模型和C-Score都只是从条件稳健性方面进行的计量。当然,这种基于累计应计项的稳健性衡量指标也存在一定的误差,比如通过坏账和资产减值等进行的盈余管理。但是,存货减值和坏账计提等经营性应计项的变化在一定程度上也体现了稳健性(条件稳健性)。只是这种计提在多大程度上是稳健的体现这比较难以衡量,数据处理上也有难度。因此,本文采用了基于累计应计项的稳健性指标,也采用了市值/账面值比(M/B)比率以及CScore都进行了敏感性测试,避免单一指标存在的计量误差。

2009)。¹²应计项1=(净利润-经营活动现金流量)/期初总资产,累计应计项1=3年累计应计项1。由于很多公司存在较大比例的非经常性项目,净利润受到非经常性损益的影响较大,因此,本文也采用非经常性损益前净利润计算应计项目。应计项2=(非经常性损益前净利润-经营活动现金流量)/期初总资产,累计应计项2=3年累计应计项2。为了解释方便,本文将三年累计应计项乘以-1,CONSERV表示稳健程度。这一数值越大(CONSERVI、CONSERV2),则表明稳健程度越高(Ahmend and Duellaman, 2007; Xia and Zhu, 2009)。为了减少异常值的影响,我们对稳健性变量上下1%样本进行了截断处理。为了避免单一指标的影响,在敏感性检验中,本文也采用了其他稳健性指标。

企业盈利能力的变化(ΔROE)采用净资产收益率的变化表征,¹³即当年净利润/所有者权益(ROE)减去上年净利润/上年所有者权益(PREROE)。为了减少异常值的影响,本文对盈利能力变化变量上下1%样本进行了截断处理。

其他控制变量(CONTROLS)包括:流通股比例(LIQUID)、企业上市年限(AGE)、规模(期末总资产自然对数SIZE)、资本结构(期末资产负债率,LEV),当期审计意见(OP,1表示非标审计意见,否则为0),是否四大事务所审计(BIG4,1表示审计师为四大,否则为0)以及行业因素(INDS采用证监会行业分类标准,剔除金融业,11个哑变量表征12个行业)。本文也加入了股权特征的影响,如最终控制人控制权比例(V,投票权比例),最终控制人性质(STATE,1表示国有,否则为0)。

(三)样本数据

市场收益数据来自于CSMAR数据库,财务数据来自于Wind和CSMAR数据库, 最终控制人信息来自于上市公司年报,手工整理。

本文从Wind资讯中选出沪深两市披露 2005、2006 年年度报表公告日的数据的 1335家公司,在从中选取有分析师预测每股收益平均值的样本公司 628家,14每家公司选取盈余披露当日及其前后各 30 个交易日作为研究期间,因此每家样本公司有 61 个交易日的日交易数据,确定的研究样本有 86,985 个公司日观测值。剔除最终控制人数据缺失、审计意见和会计师事务所数据缺失的样本,最终为 74,559 个观测值。本文也对不同事件窗口的情况进行了检验,不同事件窗口下的样本量分别为:年报公布前后各 10 个交易日的样本为 26,191 个,年报公布前后各 5 个交易日的样本为 13,767个,年报公布前后各 3 个交易日的样本为 8,771个,年报公布前后各 1 个交易日的样本为 13,767个,年报公布前后各 3 个交易日的样本为 8,771个,年报公布前后各 1 个交易日的样本为 3,768个。

三年累计应计项为前2年、前1年以及当期应计项计算的结果。

¹³ 考虑到市场反应窗口研究都采用未预期盈余,本文也采用了这种度量指标。有研究发现在中国企业的年度报告披露之前往往市场会出现提前反应,即信息有提前泄露。因此采用未预期盈余在一定程度上是可以的。

¹⁴ 剔除没有分析师预测的样本以降低由于分析师关注导致的市场价格的变化,即是否有分析师关注的企业的基本面差异导致的市场评价的差异。

表1 描述性统计

变量	样本量	均值	标准差	25%	50%	75%
CAR30	74,559	0.092	0.231	-0.044	0.053	0.203
CAR10	26,191	0.051	0.135	-0.031	0.026	0.117
CAR5	13,767	0.034	0.101	-0.028	0.016	0.081
CAR3	8,771	0.024	0.084	-0.027	0.010	0.063
CAR1	3,768	0.005	0.059	-0.029	-0.000	0.035
ABNTURN30	74,559	2.051	1.660	1.066	1.644	2.497
ABNTURN10	26,191	2.075	1.700	1.092	1.662	2.505
ABNTURN5	13,767	2.124	1.788	1.114	1.693	2.566
ABNTURN3	8,771	2.168	1.818	1.129	1.737	2.623
ABNTURN1	3,768	2.193	1.773	1.167	1.773	2.653
MEDIA	74,559	0.176	0.545	0	0	0
CONSERV1	74,559	0.043	0.379	-0.079	0.015	0.102
CONSERV2	74,559	0.053	0.381	-0.068	0.024	0.121
LIQUID	74,559	0.466	0.159	0.368	0.461	0.573
AGE	74,559	7.503	3.331	5.000	8.000	10.000
LEV	74,559	0.516	0.300	0.377	0.518	0.629
SIZE	74,559	21.654	1.040	20.937	21.599	22.250
ΔROE	74,559	0.010	0.175	-0.018	0.003	0.024
V	74,559	41.710	15.405	29.080	41.860	53.350
STATE	74,559	0.738	0.440	0	1	1
OP	74,559	0.045	0.207	0	0	0
BIG4	74,559	0.092	0.289	0	0	0

注: CAR30、CAR10、CAR5、CAR3和 CAR1 为年报披露日前后各30个交易日、前后各10个交易日、前后各5个交易日、前后各3个交易日以及前后各1个交易日的累计超额收益; ABNTURN30、ABNTURN10、ABNTURN5、ABNTURN3和 ABNTURN1分别为年报披露日前后各30个交易日、前后各10个交易日、5个交易日、3个交易日和1个交易日期间的异常换手率; MEDIA 为媒体关注程度指标; CONSERV1和 CONSERV2 为基于累计应计项的稳健性指标; LIQUID 为流通股比例; AGE 为上市年限; LEV 为总资产负债率; SIZE 为总资产自然对数; AROE 为净资产收益率的变化; V 为最终控制人控制权比例; STATE 为最终控制人属性,1表示国有最终控制,否则为0; OP 为审计意见; BIG4 为是否审计师为四大。

五、实证检验

(一)描述性统计

表1为各变量的描述性统计。年报披露前后各30个交易日窗口下样本公司的 CAR平均为9.2%, 15随着窗口的减少样本的平均CAR逐渐降低, 而年报披露前后各1

¹⁵ 样本企业年报披露前后各30个交易日的*CAR*相对较高,可能的原因在于样本公司都是具有分析师关注的,市场反应相对较高。

个交易日窗口下样本公司的平均*CAR*仅为0.5%。不同时间窗口下的异常换手率指标平均都在2左右,意味着研究期间的平均换手率是非样本期间的2倍,显示出较高的异常换手率。而且,随着年报披露日的接近,异常换手率进一步提高。每个交易日当天媒体关注程度*MEDIA*平均值为0.176,绝大部分样本缺少媒体关注问题。稳健性指标*CONSERVI*和*CONSERV2*均值都大于0,意味着上市公司财务报告总体上是稳健的,但依旧有部分公司财务报告较为激进。而上市时间长度、负债率水平、资产规模、盈利能力变化以及公司治理方面也都存在一定差异,会影响财务报告披露时的市场反应。

(二)相关性检验

表2为不同时间窗口下的市场反应与媒体关注度之间的相关性检验。异常换手率(ABNTURN)与媒体关注(MEDIA)在年报披露日前后各30个交易日、前后各10个交易日以及前后各5个交易日下都是显著正相关,而累计超额收益(CAR)与媒体关注(MEDIA)之间在所有窗口下都是显著正相关的,说明媒体关注可能会造成更高的市场反应。

表2 相关系数

		ABNTURN30	ABNTURN10	ABNTURN5	ABNTURN3	ABNTURN1
	Pearson	0.0241***	* 0.0346***	* 0.0257***	0.0137	-0.0196
	Spearman	0.0129***	* 0.0108*	0.0012	-0.0069	0.0305
MEDIA						
		CAR30	CAR10	CAR5	CAR3	CAR1
	Pearson	0.0483***	* 0.0788***	* 0.0996***	0.0988**	* 0.0574***
	Spearman	0.0435***	* 0.0677***	0.0703***	0.0589**	* 0.0203

注: ABNTURN30、ABNTURN10、ABNTURN5、ABNTURN3和 ABNTURN1分别为年报披露日前后各30个交易日、前后各10个交易日、5个交易日、3个交易日和1个交易日期间的异常换手率; CAR30、CAR10、CAR5、CAR3和CAR1为年报披露日前后各30个交易日、前后各10个交易日、前后各5个交易日、前后各3个交易日以及前后各1个交易日的累计超额收益; MEDIA为媒体关注程度指标。*、**、***分别表示在0.10、0.05以及0.01水平上显著。

(三)回归分析

媒体关注较多容易引发市场对于该股票的炒作,通常情况下以异常交易量以及换手率为代表。因此,本文首先对媒体关注(MEDIA)对股票异常换手率(ABNTURN)的影响进行了分析,对不同时间窗口下的情况都进行了回归检验,结果见表3。

表3 媒体关注与异常换手率

变量	符号	ABNTURN30 ABN	NTURN10 AI	BNTURN5 AE	BNTURN3	ABNTURN1
MEDIA	+	0.081***	0.098***	0.094***	0.093***	-0.019
		(6.04)	(5.07)	(3.61)	(2.76)	(-0.36)
MV	_	-0.072***	-0.094***	-0.098***	-0.102***	-0.088***
		(-12.07)	(-8.84)	(-6.44)	(-5.28)	(-2.97)
LIQUID	_	-0.004***	-0.004***	-0.005***	-0.005***	-0.005***
		(-8.85)	(-5.01)	(-4.15)	(-3.23)	(-2.70)
ΔROE	+	0.190***	0.197***	0.232***	0.137	-0.003
		(5.53)	(3.16)	(2.61)	(1.24)	(-0.02)
OP	+	0.047	0.333***	0.313***	0.263***	0.127
		(1.63)	(6.16)	(4.18)	(2.81)	(1.05)
INDS		控制	控制	控制	控制	控制
Obs.		74,559	26,191	13,767	8,771	3,768
\mathbb{R}^2		0.007	0.011	0.012	0.012	0.011

注:被解释变量 ABNTURN30、ABNTURN10、ABNTURN5、ABNTURN3和 ABNTURN1分别为年报披露日前后各30个交易日、前后各10个交易日、5个交易日、3个交易日和1个交易日期间的异常换手率;MEDIA为媒体关注程度指标;MV为股票市值自然对数;LIQUID为流通股比例;AROE为净资产收益率的变化;OP为审计意见;括号中为White-t统计量,考虑了异方差问题;*、**、***分别表示在0.10、0.05以及0.01水平上显著。

股票流动市值越大,很难被大量交易和炒作,因此相应的换手率较低,表现在流通市值MV的系数显著为负。而流通股比例越低,投资者持有的股票越少,越容易产生异常换手的情况,LIQUID的系数显著为负说明了这一点。企业业绩变化AROE的回归系数在大多数窗口下都显著为正,意味着未预期盈余会造成更高的异常换手率,因为投资者会基于企业盈利能力对未来进行判断,修正之前的预期,买卖手中的股票。非标意见意味着企业财务报告、信息披露或者持续经营出现某些问题,容易造成市场的波动,因此OP系数显著为正。

控制企业财务状况和流通特征等因素后,除了年报披露前后各1个交易日窗口以外,16其他时间窗口下,媒体关注变量MEDIA的回归系数都显著为正,表明媒体关注程度与窗口期间每天的异常换手率之间显著正相关,即媒体关注程度越高,股票超额换手率越高,意味着市场炒作程度越高,这与已有研究结论一致(张铮和刘力,2006;徐浩峰,2009)。总之,表3的结果表明:越多的媒体关注容易造成股票交易的异常,可能更加容易产生强烈的、甚至是过度的市场反应。

而异常的换手率是否会造成更加强烈的市场反应?媒体关注是否会造成异常的股票收益呢?表4为基于年报披露日前后各30个交易日窗口每天的累计超额收益CAR与每天的媒体关注度以及稳健会计政策之间关系的回归结果。模型1检验了媒体关注的市场反应,模型2到模型9则是进一步关于稳健会计政策的影响。模型2到模型5为采用CONSERVI的结果,模型6到模型9为采用CONSERV2进行的敏感性检验。

¹⁶ 年报披露前后各1个交易日窗口下*MEDIA*的系数不显著可能的原因在于时间窗口太短,异常换手率变化的效应不明显。当然也可能是由于异常换手率为每只股票在研究窗口期间的平均换手率除以该股票在年报披露日前-130天到-31天的平均换手率(*PREMTURN*),研究事件期间与比较期间差异较大,可能造成异常换手率计量上的一些误差。

媒体关注、稳健会计政策与市场反应

24 模型2 模型3 模型4 模型5 20**** 0.021**** 0.030**** 0.015*** 24 (12.02) (11.57) (7.80) (10.83) 24 (12.02) (11.57) (7.80) (10.83) 24 (12.02) (11.57) (7.80) (10.83) 25 (4.55) (4.11) (-3.76) (0.01) (-4.55) (-4.11) (-3.76) (0.71) (-5.24) (-4.55) (-7.36) (-7.28) (-4.55) (-2.30) (-7.28) (-7.28) (-4.55) (-2.30) (-7.28) (-7.28) (-4.55) (-2.30) (-7.28) (-7.28) (-5.19) (-5.33) (-2.30) (-7.28) (-5.19) (-5.33) (-3.99) (-7.28) (-5.19) (-5.33) (-3.99) (-0.05 (-5.19) (-5.33) (-0.05 (-0.05 (-5.4*** (-0.015*** (-0.05 (-0.05 (-5.4*** (-0.05					CONSERVI	3RVI			CONSERV2	zRV2	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		符号	模型1	模型2	模型3	模型4	模型5	模型6	模型7	模型8	模型9
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MEDIA	+	0.020***	0.021***	0.021***	0.030***	0.015***	0.022***	0.021***	0.031***	0.015***
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			(11.24)	(12.02)	(11.57)	(7.80)	(10.83)	(12.08)	(11.70)	(7.88)	(10.82)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$CONSERV \times MEDIA$	ı		-0.010***	-0.008***	-0.013***	0.001	-0.010***	-0.009***	-0.013***	0.001
$ 1 \times AROE + + \\ $				(-4.55)	(-4.11)	(-3.76)	(0.71)	(-4.79)	(-4.38)	(-3.92)	(0.86)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	MEDIA imes AROE	+			0.057***	0.104***	0.050***		0.047***	***660.0	0.048***
$\begin{array}{llllllllllllllllllllllllllllllllllll$					(4.35)	(3.67)	(4.71)		(3.76)	(3.63)	(4.82)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$CONSERV \times MEDIA \times AROE$	ı			-0.147***	-0.162**	-0.176***		-0.120***	-0.138*	-0.200***
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					(-4.55)	(-2.30)	(-7.28)		(-3.21)	(-1.80)	(-7.81)
RAV ? -0.012*** -0.013*** 0.057* (7.10) ? -0.013*** -0.015** 0.006*** ? 0.013*** 0.015** 0.006** ? 0.013*** 0.015** 0.002* /RN + 0.026*** 0.026** 0.026** + 0.026*** 0.026** 0.026** 0.023** + 0.010*** 0.012** 0.013** 0.022** + 0.010*** 0.012** 0.013** 0.025**	$CONSERV \times AROE$	÷			0.040**	0.074	0.104***		0.025	0.051	0.139***
ZRV ? -0.012*** -0.013*** 0.015*** 0.006*** ? (-5.19) (-5.33) (2.39) (3.16) ? 0.013*** 0.015*** -0.002 -0.092* -0.006 /RN + 0.026*** 0.026*** 0.026*** 0.024*** 0.024*** /RN + 0.016*** 0.012*** 0.012*** 0.013*** 0.024*** + 0.010*** 0.012*** 0.013*** -0.013*** -0.025** + 0.017*** 0.020*** 0.025** 0.043***					(2.47)	(0.67)	(7.10)		(1.17)	(0.37)	(7.14)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	CONSERV	ċ		-0.012***	-0.013***	0.015**	***900.0	-0.013***	-0.013***	0.015**	0.004**
7 0.013*** 0.015*** -0.002 -0.092** -0.006 (2.77) (3.12) (-0.21) (-1.95) (-0.92) //RN + 0.026*** 0.026*** 0.026*** 0.023*** 0.024*** (43.57) (43.48) (43.54) (14.24) (50.13) (+ 0.010*** 0.012*** -0.013*** -0.022*** (11.39) (12.83) (12.88) (-4.21) (-29.56) (+ 0.017*** 0.020*** 0.021*** 0.025** 0.043***				(-5.19)	(-5.33)	(2.39)	(3.16)	(-5.50)	(-5.50)	(2.26)	(2.42)
$ (2.77) \qquad (3.12) \qquad (-0.21) \qquad (-1.95) \qquad (-0.92) $ $ (-0.92) \qquad (-0$	IROE	÷	0.013***	0.015***	-0.002	-0.092*	900.0-	0.015***	0.004	-0.093**	-0.008
TURN + 0.026*** 0.026*** 0.025*** 0.023*** 0.024*** (43.57) (43.48) (43.54) (14.24) (50.13) (+ 0.010*** 0.012*** 0.012*** -0.013*** -0.022*** (11.39) (12.83) (12.88) (-4.21) (-29.56) (+ 0.017*** 0.020*** 0.021*** 0.025** 0.043***			(2.77)	(3.12)	(-0.21)	(-1.95)	(-0.92)	(3.15)	(0.58)	(-2.04)	(-1.20)
(43.57) (43.48) (43.54) (14.24) (50.13) (60.13) (60.13) (60.13) (60.13) (60.12) (60.13) (60.	1BNTURN	+	0.026***	0.026***	0.026***	0.023***	0.024***	0.026***	0.026***	0.023***	0.024***
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			(43.57)	(43.48)	(43.54)	(14.24)	(50.13)	(43.47)	(43.51)	(14.23)	(50.08)
$(11.39) (12.83) (12.88) (-4.21) (-29.56) ($ $+ 0.017^{***} 0.020^{***} 0.021^{***} 0.025^{**} 0.043^{***}$	NZE	+	0.010***	0.012***	0.012***	-0.013***	-0.022***	0.012***	0.012***	-0.013***	-0.022***
+ 0.017*** 0.020*** 0.021*** 0.025** 0.043***			(11.39)	(12.83)	(12.88)	(-4.21)	(-29.56)	(12.98)	(13.03)	(-4.14)	(-29.14)
	SEV	+	0.017***	0.020***	0.021***	0.025**	0.043***	0.019***	0.019***	0.026***	0.042***
53) (7.51) (7.83) (2.56) (17.05)			(6.53)	(7.51)	(7.83)	(2.56)	(17.05)	(7.23)	(7.43)	(2.77)	(17.15)

媒体关注、稳健会计政策与市场反应(续)

表4

				CONSERVI	ERVI			CONSERV2	SRV2	
冰量	符号	模型1	模型2	模型3	模型4	模型5	模型6	模型7	模型8	模型9
AGE	¿	***900.0	0.006***	0.006***	0.003***	0.004***	***900.0	0.006***	0.003***	0.004***
		(24.55)	(24.34)	(24.19)	(3.38)	(19.08)	(24.38)	(24.26)	(3.50)	(18.95)
Λ	ż	**000.0-	*000.0-	*000.0-	-0.001***	***000.0-	*000.0-	*000.0-	-0.001***	-0.000***
		(-2.08)	(-1.76)	(-1.83)	(-4.02)	(-8.26)	(-1.76)	(-1.84)	(-3.95)	(-8.34)
STATE	I	-0.021***	-0.022***	-0.021***	-0.010	***900.0-	-0.022***	-0.021***	-0.011	-0.006***
		(-10.26)	(-10.41)	(-10.38)	(-1.46)	(-3.72)	(-10.42)	(-10.37)	(-1.55)	(-3.55)
OP	ż	0.052***	0.054***	0.053***	0.077***	0.003	0.053***	0.053***	0.077	0.005
		(12.26)	(12.57)	(12.24)	(5.14)	(0.83)	(12.50)	(12.35)	(5.21)	(1.24)
BIG4	ċ	-0.066***	-0.065***	-0.064***	-0.057***	-0.026***	-0.065***	-0.064***	-0.057***	-0.026***
		(-23.70) (-2	(-23.07)	(-22.83)	(-7.46)	(-11.56)	(-23.07)	(-22.90)	(-7.51)	(-11.61)
INDS		Control	Control	Control	Control	Control	Control	Control	Control	Control
Obs.		74559	74559	74559	8829	74559	74559	74559	8829	74559
\mathbb{R}^2		0.079	0.080	0.081	0.109	0.095	0.081	0.081	0.108	0.095

对数;V为最终控制人控制权比例;STATE为最终控制人属性,1表示国有最终控制,否则为0;OP为审计意见;BIG4为是否四大为其审计师;INDS为行业哑 注:被解释变量 CAR30年报披露日前后各30个交易日的累计超额收益;MEDIA为媒体关注程度指标;CONSERV1和 CONSERV2为基于累计应计项的稳健性指标; AROE为净资产收益率的变化;ABNTURN30为年报披露日前后各30个交易日的异常换手率;AGE为上市年限长度;LEV为总资产负债率;SIZE为总资产自然 变量,采用证监会行业分类标准,剔除金融业,11个哑变量表征12个行业。括号中为white-t统计量,考虑了异方差问题;*、**、***分别表示在0.10、0.05以 及0.01水平上显著。

模型1检验了每天的媒体关注与每天的CAR之间的关系。MEDIA的系数在0.01水平上高度显著,表明由于存在媒体更多的曝光、过度宣传以及投资者利益追逐动机造成了市场的强烈反应。或者说,媒体效应会带来更高的市场收益,放大企业的各种信息作用。MEDIA系数意味着增加一篇媒体关注,就会导致该公司超额收益增加0.021%。媒体关注对股票市场收益影响较大,这也反映了市场对于媒体信息的关注。假设1得到验证。可以看到,模型1中异常换手率ABNTURN的系数也高度显著为正,说明异常换手率容易产生较高的超额收益,可能是因为媒体关注造成投资者的大量介入,造成更高的交易量以及换手率,推动了股价上升,产生超额收益。

模型2和模型6加入了稳健会计政策对媒体效应的影响,MEDIA的系数依旧高度显著,支持了假设1,增加一篇媒体关注会导致该公司超额收益大致增加0.02%,媒体关注对股票市场收益影响较大。CONSERV×MEDIA的回归系数也都至少在0.05水平上高度显著为负,即稳健会计政策能够降低媒体效应,抑制股票被高估的可能,从而缓解市场的过度反应。稳健程度提高1%,会降低市场反应1%,说明稳健会计政策能够在一定程度上抑制市场的强烈反映,有利于降低股票市场的波动。假设2得到验证。

模型3和模型7进一步检验了不同盈利水平下,媒体效应以及稳健会计政策对媒体效应的影响。MEDIA的回归系数依旧在0.01水平上显著为正,CONSERV×MEDIA也显著为负,与之前结果一致,假设1和假设2进一步得到验证。MEDIA×AROE的系数显著为正,意味着基于企业未预期盈余的媒体关注会导致未预期盈余与市场超额收益之间更高的相关度,即放大了盈余信息的市场反应,可能是由于不正常的信息披露,也可能是由于市场结构不合理以及中小投资者过度买入所造成的。而CONSERV×MEDIA×AROE的回归系数在0.01水平上显著为负,表明稳健会计原则可以进一步降低这种媒体对于企业未预期盈余关注所造成的市场过度反应,即降低由于媒体更多的关注导致的未预期盈余与市场超额收益之间更高的相关度。假设3得到验证。

由于很多样本没有媒体关注,可能导致回归误差。因此,模型4和模型8剔除了没有媒体关注的样本,采用只有媒体关注的交易日样本回归。同样的,MEDIA的系数显著为正, $CONSERV \times MEDIA$ 的系数显著为负, $CONSERV \times MEDIA \times \Delta ROE$ 的系数显著为负,与全部样本结果一致,假设1、假设2和假设3都进一步得到验证。

为了避免超额收益计算误差的影响,模型5和模型9采用指数调整超额收益计算方法,即超额收益(AR)等于个股当日收益率减去相应市场的指数收益率。MEDIA的系数显著为正,CONSERV×MEDIA的系数为负但不显著,CONSERV×MEDIA×AROE的系数显著为负,与Fama-French(1993)三因子模型计算的累计超额收益回归基本相同,说明超额收益计算方法不同对本文结论影响不大。

本文也对年报披露目前后不同时间窗口下(前后各10个交易日、5个交易日、3个交易日和1个交易日的窗口)每天的累计超额收益CAR与媒体效应以及稳健会计政策之间的关系进行了检验,结果见表5。MEDIA的系数在所有回归中都显著为正,即媒体关注与每天的CAR之间呈正相关关系。从MEDIA的系数上来,在不同的时间窗口下,媒体关注程度的提高会带来企业不同的市场超额收益。 $CONSERV \times MEDIA$ 的系数也都是显著为负的,也就是说稳健会计政策可以降低媒体放大的信息效应。 $CONSERV \times MEDIA \times \Delta ROE$ 的回归系数在0.01水平上也基本都显著为负,表明稳健会计原则可以进一步降低媒体关注企业盈利造成的市场反应。总之,采用每天的媒体关注度对不同时间窗口下的市场反应进行的检验进一步支持了本文的3个假设。

不同时间窗口的检验

二		CARIO		CARS		CA R3		(AK)	
	ţ							3	
	符号	CONSERVI CONSERV2		CONSERVI CONSERV2	VSERV2 CO	CONSERVI CONSERV2 CONSERVI	VSERV2 COI		CONSERV2
MEDIA	+	0.017***	0.017***	0.015***	0.016***	0.011***	0.012***	0.005***	0.005***
		(11.40)	(11.45)	(11.01)	(11.07)	(7.49)	(7.55)	(2.80)	(2.82)
CONSERV imes MEDIA	I	-0.011***	-0.011***	-0.011***	-0.012***	-0.008***	-0.008***	-0.002*	-0.002*
		(-7.05)	(-7.38)	(-7.01)	(-7.54)	(-5.12)	(-5.54)	(-1.77)	(-1.66)
$MEDIA \times AROE$	+	0.040***	0.031***	0.039***	0.027***	0.027**	0.019*	0.014	0.008
		(3.87)	(3.15)	(3.64)	(2.68)	(2.31)	(1.75)	(1.12)	(0.73)
$CONSERV \times MEDIA \times AROE$	I	-0.110***	-0.081***	-0.083***	-0.057**	-0.017	0.009	-0.046**	-0.043*
		(-4.69)	(-3.37)	(-3.99)	(-2.44)	(-0.77)	(0.40)	(-2.03)	(-1.75)
$CONSERV \times AROE$	ċ	-0.051***	***060.0-	-0.126***	-0.207***	-0.091***	-0.158***	-0.017	-0.047*
		(-2.93)	(-3.80)	(-6.97)	(-8.60)	(-4.74)	(-6.13)	(-0.82)	(-1.69)
CONSERV	ċ	0.007**	0.007**	0.014***	0.016***	0.012***	0.014***	0.005*	0.005**
		(2.30)	(2.36)	(4.07)	(4.78)	(3.74)	(4.25)	(1.94)	(1.97)
ΔROE	ċ	0.039***	0.045***	0.037***	0.049***	0.018**	0.029***	0.004	0.010
		(4.98)	(5.61)	(4.68)	(6.05)	(2.11)	(3.31)	(0.42)	(1.04)
ABNTURN	+	0.016***	0.016***	0.012***	0.012***	0.009***	0.009***	0.005***	0.005***
		(26.46)	(26.48)	(18.78)	(18.89)	(14.06)	(14.18)	(7.05)	(7.03)
SIZE	+	0.004***	0.004***	0.002**	0.002*	0.004***	0.003***	0.003***	0.003***
		(4.67)	(4.61)	(2.19)	(1.88)	(3.46)	(3.25)	(3.00)	(2.97)

不同时间窗口的检验(续)

表5	不同时间窗口的检验(续)								
		CARIO	10	CARS		CAR3	3	CARI	n n
帝	谷号	CONSERVI CONSERVZ CONSERVI	ONSERV2 (CONSERV2 CONSERVI	ONSERVI CC	NSERV2	CONSERV2 CONSERVI C	CONSERV2
LEV	+	0.011***	0.011***	-0.003	-0.002	***600.0-	***800.0-	**800.0-	***800.0-
		(4.08)	(4.38)	(-1.16)	(-0.85)	(-2.90)	(-3.00)	(-2.25)	(-2.72)
AGE	÷	0.002***	0.002***	0.001***	0.001***	0.000	*000.0	0.000	0.000
		(7.82)	(7.97)	(2.83)	(3.08)	(1.59)	(1.71)	(1.27)	(1.31)
Δ	ċ	***0000-	***000.0-		-0.000	-0.000	-0.000	0.000	0.000
		(-4.13)	(-4.09)	(-0.77)	(-0.65)	(-1.05)	(-0.99)		(1.50)
STATE	I	-0.014***	-0.015***		-0.015***	-0.018***	-0.018***	** -0.010***	-0.010***
		(-6.97)	(-7.08)	(-6.94)	(-7.26)	(-7.94)	(-8.15)	(-4.42)	
OP	÷	0.023***	0.023***	0.004	0.003	0.002	0.001	0.011**	0.011**
		(5.16)	(5.15)	(0.78)	(0.58)	(0.38)	(0.27)	(2.25)	(2.28)
BIG4	ċ	-0.032***	-0.032***	-0.023***	-0.023***	-0.014***	-0.013***	* -0.012***	-0.012***
		(-12.10)	(-12.12)	(-8.23)	(-8.19)	(-4.36)	(-4.29)	(-3.69)	(-3.70)
SGNI		控制	控制	控制	控制	控制	控制	控制	控制
Obs.		26191	26191	13767	13767	8771	8771	3768	3768
\mathbb{R}^2		0.082	0.081	0.090	0.091	0.080	0.082	0.048	0.048

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 <t ABNTURN3和ABNTURN1分别为年报披露目前后各10个交易日、5个交易日、3个交易日和1个交易日期间的异常换手率;AGE为上市年限长度;LEV为总资 益;MEDIA为媒体关注程度指标;CONSERVI和CONSERV2为基于累计应计项的稳健性指标;AROE为净资产收益率的变化;ABNTURN10、ABNTURN5、 产负债率;SIZE为总资产自然对数;V为最终控制人控制权比例;STATE为最终控制人属性,1表示国有最终控制,否则为0;OP为审计意见;BIG4为是否四 大为其审计师;INDS为行业哑变量,采用证监会行业分类标准,剔除金融业,11个哑变量表征12个行业。括号中为White-t统计量,考虑了异方差问题;*、 **、***分别表示在0.10、0.05以及0.01水平上显著

表6 媒体关注、稳健会计政策与市场反应——不同盈利变化情况

	ΔROE	E > 0	ΔROE	Z < 0
变量	CONSERV1	CONSERV2	CONSERV1	CONSERV2
MEDIA	0.039***	0.038***	-0.012***	-0.012***
	(15.00)	(14.89)	(-4.11)	(-4.15)
$CONSERV \times MEDIA$	-0.002*	-0.001	-0.036***	-0.033***
	(-1.70)	(-0.25)	(-9.41)	(-9.09)
$MEDIA \times \Delta ROE$	0.008	0.025	-0.084***	-0.096***
	(0.35)	(1.28)	(-3.94)	(-4.61)
$CONSERV \times MEDIA \times \Delta ROE$	-0.303***	-0.459***	0.076**	0.136***
	(-5.99)	(-6.93)	(2.03)	(3.50)
$CONSERV \times \Delta ROE$	-0.218***	-0.189***	0.291***	0.332***
	(-7.69)	(-5.50)	(10.02)	(9.14)
CONSERV	-0.019***			
	(-6.82)	(-6.62)	(8.27)	(7.62)
ΔROE	0.141***			
	(11.81)	(10.18)	(-15.29)	(-15.54)
ABNTURN	0.025***			
	(30.36)	(30.17)	(32.96)	(32.91)
SIZE	0.014***		0.008***	0.009***
	(10.16)	(11.20)	(5.74)	(6.42)
LEV	0.042***		0.005	-0.004
	(7.17)	(4.82)	(1.33)	(-1.18)
AGE	0.005***			
	(13.15)	(13.63)	(17.51)	(17.37)
V	-0.000***	-0.000***	-0.000	-0.000
	(-2.71)	(-2.81)	(-0.01)	(-0.24)
STATE	-0.026***			
	(-9.21)	(-9.45)	(-3.67)	(-3.25)
OP	0.047***	0.038***	0.015**	0.014**
	(6.69)	(5.37)	(2.32)	(2.14)
BIG4	-0.042***	-0.044***	-0.088***	-0.090***
	(-11.06)	(-11.66)	(-21.13)	(-21.80)
INDS	控制	控制	控制	控制
Obs.	42,325	42,325	32,234	32,234
\mathbb{R}^2	0.098	0.098	0.101	0.101

注: 被解释变量 CAR30 为年报披露目前后各30个交易目的累计超额收益;MEDIA为媒体关注程度指标;CONSERV1和 CONSERV2 为基于累计应计项的稳健性指标;AROE 为净资产收益率的变化;ABNTURN30 为年报披露目前后各30个交易日的异常换手率;AGE为上市年限;LEV为总资产负债率;SIZE为总资产自然对数;V为最终控制人控制权比例;STATE 为最终控制人属性,1表示国有最终控制,否则为0;OP 为审计意见;BIG4 为是否四大为其审计师;INDS 为行业哑变量,采用证监会行业分类标准,剔除金融业,11个哑变量表征12个行业。括号中为White-t统计量,考虑了异方差问题;*、**、***分别表示在0.10、0.05以及0.01水平上显著。

(四)不同盈亏情况的媒体效应与稳健会计政策

表6区分了不同盈利变化(未预期盈余),采用年报披露日前后各30个交易日窗口对媒体效应以及稳健政策进行了进一步检验。 17 前2列为盈利变化 $^{\Delta}ROE$ 大于0的结果,后2列为盈利变化 $^{\Delta}ROE$ 小于0的结果,并分别采用两种稳健性指标进行检验。

对于 $\Delta ROE>0$,即好消息的企业来讲,存在非常明显的媒体效应,MEDIA的系数都高度显著为正,即非预期盈余为正(Naive模型中上一期的盈余为当期盈余预期值)的企业的媒体报道,市场反应更加强烈。而稳健原则可以降低这种市场过度反应,表现在 $CONSERV \times MEDIA$ 的系数为负,与之前一致。 $CONSERV \times MEDIA \times \Delta ROE$ 的系数也都显著为负,意味着市场可能对媒体基于企业盈利能力的报道反应过度,但稳健会计原则可以进一步降低由于媒体更多关注导致的未预期盈余与市场超额收益之间更高的相关度。

但是,对于非预期盈余为负 ($\Delta ROE < 0$)的企业,媒体关注与CAR之间显著负相关,可能的原因是企业出现盈利未达到市场预期的情况,而媒体的报道放大了这种未预期盈利下降的效果 ($MEDIA \times \Delta ROE$ 显著为负的系数也说明了这一问题),导致媒体关注与CAR之间显著负相关,说明媒体关注会进一步降低非预期盈余为负的企业的市场收益。而 $CONSERV \times MEDIA \times \Delta ROE$ 高度显著为正的回归系数说明,稳健原则也会进一步降低这种联系。

当然,可能也存在市场不看非预期盈余,而重点关注企业当期盈亏情况,因为在中国股票市场中存在连续3年亏损需要ST以及退市的规定,投资者以及投机者会利用是否盈亏进行投机,而并非看重企业的非预期盈余。因此,表7列示了不同盈亏情况下,媒体效应以及稳健政策对市场超额收益的影响。前2列为盈利公司的情况,后2列为亏损公司的结果,采用两种稳健性指标都进行了检验。

对于盈利公司而言,媒体关注可以进一步提高市场超额收益,因为存在媒体的放大作用,对盈利有了进一步的放大,表现在媒体关注指标MEDIA的系数都显著为正。而稳健原则可以降低这种放大效应,表现在 $CONSERV \times MEDIA$ 为负的回归系数。而 $CONSERV \times MEDIA \times \Delta ROE$ 的系数也依旧显著为负,说明稳健原则可以进一步降低媒体关于预期盈余的放大效应。

对于亏损公司来讲,媒体关注也能够提高市场超额收益,因为这类公司可能存在着"大洗澡"等盈余管理行为,为下一年的盈利奠定基础,或者存在非预期盈余为正的情况,因此MEDIA的系数显著为正。 18 而稳健原则依旧能够发挥降低投机的作用,表现在交叉变量 $CONSERV \times MEDIA$ 的系数显著为负。而亏损公司的 $CONSERV \times MEDIA \times \Delta ROE$ 却不显著,说明亏损公司稳健会计政策的影响并不明显。

综上所述,虽然有可能企业或者投机者(机构)通过媒体宣传等方式过度放大企业的非预期盈利变化,或者直接对是否盈亏进行投机,但是总体上媒体都会放大信息效用,不同的会计政策对这种投机行为会产生不同影响。基于盈余变化以及企业盈利状态的回归结果与之前基本一致,假设1、假设2和假设3都得到进一步验证。

¹⁷ 采用短期时间窗口结果基本一致。

¹⁸ 亏损公司中有一部分可能是采用"洗大澡"的方式进行利润操纵,也有可能是实际的亏损。本文在此处没有对样本进行严格的区分,结论可能存在一定的偏差。

表7 媒体关注、稳健会计政策与市场反应—不同盈亏情况

	盈利名	公司	亏损么	公司
变量	CONSERV1	CONSERV2	CONSERV1	CONSERV2
MEDIA	0.018***	0.018***	0.056***	0.049***
	(9.80)	(9.79)	(2.97)	(2.68)
$CONSERV \times MEDIA$	-0.004*	-0.002	-0.173**	-0.114*
	(-1.79)	(-1.22)	(-2.25)	(-1.74)
$MEDIA \times \Delta ROE$	0.090***	0.097***	0.043	0.017
	(4.37)	(5.03)	(1.09)	(0.44)
$CONSERV \times MEDIA \times \Delta ROE$	-0.304***	-0.423***	-0.111	0.049
	(-6.81)	(-7.12)	(-0.82)	(0.39)
$CONSERV \times \Delta ROE$	-0.084***	-0.089***	0.193***	0.114*
	(-4.49)	(-3.49)	(3.44)	(1.74)
CONSERV	-0.017***	-0.017***	0.239***	
	(-7.21)	(-7.27)	(7.70)	(7.40)
ΔROE	0.115***			-0.029*
	(11.37)	(10.22)	(-2.51)	(-1.80)
ABNTURN	0.026***			
	(42.52)	(42.54)	(11.97)	(12.13)
SIZE	0.016***	0.016***	-0.011***	-0.010**
	(16.35)	(16.20)	(-2.76)	(-2.52)
LEV	0.006*	0.007**	-0.048***	
	(1.91)	(2.57)	(-5.25)	(-5.63)
AGE	0.006***	0.006***	-0.003**	-0.003**
	(23.25)	(23.71)	(-2.15)	(-2.30)
V	-0.000	-0.000	-0.002***	-0.002***
	(-1.44)	(-1.34)	(-8.91)	(-8.88)
STATE	-0.028***			
	(-12.92)	(-13.05)	(7.43)	(7.32)
OP	0.034***			
	(5.86)	(5.27)	(-4.23)	(-3.96)
BIG4	-0.074***			
	(-26.49)	(-26.50)	(4.81)	(4.59)
INDS	控制	控制	控制	控制
Obs.	69359	69359	5200	5200
\mathbb{R}^2	0.093	0.093	0.128	0.127

注: 被解释变量为 CAR30 年报披露日前后各30个交易日的累计超额收益;MEDIA为媒体关注程度指标;CONSERV1和 CONSERV2为基于累计应计项的稳健性指标;AROE为净资产收益率的变化;ABNTURN30为年报披露日前后各30个交易日的异常换手率;AGE为上市年限;LEV为总资产负债率;SIZE为总资产自然对数;V为最终控制人控制权比例;STATE为最终控制人属性,1表示国有最终控制,否则为0;OP为审计意见;BIG4为是否四大为其审计师;INDS为行业哑变量,采用证监会行业分类标准,剔除金融业,11个哑变量表征12个行业。括号中为White-t统计量,考虑了异方差问题;*、**、****分别表示在0.10、0.05以及0.01水平上显著。

表8 媒体关注、稳健会计政策与市场反应——不同产权性质

	STAT	E=1	STAT	E=0
变量	CONSERV1	CONSERV2	CONSERV1	CONSERV2
MEDIA	0.023***	0.023***	0.019***	0.022***
	(11.49)	(11.52)	(5.04)	(5.68)
$CONSERV \times MEDIA$	-0.007***	-0.007***	-0.081***	-0.109***
	(-3.55)	(-3.57)	(-5.05)	(-6.56)
$MEDIA \times \Delta ROE$	0.103***	0.100***	-0.012	-0.033*
	(5.22)	(5.26)	(-0.71)	(-1.82)
$CONSERV \times MEDIA \times \Delta ROE$	-0.112***	-0.098**	-0.054	0.087
	(-2.67)	(-2.34)	(-1.27)	(1.15)
$CONSERV \times \Delta ROE$	-0.185***	-0.143***	0.130***	0.189***
	(-6.75)	(-4.27)	(6.17)	(7.16)
CONSERV	-0.009***	-0.011***	0.066***	0.061***
	(-3.64)	(-4.34)	(7.86)	(7.15)
DROE	0.023**	0.007	-0.010	-0.017
	(2.10)	(0.60)	(-0.93)	(-1.54)
ABNTURN	0.025***	0.025***	0.026***	0.026***
	(37.35)	(37.24)	(22.03)	(22.04)
SIZE	-0.001	0.000	0.039***	0.040***
	(-0.70)	(0.08)	(18.72)	(19.30)
LEV	0.080***	0.073***	0.002	0.004
	(13.61)	(12.55)	(0.58)	(1.20)
AGE	0.004***	0.004***	0.012***	0.011***
	(13.56)	(13.56)	(21.72)	(21.66)
V	-0.000***	-0.000***	0.001***	0.001***
	(-3.42)	(-3.54)	(8.42)	(8.26)
OP	0.062***	0.057***	0.033***	0.037***
	(10.92)	(10.06)	(4.57)	(5.24)
BIG4	-0.036***	-0.037***	-0.125***	-0.125***
	(-11.50)	(-12.01)	(-17.22)	(-17.20)
INDS	控制	控制	控制	控制
Obs.	55021	55021	19538	19538
\mathbb{R}^2	0.085	0.084	0.146	0.147

注:被解释变量为 CAR30 年报披露目前后各30个交易目的累计超额收益;MEDIA为媒体关注程度指标;CONSERV1和 CONSERV2为基于累计应计项的稳健性指标;AROE为净资产收益率的变化;ABNTURN30为年报披露目前后各30个交易目的异常换手率;AGE为上市年限;LEV为总资产负债率;SIZE为总资产自然对数;V为最终控制人控制权比例;STATE为最终控制人属性,1表示国有最终控制,否则为0;OP为审计意见;BIG4为是否四大为其审计师;INDS为行业哑变量,采用证监会行业分类标准,剔除金融业,11个哑变量表征12个行业。括号中为White-t统计量,考虑了异方差问题;*、**、***分别表示在0.10、0.05以及0.01水平上显著。

(五)不同产权性质下的媒体效应与稳健政策

相对于民营企业而言,国有企业管理层的政治敏感度更高(Xia and Zhu, 2009),会更加重视媒体效应,尤其是出现某些负面消息时。再加上国有上市公司和民营上市公司在资源获取上存在差异(陈运森和朱松,2009),民营企业可能更需要通过市场运作得到进一步融资。因此,表8对国有上市公司和非国有上市公司分别进行了检验。前2列为国有样本的结果,后2列为民营样本的结果,并分别采用两种稳健性指标进行了检验。

对于国有控制的上市公司而言,媒体关注可以进一步提高市场超额收益,表现为 MEDIA 的系数都高度显著为正。而 CONSERV × MEDIA 的系数显著为负,表明稳健原则可以降低这种夸大效应。而 CONSERV × MEDIA × AROE 的系数也依旧显著为负,说明稳健原则可以进一步降低媒体关于预期盈余的放大效应。

对于非国有上市公司而言,在每天的媒体关注指标回归中,MEDIA显著为正,与预期一致。稳健原则依旧能够发挥降低投机的作用, $CONSERV \times MEDIA$ 的系数都显著为负。而 $CONSERV \times MEDIA \times \Delta ROE$ 的系数不显著,对非国有企业稳健会计政策的影响并不明显。

因此,虽然国有上市公司和非国有上市公司存在管理层政治敏感度不同,资源 优势不同,可能造成不同企业通过与投机者合谋,进行市场投机从而获得资金。但 总体而言,媒体会放大企业的信息作用,而稳健性则可以降低这种投机行为。

(六)内生性

媒体对于企业的关注可能是基于企业特定的信息,如盈余的变化、分析师的关注或者利润分配等问题,因此媒体关注取决于企业的某些特征,而这些特征在一定程度上造成了市场更高的反应,即媒体关注存在内生性。而内生性在很多研究中都存在,目前学术界对于内生性的解决通常采用工具变量、面板数据模型以及联立方程。由于选择合适的工具变量很难,本文的数据也只有2年,因此为了解决内生性问题,本文采用了联立方程模型。模型设定如下:

$$CAR = \alpha + \alpha_{1}MEDIA + \alpha_{2}CONSERV \times MEDIA + \alpha_{3}MEDIA \times \Delta ROE$$

$$+ \alpha_{4}CONSERV \times MEDIA \times \Delta ROE + \alpha_{5}CONSERV \times \Delta ROE$$

$$+ \alpha_{6}CONSERV + \alpha_{7}\Delta ROE + \alpha_{8}ABNTURN + \varepsilon$$
(3)

$$COVERAGE = \beta + \beta_{1}CONSERV + \beta_{2}\Delta ROE + \beta_{3}SIZE + \beta_{4}LEV + \beta_{5}AGE + \beta_{6}V + \beta_{7}STATE + \beta_{8}BIG4 + \beta_{9}OP + \sum_{j}\beta_{j}INDS + \varepsilon$$

$$(4)$$

表9 媒体关注、稳健会计政策与市场反应—内生性

	CONSER	V1	CONSER	V2
	CAR	MEDIA	CAR	MEDIA
MEDIA	0.068		0.070	
	(8.43)***		(8.60)***	
$CONSERV \times MEDIA$	-0.016		-0.015	
	(-5.53)***		(-5.04)***	
$MEDIA \times \Delta ROE$	0.068		0.055	
	(5.82)***		(4.73)***	
$CONSERV \times MEDIA \times \Delta ROE$	-0.164		-0.127	
	(-5.09)***		(-3.36)***	
$CONSERV \times \Delta ROE$	0.012		-0.009	
	(0.74)		(-0.42)	
CONSERV	-0.004	0.084	-0.007	0.081
	(-1.65)*	(15.20)***	(-2.69)***	(14.90)***
ΔROE	0.025	0.023	0.031	0.023
	(3.57)***	(2.10)**	(4.32)***	(2.06)**
ABNTURN	0.027		0.026	
	(53.11)***		(53.08)***	
SIZE		0.105		0.104
		(46.71)***		(46.52)***
LEV		-0.041		-0.035
		(-5.76)***		(-4.97)***
AGE		0.003		0.003
		(4.78)***		(4.81)***
V		0.001		0.001
		(1.74)*		(1.76)*
STATE		-0.018		-0.018
		(-3.87)***		(-3.91)***
OP		0.017		0.021
		(1.78)*		(2.14)**
BIG4		-0.014		-0.014
		(-2.00)**		(-2.02)**
INDS		Control		Control
Obs.	74559	74559	74559	74559
\mathbb{R}^2	0.0306	0.0508	0.0295	0.0506

注:被解释变量为 CAR30 年报披露目前后各30个交易目的累计超额收益;MEDIA为媒体关注程度指标;CONSERV1和 CONSERV2为基于累计应计项的稳健性指标;AROE为净资产收益率的变化;ABNTURN30为年报披露目前后各30个交易目的异常换手率;AGE为上市年限;LEV为总资产负债率;SIZE为总资产自然对数;V为最终控制人控制权比例;STATE为最终控制人属性,1表示国有最终控制,否则为0;OP为审计意见;BIG4为是否四大为其审计师;INDS为行业哑变量,采用证监会行业分类标准,剔除金融业,11个哑变量表征12个行业。括号中为White-t统计量,考虑了异方差问题;*、**、***分别表示在0.10、0.05以及0.01水平上显著。

模型(3)为媒体关注以及稳健会计政策的市场反应模型,模型(4)为媒体关注的影响因素模型。19表9为采用年报披露前后各30个交易日,基于以上联立方程对媒体关注与稳健会计政策的市场反应进行的回归结果,分别采用以上两种稳健指标回归。

从模型4的回归结果来看,企业基本面信息在很大程度上影响到企业被媒体关注的程度,盈利能力超预期、大型企业、负债率较低、被出具非标意见的公司往往很容易受到媒体的关注,甚至会计报告政策较为稳健的企业也很容易被媒体所关注。这种关注容易导致媒体对企业更多的报道,从而影响市场反应。模型3的回归结果显示,不论是采用哪种稳健性计量指标,MEDIA的系数依旧高度显著为正,CONSERV×MEDIA的系数显著为负,CONSERV×MEDIA×AROE的系数也依旧显著为负,与之前的结果都一致,都支持了本文的假设。

(七)其他媒体关注指标

由于市场对于信息的披露以及消化可能存在一定的滞后,因此本文也采用累计媒体披露度(CUMMEDIA)替换当天的媒体关注度,累计媒体关注度是从事件窗口日开始到交易日的累计媒体报道次数,定义如下:

$$CUMMEDIA_{i} = \sum_{t=d1}^{d2} COVERAGE_{i,t}$$
 (5)

其中COVERAGE为每个交易日的媒体关注程度,累计媒体披露度与累计超额市场反应的回归结果见表 $10 \circ {}^{20}$

不同时间窗口下,累计媒体关注度CUMMEDIA的系数都显著为正,CONSERV×CUMMEDIA的系数显著为负,CONSERV×CUMMEDIA×AROE的系数也都显著为负(除前后3个交易日窗口外),本文的假设1、假设2和假设3都得到验证。21即媒体关注容易造成更强烈的市场反应,媒体关注会起到放大企业信息的作用,而稳健会计政策则可以抑制媒体关注导致的强烈的市场反应。

¹⁹ 模型(4)中仅包括了企业基本面特征、盈利水平、审计特征以及股权结构特征,其他特征并没有全部包括在该模型中,如企业是否有并购、股利政策等因素并没有包括在内。原因在于,该模型的研究完全可以作为一篇独立的文章进行深入探讨,本文对媒体关注影响因素的分析只是为了降低该指标的内生性问题。另一方面,在样本选择中,本文已经剔除了没有分析师预测的样本,降低了分析师的影响。而且在分析中采用了不同时间窗口下的 CAR在一定程度上降低其他事件的影响。由于模型(4)设定上可能忽略了某些重要因素,因此造成本文结论可能存在一定的偏误。

表10采用的是CONSERV1表征稳健性,CONSERV2的结果基本相同。简洁起见未列入正文。
 剔除没有媒体关注的样本后,结果与表7基本一致,CUMMEDIA的系数显著为正,CONSERV × CUMMEDIA的系数显著为负,CONSERV × CUMMEDIA × ΔROE的系数也都显著为负。简洁起见没有列入正文。

表10 累计媒体关注度与累计超额市场收益

变量	CAR30	CAR10	CAR5	CAR3	CAR1
CUMMEDIA	0.006***	0.008***	0.009***	0.009***	0.005***
	(16.16)	(13.97)	(11.20)	(7.89)	(3.26)
$CONSERV \times CUMMEDIA$	-0.003***	-0.005***	-0.006***	-0.005***	-0.002***
	(-13.00)	(-13.31)	(-11.44)	(-7.05)	(-3.63)
$CUMMEDIA \times \Delta ROE$	0.030***	0.038***	0.049***	0.029***	0.013
	(7.69)	(8.74)	(6.14)	(2.91)	(1.12)
$CONSERV \times CUMMEDIA \times \Delta ROE$	-0.034***	-0.052***	-0.097***	-0.024	-0.044**
	(-4.91)	(-6.84)	(-6.54)	(-1.31)	(-2.35)
$CONSERV \times \Delta ROE$	0.072***	-0.035**	-0.113***	-0.089***	-0.018
	(4.30)	(-2.01)	(-6.21)	(-4.63)	(-0.85)
CONSERV	-0.001	0.010***	0.013***	0.010***	0.005**
	(-0.34)	(3.98)	(4.55)	(3.65)	(2.27)
ΔROE	0.033***	0.022***	0.029***	0.017**	0.004
	(4.42)	(2.76)	(3.67)	(1.96)	(0.44)
ABNTURN	0.025***	0.016***	0.012***	0.009***	0.005***
	(43.48)	(26.59)	(18.91)	(14.21)	(7.06)
SIZE	0.010***	0.004***	0.002**	0.003***	0.003***
	(11.19)	(4.40)	(2.44)	(3.44)	(3.06)
LEV	0.020***	0.011***	-0.002	-0.008***	-0.008**
	(7.80)	(4.16)	(-0.87)	(-2.69)	(-2.30)
AGE	0.006***	0.002***	0.001***	0.000	0.000
	(23.39)	(7.59)	(2.74)	(1.62)	(1.26)
V	-0.000**	-0.000***	-0.000	-0.000	0.000
	(-2.54)	(-4.30)	(-0.80)	(-0.96)	(1.56)
STATE	-0.021***	-0.014***	-0.014***	-0.018***	-0.010***
	(-10.15)	(-6.71)	(-6.98)	(-7.96)	(-4.45)
OP	0.052***	0.021***	0.003	0.001	0.011**
	(11.92)	(4.66)	(0.61)	(0.29)	(2.25)
BIG4	-0.063***	-0.032***	-0.023***	-0.014***	-0.012***
	(-22.44)	(-11.82)	(-8.17)	(-4.49)	(-3.75)
INDS	控制	控制	控制	控制	控制
Obs.	74,559	26,191	13,767	8,771	3,768
\mathbb{R}^2	0.086	0.087	0.091	0.081	0.049

注:被解释变量 CAR30、CAR10、CAR5、CAR3和 CAR1为年报披露目前后各30个交易日、前后各10个交易日、前后各5个交易日、前后各3个交易日以及前后各1各交易日的累计超额收益;CUMMEDIA为累计媒体关注程度指标;CONSERV1和 CONSERV2为基于累计应计项的稳健性指标;AROE为净资产收益率的变化;ABNTURN30、ABNTURN10、ABNTURN5、ABNTURN3和ABNTURN1分别为年报披露日前后各30个交易日、前后各10个交易日、5个交易日、3个交易日和1个交易日期间的异常换手率;AGE为上市年限长度;LEV为总资产负债率;SIZE为总资产自然对数;V为最终控制人控制权比例;STATE为最终控制人属性,1表示国有最终控制,否则为0;OP为审计意见;BIG4为是否四大为其审计师;INDS为行业哑变量,采用证监会行业分类标准,剔除金融业,11个哑变量表征12个行业。括号中为White-t统计量,考虑了异方差问题;*、**、****分别表示在0.10、0.05以及0.01水平上显著。

表11 媒体关注、稳健会计政策与市场反应—其他稳健性指标

变量	符号	M/B	Cscore
MEDIA	+	0.032***	0.022
		(10.40)	(1.33)
$CONSERV \times MEDIA$	_	-0.006***	0.830
		(-4.65)	(1.13)
$MEDIA \times \Delta ROE$	+	0.025**	0.273***
		(2.08)	(5.38)
$CONSERV \times MEDIA \times \Delta ROE$	_	0.005	-3.748***
		(1.38)	(-4.83)
$CONSERV \times \Delta ROE$?	0.005**	3.243***
		(2.29)	(12.21)
CONSERV	?	-0.015***	0.347***
		(-21.11)	(3.24)
ΔROE	+	0.010	-0.201
		(1.37)	(-1.00)
ABNTURN	+	0.025***	0.026***
		(43.33)	(39.86)
SIZE	+	0.004***	0.005***
		(4.19)	(4.95)
LEV	+	0.012***	0.017***
		(4.41)	(4.27)
AGE	?	0.007***	0.002***
		(24.97)	(6.08)
V	?	0.001	-0.001***
		(1.62)	(-3.79)
STATE	_	-0.023***	-0.045***
		(-10.95)	(-17.49)
OP	?	0.046***	0.012***
		(10.41)	(2.92)
BIG4	?	-0.063***	-0.059***
		(-22.36)	(-17.54)
INDS		控制	控制
Obs.		74559	55161
\mathbb{R}^2		0.086	0.080

注:被解释变量CAR30年报披露日前后各30个交易日的累计超额收益;MEDIA为媒体关注程度指标;CONSERV为稳健性指标,M/B为市值与账面值比,Cscore为基于Basu模型的度量每家企业在特定年份的稳健程度(Khan and Watts, 2009);AROE为净资产收益率的变化;ABNTURN30为年报披露日前后各30个交易日的异常换手率;AGE为上市年限;LEV为总资产负债率;SIZE为总资产自然对数;V为最终控制人控制权比例;STATE为最终控制人属性,1表示国有最终控制,否则为0;OP为审计意见;BIG4为是否四大为其审计师;INDS为行业哑变量,采用证监会行业分类标准,剔除金融业,11个哑变量表征12个行业。括号中为White-t统计量,考虑了异方差问题;*、**、***分别表示在0.10、0.05以及0.01水平上显著。

(八)其他稳健性指标

为了避免单一指标计量误差的影响,本文也采用了其他稳健性指标进行检验。市值与账面值比(M/B)是文献中衡量稳健程度的指标之一(Wittenberg-Moerman, 2008; Khan and Watts, 2009)。另外,Khan and Watts基于Basu模型建立了Cscore度量了每家企业在特定年份的稳健程度(Wittenberg-Moerman, 2008; Khan and Watts, 2009)。本文分别采用这两个稳健性指标对年报披露前后各30个交易日时间窗口下的情况进行了检验,回归结果见表11(其他时间窗口下结果基本相同,未报告)。由于基于Basu模型建立的Cscore需要企业年度市场数据,因此样本有所缺失。22表11的前1列是采用市值与账面值比(M/B)的结果,后1列为采用Cscore的回归结果。

以市值与账面值比(M/B)衡量的稳健程度回归中,媒体关注指标MEDIA的系数显著为正,稳健程度与媒体关注的交叉变量CONSERV×MEDIA也显著为负,表明虽然媒体关注容易造成市场反应过度,导致较高的超额收益;稳健的会计政策会降低投资者预期,降低市场过度反应。假设1和假设2进一步得到验证,但CONSERV×MEDIA×AROE的系数不显著,即假设3没有得到验证。

Cscore 衡量的稳健程度回归结果中,²³媒体关注指标*MEDIA*不显著,交叉变量 CONSERV×MEDIA的系数也不显著,只有CONSERV×MEDIA×AROE的系数在 0.05水平上显著为负。Cscore的回归中只有假设3得到验证。

六、结论

本文研究发现,在发展和转型中的中国资本市场,媒体关注会放大企业的超额市场收益,对于不同盈亏状况、盈利变化情况、不同产权都如此。而稳健原则可以起到抑制投机的作用,降低媒体效应。研究表明,媒体在资本市场中发挥了重要作用,会严重影响投资者的财富水平。为了更好的保护投资者的利益,应当对媒体进行更适当的引导和监管。

本文采用实证研究的方法为媒体在市场中发挥的作用提供了初步证据,同时用证据表明会计政策能够显著影响市场投机行为,影响资本市场的效率。因此,加强会计准则和会计计量方法的研究能够更好的完善资本市场的运作,并且保护投资者的利益。

什么样的公司更容易引起媒体关注是另一个话题,本文侧重媒体关注以及会计信息质量对市场反应的影响,因此在这一问题解决和设计上有所欠缺,这也是本文 存在的不足。

²² 本文采用了1991年1月到2006年12月31日一直在市的上市公司,剔除了账面价值为负,资产负债率超过100%的样本,按照Khan and Watts(2009)的方法计算了Cscore。由于某些公司在样本期间新上市,因此样本比之前少一些。

²³ Khan and Watts(2009)基于Basu模型建立的Cscore衡量的是条件稳健性,而Ahmend and Duellaman (2007)基于累计应计项衡量的稳健性则计量了全面稳健程度。由于计量非条件稳健性较为困难,也很难从基于累计应计项衡量的稳健性中将条件稳健性分离开来,因此基于累计应计项衡量的稳健性的回归结果可能在很大程度上是由于条件稳健性发挥作用。

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Media Coverage, Conservative Accounting, and Market Reaction¹

Song Zhu,² Hawfeng Shyu,³ and Lijie Yao⁴

Abstract

How the media works in the securities market is attracting increasing attention, especially in markets full of speculation and information transfer distortion. We find that in emerging markets such as China, media coverage can trigger higher trading turnover and magnify the market reaction; in other words, media coverage can magnify the information effect. This effect exists for different accounting performances or changes in profitability and ownership. Conservative accounting can restrict the speculation effect and reduce the magnification of the media effect. This means that the media plays an important role in the securities market and significantly affects the wealth of investors, while conservative accounting can alleviate the responsive reaction of the market and thus can have a significant impact on speculative behaviour and market efficiency.

Keywords: Media Coverage, Media Effect, Market Reaction, Conservative Accounting *CLC codes:* F23, F27, F83

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PhD, Assistant Professor, School of Economics and Business Administration, Beijing Normal University, Haidian District, Beijing, China (100875). Email: zhusong@bnu.edu.cn.
 PhD, Assistant Professor, Business School, Sun Yat-sen University, 135# Xingang West Street,

Guangzhou, Guangdong, China (510275). Email (Corresponding author): zsu640@hotmail.com.

⁴ PhD, Assistant Professor, School of Economics and Management, Beijing Jiaotong University, Haidian District, Beijing, China (100044). Email: ljyao@bjtu.edu.cn.

I. Introduction

As research on the corporate governance mechanism develops, scholars and regulatory authorities are paying increasing attention to the external governance factor, namely the role of intermediate institutions in financial markets. As an important channel for information transfer, the media plays a role in reducing information asymmetry between firms and stakeholders, acting as an external governance mechanism (Miller, 2006; Dyck et al., 2008; Joe et al., 2009). In developed markets, the media can act as an effective governance mechanism via influencing management reputation (Dyck et al., 2008; Zheng, 2007), while in China, the media works as a governance factor in a different way to the reputation mechanism due to differences in the soundness of securities markets and the constitution of investors and their rationalities. In China, media coverage leads to interference by the government, which will finally urge firms to correct their illegal behaviour (Li and Shen, 2010). In markets full of speculation and information transfer distortion (Tian, 2003; Tang, 2003; Tan, 2003), is the media playing the opposite role in emerging markets and promoting market volatility? At the end of 2007, the prices of some medium-and small-cap theme stocks, such as Quanjude and Goldwind, jumped several times, and this attracted great attention from, and caused anxiety among, the market and regulatory authorities. Most investors attributed the jump in prices to the intense media coverage that exaggerated the potential fundamental development of firms and to irrational purchases by retail investors (Huang, 2008). Does media coverage of firms magnify the information effect during information disclosure or even promote speculation? Does accounting policy work in this process? This paper tries to investigate these issues.

Using the method of Fang and Peress (2009) that measures media coverage by the number of newspaper articles written on a stock, we find that in emerging markets such as China, media coverage can trigger higher trading turnover and magnify the market reaction; in other words, media coverage can magnify the information effect. This effect exists for different performances and changes in profitability and ownership, while conservative accounting can restrict the speculation effect and reduce the magnification of the media effect. This paper investigates the role of the media in the development of the securities market by empirical analysis and provides alternative evidence to enrich the previous literature. Using the data of Chinese securities markets, this study suggests the unsound governance function of the media in emerging markets.

Meanwhile, we also show that accounting policy significantly influences the speculative behaviour of the market and affects market efficiency. Therefore, research aimed at improving the standards setting and accounting measurements will be beneficial to the soundness of the securities markets and the protection of investors' interests. Moreover, we introduce conservative accounting policy into media effect research, showing that the media effect is also influenced by accounting information and accounting policy, and provide some references for this kind of studies. On

the other hand, we also provide some empirical evidence for the valuation effect of conservative accounting, supporting the existing theoretical research on the pricing role of conservatism.

The rest of this paper is organised as follows: Section II reviews the previous literature; Section III develops our hypotheses; Section IV presents the data and the variables; the empirical analysis and results are discussed in Section V; and Section VI concludes the paper.

II. Literature Review

Managers guard their reputations in order to enhance their future employment opportunities and compensations. However, opportunistic incentives induce them to make decisions that are harmful for investors. The media can play a governance role via influencing the reputation of management (Dyck *et al.*, 2008); as negative reports by the media will damage the reputations of managers, media coverage of negative internal firm information will lead to bad evaluations by investors (Joe *et al.*, 2009), and management will actively respond to media coverage (Joe *et al.*, 2009).

The existence of the media eliminates the possibility of fake information being provided by management. More intense coverage of firms by the media promotes firms' governance and helps to protect investors (Miller, 2006; Dyck et al., 2008; Joe et al., 2009). Actually, the influence of the media on the reputation of management is due to the effect of media coverage on stock pricing. With more media coverage, much of the information about firms is already known by the market and so information is more transparent. Fang and Peress (2009) find that compared to firms with more media coverage, firms without media coverage have a higher market return. Since an increase in the media coverage of some firms can improve the quality of information for investors, the information risk is lower. Firms with higher information risk due to lower coverage by analysts will get higher no-media premiums as their stocks are mostly held by small investors and their stock prices are more volatile. Thus, no matter whether the information is bad or good, firms with intense media coverage will get lower expected returns for lower information risk ceteris paribus. However, once new information breaks out on firms covered by the media, these firms will become more informative, and this will lead to higher abnormal returns. Moreover, rather than acting as a governance mechanism, the media usually plays the opposite role in a market with a bad governance environment. Chen et al. (2009) suggest that firms with unusual media coverage will aggravate the pricing bias; that is, unusual media coverage may trigger a strong emotional effect and overreaction among investors which results in stock mispricing. The above research shows that media coverage can easily lead to more responsive market reactions once new information is released, while the influence of media coverage on stock pricing is determined by the characteristics of investors and investors' attention to the media. Merton (1987) finds that investors may only purchase the stocks they focus on. Lee (1992) and Barber and Odean (2008) propose that under the condition with short selling constraints, investors will behave attention-grabbing phenomenon. The attention of retail investors is limited, and under the short selling constraint, they cannot sell short attention-grabbing stocks, but instead just purchase stocks they are focusing on. Therefore, in order to attract investors' attention, the main step to take is to improve firms' visibility through media coverage (Merton, 1987). Barber and Odean (2008) find that stocks with higher media coverage are purchased more by retail investors. Therefore, media coverage can influence market performance by influencing the behaviour of investors, and this will affect and restrict the behaviour of management and act as a governance mechanism.

There is less research on the media in China. Zheng (2007) reviews the governance mechanisms of media coverage and proposes that the governance role of the media is fulfilled through influencing reputation: (1) media coverage will encourage politicians (senators or other governors) to revise and effectively implement laws or rules; (2) media coverage will force board members (management) to sustain a "good" image; (3) media coverage will affect the social reputation and public image of board members (management). The empirical research by Li and Shen (2010) supports the positive governance role of media coverage in promoting corporate governance and protecting the interests of investors; they find that as the amount of negative media articles increases, the probability of correcting illegal conduct also increases. The nature of the media, reporting method, and reporting technique will also positively influence the correction behaviour, and the media's governance role works by improving the possibility of correcting illegal behaviour by initiating executive interference. Xin (2010) also suggests that the media works as a governance mechanism in the split share structural reform. However, by tracing and analysing the related-party transactions and cash dividends for the Wuliangye Group after 2003, He et al. (2008) find that the media cannot restrict the tunnelling behaviour of controlling shareholders, which means that it cannot significantly influence governance under the current market structure. Of course, the role of media coverage should be supported by large sample investigations (Dyck et al., 2008; Li and Shen, 2010).

Since the establishment of the Shanghai Stock Exchange in December 1990, the development history of China's stock markets, especially the operation history of secondary markets, is an epic produced by market makers (He, 2002). Lots of small investors and a few institutional investors enjoying the advantages of capital and information coexist in the Chinese stock markets, triggering the incentive for institutional investors to manipulate stock pricing (Lu and Chen, 2005). As an important information intermediary in the capital market, is the media playing a governance role or other roles? Accounting information is the most important factor in stock pricing, the generation and reporting of which significantly influences stock valuation. Therefore, what is the role of aggressive or conservative accounting in stock pricing? Currently, little research has been done on this.

III. Hypothesis

The media plays an important governance role in Chinese securities markets; it helps investors to acquire more information and alleviates the information asymmetry. The increase in media coverage will improve the quality of information that investors can obtain to lower the information risk (Li and Shen, 2010). Fan and Peress (2009) find that due to the liquidity constraint and investor cognition, the market will compensate firms that have low media coverage with risk premiums; therefore, their monthly returns will be higher. Tetlock (2007) finds that media coverage will give a shock to firms' stock prices and to the cumulative abnormal return for 1 to 5 days, and afterwards the abnormal return will show a reverse. Shiller (2000) suggests that the role of media is not only to deliver important economic events to investors but also to overemphasise the stock price reaction to information caused by the public attention and opinion aroused by the media. Investors can hardly discern the repeated media information, and they will trade based on repeated old information, which will bring the positive feedback effect that the trend of increasing market return is due to the continuous media coverage. Cook et al. (2006) find that 99 per cent of media coverage about initial public offerings is positive and that most of this consists of descriptive sentences. The market will evaluate the information not according to the attitude of media but according to the agreement of investors (Liu et al., 2008). In other words, media coverage itself can spur a change in stock prices and further cause prices to change according to whether attention is focused on bad news or good news. By investigating the "Stock Recommendations by Institutional Investors" column in the China Securities Journal, Xu and Chen (2009) find that during the period from 1 week before a stock is recommended by the journal to 1 day after the recommendation, there is a significantly positive abnormal return, but there is then a significantly negative return for the period from 2 days after the recommendation to 5 days after the recommendation. They propose that stock recommendations by the media lead to positive market reactions, but after recommendation, the return is reversed, and they suggest that this phenomenon is due to the fact that there are a huge number of small investors in Chinese securities markets.

Owing to the influence of heterogeneous beliefs, investors will have different prior expectations of the same firm; therefore, the quantitative earnings disclosure will increase the disagreement among investors (Hong and Stein, 2007). The media can transfer and filter information; however, as the information filtered by the media and the sources of information may be biased, investors will be further divided, allowing for the subjective preferences of journalists and their catering for investors (Fang and Peress, 2009). Scheinkman and Xiong (2003) point out that an increase in the division among investors over information will lead to greater division of investors' beliefs and increase the resale option value of stock prices (speculation bubble). Under an environment full of intense speculations with a huge number of retail investors and frequent turnover among institutional investors, lots of media reports will increase the division among investors

over their beliefs in information filtrated by the media, which may deviate from the original information, and this will cause stock bubbles.

Actually, in a market with an unsound legal environment and ineffective monitoring system, media coverage and media disclosure may work oppositely and unexpectedly. The quality of information disclosure is determined by the information disclosing entities, namely the firms. On the other hand, it is also determined by the information delivery process, namely the media coverage. When the media proclaims information without scrutiny or checks, this is equivalent to spreading "rumours" which will influence stock pricing, market efficiency, and the purchase behaviour of investors (Rose, 1951). If analysts also do not appropriately investigate and then propagandise, this will further lead to stronger market reactions, rather than to lower market expectations.5 This kind of media coverage will lead to a higher emotional effect and overreaction among investors, thereby resulting in the mispricing of stocks (Chen et al., 2009). Moreover, many reports and case studies have found that investment intermediaries and other institutional investors are in cahoots with the managements of listed firms and use the media to overdisseminate information in order to get a higher market return. In a notorious case in China's securities markets, Jianzhong Wang was charged with making "recommendations after purchases" and the "manipulation of stock prices". Wang recommended stocks for small investors using the name of his investment firm in the columns of Sina, Sohu, the Shanghai Securities Journal, and Securities Times after he had bought in these stocks. He was charged with manually influencing the trading prices and obtaining illegal personal gains. In other words, media coverage can trigger a strong emotional effect among investors and lead to stronger market reactions.

On the other hand, even if the media's coverage and information disclosure on listed firms is for the purposes of lowering information asymmetry and better governance, the market will also overreact due to naive investors and the unsoundness of the market structure.⁶ Securities markets in China have been developing for 20 years, but current market rules are unsound and imperfect, which leads to ineffective monitoring of, and guidance for, investor behaviour. The market is full of speculations; in this environment, investors are more likely to speculate in stocks, and some institutional investors are manipulating market performance. In markets full of speculation and information transfer distortion (Tian, 2003; Tang, 2003; Tan, 2003), the media plays an opposite role in emerging markets in terms of promoting market volatility. At the end of 2007, the prices of Quanjude, Goldwind, and other medium-and small-cap theme stocks surged, which attracted great attention from, and anxiety among, the market and regulatory authorities. Most investors attributed the huge jump in prices to the over-reporting on fundamentals and to huge purchases by retail investors (Huang, 2008). Media coverage on firms and news reports will create opportunities for speculators, making the market show stronger

Such as the graphite incident of China Baoan in 2011.

Media coverage and tremendous reports on the food safety problems in China listed firms led to slumps in stock prices, such as the "Shuanghui Incident".

reactions to the speculations. For profitable firms or positive unexpected earnings, the market will be more responsive and positive and thus perform better, while for loss firms or negative unexpected earnings, the market will correspondingly show worse evaluations.

In all, from the perspective of governance, media coverage will lower the information asymmetry and lead to lower expected returns. However, considering the current market structure and environment in China's securities markets, media coverage may play the opposite role: that is, media coverage may lead to higher market reactions. Therefore, we develop the following hypothesis:

Hypothesis 1: Media coverage will trigger higher market reactions.

Timely recognising losses and not overvaluing net assets and earnings are considered to be the principles of conservative accounting, and this kind of reporting policy can provide more timely information for creditors to enable them to make timely responses to debt defaults. It will improve the efficiency of the debt contracts and is beneficial to the interests of creditors (Watts, 2003; Ahmed *et al.*, 2002). Moreover, conservative accounting can also provide a timely signal to a board of directors to investigate investments (Watts, 2003) and inspire the management to avoid projects with a negative net present value (NPV) as far as possible (LaFond and Roychowdhury, 2008) so as to reduce the agency problem between management and shareholders caused by the separation of control rights and cash flow rights. Conservative accounting can lower social inefficiency by reducing compensations and earnings management (Chen *et al.*, 2007) and can also improve capital allocation efficiency by reducing the distortion of investment (Venugopalan, 2004). Therefore, although conservative accounting cannot increase firms' value directly, it can alleviate the damages to firms' value and is beneficial for value maintenance.

Miller (1977) suggests that since investors cannot sell short due to higher sell-short costs, stocks will be overvalued to reflect optimistic evaluations. Diether *et al.* (2002) also believe that optimistic demand will further push up the stock price and lead to overvaluation. Moreover, undisclosed bad news can also lead to overvalued stock prices. A conservative accounting system can result in more effective stock prices, especially when short selling is restricted (Diether *et al.*, 2002). Compulsory conservative accounting can avoid bubbles and overvaluations since conservative accounting timely recognises the "bad news" and lowers the expectations of investors (Dierker, 2006). Before 2010 in China's securities market, there was no short selling mechanism and it was very easy for stocks to be overvalued, and stock bubbles were engendered. As the investors are immature and the market structure is unsound, both unusual information disclosure and ordinary media coverage can easily trigger responsive reactions among investors and lead to a mis-pricing of stocks (Chen *et al.*, 2009; Tian, 2003; Tang,

2003). Aggressive accounting will lead to an overvaluation of firms' profitability due to the untimely recognition of bad news, and this will be easily speculated on and magnified by some investors, resulting in more responsive market reactions. In other words, conservative accounting will result in lower expected stock prices due to the timely recognition of bad news (Dierker, 2006). Owing to its nature of not overvaluing net assets and earnings,⁷ accounting conservatism can alleviate the responsive reaction of the market. Therefore, we develop the following hypothesis:

Hypothesis 2: Conservative accounting can reduce the market reaction caused by media coverage.

The media often focuses on important events, earnings levels, or the unexpected earnings of firms. Around the annual report announcement day, media coverage and news reports are almost completely concentrated on firms' profitability and unexpected earnings. Therefore, firms with higher profitability and higher unexpected earnings will be focused on more by the media and get more media coverage. Because of the dissemination effect of the media, firms are prone to be over-reported and speculated on by a huge number of investors (Huang, 2008). Considering the fact that investors are immature and the market structure is unsound, media coverage may result in an overreaction by the market to accounting information, particularly accounting earnings. As information is used and manipulated by institutional investors, media coverage will lead to more responsive market reactions given the same level of earnings or unexpected earnings. When the earnings are positive or firms get positive unexpected earnings, media coverage will further reinforce the positive relationship between the stock price and earnings level; for negative earnings or unexpected earnings, media coverage will further shock the market and lead to worse market performance.

Conservative accounting recognises bad news and does not overvalue net assets and earnings, and so results in lower expected stock prices (Dierker, 2006), and alleviates the over-response from the market to unexpected earnings caused by the large amount of media coverage; in other words, conservative accounting can reduce market reactions when unexpected earnings are positive. When earnings or unexpected earnings are negative, a conservative accounting policy creates more potential for growth than an aggressive accounting policy (Ohlson, 2009; Easton, 2009) and lowers the negative market reactions to negative unexpected earnings. Therefore, we develop the following hypothesis:

Hypothesis 3: Conservative accounting can further reduce market reactions to media coverage for unexpected earnings.

Both conditional and unconditional conservatism have this nature of not overvaluing net assets and earnings.

IV. Research Design

4.1 Model

In order to investigate the influence of media coverage and conservative accounting on market reactions, we set our model as follows:

$$CAR = \beta_0 + \beta_1 MEDIA + \beta_2 CONSERV \times MEDIA + \beta_3 MEDIA \times \Delta ROE$$

$$+ \beta_4 CONSERV \times MEDIA \times \Delta ROE + \beta_5 CONSERV \times \Delta ROE$$

$$+ \beta_6 CONSERV + \beta_7 \Delta ROE + \sum \beta_i CONTROLS + \varepsilon.$$
(1)

CAR is the cumulative abnormal return of different time windows around the annual reporting date. We use each trading day as an observation, not each firm-year. 8 MEDIA is the media coverage, CONSERV the accounting conservatism measure, and ΔROE the change in return on equity compared to the previous year. $CONSERV \times MEDIA$ shows the influence of conservative accounting on the media effect, $MEDIA \times \Delta ROE$ shows the media effect for different performance levels, and $CONSERV \times MEDIA \times \Delta ROE$ indicates the effect of conservative accounting on the media effect for different performance levels. CONTROLS are the other control variables. As the hypothesis predicts, we expect that (1) $\beta_1 > 0$, meaning that the media effect will trigger stronger market reactions; (2) $\beta_2 < 0$, indicating that conservative accounting will alleviate the magnification of media effect; and (3) $\beta_4 < 0$, suggesting that conservative accounting will further reduce the market reactions produced by the media effect on accounting earnings.

4.2 Variables

The dependent variable is the cumulative abnormal return for each trading date under different time windows. *CAR30* is the cumulative abnormal return for the 61-day window around the earnings announcement date (30 days prior to the earnings announcement date and 30 days after the earnings announcement date). *CAR10*, *CAR5*, *CAR3*, and *CAR1* are respectively the cumulative abnormal returns for the 21-day, 11-day, 7-day, and 3-day time windows around the earnings announcement date, where the

We do this for the following reasons: (1) The media effect has some timeliness. If we choose the firm year as each sample, we cannot observe the specific influence of media coverage because in the yearly time window, too many factors will affect the market return and this may counteract the spur effect of media coverage on earnings disclosure. For example, speculation or dissemination by institutional investors, or so-called market makers, is often concentrated during a certain time period. Before selling by institutional investors and speculators, the market return may be higher. However, after sales by investors and speculators and purchases by lots of small investors, the market return will drop further. Combining the market return for different periods will not show the effect of media coverage; therefore, we choose each trading day as an observation as this can better reflect the effect of concentrated media coverage on specific stocks; (2) With regard to studies on the capital market and accounting information, most focus on the short time window as the characteristics of change in such a short time window are meaningful for research; our time windows are similar to those in Vega (2006); (3) Some studies on the influence of earnings disclosure are based on the microstructure of the market using high-frequency data (Lee, 1992); we also choose specific trading days as samples to investigate our hypothesis.

abnormal return (AR) is calculated using the Fama-French (1993) three-factor model. We first use the daily return for 130 days to 31 days before the earnings announcement date (a total of 100 days) to calculate these factor loadings and then calculate the abnormal return for each time window.

$$AR_{it} = r_{it} - \hat{\beta}_{MKT}r_{mt} - \hat{\beta}_{SMB}SMB_t - \hat{\beta}_{HML,i}HML_t$$
(2)

 AR_{it} is the abnormal return for stock i on day t relative to the annual reporting day; $\hat{\beta}_{MKT}$, $\hat{\beta}_{SMB,i}$, and $\hat{\beta}_{HML,i}$ are the factor loadings according to the Fama-French model; SMB_t is the premium of small firms relative to big firms; and HML_t is the premium of firms with high book to market ratios relative to firms with low book to market ratios. In order to minimise the measurement error for abnormal return, we also use the common measurement for abnormal return in China, namely, abnormal return (AR) is the actual return minus the corresponding market index return. Owing to the problem of outliers, we winsorise the CAR at the top and bottom 1 per cent of the sample.

In order to examine the strong market reaction to media coverage, we choose the trading turnover under different time windows. Because of the unique ownership structure which means that some stocks do not circulate on the public market in China, trading turnover (TURNOVER) is calculated as the trading volume divided by the market value of circulating stocks. Since there are great differences in terms of the amount of circulating stocks and volatility for each firm, we use abnormal turnover (ABNTURN) to capture the influence of media coverage on trading volume. Abnormal turnover (ABNTURN) is the average turnover within the event window divided by the average turnover for the period of 130 days to 31 days before the earnings announcement date (PRETURN). Generally speaking, a higher abnormal turnover means that market overreaction is more possible within the event windows. ABNTURN30 is the abnormal turnover for the 61-day window around the earnings announcement date. ABNTURN10, ABNTURN5, ABNTURN3, and ABNTURN1 are the abnormal turnovers for the 21-day, 11-day, 7-day, and 3-day time windows around the earnings announcement date, respectively.

For media coverage (MEDIA), we choose seven newspapers – China Securities Journal, Securities Daily, Securities Times, China Business Journal, The Economic Observer, Shanghai Securities News, and The 21st Century Business Herald – as the sources of media reports and collect the media reports on the sample firms from these seven newspapers during the research period (61-day time window around the annual report date). The data are taken from the China Newspaper Database, which covers more than 99 per cent of the contents of the seven newspapers. We search by theme for media

We use the average turnover for the 130 days to 31 days before the annual report day to further compare the difference in turnover between the event period and the non-event period.

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reports of the sample firms.¹⁰ As Fang and Peress (2009) measure media coverage by the numbers of media articles, we use the total number of media articles from the seven papers above for each event day for the sample firms as the media coverage (*MEDIA*); the greater the number of media reports during the event period, the higher the media coverage. In order to minimise the influence of outliers, we winsorise the media coverage measures at the top and bottom 1 per cent of the sample.

Based on Givoly and Hayn (2000), Ahmend and Duellaman (2007), and Qiang (2007), we use accrual measures as the indicator for conservatism.11 This measure captures both conditional and unconditional conservatism. Since accounting accruals may be reversed in the next period, we use 3-year cumulative accruals as the conservatism measure, as proposed by Ahmend and Duellaman (2007) and Qiang (2007).¹² To simplify our explanation for this measurement, we multiply the cumulative accruals by -1; thus the higher this measure, the higher the accounting conservatism (Ahmend and Duellaman, 2007; Xia and Zhu, 2009). CONSERVI is the 3-year cumulative accruals multiplied by -1. Accruals for each year equal earnings after deduction of cash flow from operations divided by total assets at year end. Firms often use extraordinary items to manipulate their earnings, and so we also control for this effect and measure conservatism using earnings before extraordinary items. CONERV2 is the 3-year cumulative accruals multiplied by -1; accruals for each year equal earnings before extraordinary items and after the deduction of cash flow from operations divided by total assets at year end. In order to minimise the influence of outliers, we winsorise the conservatism measures at the top and bottom 1 per cent of the sample. To minimise the measurement bias, we also use other conservatism measures in robustness tests.

The change in firms' profitability (ΔROE) is proxied by the change in return on equity, ¹³ namely the return on equity for the current year (ROE) minus the return on equity for the previous year (PREROE). In order to minimise the influence of outliers, we winsorise the change in profitability at the top and bottom 1 per cent of the sample.

We do not choose websites and magazines as media sources for the following reasons: (1) quite a lot of information from the Internet and websites is reproduced from news reports, which may lead to over-repeated coverage, and also it is hard to separate this information; (2) although reports by magazines are deep and in detail, overall, the scope of information coverage is narrow and lacks timeliness.

The measure of conservatism using cumulative accruals shows the overall effect of conditional and unconditional conservatism. It not only covers the timely recognition of bad news (conditional conservatism), but also includes unconditional conservatism such as research and development expenditures. The Basu model and the Cscore are measurements for conditional conservatism in the literature. Of course, the measurement of cumulative accruals also has some errors, such as earnings management through bad debt expenses and asset impairment. Changes in operating accruals including inventory impairment and bad debt provision are the features of conditional conservatism. However, it is hard to calculate and separate this measurement proxy for conservatism. Therefore, this paper uses cumulative accruals as the indicator for conservatism, and it also uses the market value to book value (M/B) and the Cscore in robustness tests in order to minimise the measurement error for interested variables.

Three years' cumulative accruals are the total accruals for the previous 2 years and the current year.
 Since unexpected earnings are commonly used in event studies, we use this measurement. Some research finds that the China market reacts before the disclosure of annual reports, which means that information is leaked before the reporting day. Therefore, it is reasonable to use unexpected earnings.

Other control variables (CONTROLS) include LIQUID, which is the ratio of circulating stocks to total stock; the time span for listing of firms (AGE); firm scale (the natural log form of total assets at year end, SIZE); capital structure (total debt ratio at year end, LEV); audit opinion (OP: 1 indicates a qualified opinion and 0 otherwise); and accounting firms (BIG4: 1 indicates the auditor is among the Big Four accounting firms and 0 otherwise). INDS is the industry dummy variable for the 12 industry categories classified by the China Securities Regulatory Commission (CSRC) excluding the financial industry. We also control for the characteristics of ultimate shareholders. V is the control right of ultimate shareholders. STATE is a dummy variable: 1 indicates the ultimate shareholder is the government and 0 otherwise.

4.3 Samples

The market return data are taken from the CSMAR database and the financial data from the Wind and CSMAR databases; the information on ultimate shareholders is taken manually from annual reports.

For the 1,335 firms that disclose their annual financial reports for 2005 and 2006 on the Wind database, we choose 628 firms with forecasted earnings per share (EPS) by analysts, and for each firm we choose the 61-day time window around the financial reporting day as the event period. Therefore, each firm has 61-day trading data, and our final sample consists of 86,985 observations. After dropping firms without information on ultimate shareholders or information on audit opinion and accounting firms, we finally obtain 74,559 observations. We also investigate for different time windows, and the samples for different windows are as follows: 26,191 for the 21-day time window around the annual reporting day, 13,767 for the 11-day window, 8,771 for the 7-day window, and 3,768 for the 3-day window.

V. Empirical Analysis

5.1 Descriptive Statistics

Table 1 shows the descriptive statistics for the regression variables. *CAR* for the 61-day time window is 9.2 per cent on average.¹⁵ As the time window is shortened, the mean *CAR* decreases. The *CAR* for the 3-day window is 0.5 per cent on average.

The means of abnormal turnovers are about 2, indicating that the average trading turnovers during event periods are two times those during the non-event period. Also, as the earnings announcement date approaches, the abnormal turnover increases. Average media coverage for each trading day is 0.176, and most of the samples lack

We drop samples without analysts' forecasts in order to minimise the influence of price change due to analysts' coverage because analysts' coverage of firms' fundamental aspects will also trigger different market valuations for stocks.

¹⁵ The *CAR* for the 61-day time window around the annual report day is much higher, and this may be due to the fact that those firms are all covered by analysts, leading to higher market return.

media coverage. Average *CONSERV1* and *CONSERV2* are positive, meaning that the financial reports for listed firms are conservative overall, but some are still aggressive. Other aspects, such as age, leverage, scale, profitability, and corporate governance characteristics, also show great differences and influence market reactions around the earnings announcement date.

Table 1 Descriptive Statistics

Variables	N	Mean	SD	25%	50%	75%
CAR30	74,559	0.092	0.231	-0.044	0.053	0.203
CAR10	26,191	0.051	0.135	-0.031	0.026	0.117
CAR5	13,767	0.034	0.101	-0.028	0.016	0.081
CAR3	8,771	0.024	0.084	-0.027	0.010	0.063
CAR1	3,768	0.005	0.059	-0.029	-0.000	0.035
ABNTURN30	74,559	2.051	1.660	1.066	1.644	2.497
ABNTURN10	26,191	2.075	1.700	1.092	1.662	2.505
ABNTURN5	13,767	2.124	1.788	1.114	1.693	2.566
ABNTURN3	8,771	2.168	1.818	1.129	1.737	2.623
ABNTURN1	3,768	2.193	1.773	1.167	1.773	2.653
MEDIA	74,559	0.176	0.545	0	0	0
CONSERV1	74,559	0.043	0.379	-0.079	0.015	0.102
CONSERV2	74,559	0.053	0.381	-0.068	0.024	0.121
LIQUID	74,559	0.466	0.159	0.368	0.461	0.573
AGE	74,559	7.503	3.331	5.000	8.000	10.000
LEV	74,559	0.516	0.300	0.377	0.518	0.629
SIZE	74,559	21.654	1.040	20.937	21.599	22.250
ΔROE	74,559	0.010	0.175	-0.018	0.003	0.024
V	74,559	41.710	15.405	29.080	41.860	53.350
STATE	74,559	0.738	0.440	0	1	1
OP	74,559	0.045	0.207	0	0	0
BIG4	74,559	0.092	0.289	0	0	0

Note: CAR30, CAR10, CAR5, CAR3, and CAR1 are respectively the cumulative abnormal returns for the 61-day, 21-day, 11-day, 7-day, and 3-day time windows around the earnings announcement date. ABNTURN30, ABNTURN10, ABNTURN5, ABNTURN3, and ABNTURN1 are respectively the abnormal turnovers for the 61-day, 21-day, 11-day, 7-day, and 3-day time windows. MEDIA is the media coverage. CONSERV1 and CONSERV2 are two conservatism measurements based on the cumulative accruals. LIQUID is the ratio of circulating stocks to total stocks. AROE is the change in return on equity compared to the previous year. ABNTURN30 is the abnormal turnover for the 61-day time window. AGE is the listing time span of firms. LEV is the total debt ratio. SIZE is the natural log form of assets. V is the control rights of ultimate shareholders. STATE is dummy variable: 1 indicates the ultimate shareholder is the government and 0 otherwise. OP is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. BIG4 is a dummy variable: 1 indicates that the auditor is among the Big Four accounting firms and 0 otherwise.

5.2 Correlation

Table 2 shows the correlation between market reactions and media coverage for different windows. Abnormal turnover (*ABNTURN*) is significantly and positively related with media coverage for the 61-day, 10-day, and 5-day time windows, while the cumulative abnormal return (*CAR*) is significantly and positively related with media coverage in all time windows, which means that higher media coverage is related with higher market reactions.

Table 2 Correlation Coefficients

	ABN	TURN30 ABN	TURN10 AB	NTURN5 AB	NTURN3	ABNTURN1
	Pearson	0.0241***	0.0346***	0.0257***	0.0137	-0.0196
	Spearman	0.0129***	0.0108*	0.0012	-0.0069	0.0305
MEDIA						
		CAR30	CAR10	CAR5	CAR3	CAR1
	Pearson	0.0483***	0.0788***	0.0996***	0.0988**	* 0.0574***
	Spearman	0.0435***	0.0677***	0.0703***	0.0589**	* 0.0203

Note: *ABNTURN30*, *ABNTURN10*, *ABNTURN5*, *ABNTURN3*, and *ABNTURN1* are respectively the abnormal turnovers for the 61-day, 21-day, 11-day, 7-day, and 3-day time windows. *CAR30*, *CAR10*, *CAR5*, *CAR3*, and *CAR1* are respectively the cumulative abnormal returns for the 61-day, 21-day, 11-day, 7-day, and 3-day time windows around the earnings announcement date. *MEDIA* is the media coverage. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

5.3 Regression

Media coverage easily triggers more speculative trading on stocks, which is proxied by the abnormal turnover. Therefore, we first investigate how media coverage (*MEDIA*) affects trading turnover (*ABNTURN*). Table 3 shows the results for different time windows.

It is hard to trade and speculate on high market valued firms, thus the abnormal turnover is lower, as shown by the significantly negative coefficients for MV. A low liquid ratio means that fewer shares are held by circulating-stock investors, which leads to more abnormal turnover and speculative activities. The regression coefficients for LIQUID are significantly negative. The coefficients for the change in performance (AROE) are significantly positive for most windows, which means that unexpected earnings will lead to higher abnormal turnover as many investors will trade based on the firms' profitability. An unclean audit opinion means that there may be some problems with the firm's financial reporting, information disclosure, or operational activities, and such problems easily induce market volatility. Thus, the coefficients for OP are significantly positive.

Table 3	Media	Coverage	and	Abnormal	Turnover

Variables	Sign	ABNTURN30 AL	BNTURN10	ABNTURN5	ABNTURN3	ABNTURN1
MEDIA	+	0.081***	0.098***	0.094***	0.093***	* -0.019
		(6.04)	(5.07)	(3.61)	(2.76)	(-0.36)
MV	_	-0.072***	-0.094***	-0.098***	-0.102***	* -0.088***
		(-12.07)	(-8.84)	(-6.44)	(-5.28)	(-2.97)
LIQUID	_	-0.004***	-0.004***	-0.005***	-0.005***	* -0.0050***
		(-8.85)	(-5.01)	(-4.15)	(-3.23)	(-2.70)
ΔROE	+	0.190***	0.197***	0.232***	0.137	-0.003
		(5.53)	(3.16)	(2.61)	(1.24)	(-0.02)
OP	+	0.047	0.333***	0.313***	0.263***	* 0.127
		(1.63)	(6.16)	(4.18)	(2.81)	(1.05)
INDS		Control	Control	Control	Control	Control
Obs.		74559	26191	13767	8771	3768
\mathbb{R}^2		0.007	0.011	0.012	0.012	0.011

Note: The dependent variables *ABNTURN30*, *ABNTURN10*, *ABNTURN5*, *ABNTURN3*, and *ABNTURN1* are respectively the abnormal turnovers for the 61-day, 21-day, 11-day, 7-day, and 3-day time windows. *MEDIA* is the media coverage. *MV* is the natural log form of the market value of equity. *LIQUID* is the ratio of circulating stocks to total stocks. *ΔROE* is the change in return on equity compared to the previous year. *OP* is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. *INDS* are the industry dummy variables for the 12 industry categories classified by the CSRC excluding the financial industry. In the parentheses are the White–adjusted t statistics considering the heteroscedasticity. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

After controlling for financial status and liquid ratio, the coefficients for media coverage (*MEDIA*) are all significantly positive except for the 3-day time window, ¹⁶ meaning that more media coverage will lead to higher abnormal turnover and market speculation may be much higher, which is consistent with the existing literature (Zhang and Liu, 2006; Xu, 2009). In all, the results in Table 3 show that more media coverage will lead to more abnormal turnover and promote stock trading and speculative activities.

Does abnormal turnover lead to more responsive market reactions? Does media coverage conduce higher market reactions? Table 4 shows the result for the relation between (a) cumulative abnormal return (*CAR*) of each trading day for the 61-day time window and media coverage and (b) conservative accounting policy. Model 1 examines the market reaction to media coverage, and Models 2 to 9 further show the influence of conservative accounting. Models 2 to 5 are results using *CONSERV1*, while Models 6 to 9 are robustness tests using *CONSERV2*.

The insignificance of the coefficient for the 3-day time window may be due to the very short time window, as the change in turnover is not evident. Of course, it may also be due to the measurement error for abnormal turnover since our abnormal turnover is the average turnover in the event period divided by the average turnover for the 130 days to 30 days prior to the annual reporting day. The spans of these two periods differ a lot.

Table 4 Media Coverage, Conservative Accounting, and Market Reactions

				CONSERVI	1/13			CONSERV2	RV2	
Variables	Sign	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
MEDIA	+	0.020***	0.021***	0.021***	0.030***	0.015***	0.022***	0.021***	0.031***	0.015***
		(11.24)	(12.02)	(11.57)	(7.80)	(10.83)	(12.08)	(11.70)	(7.88)	(10.82)
$CONSERV \times MEDIA$	I		-0.010***	***800.0-	-0.013***	0.001	-0.010***	***600.0-	-0.013***	0.001
			(-4.55)	(-4.11)	(-3.76)	(0.71)	(-4.79)	(-4.38)	(-3.92)	(0.86)
$MEDIA \times AROE$	+			0.057	0.104**	0.050***		0.047	***660.0	0.048***
				(4.35)	(3.67)	(4.71)		(3.76)	(3.63)	(4.82)
$CONSERV \times MEDIA \times AROE$	1			-0.147***	-0.162**	-0.176***		-0.120***	-0.138*	-0.200***
				(-4.55)	(-2.30)	(-7.28)		(-3.21)	(-1.80)	(-7.81)
$CONSERV \times AROE$	ċ			0.040**	0.074	0.104**		0.025	0.051	0.139***
				(2.47)	(0.67)	(7.10)		(1.17)	(0.37)	(7.14)
CONSERV	ċ		-0.012***	-0.013***	0.015**	***900.0	-0.013***	-0.013***	0.015**	0.004**
			(-5.19)	(-5.33)	(2.39)	(3.16)	(-5.50)	(-5.50)	(2.26)	(2.42)
ΔROE	ċ	0.013***	0.015***	-0.002	-0.092*	900:0-	0.015***	0.004	-0.093**	-0.008
		(2.77)	(3.12)	(-0.21)	(-1.95)	(-0.92)	(3.15)	(0.58)	(-2.04)	(-1.20)
ABNTURN	+	0.026**	0.026**	0.026***	0.023***	0.024***	0.026***	0.026***	0.023***	0.024***
		(43.57)	(43.48)	(43.54)	(14.24)	(50.13)	(43.47)	(43.51)	(14.23)	(50.08)
SIZE	+	0.010***	0.012**	0.012***	-0.013***	-0.022***	0.012***	0.012***	-0.013***	-0.022***
		(11.39)	(12.83)	(12.88)	(-4.21)	(-29.56)	(12.98)	(13.03)	(-4.14)	(-29.14)
LEV	+	0.017**	0.020***	0.021***	0.025**	0.043***	0.019***	0.019***	0.026**	0.042***
		(6.53)	(7.51)	(7.83)	(2.56)	(17.05)	(7.23)	(7.43)	(2.77)	(17.15)

				CONSERVI	RVI			CONSERV2	RV2	
Variables	Sign	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
AGE	<i>د</i> ٠	***900.0	***900:0	***900.0	0.003***	0.004***	***900.0	***900.0	0.003***	0.004***
		(24.55)	(24.34)	(24.19)	(3.38)	(19.08)	(24.38)	(24.26)	(3.50)	(18.95)
Λ	٠.	**000.0-	*000.0-	*000.0-	-0.001***	***000.0-	*000.0-	*000.0-	-0.001***	***000.0-
		(-2.08)	(-1.76)	(-1.83)	(-4.02)	(-8.26)	(-1.76)	(-1.84)	(-3.95)	(-8.34)
STATE	I	-0.021***	-0.022***	-0.021***	-0.010	***900.0-	-0.022***	-0.021***	-0.011	***900.0-
		(-10.26)	(-10.41)	(-10.38)	(-1.46)	(-3.72)	(-10.42)	(-10.37)	(-1.55)	(-3.55)
OP	٠.	0.052***	0.054**	0.053***	***/	0.003	0.053***	0.053***	***/	0.005
		(12.26)	(12.57)	(12.24)	(5.14)	(0.83)	(12.50)	(12.35)	(5.21)	(1.24)
BIG4	٠.	***990.0-	-0.065**	-0.064***	-0.057***	-0.026***	-0.065***	-0.064***	-0.057***	-0.026***
		(-23.70)	(-23.07)	(-22.83)	(-7.46)	(-11.56)	(-23.07)	(-22.90)	(-7.51)	(-11.61)
INDS		Control								
Obs.		74559	74559	74559	8829	74559	74559	74559	8829	74559
\mathbb{R}^2		0.079	0.080	0.081	0.109	0.095	0.081	0.081	0.108	0.095

CONSERVI and CONSERV2 are two conservatism measurements based on the cumulative accruals. AROE is the change in return on equity compared to the previous Note: The dependent variable CAR30 is the cumulative abnormal return for the 61-day time window around the earnings announcement date. MEDIA is the media coverage. year. ABNTURN30 is the abnormal turnover for the 61-day time window. AGE is the listing time span of firms. LEV is the total debt ratio. SIZE is the natural log form OP is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. BIG4 is a dummy variable: 1 indicates that the auditor is among the Big Four accounting firms and 0 otherwise. INDS are the industry dummy variables for the 12 industry categories classified by the CSRC after dropping the financial industry. In the of assets. V is the control rights of ultimate shareholders. STATE is a dummy variable: 1 indicates that the ultimate shareholder is the government and 0 otherwise. parentheses are the White-adjusted t statistics considering the heteroscedasticity. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively. Model 1 investigates the media coverage on cumulative abnormal return for each trading day. The coefficient for *MEDIA* is significantly positive at the 0.01 level, indicating that more media reports or coverage will lead to stronger market reactions. In other words, the media effect will lead to higher market return and magnify the information effect. One more media report will lead to an increase of 0.021 per cent in the cumulative abnormal return for the targeted firm. Thus, Hypothesis 1 is supported. We can also see that in Model 1, the coefficient for abnormal turnover (*ABNTURN*) is significantly positive, indicating that abnormal turnover will be accompanied by higher abnormal return. This may be because more media coverage will result in huge purchases by small investors and higher turnover, which pushes up prices.

Models 2 and 6 incorporate the influence of conservative accounting on the media effect. The coefficients for *MEDIA* are still significantly positive, supporting Hypothesis 1. One more media report will lead to an increase of 0.02 per cent in market reactions. The regression coefficients for *CONSERV* × *MEDIA* are significantly negative at the 0.05 level: that is, conservative accounting can reduce the media effect and restrict the possibility of stock overvaluation and market overreaction. An increase of 1 per cent in conservatism will lead to a decrease of 1 per cent in market abnormal return, indicating that conservative accounting can constrain the responsive reactions of the market and is helpful in reducing stock volatility. Thus, Hypothesis 2 is supported.

Models 3 and 7 further investigate the influence of media coverage and conservative accounting on market return allowing for profitability. The coefficients for MEDIA are significantly positive at the 0.01 level and those for $CONSERV \times MEDIA$ are significantly negative, consistent with previous results. Thus, Hypotheses 1 and 2 are further supported.

The coefficients for $MEDIA \times \Delta ROE$ are significantly positive, meaning that unexpected earnings and market return due to media coverage on the expected earnings are highly related. In other words, media coverage magnifies market reactions to earnings information, and this may be due to unusual information disclosure or to imbalanced market structure and huge purchases by small investors. The coefficients for $CONSERV \times MEDIA \times \Delta ROE$ are significantly negative at the 0.01 level, indicating that conservative accounting can further reduce market reactions caused by media coverage on unexpected earnings. Thus, Hypothesis 3 is supported.

Since most of the samples lack media coverage, which may lead to some bias for regression, Models 4 and 8 eliminate these samples and only use samples with media coverage. The coefficients for MEDIA are still significantly positive, those for $CONSERV \times MEDIA$ are significantly negative, and those for $CONSERV \times MEDIA \times \Delta ROE$ are significantly negative, consistent with the results for all samples. Thus, Hypotheses 1, 2, and 3 are further supported.

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In order to avoid some measurement errors for CAR, Models 5 and 9 use the market index-adjusted method to calculate the abnormal return (AR), which is measured as the stock daily return minus the corresponding market index return. The coefficients for MEDIA are significantly positive and those for $CONSERV \times MEDIA$ are negative but not significant. The coefficients for $CONSERV \times MEDIA \times \Delta ROE$ are significantly negative, consistent with the Fama-French (1993) three-factor model, indicating that the different calculation methods of cumulative abnormal return do not influence our conclusions.

We also regress for different time windows (21-day, 11-day, 7-day, and 3-day time windows around the annual reporting day), and the results are shown in Table 5. The coefficients for MEDIA are all significantly positive for all time windows; that is, media coverage and cumulative abnormal return (CAR) are positively related. Regarding the coefficients for MEDIA, market reactions are different for different media coverage under different time windows. The coefficients for $CONSERV \times MEDIA$ are significantly negative, which means that conservative accounting can significantly reduce the magnification of the media effect. For $CONSERV \times MEDIA \times \Delta ROE$, the regression coefficients are significantly negatively at the 0.01 level, indicating that conservative accounting can further reduce the market reactions with regard to firms' profitability. In all, the results for media coverage and market return for each trading date under different time windows support our three hypotheses.

5.4 Media Effect and Conservative Accounting for Different Performances

Using a 61-day time window around the earnings announcement date, Table 6 further investigates the effects of media coverage and conservative accounting separately for different performances (different unexpected earnings).¹⁷ The first two columns are for positive unexpected earnings ($\Delta ROE > 0$) and the last two columns for negative unexpected earnings ($\Delta ROE < 0$), and we use both *CONSERV1* and *CONSERV2*.

For firms whose $\triangle ROE > 0$, the media effect is obvious: the coefficients for MEDIA are significantly positive, meaning that the market is more responsive to media coverage on firms with positive unexpected earnings (current expected earnings are the previous year's earnings under the naïve model). Conservative accounting can alleviate the over-responsive reactions of the market, as shown by the negative coefficients for $CONSERV \times MEDIA$, consistent with previous results. The coefficients for $CONSERV \times MEDIA \times \triangle ROE$ are significantly negative, meaning that the market may overreact to media reports on firms' unexpected earnings, but conservatism can further reduce the over-responsiveness of the market towards higher media coverage of firms' unexpected earnings.

¹⁷ The results for the short time windows are basically the same.

Table 5 Regressions for Different Windows

		CAL	CAR10	CA	CARS	CAR3	R3	CARI	RI
Variables	Sign	CONSERVI	CONSERV2	CONSERVI	CONSERV2	CONSERVI	CONSERV2	CONSERVI	CONSERV2
MEDIA	+	0.017***	0.017***	0.015***	0.016***	0.011***	0.012***	0.005***	0.005***
		(11.40)	(11.45)	(11.01)	(11.07)	(7.49)	(7.55)	(2.80)	(2.82)
$CONSERV \times MEDIA$	I	-0.011***	-0.011***	-0.011***	-0.012***	***800.0-	***800.0-	-0.002*	-0.002*
		(-7.05)	(-7.38)	(-7.01)	(-7.54)	(-5.12)	(-5.54)	(-1.77)	(-1.66)
$MEDIA \times AROE$	+	0.040***	0.031***	0.039***	0.027***	0.027**	0.019*	0.014	0.008
		(3.87)	(3.15)	(3.64)	(2.68)	(2.31)	(1.75)	(1.12)	(0.73)
$CONSERV \times MEDIA \times AROE$	I	-0.110***	-0.081***	-0.083***	-0.057**	-0.017	0.009	-0.046**	-0.043*
		(-4.69)	(-3.37)	(-3.99)	(-2.44)	(-0.77)	(0.40)	(-2.03)	(-1.75)
$CONSERV \times AROE$	ċ	-0.051***	***060.0-	-0.126***	-0.207***	-0.091***	-0.158***	-0.017	-0.047*
		(-2.93)	(-3.80)	(-6.97)	(-8.60)	(-4.74)	(-6.13)	(-0.82)	(-1.69)
CONSERV	ċ	**40000	0.007**	0.014**	0.016**	0.012***	0.014***	0.005*	0.005**
		(2.30)	(2.36)	(4.07)	(4.78)	(3.74)	(4.25)	(1.94)	(1.97)
AROE	ċ	0.039***	0.045***	0.037***	0.049***	0.018**	0.029***	0.004	0.010
		(4.98)	(5.61)	(4.68)	(6.05)	(2.11)	(3.31)	(0.42)	(1.04)
ABNTURN	+	0.016***	0.016***	0.012***	0.012***	***600.0	0.009***	0.005	0.005***
		(26.46)	(26.48)	(18.78)	(18.89)	(14.06)	(14.18)	(7.05)	(7.03)
SIZE	+	0.004***	0.004***	0.002**	0.002*	0.004**	0.003***	0.003***	0.003***
		(4.67)	(4.61)	(2.19)	(1.88)	(3.46)	(3.25)	(3.00)	(2.97)

		CARIO	810	CA	CARS	CA	CAR3	CA	CARI
Variables	Sign	CONSERVI	CONSERV2	CONSERVI	CONSERV2	CONSERVI	CONSERV2	CONSERVI	CONSERV2
LEV	+	0.011***	0.011***	-0.003	-0.002	***600:0-	***800.0-	**800.0-	***800:0-
		(4.08)	(4.38)	(-1.16)	(-0.85)	(-2.90)	(-3.00)	(-2.25)	(-2.72)
AGE	ċ	0.002***	0.002***	0.001***	0.001***	0.000	*000.0	0.000	0.000
		(7.82)	(7.97)	(2.83)	(3.08)	(1.59)	(1.71)	(1.27)	(1.31)
Λ	ċ	***0000-	***0000-	-0.000	-0.000	-0.000	-0.000	0.000	0.000
		(-4.13)	(4.09)	(-0.77)	(-0.65)	(-1.05)	(-0.99)	(1.48)	(1.50)
STATE	I	-0.014***	-0.015***	-0.014**	-0.015***	-0.018***	-0.018***	-0.010***	-0.010***
		(-6.97)	(-7.08)	(-6.94)	(-7.26)	(-7.94)	(-8.15)	(-4.42)	(-4.47)
<i>OP</i>	ċ	0.023***	0.023***	0.004	0.003	0.002	0.001	0.011**	0.011**
		(5.16)	(5.15)	(0.78)	(0.58)	(0.38)	(0.27)	(2.25)	(2.28)
BIG4	ċ	-0.032***	-0.032***	-0.023***	-0.023***	-0.014**	-0.013***	-0.012***	-0.012***
		(-12.10)	(-12.12)	(-8.23)	(-8.19)	(-4.36)	(-4.29)	(-3.69)	(-3.70)
INDS		Control							
Obs.		26191	26191	13767	13767	8771	8771	3768	3768
\mathbb{R}^2		0.082	0.081	0.090	0.091	0.080	0.082	0.048	0.048

Note: The dependent variables CAR10, CAR5, and CAR1 are respectively the cumulative abnormal returns for the 21-day, 11-day, and 3-day time windows around the earnings announcement date. MEDIA is the media coverage. CONSERVI and CONSERV2 are two conservatism measurements based on the cumulative accruals. AROE is the change in return on equity compared to the previous year. ABNTURNIO, ABNTURNS, ABNTURNS, and ABNTURNI are the abnormal turnovers for the 21-day, 11-day, and 3-day time windows, respectively. AGE is the listing time span of firms. LEV is the total debt ratio. SIZE is the natural log form OP is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. BIG4 is a dummy variable: 1 indicates that the auditor is among the Big Four accounting firms and 0 otherwise. INDS are the industry dummy variables for the 12 industry categories classified by the CSRC after excluding the financial industry. In the of assets. V is the control rights of ultimate shareholders. STATE is a dummy variable: 1 indicates that the ultimate shareholder is the government and 0 otherwise. parentheses are the White-adjusted t statistics considering the heteroscedasticity. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively. However, for firms whose $\triangle ROE < 0$, media coverage and CAR are significantly and negatively related. This may be because when firms do not meet the market expectation, media coverage will magnify the effect of such negative news on the market, as shown by the significantly negative coefficients for $MEDIA \times \triangle ROE$, and this leads to a more negative market response. For $CONSERV \times MEDIA \times \triangle ROE$, the coefficients are significantly positive, indicating that conservatism can also alleviate the above relationship.

Of course, perhaps the market does not care about the unexpected earnings but rather focuses on the level of gain or loss. As, in China, a listed firm will be delisted if it suffers a loss for 3 consecutive years, this makes investors and speculators short-sighted and only care about current profitability, not unexpected earnings. Therefore, Table 7 shows the different situations for the media effect under different profitability levels. The first two columns are for profitable firms and the last two for firms suffering loss using both *CONSERV1* and *CONSERV2*.

For profitable firms, media coverage will lead to higher market response, magnifying the earnings effect, as shown by the significantly positive coefficients for *MEDIA*. Conservative accounting can alleviate this magnifying effect, as shown by the fact that the coefficients for $CONSERV \times MEDIA$ are significantly negative. For $CONSERV \times MEDIA \times \Delta ROE$, the coefficients are also significantly negative, meaning that the conservatism principle can further reduce the magnifying effect of media coverage on earnings.

For firms suffering loss, media coverage will also trigger higher market return since these kinds of firms often use "Big Bath" to manipulate their earnings for the following year or for positive unexpected earnings; thus, the coefficients for MEDIA are significantly positive. Conservative accounting can play a role in reducing speculation, as indicated by the significantly negative coefficients for $CONSERV \times MEDIA$. The coefficients for $CONSERV \times MEDIA \times \Delta ROE$ are not significant, meaning that the influence of conservative accounting is not that strong for firms suffering loss.

In all, although firms or speculators (institutional investors) may try to magnify the effect of unexpected earnings via media coverage or to directly speculate on the profitability of firms, media coverage can magnify the information effect. Different accounting policies will also affect this media effect and speculative behaviour. The results based on the change in earnings (unexpected earnings) and profitability (gain or loss) are basically the same as above. Thus, Hypotheses 1, 2, and 3 are further supported.

Among firms suffering loss, some may use the "Big Bath" to manipulate their earnings and some may be actual loss firms. Since we cannot strictly separate them, the conclusions may be impaired.

Table 6 Media Coverage, Conservative Accounting, and Market Reactions – By Performance

	ΔROE	> 0	ΔROE	< 0
Variables	CONSERV1	CONSERV2	CONSERV1	CONSERV2
MEDIA	0.039***	0.038***	-0.012***	-0.012***
	(15.00)	(14.89)	(-4.11)	(-4.15)
$CONSERV \times MEDIA$	-0.002*	-0.001	-0.036***	-0.033***
	(-1.70)	(-0.25)	(-9.41)	(-9.09)
$MEDIA \times \Delta ROE$	0.008	0.025	-0.084***	-0.096***
	(0.35)	(1.28)	(-3.94)	(-4.61)
$CONSERV \times MEDIA \times \Delta ROE$	-0.303***	-0.459***	0.076**	0.136***
	(-5.99)	(-6.93)	(2.03)	(3.50)
$CONSERV \times \Delta ROE$	-0.218***	-0.189***	0.291***	0.332***
	(-7.69)	(-5.50)	(10.02)	(9.14)
CONSERV	-0.019***	-0.019***	0.060***	0.055***
	(-6.82)	(-6.62)	(8.27)	(7.62)
ΔROE	0.141***	0.131***	-0.191***	-0.196***
	(11.81)	(10.18)	(-15.29)	(-15.54)
ABNTURN	0.025***	0.025***	0.028***	0.028***
	(30.36)	(30.17)	(32.96)	(32.91)
SIZE	0.014***	0.015***	0.008***	0.009***
	(10.16)	(11.20)	(5.74)	(6.42)
LEV	0.042***	0.026***	0.005	-0.004
	(7.17)	(4.82)	(1.33)	(-1.18)
AGE	0.005***	0.005***	0.007***	0.007***
	(13.15)	(13.63)	(17.51)	(17.37)
V	-0.000***	-0.000***	-0.000	-0.000
	(-2.71)	(-2.81)	(-0.01)	(-0.24)
STATE	-0.026***	-0.026***	-0.012***	-0.010***
	(-9.21)	(-9.45)	(-3.67)	(-3.25)
OP	0.047***	0.038***	0.015**	0.014**
	(6.69)	(5.37)	(2.32)	(2.14)
BIG4	-0.042***	-0.044***	-0.088***	-0.090***
	(-11.06)	(-11.66)	(-21.13)	(-21.80)
INDS	Control	Control	Control	Control
Obs.	42325	42325	32234	32234
\mathbb{R}^2	0.098	0.098	0.101	0.101

Note: The dependent variable *CAR30* is the cumulative abnormal return for the 61-day time window around the earnings announcement date. *MEDIA* is the media coverage. *CONSERV1* and *CONSERV2* are two conservatism measurements based on the cumulative accruals. *AROE* is the change in return on equity compared to the previous year. *ABNTURN30* is the abnormal turnover for the 61-day time window. *AGE* is the listing time span of firms. *LEV* is the total debt ratio. *SIZE* is the natural log form of assets. *V* is the control rights of ultimate shareholders. *STATE* is a dummy variable: 1 indicates that the ultimate shareholder is the government and 0 otherwise. *OP* is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. *BIG4* is a dummy variable: 1 indicates that the auditor is among the Big Four accounting firms and 0 otherwise. *INDS* are the industry dummy variables for the 12 industry categories classified by the CSRC after excluding the financial industry. In the parentheses are the White-adjusted t statistics considering the heteroscedasticity. ***, ***, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

5.5 Media Effect and Conservative Accounting for Different Types of Ownership

Compared to those of non-state-owned firms, the managements of state-owned firms are more politically sensitive (Xia and Zhu, 2009) and pay more attention to media, especially when negative news break out. Moreover, since there are great differences between state-owned firms and non-state-owned firms in terms of resource acquisition (Chen and Zhu, 2009), non-state-owned firms are more likely to rely on the market mechanism for financing. Therefore, Table 8 shows the results for state-owned firms and non-state-owned firms. The first two columns are for state-owned firms (STATE = 1) and the last two for non-state-owned firms (STATE = 0), and we use both CONSERV1 and CONSERV2.

For state-owned firms, media coverage can increase the market return, as indicated by the significantly positive coefficients of *MEDIA*. The coefficients for *CONSERV* × *MEDIA* are significantly negative, meaning that the conservatism principle can reduce the magnifying effect of media coverage. For *CONSERV* × *MEDIA* × ΔROE , the regression coefficients are still significantly negative, which means that conservative accounting can further reduce the enlargement effect of media coverage on firms' earnings.

As expected, for non-state-owned firms, the coefficients for MEDIA are significantly positive. Conservative accounting can effectively reduce this influence, as shown by the significantly negative coefficients for $CONSERV \times MEDIA$. For $CONSERV \times MEDIA \times \Delta ROE$, the coefficients are not significant, which means that the influence of conservative accounting is not strong.

Therefore, the managements in state-owned firms and non-state-owned firms are different in terms of political sensitivity, and these two kinds of firms are also different in terms of capital advantage, which may lead to the managements of firms being in cahoots with speculators in the market. However, overall media coverage will magnify the information effect of firms' information and conservative accounting can effectively alleviate this effect.

5.6 Endogeneity

Media coverage on firms may be due to some specific information, such as earnings change, the forecasts of analysts, or earnings distributions, which means that the fundamental characteristics of firms that the media cares about trigger higher market return (i.e. the endogenous problem). The endogeneity problem exists in most research, and the current popular methods used to solve this problem are the instrument variable, panel data, and simultaneous equations. Since proper instrument variables are hard to find and our data is only for 2 years, we use simultaneous equations to solve the endogenous issue. The models are as follows:

Table 7 Media Coverage, Conservative Accounting, and Market Reactions – By Profitability

	Gai	n	Los	S
Variables	CONSERV1	CONSERV2	CONSERV1	CONSERV2
MEDIA	0.018***	0.018***	0.056***	0.049***
	(9.80)	(9.79)	(2.97)	(2.68)
CONSERV × MEDIA	-0.004*	-0.002	-0.173**	-0.114*
	(-1.79)	(-1.22)	(-2.25)	(-1.74)
$MEDIA \times \Delta ROE$	0.090***	0.097***	0.043	0.017
	(4.37)	(5.03)	(1.09)	(0.44)
$CONSERV \times MEDIA \times \Delta ROE$	-0.304***	-0.423***	-0.111	0.049
	(-6.81)	(-7.12)	(-0.82)	(0.39)
$CONSERV \times \Delta ROE$	-0.084***	-0.089***	0.193***	0.114*
	(-4.49)	(-3.49)	(3.44)	(1.74)
CONSERV	-0.017***	-0.017***	0.239***	0.214***
	(-7.21)	(-7.27)	(7.70)	(7.40)
ΔROE	0.115***	0.109***	-0.039**	-0.029*
	(11.37)	(10.22)	(-2.51)	(-1.80)
ABNTURN	0.026***	0.026***	0.031***	0.032***
	(42.52)	(42.54)	(11.97)	(12.13)
SIZE	0.016***	0.016***	-0.011***	-0.010**
	(16.35)	(16.20)	(-2.76)	(-2.52)
LEV	0.006*	0.007**	-0.048***	-0.054***
	(1.91)	(2.57)	(-5.25)	(-5.63)
AGE	0.006***	0.006***	-0.003**	-0.003**
	(23.25)	(23.71)	(-2.15)	(-2.30)
V	-0.000	-0.000	-0.002***	-0.002***
	(-1.44)	(-1.34)	(-8.91)	(-8.88)
STATE	-0.028***	-0.028***	0.070***	0.069***
	(-12.92)	(-13.05)	(7.43)	(7.32)
OP	0.034***	0.031***	-0.037***	-0.034***
	(5.86)	(5.27)	(-4.23)	(-3.96)
BIG4	-0.074***	-0.074***	0.074***	0.071***
	(-26.49)	(-26.50)	(4.81)	(4.59)
INDS	Control	Control	Control	Control
Obs.	69359	69359	5200	5200
\mathbb{R}^2	0.093	0.093	0.128	0.127

Note: The dependent variable *CAR30* is the cumulative abnormal return for the 61-day time window around the earnings announcement date. *MEDIA* is the media coverage. *CONSERV1* and *CONSERV2* are two conservatism measurements based on the cumulative accruals. *AROE* is the change in return on equity compared to the previous year. *ABNTURN30* is the abnormal turnover for the 61-day time window. *AGE* is the listing time span of firms. *LEV* is the total debt ratio. *SIZE* is the natural log form of assets. *V* is the control rights of ultimate shareholders. *STATE* is a dummy variable: 1 indicates that the ultimate shareholder is the government and 0 otherwise. *OP* is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. *BIG4* is a dummy variable: 1 indicates that the auditor is among the Big Four accounting firms and 0 otherwise. *INDS* are the industry dummy variables for the 12 industry categories classified by the CSRC after excluding the financial industry. In the parentheses are the White-adjusted t statistics considering the heteroscedasticity. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 8 Media Coverage, Conservative Accounting, and Market Reactions – By Ownership

	STATE	= 1	STATE	= 0
Variables	CONSERV1	CONSERV2	CONSERV1	CONSERV2
MEDIA	0.023***	0.023***	0.019***	0.022***
	(11.49)	(11.52)	(5.04)	(5.68)
CONSERV × MEDIA	-0.007***	-0.007***	-0.081***	-0.109***
	(-3.55)	(-3.57)	(-5.05)	(-6.56)
$MEDIA \times \Delta ROE$	0.103***	0.100***	-0.012	-0.033*
	(5.22)	(5.26)	(-0.71)	(-1.82)
$CONSERV \times MEDIA \times \Delta ROE$	-0.112***	-0.098**	-0.054	0.087
	(-2.67)	(-2.34)	(-1.27)	(1.15)
$CONSERV \times \Delta ROE$	-0.185***	-0.143***	0.130***	0.189***
	(-6.75)	(-4.27)	(6.17)	(7.16)
CONSERV	-0.009***	-0.011***	0.066***	0.061***
	(-3.64)	(-4.34)	(7.86)	(7.15)
ΔROE	0.023**	0.007	-0.010	-0.017
	(2.10)	(0.60)	(-0.93)	(-1.54)
ABNTURN	0.025***	0.025***	0.026***	0.026***
	(37.35)	(37.24)	(22.03)	(22.04)
SIZE	-0.001	0.000	0.039***	0.040***
	(-0.70)	(0.08)	(18.72)	(19.30)
LEV	0.080***	0.073***	0.002	0.004
	(13.61)	(12.55)	(0.58)	(1.20)
AGE	0.004***	0.004***	0.012***	0.011***
	(13.56)	(13.56)	(21.72)	(21.66)
V	-0.000***	-0.000***	0.001***	0.001***
	(-3.42)	(-3.54)	(8.42)	(8.26)
OP	0.062***	0.057***	0.033***	0.037***
	(10.92)	(10.06)	(4.57)	(5.24)
BIG4	-0.036***	-0.037***	-0.125***	-0.125***
	(-11.50)	(-12.01)	(-17.22)	(-17.20)
INDS	Control	Control	Control	Control
Obs.	55021	55021	19538	19538
\mathbb{R}^2	0.085	0.084	0.146	0.147

Note: The dependent variable *CAR30* is the cumulative abnormal return for the 61-day time window around the earnings announcement date. *MEDIA* is the media coverage. *CONSERV1* and *CONSERV2* are two conservatism measurements based on the cumulative accruals. *AROE* is the change in return on equity compared to the previous year. *ABNTURN30* is the abnormal turnover for the 61-day time window. *AGE* is the listing time span of firms. *LEV* is the total debt ratio. *SIZE* is the natural log form of assets. *V* is the control rights of ultimate shareholders. *STATE* is a dummy variable: 1 indicates that the ultimate shareholder is the government and 0 otherwise. *OP* is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. *BIG4* is a dummy variable: 1 indicates that the auditor is among the Big Four accounting firms and 0 otherwise. *INDS* are the industry dummy variables for the 12 industry categories classified by the CSRC after excluding the financial industry. In the parentheses are the White-adjusted t statistics considering the heteroscedasticity. ***, ***, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

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$$CAR = \alpha + \alpha_{1}MEDIA + \alpha_{2}CONSERV \times MEDIA + \alpha_{3}MEDIA \times \Delta ROE$$

$$+ \alpha_{4}CONSERV \times MEDIA \times \Delta ROE + \alpha_{5}CONSERV \times \Delta ROE$$

$$+ \alpha_{6}CONSERV + \alpha_{7}\Delta ROE + \alpha_{8}ABNTURN + \varepsilon$$
(3)

$$COVERAGE = \beta + \beta_1 CONSERV + \beta_2 \Delta ROE + \beta_3 SIZE + \beta_4 LEV + \beta_5 AGE + \beta_6 V + \beta_7 STATE + \beta_8 BIG4 + \beta_9 OP + \sum_{i} \beta_i INDS + \varepsilon$$

$$(4)$$

Equation 3 is for market reactions to media coverage and conservative accounting, and Equation 4 for the determinants of media coverage. Based on the 61-day time window, Table 9 shows the regression results for media coverage, conservative accounting, and market reactions using the simultaneous equation model. We regress for both *CONSERV1* and *CONSERV2*.

Regarding the results for Equation 4, fundamental aspects significantly influence the attractiveness of firms for media coverage as firms that are more profitable and large in scale with lower debt ratios or unclean audit opinions are more likely to be covered by the media. Moreover, firms with a more conservative reporting policy are also more likely to be covered. A higher coverage by the media leads to stronger market reactions and a higher market return. The results for Equation 3 show that for both of the conservatism measures, the coefficients for MEDIA are significantly positive, those for $CONSERV \times MEDIA$ are significantly negative, and those for $CONSERV \times MEDIA \times \Delta ROE$ are still significantly negative, consistent with previous results and expectations. Thus, our hypotheses are further supported.

5.7 Other Media Coverage Measure

Since the market may lag behind the information disclosure, we also use cumulative media coverage (*CUMMEDIA*) to substitute for the concurrent media coverage. Cumulative media coverage is the cumulative number of media coverage since the beginning of the time window, as follows:

$$CUMMEDIA_{i} = \sum_{t=d1}^{d2} COVERAGE_{i,t}$$
 (5)

In Model 4, we include some fundamental characteristics, namely, profitability, auditing factors, and ownership structure. However, other factors, such as mergers and acquisitions and dividend policy, are not considered in Model 4 because this paper focuses on the effect of media coverage on market reactions and not on the determinants of media coverage, and the simultaneous equation model is used to account for the endogenous problem. On the other hand, in the empirical regressions, we also eliminate samples without media coverage and analyst forecasts to lower the influence of analysts. Moreover, we use different time windows to lower the effect of other events. Owing to the model specification in Model 4 for potential missing variables, our conclusions may be biased.

Table 9 Media Coverage, Conservative Accounting, and Market Reactions – Endogenous Issue

	CONSE	RV1	CONSE	RV2
	CAR	MEDIA	CAR	MEDIA
MEDIA	0.068		0.070	
	(8.43)***		(8.60)***	
CONSERV × MEDIA	-0.016		-0.015	
	(-5.53)***		(-5.04)***	
$MEDIA \times \Delta ROE$	0.068		0.055	
	(5.82)***		(4.73)***	
$CONSERV \times MEDIA \times \Delta ROE$	-0.164		-0.127	
	(-5.09)***		(-3.36)***	
$CONSERV \times \Delta ROE$	0.012		-0.009	
	(0.74)		(-0.42)	
CONSERV	-0.004	0.084	-0.007	0.081
	(-1.65)*	(15.20)***	(-2.69)***	(14.90)***
ΔROE	0.025	0.023	0.031	0.023
	(3.57)***	(2.10)**	(4.32)***	(2.06)**
ABNTURN	0.027	,	0.026	, ,
	(53.11)***		(53.08)***	
SIZE	0.105		0.104	
	(46.71)***		(46.52)***	
LEV	-0.041		-0.035	
	(-5.76)***		(-4.97)***	
AGE	0.003		0.003	
	(4.78)***		(4.81)***	
V	0.001		0.001	
	(1.74)*		(1.76)*	
STATE	-0.018		-0.018	
	(-3.87)***		(-3.91)***	
OP	0.017		0.021	
	(1.78)*		(2.14)**	
BIG4	-0.014		-0.014	
	(-2.00)**		(-2.02)**	
INDS	(' ' ')	Control	(')	Control
Obs.	74559	74559	74559	74559
\mathbb{R}^2	0.0306	0.0508	0.0295	0.0506

Note: The dependent variable *CAR30* is the cumulative abnormal return for the 61-day time window around the earnings announcement date. *MEDIA* is the media coverage. *CONSERV1* and *CONSERV2* are two conservatism measurements based on the cumulative accruals. *AROE* is the change in return on equity compared to the previous year. *ABNTURN30* is the abnormal turnover for the 61-day time window. *AGE* is the listing time span of firms. *LEV* is the total debt ratio. *SIZE* is the natural log form of assets. *V* is the control rights of ultimate shareholders. *STATE* is a dummy variable: 1 indicates that the ultimate shareholder is the government and 0 otherwise. *OP* is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. *BIG4* is a dummy variable: 1 indicates that the auditor is among the Big Four accounting firms and 0 otherwise. *INDS* are the industry dummy variables for the 12 industry categories classified by the CSRC after excluding the financial industry. In the parentheses are the White-adjusted t statistics considering the heteroscedasticity. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 10 Cumulative Media Coverage and Cumulative Abnormal Return

Variables	CAR30	CAR10	CAR5	CAR3	CAR1
CUMMEDIA	0.006***	0.008***	0.009***	0.009***	0.005***
	(16.16)	(13.97)	(11.20)	(7.89)	(3.26)
CONSERV × CUMMEDIA	-0.003***	-0.005***	-0.006***	-0.005***	-0.002***
	(-13.00)	(-13.31)	(-11.44)	(-7.05)	(-3.63)
$CUMMEDIA \times \Delta ROE$	0.030***	0.038***	0.049***	0.029***	0.013
	(7.69)	(8.74)	(6.14)	(2.91)	(1.12)
$CONSERV \times CUMMEDIA \times \Delta ROE$	-0.034***	-0.052***	-0.097***	-0.024	-0.044**
	(-4.91)	(-6.84)	(-6.54)	(-1.31)	(-2.35)
$CONSERV \times \Delta ROE$	0.072***	-0.035**	-0.113***	-0.089***	-0.018
	(4.30)	(-2.01)	(-6.21)	(-4.63)	(-0.85)
CONSERV	-0.001	0.010***	0.013***	0.010***	0.005**
	(-0.34)	(3.98)	(4.55)	(3.65)	(2.27)
ΔROE	0.033***	0.022***	0.029***	0.017**	0.004
	(4.42)	(2.76)	(3.67)	(1.96)	(0.44)
ABNTURN	0.025***	0.016***	0.012***	0.009***	0.005***
	(43.48)	(26.59)	(18.91)	(14.21)	(7.06)
SIZE	0.010***	0.004***	0.002**	0.003***	0.003***
	(11.19)	(4.40)	(2.44)	(3.44)	(3.06)
LEV	0.020***	0.011***	-0.002	-0.008***	-0.008**
	(7.80)	(4.16)	(-0.87)	(-2.69)	(-2.30)
AGE	0.006***	0.002***	0.001***	0.000	0.000
	(23.39)	(7.59)	(2.74)	(1.62)	(1.26)
V	-0.000**	-0.000***	-0.000	-0.000	0.000
	(-2.54)	(-4.30)	(-0.80)	(-0.96)	(1.56)
STATE	-0.021***	-0.014***	-0.014***	-0.018***	-0.010***
	(-10.15)	(-6.71)	(-6.98)	(-7.96)	(-4.45)
OP	0.052***	0.021***	0.003	0.001	0.011**
	(11.92)	(4.66)	(0.61)	(0.29)	(2.25)
BIG4	-0.063***	-0.032***	-0.023***	-0.014***	-0.012***
	(-22.44)	(-11.82)	(-8.17)	(-4.49)	(-3.75)
INDS	Control	Control	Control	Control	Control
Obs.	74559	26191	13767	8771	3768
\mathbb{R}^2	0.086	0.087	0.091	0.081	0.049

Note: The dependent variables CAR30, CAR10, CAR5, CAR3, and CAR1 are respectively the cumulative abnormal returns for the 61-day, 21-day, 11-day, 7-day, and 3-day time windows around the earnings announcement date. CUMMEDIA is the cumulative media coverage. CONSERV1 and CONSERV2 are two conservatism measurements based on the cumulative accruals. AROE is the change in return on equity compared to the previous year. ABNTURN30, ABNTURN10, ABNTURN5, ABNTURN3, and ABNTURN1 are the abnormal turnovers for the 61-day, 21-day, 11-day, 7-day, and 3-day time windows, respectively. AGE is the listing time span of firms. LEV is the total debt ratio. SIZE is the natural log form of assets. V is the control rights of ultimate shareholders. STATE is a dummy variable: 1 indicates that the ultimate shareholder is the government and 0 otherwise. OP is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. BIG4 is a dummy variable: 1 indicates that the auditor is among the Big Four accounting firms and 0 otherwise. INDS are the industry dummy variables for the 12 industry categories classified by the CSRC after excluding the financial industry. In the parentheses are the White-adjusted t statistics considering the heteroscedasticity. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

COVERAGE is the media coverage for each trading date. The results for cumulative media coverage, conservative accounting, and market reactions are shown in Table 10.²⁰

For all of the different time windows, the coefficients for cumulative media coverage are significantly positive, those for $CONSERV \times CUMMEDIA$ are significantly negative, and those for $CONSERV \times CUMMEDIA \times \Delta ROE$ are significantly negative (except for the 7-day time window). Therefore, Hypotheses 1, 2, and 3 are supported. Media coverage easily leads to stronger market reactions because the media will magnify the information effect of firms' disclosure, while conservative accounting policy can effectively restrict the intensive market reactions caused by media coverage.

5.8 Other Conservatism Measures

We also use other conservatism measures in the robustness tests in order to minimise the measurement error caused by one simple proxy. The market to book value (M/B) is used in previous literature (Wittenberg-Moerman, 2008; Khan and Watts, 2009), and Khan and Watts (2009) propose the Cscore based on the Basu (1997) model to measure conservatism for each firm in specific years. We conduct separate regressions for each of the two alternative measures for the 61-day time window before and after the disclosure of annual reports, and the results are shown in Table 11 (the results for the other time windows are basically the same and are therefore not reported). Since the Cscore is based on the Basu (1997) model, which needs annual market return data, some samples are missing from the Cscore regression.²² The first column shows the results for M/B and the last column shows the Cscore regults.

In the regression using the M/B as the conservatism measure, the coefficient for media coverage is significantly positive and that for $CONSERV \times MEDIA$ is significantly negative, indicating that although media coverage easily triggers stronger market reactions, a conservative accounting policy can effectively reduce this effect. Thus, Hypotheses 1 and 2 are supported. However, the coefficient for $CONSERV \times MEDIA \times AROE$ is not significant, thus Hypothesis 3 is not further supported.

Table 7 shows the results for CONSERV1. The results for CONSERV2 are basically the same; to save space, we do not show them in the main text.

The results excluding those samples that have no media coverage are consistent with Table 7, that is, the coefficients for CUMMEDIA are significantly positive, those for CONSERV × CUMMEDIA are significantly negative, and those for CONSERV × CUMMEDIA × ΔROE are significantly negative. To save space, we do not show them in the main text.

We use firms continuously listed between 1 January 1991 and 31 December 2006. After eliminating those samples with negative book values and a total debt ratio exceeding 100 per cent, we calculate the Cscore following Khan and Watts (2009). Since some firms are newly listed during that period, there are fewer samples in Table 9.

Table 11 Media Coverage, Conservative Accounting, and Market Reactions – Other Conservatism Measures

Variables	Sign	M/B	Cscore	
MEDIA	+	0.032***	0.022	
		(10.40)	(1.33)	
$CONSERV \times MEDIA$	_	-0.006***	0.830	
		(-4.65)	(1.13)	
$MEDIA \times \Delta ROE$	+	0.025**	0.273***	
		(2.08)	(5.38)	
$CONSERV \times MEDIA \times \Delta ROE$	_	0.005	-3.748***	
		(1.38)	(-4.83)	
$CONSERV \times \Delta ROE$?	0.005**	3.243***	
		(2.29)	(12.21)	
CONSERV	?	-0.015***	0.347***	
		(-21.11)	(3.24)	
ΔROE	+	0.010	-0.201	
		(1.37)	(-1.00)	
ABNTURN	+	0.025***	0.026***	
		(43.33)	(39.86)	
SIZE	+	0.004***	0.005***	
		(4.19)	(4.95)	
LEV	+	0.012***	0.017***	
		(4.41)	(4.27)	
AGE	?	0.007***	0.002***	
		(24.97)	(6.08)	
V	?	0.001	-0.001***	
		(1.62)	(-3.79)	
STATE	_	-0.023***	-0.045***	
		(-10.95)	(-17.49)	
OP	?	0.046***	0.012***	
		(10.41)	(2.92)	
BIG4	?	-0.063***	-0.059***	
		(-22.36)	(-17.54)	
INDS		Control	Control	
Obs.		74559	55161	
\mathbb{R}^2		0.086	0.080	

Note: The dependent variable *CAR30* is the cumulative abnormal return for the 61-day time window around the earnings announcement date. *MEDIA* is the media coverage. *CONSERV* is the conservatism measure of Khan and Watts (2009) based on the Basu (1997) model. *AROE* is the change in return on equity compared to the previous year. *ABNTURN30* is the abnormal turnover for the 61-day time window. *AGE* is the listing time span of firms. *LEV* is the total debt ratio. *SIZE* is the natural log form of assets. *V* is the control rights of ultimate shareholders. *STATE* is a dummy variable: 1 indicates that the ultimate shareholder is the government and 0 otherwise. *OP* is the audit opinion: 1 indicates a qualified opinion and 0 otherwise. *BIG4* is a dummy variable: 1 indicates that the auditor is among the Big Four accounting firms and 0 otherwise. *INDS* are the industry dummy variables for the 12 industry categories classified by the CSRC after excluding the financial industry. In the parentheses are the White-adjusted t statistics considering the heteroscedasticity. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

In the regression using the Cscore, ²³ the coefficients for *MEDIA* and *CONSERV* \times *MEDIA* are not significant, while the coefficient for *CONSERV* \times *MEDIA* \times \triangle *AROE* is significantly negative at the 0.05 level. Thus, Hypothesis 3 is supported.

VI. Conclusions

We find that in developing and transitional markets such as China, media coverage can magnify the market reaction. This effect exists for different firm performances, changes in profitability, and different types of ownership. Conservative accounting can restrict the speculative effect and reduce the magnification of the media effect. Our results show that media coverage plays an important role in the securities market and heavily affects the wealth of investors. In order to better protect the interests of investors, the media should be properly guided and monitored.

This paper investigates the role of the media in the development of the securities market by empirical analysis and provides some evisdence. Meanwhile, we also show that accounting policies significantly influence the speculative behaviour of the market and affect the efficiency of the market. Therefore, research aimed at improving accounting standards and measurements will be beneficial to the soundness of the securities market and the protection of investors' interests.

Another interesting issue would be to investigate what kinds of firms more easily attract the media's attention. Our paper just focuses on the influence of media coverage and the effect of accounting information quality on market reactions. Therefore, there may be some research design bias in our model which could be further investigated in the future.

References

Please refer to pp. 83-85.

The Cscore of Khan and Watts (2009) based on the Basu (1997) model measures conditional conservatism, while the cumulative accruals used by Ahmend and Duellaman (2007) measure the overall conservatism. Since it is hard to measure unconditional conservatism and to separate conditional conservatism from the overall conservatism, the results based on the cumulative accruals may mostly be due to conditional conservatism.