

The Effects of Corporate Ownership Structure on Earnings Conservatism: Evidence from China

Fan-Hua Kung

Department of Accounting, Tamkang University

Tamsui, Taipei County, Taiwan, 25137

Tel: 886-2-2621-5656 E-mail: kung@mail.tku.edu.tw

Chia-Ling Cheng

Department of Accounting, Fu-Jen Catholic University

Hsinchuang City, Taipei County, Taiwan, 24205

Tel: 886-2-2905-2962 E-mail: 075024@mail.fju.edu.tw

Kieran James (Corresponding author)

Department of Accounting, Economics and Finance,

University of Southern Queensland, Toowoomba Qld. 4350, Australia

Tel: 61-7-46311456 E-mail: kieran_james@yahoo.com and jamesk@usq.edu.au

Received: June 29, 2010 Accepted: December 16, 2010

Abstract

This paper investigates the incremental effects of corporate ownership structure on earnings conservatism, examining data of Chinese listed companies. We employ the concept of conditional conservatism to define earnings conservatism and adopt empirical models developed by Basu (1997) and Ball and Shivakumar (2005) to measure the degree of earnings conservatism. Our empirical results show that the earnings of companies with higher non-tradable shares have lower earnings conservatism. Consistent with prior studies, this point demonstrates that the companies with state and concentrated ownership structures are more likely to depend on private communication to reduce information asymmetry and to resolve agency problems internally, thereby creating a low demand for earnings conservatism. The results of this study contribute to our understanding of how companies' ownership structures affect the properties of earnings in emerging markets and post-Communist markets.

Keywords: earnings conservatism, non-tradable shares, ownership structure, post-Communist studies, split-share structure, state ownership

JEL Classifications: M40, M41, M49

1. Introduction

In the 1990s, China launched the Shanghai Stock Exchange and subsequently the Shenzhen Stock Exchange. Apart from allowing state-owned enterprises (SOEs) to obtain foreign capital, the purpose of establishing the stock exchanges was to boost the performance of SOEs through pressure and accountability in the capital market. However, due to political and economic concerns and the possibility of a foreign takeover of local SOEs, the Chinese government refused a complete privatization of enterprises and intended to retain its position as the proprietor of businesses, in order to seize control of resource allocation within the country (Allen et al., 2005). The country presently has some Communist elements and some capitalist elements operating under broader Communist Party supervision, and to that extent we are largely in uncharted waters. The Slovenian post-Communist philosopher Slavoj Žižek (2010) has commented that China's unique synthesis of capitalism and Communism, rather than being unstable, has been a broadly successful experiment that has lasted 30 years. This Chinese experiment can be seen as a longer and deeper version of the limited capitalism called the New Economic Policy (NEP) that the Marxist revolutionary Vladimir Ilyich Lenin introduced to the former Soviet Union in the 1920s to kick-start growth after the civil war.

The Chinese government later devised a “binary equity structure” in which shares are divided into two categories: those owned by the government, legal persons and institutions, and those owned by investors to be traded in the capital market (Tenev et al., 2002).¹ The two types of shares differ in that the former is not allowed to be publicly traded and its valuation is based on the net asset value of an enterprise, whereas that of the latter is based on market value. As a result, such a split-share structure allows only one-third of the public companies' shares to be traded in the market, while a majority of the shares is held by the Chinese government. Under such circumstances, investors are unable to monitor operations. In the meantime, since the board and corporate executives are mostly appointed by the government, their management and supervision activities are not aimed specifically at maximizing the earnings of owners of tradable shares who have no say in supervision and decision-making processes. Dividend payments also depend on holders of non-tradable shares. As a consequence, majority shareholders are able to enjoy most of the shareholder rights, despite investing only a small amount of capital, while the minority shareholders' benefits are undermined.

Since non-tradable shares cannot be traded in secondary markets, their prices are based on the net asset value of corporations. Transfers of non-tradable shares mostly require the approval of the boards of both buying and selling parties, authorities, and other relevant departments before contracts are signed to complete the transaction. De Alessi (1974) suggested that since equities of SOEs are nontransferable, stock valuation does not reflect corporate value and performance. Estrin and Perotin (1991) argued that government, as the proprietor of SOEs, does not prioritize profit maximization. Enhancing corporate performance is a secondary goal whose importance comes after political and economic ones have been achieved.

¹ The ultimate controlling owner of state shares is the State Council, but these shares are managed by the local bureau of the Ministry of Finance or other central and local government bureaus, as well as SOEs (Green, 2003).

This paper investigates the incremental effects of state and concentrated ownership structure on earnings conservatism, examining data for Chinese listed companies. We employ the concept of “conditional conservatism” to operationalize earnings conservatism. Conditional conservatism is defined as the tendency to accelerate losses and defer gains. This characteristic of conservatism is referred to in the literature as asymmetric loss recognition timeliness (Ball and Shivakumar, 2005; Beaver and Ryan, 2005; Pae et al., 2005). Ball and Shivakumar (2005) assert that conditional conservatism, which enhances relevance and representational faithfulness, is one of the primary attributes of financial reporting quality in capitalist countries. They also contend that conditional conservatism enhances contracting efficiency because it makes financial reporting more informative and useful, and thus allows stakeholders to monitor a company’s performance better.

Prior research suggests that the demand for earnings conservatism is determined either directly or in interaction with managers’ reporting incentives. As discussed above, China’s unique corporate ownership structure nevertheless induces agency problems. Meeting the demand for earnings conservatism benefits the corporation and its stakeholders because it alleviates the agency conflicts (or information asymmetry). This paper maintains that the stakeholders’ economic and/or political interests provide important signals about the level of earnings conservatism that should be supplied to meet demand. Since China’s government holds a majority stake, this concentrated ownership structure typically ignores minority shareholders’ demands and places higher reliance upon private forms of communication. Therefore, there will be less demand for earnings conservatism in China than in pure capitalist economies such as Hong Kong, Japan, Singapore, Taiwan, etc (Ball et al., 2000). Hence, we posit that the capital structure of higher non-tradable shares, or less proportionate outside investor interests, will diminish the demand for prompt disclosure of financial information and result in lower earnings quality.

Consistent with Bushman and Piotroski (2006) and LaFond (2005), our overall results suggest that Chinese companies with higher non-tradable shares report less earnings conservatism. As long as the constraints of dominant government involvement are imposed on the market economy, China will not have an infrastructure that encourages capitalist-style financial reporting.

This paper provides additional support for discriminating among institutional determinants of financial reporting quality. In addition, it adds to the literature by identifying the extent to which conditional conservatism has been incorporated into current accounting practice in China. In particular, it takes into account the institutional, cultural, and political characteristics of a major emerging economy that whilst in the process of guided transition from Communism to capitalism has even its capitalist activities monitored and controlled by the Communist Party. Our results will have special relevance for other countries in transition from Communism to some style of capitalism, whether market- or state-controlled, such as Russia, Vietnam, the former Soviet Union republics, and the Eastern European countries. It takes a long period of time for social relationships, and expectations in relation to those

relationships, to adjust after a number of years of Communism operating in a country (Zinoviev, 1985). For example, in the former Soviet Union, Communist social relationships and their related expectations did not completely stabilize until as late as the Leonid Brezhnev era in the late 1960s and 1970s.

The remainder of this paper is structured as follows. The next section describes our hypothesis development. The following sections present our research design and sample selection process. We then discuss our empirical evidence. The last section contains a brief recap and summarizes the key findings of the study.

2. Hypotheses Development

2.1 Institutional and Political Influences

During the course of China's institutional transformation, the majority of corporations listed on China's stock exchanges are new restructured SOEs that have a distinctive capital structure consisting of non-tradable shares and public tradable shares. Due to restrictions on public offerings in China, the percentage of shares available in the open market is relatively low. In 2003, the proportion of all non-tradable (tradable) shares was 64.45% (35.55%).² Consequently, a high percentage of non-tradable shares in the typical corporation are controlled by a small number of controlling shareholders.³

Shleifer and Vishny (1994) claim that privatization improves corporate performance and motivates executives. From a political perspective, government officials demanding that corporations pursue political and social goals will generate political costs that are borne by the SOEs. From a management point of view, the agency costs borne by proprietors and managers are manifest in SOEs because shareholders are less motivated to monitor executives and the binding mechanism of the market is nonexistent. Complete privatization indicates that capital flow rights and voting rights are transferred simultaneously to private proprietors, making it difficult for them to discern political and management opinions. However, with partial privatization, corporations still are subject to government interference as political cost, despite the fact that their shares are traded on the capital market and monitored by shareholders.

Political involvement often occurs at the expense of corporate interest, for the purpose of achieving political goals. For instance, politicians may abuse their power to transfer some corporate resources into the hands of their supporters. From the perspective of agency theory, under a corporate governance framework, the equity structure of publicly traded companies in China is susceptible to both internal and external moral hazards. Tian and Estrin (2008) observe that in China, in times of high profitability, the state is motivated to influence corporate profit outcome.

² Based on existing regulations, state and legal person shares held by promoters are not traded in the open market. China Securities Regulatory Commission (CSRC) <http://www.csrc.gov.cn/>, accessed 19 December 2004.

³ In 2001, the largest shareholder stake in listed companies averaged 44.9 per cent (Shi and Weisert, 2002), indicating a severe concentrated share ownership for Chinese listed companies.

Shleifer and Vishny (1998) also propose that equities are better privatized than state-owned, because politicians and bureaucrats tend to take advantage of corporate benefits. In other words, state proprietorship has a detrimental effect on corporate performance. Megginson and Netter (2001) contend that private enterprises outperform their state-owned counterparts, saying that corporate performance is found to have improved after privatization. Gupta (2005) points out that some privatized companies saw their performance improved thanks to the supervisory role that the stock market plays in terms of management.

The continuing government involvement of Chinese listed companies (i.e. the government remains a common controlling shareholder) is expected to affect management reporting incentives and threaten the transparency of accounting information. Firstly, state ownership raises a query about whether financial reporting is and can be based on arm's-length transactions. The lack of separation between ownership and management and close business relationships between promoters and listed companies thus presents a conflict of interest and raises the possibility of material related-party transactions. Related-party transactions provide an easy mechanism for smoothing reported income and reducing financial reporting transparency (Fan and Wong, 2002). In addition, officials in control of SOEs are not entitled to residual claims, thus creating a bad alignment between their interests and those of the firm's minority shareholders. Since the government is in charge of appointing important personnel, and makes the final call on many matters, executives of SOEs in China may be more attentive to the government's demand than safeguarding the interest of individual shareholders (Chen et al., 2002).

In addition, the problem of agency may surface as a result of the state being the controlling shareholder (Lin and Chen, 1999). Government officials may use state proprietorship as a means to create jobs, subsidies, or other benefits as a form of bribery or in exchange for votes and support. This allows managers to manipulate financial reports to prevent a decline in state fiscal revenue or avoid an embarrassing report that reveals large losses (Tang et al., 1999). We recall that, in the Mao Zedong era, the Great Leap Forward of 1958-1959 was characterized not only by inefficiencies in production but also by grossly overstated production figures, the main form of "creative accounting" that occurs in a pure Communist system (Han, 1976, p. 131). Finally, state shareholders, either state or state legal persons, usually have access to inside information, another factor that reduces the reliability of the published financial reports.

2.2 Concentrated Ownership Structure

La Porta et al. (1998) claim that agency problem is prevalent in many emerging markets, where comprehensive legal protection and other governance mechanisms are not in place. Wei et al. (2005) consider the agency problem to be particularly serious in China. The split-share structure incentivizes majority shareholders at the expense of minority shareholders' interests. Such imbalance exists because corporate insiders enjoy a marked separation of voting rights and cash flow rights. A lack of legal protection for external shareholders also contributes to the agency problem. As a result, the split-share structure

adopted by Chinese corporations has led to ineffective governance of public companies in China, which in turn has weakened corporate values.

Previous studies took ownership structure as a variable for corporate governance. Berle and Means (1932) investigated the securities markets in the United States and found that shareholder supervision is diminished under a decentralized equity structure. When proprietors and corporate executives have conflicting goals and face information asymmetries, the executives shift their goals from “maximizing shareholder benefits” to “maximizing personal wealth.” In such cases, the proprietors will be forced to shoulder a tremendous agency cost. Jensen and Meckling (1976) propose the agency theory under the rationale that a separation of ownership and management will prevent executives from bearing the full burden of the post-decision consequences. In addition, since salaries are the incentive for hard work, profit-seeking executives may end up making inefficient decisions or compromising proprietors’ interests in pursuit of self-interest.

La Porta et al. (1999) discover that controlling shareholders of numerous publicly listed companies use pyramid structure, cross-shareholding, and interlocking directorates to expand their control rights beyond their current cash flow rights, and eventually gain total control of the company. When controlling shareholders obtain control rights asymmetrical to their equities holdings, they are likely to damage other shareholders’ interest by means of quid pro quo, hollowing out corporate assets and other activities of similar nature.

Research has been conducted to investigate the relationship between ownership structure and corporate performance with differing results. Jensen and Meckling (1976) propose the “Convergence-of-Interest Hypothesis,” demonstrating positive correlation between insider stock holdings and corporate performance, whereas Fama (1980), Demsetz and Lehn (1985), and Mak and Li (2001) show no correlation whatsoever. Shleifer and Vishny (1986), Agrawal (1990), and Kang and Shivdasani (1997) propose that the greater the proportion of controlling shareholders’ holdings, the better the corporate performance. However, Xiang and Zhang (1996) and Steiner (1996) disagree, arguing that the greater the proportion of controlling shareholder holdings, the greater the likelihood of those shareholders snatching corporate assets, with corporate performance worse off. Nevertheless, another group of scholars maintain no correlation between insider stock holdings and corporate performance (Agrawal and Knoeber, 1996).

A significant correlation can be found between equity structure and information disclosure. La Porta et al. (1999) noticed a negative correlation between the level of ownership concentration and the level of accounting disclosure. Chau et al. (2002) pointed out an apparent correlation between external ownership and information disclosure. Meanwhile, in corporations with a greater proportion of insider holdings and family ownership, the level of information disclosure decreases. When corporate shareholder ownership exceeds a certain proportion, the majority shareholders tend to take advantage of the company to generate personal profits or sacrifice those of the minority shareholders.

McKinnon and Dalimunthe (1993) discover negative correlation between majority shareholders and the level of information disclosure. When majority shareholders have greater holdings, corporations tend to lower the level of information disclosure and are less willing to disclose much information. According to the corporate governance framework of the World Bank, majority stockholders are placed under the internal corporate governance. Following that line of thinking, majority shareholders' stock holdings do not facilitate corporate governance and information disclosure; quite the opposite, greater holdings of majority shareholders may diminish a firm's willingness to disclose information.

Fan and Wong (2002) study corporate governance and the information content of accounting earnings and find that stronger corporate governance has a positive impact on the information content of accounting earnings, that is, higher credibility of the company's financial statements. When controlling shareholders increase their control rights by means of pyramid structures, cross-holding, and the like, agency problem involving controlling and minority shareholders surfaces gradually. Controlling shareholders tend to take self-interested actions when disclosing financial information and inevitably lower the credibility of the financial statements. As the control rights of controlling shareholders expand, or there is greater separation of control rights and cash flow rights, corporate governance deteriorates and the information content of accounting earnings is compromised. Transparency and disclosure are the basic elements of corporate governance. The campaign themes of *glasnost* (openness) and *perestroika* (restructuring) used by the reforming last leader of the Soviet Union, Mikhail Gorbachev, include respectively accounting transparency and economic efficiency in production. Higher transparency and disclosure allow corporate stakeholders to gain insight into how a company is run and governed. Additionally, accurate and timely information disclosure can boost investors' confidence and create market efficiencies.

As Ball et al. (2000) argue, concentrated ownership increases the likelihood that information will be communicated privately to the company's controlling shareholders. The absence of strong information demand in companies with concentrated ownership is unlikely to encourage management to provide high quality financial reporting. This situation reduces financial transparency and is likely to lead to the expropriation of wealth from minority (nongovernment) shareholders.

Moreover, the existence of a high proportion of non-tradable shares implies low contestability of control, a situation that can lead to abuses by controlling shareholders as well as long-term inefficiencies and poor decisions. Tradable shares generally are held by individuals who have few incentives and resources to perform a monitoring function (Tenev et al., 2002). In contrast, widely-held companies experience information asymmetry problems between managers and shareholders, make more use of financial reporting in contracting and communicating, and therefore attract a demand for conservative reporting (Ball and Shivakumar, 2005). Prior research posits that low ownership concentration or greater

proportionate outside shareholder interests encourages a higher level of earnings conservatism. The aforementioned literature and inferences lead to the following hypothesis:

Hypothesis: Ceteris paribus, there is a negative association between the proportion of non-tradable shares and earnings conservatism.

3. Research Design

3.1 Data and Sample Selection

The sample comprises all publicly-listed nonfinancial companies during the period of 1994–2003. The empirical analysis begins in 1994 because few observations were available before 1994 for the China sample and the relation between earnings and returns in the sample was substantially weak.⁴ More pertinently, China adopted a new accounting system in 1993, which was adapted to international accounting standards to improve information disclosure. After deleting observations with incomplete data and extreme values, the final sample consists of 7,353 firm-year observations. All data are collected from the databases of *Taiwan Economic Journal* (TEJ).

3.2 Specification of the Empirical Model

Following prior studies, Basu's (1997) conservatism model is used to test hypothesis concerned with the difference in the speed with which economic gains and losses are captured in accounting earnings. Prior research indicates that earnings conservatism is influenced by company-specific attributes like company size, leverage, and profitability (Ball and Shivakumar, 2005). This study extends Basu's (1997) model by incorporating the link between earnings conservatism and company-specific attributes. The estimated general model is as follows:

$$\begin{aligned} \frac{X_{it}}{P_{it-1}} = & \alpha_0 + \beta_1 D_{it} + \beta_2 R_{it} + \beta_3 D_{it} R_{it} + \beta_4 NTA_{it} R_{it} + \beta_5 NTA_{it} D_{it} R_{it} + \beta_6 SIZE_{it} R_{it} \\ & + \beta_7 SIZE_{it} D_{it} R_{it} + \beta_8 LEV_{it} R_{it} + \beta_9 LEV_{it} D_{it} R_{it} + \beta_{10} ROA_{it} R_{it} \\ & + \beta_{11} ROA_{it} D_{it} R_{it} + \varepsilon_{it} \end{aligned} \quad (1)$$

where:

X_{it} is the earnings-per-share for company i in year t ;

P_{it-1} is the stock price-per-share for company i at $t-1$;

R_{it} is inter-announcement stock returns measured from May of year t to April of year $t+1$;

D_{it} is a dummy variable set equal to one if R_{it} is negative and zero otherwise;

NTA_{it} is comprised of the average of the percentage of state ownership and non-tradable shares of company i .

Control variables are defined as follows:

⁴ There were only 77 observations in the 1993 sample and the earnings response coefficient (ERC) is significantly negative.

- (1) Company size (*SIZE*) is the average of the natural logarithm of company *i* total assets. Findings in some prior research indicate that company size strongly influences financial transparency (see Jaggi and Low, 2000). Watts and Zimmerman (1986) suggest the political costs hypothesis in positive accounting theory that large companies, subject to political costs, may defer reported earnings from current to future periods. However, most large corporations in China are SOEs with high state ownership. They tend to diminish the demand for promptly disclosing financial information. Consequently, it is expected that there will be a negative association between company size and earnings conservatism.

- (2) Leverage (*LEV*) is the average of the long-term debt divided by total assets of company *i*. Efficient contracting theory suggests that creditors can mitigate the agency conflicts between shareholders and creditors by contracting with companies using financial accounting numbers via a debt covenant (Cotter, 1998; Fields et al., 2001; Jensen and Meckling, 1976). Earnings conservatism provides contracting parties with an additional tool to cope with conflict between debtholders and shareholders (Ahmed et al., 2002; Watts, 2003a). Companies with a high level of leverage generally are under greater creditor scrutiny to ensure that they do not violate debt covenants (Jaggi and Low, 2000; Jensen and Meckling, 1976). Anticipating this risk and substantial losses from aggressive accounting, creditors will demand more conservative accounting by setting tight debt covenants to minimize expected losses. Ahmed et al. (2002) conclude that companies with high leverage tend to adopt conservative accounting to reduce refinancing expenses and subsequent costly borrowings or restructuring costs. It may be that lenders prefer to actively seek out or impose less onerous restrictions upon companies that adopt conservative accounting practices. Although the level of financing provided by banks falls as publicly issued debt and equity financing becomes increasingly important, banks are the major supplier of funds in China. Hence, Chinese banks are expected to play a prominent role in mitigating agency problems by monitoring listed companies and encouraging conservative accounting reporting.

- (3) Profitability (*ROA*) is the average of company *i* return on assets. Profitability also is potentially associated with companies' demands for and cost of conservatism (see Ahmed et al., 2002). Companies with higher profitability are expected to use more conservative accounting because the cost of making a conservative accounting choice is lower than for low-profitability companies. Hence, we include return on assets as a proxy for profitability to control for the potential cost of conservatism (Ahmed et al., 2002). In addition, including a control for profitability also reduces the likelihood of an omitted-variables bias.

Equation (1) posits that using accounting earnings (a lagging variable) as the dependent variable and stock returns (a leading variable) as the independent variable estimates the slope coefficient better. A bad news dummy D_{it} is included in the regression to distinguish bad news from good news. The slope coefficients β_2 and β_3 in equation (1) are used to measure

the responsiveness of reported earnings to the news captured in contemporaneous returns. These slope coefficients are termed “return response coefficients.” The bad news slope coefficient is steeper than the good news slope when conservatism exists. Under conservative reporting, the slope coefficient β_3 , which measures the incremental response of earnings to bad news over the response to good news, is expected to be positive. coefficient β_4 captures the marginal effect of sensitivity to bad news for companies where $NTA_{it}D_{it}$ equals zero, and the interaction coefficient β_5 captures the incremental earnings conservatism for companies where $NTA_{it}D_{it}$ equals one. It also is expected that, for conservative reporting, the interaction coefficient β_5 will be significantly positive.

4. Results

4.1 Descriptive Statistics

Table 1 provides the patterns of annual distributions for non-tradable shares for the sample period. Overall, SOE reform in China has not resulted in a fundamental change in ownership patterns. The ownership structure of listed companies has been relatively stable. For non-tradable shares, the annual mean (median), although quite high, decreased slightly from 61.57% (63.33%) in 1994 to 59.02% (61.11%). This pattern implies that the ownership of most Chinese listed companies was not diversified during the sample period. The proportion of non-tradable shares is high so only a small portion of these shares are traded in the open market. More than half of all shares are non-tradable. Such a high proportion of non-tradable shares implies that external monitoring of management probably is deficient, and that there is either low demand for earnings conservatism from external user groups or that the demand that does exist is not fulfilled.

Table 1. Summary statistics for non-tradable shares

Year	<i>n</i>	Mean	StdDev	Min	Max	75th Pctl	Median	25th Pctl
1994	249	0.616	0.169	0	0.928	0.725	0.633	0.523
1995	290	0.605	0.161	0	0.928	0.716	0.621	0.518
1996	330	0.602	0.155	0	0.928	0.710	0.617	0.516
1997	568	0.608	0.137	0	0.928	0.708	0.624	0.527
1998	737	0.607	0.133	0	0.928	0.704	0.625	0.525
1999	839	0.582	0.147	0	0.928	0.696	0.608	0.502
2000	934	0.575	0.145	0	0.928	0.684	0.600	0.488
2001	1089	0.576	0.143	0	0.928	0.683	0.602	0.495
2002	1114	0.575	0.142	0	0.928	0.681	0.600	0.495
2003	1203	0.590	0.128	0	0.913	0.682	0.611	0.525
Total	7353	0.588	0.142	0	0.928	0.694	0.611	0.509

^a Non-tradable shares (state shares, state legal person shares, domestic legal person shares, foreign capital legal person shares, and internal employee shares) for the sample companies that have a full set of available data and accounting years falling within the period 1994-2003.

Panels A and B of Table 2 report the descriptive statistics for the data used to estimate Basu’s (1997) model. The mean (median) annual returns (*R*) are 0.1218 (-0.0723) with a greater

variation over the sample period and a relatively high volatility (the standard deviation is 0.6743) that is characteristic of emerging markets.⁵

The mean value of earnings variable (*NI*) is close to zero, having mean (median) and standard deviation values of 0.0255 (0.0186) and 0.0789, while the distribution of the *NI* variable tends to decrease over the sample period. Both *R* and *NI* are right-skewed (means exceed medians), indicating a low level of earnings conservatism for the China sample.⁶ Also, the standard deviation of the *NI* variable always is smaller than the standard deviation of *R*, consistent with Ball et al.'s (2000, p. 12) argument that accounting income is a lagged function of past and present years' stock returns.

Table 2. Descriptive statistics for variables

Panel A: Pooled sample

	<i>n</i>	Mean	Median	StdDev	Min	Max
<i>NI</i>	7353	0.026	0.019	0.079	-0.701	1.756
<i>R</i>	7353	0.122	-0.072	0.674	-0.862	8.485
<i>ROA</i>	7353	0.016	0.042	0.337	-3.790	0.377
<i>LEV</i>	7353	0.458	0.393	1.192	0	72.310
<i>SIZ</i>	7353	13.793	13.736	0.908	8.910	19.576

Panel B: Selected years

Year	<i>n</i>	<i>NI</i>		<i>R</i>	
		Mean	StdDev	Mean	StdDev
1994	249	0.128	0.153	-0.064	0.357
1995	290	0.107	0.163	0.313	0.477
1996	330	0.071	0.149	1.300	1.115
1997	568	0.034	0.063	0.015	0.515
1998	737	0.027	0.066	-0.089	0.429
1999	839	0.030	0.053	0.758	0.726
2000	934	0.013	0.040	0.381	0.890
2001	1089	0.007	0.041	-0.212	0.221
2002	1114	0.006	0.051	-0.190	0.205
2003	1203	0.008	0.061	-0.083	0.242

^a $NI (X_{it} / P_{it-1})$ represents earnings-per-share deflated by price at the beginning of year t . $R (R_{it})$ denotes inter-announcement stock returns measured from May of year t to April of year $t+1$. *ROA* is defined as a company's net income divided by total assets. *LEV* is the company's leverage ratio, measured as total debts divided by total assets. *SIZ* is the natural log of a company's total assets.

4.2 Correlation Analysis

⁵ The standard deviations of both *R* and *NI* in the China sample are very similar to the sample in Ball et al. (2000) and to those of the four East Asian country samples in Ball et al. (2003).

⁶ Ball et al. (2000, p. 12) state that the right skew of earnings indicates accounting conservatism because conservative accounting tends to incorporate economic losses as larger but less frequent capitalized amounts and to incorporate economic gains as smaller but persistent flows over time.

Table 3 provides the Pearson correlation matrix for determinant and proxy variables for company-specific institutional factors. As shown in Table 3, the correlations among the dependent variables *NI* and *R* are significantly correlated (+0.206) as expected, suggesting that accounting income does reflect information in companies' contemporaneous economic incomes (Ball et al., 2000). *NI* also is significantly correlated with profitability (*ROA*) (+0.352), leverage (*LEV*) (-0.088) and company size (*SIZ*) (+0.023). Non-tradable shares (*NTA*) is significantly correlated with *ROA* (+0.025). These correlations indicate that the incremental effect of a hypothesized determinant of earnings conservatism should be properly identified and explained.⁷

Table 3. Pearson correlation coefficients among variables

	<i>NI</i>	<i>R</i>	<i>ROA</i>	<i>LEV</i>	<i>SIZ</i>	<i>NTA</i>
<i>NI</i>	1.000					
<i>R</i>	0.206*** (0.000)	1.000				
<i>ROA</i>	0.352*** (0.000)	0.064*** (0.000)	1.000			
<i>LEV</i>	-0.088*** (0.000)	0.001 (0.910)	-0.305*** (0.000)	1.000		
<i>SIZ</i>	0.065*** (0.000)	-0.028** (0.015)	0.147*** (0.000)	-0.050*** (0.000)	1.000	
<i>NTA</i>	0.011 (0.360)	0.005 (0.642)	0.026** (0.025)	0.018 (0.131)	0.013 (0.259)	1.000

^a Note. *, **, and *** indicate significance at the 10, 5, and 1 percent levels, respectively. The *p*-values are in parentheses.

^a *NI* (X_{it} / P_{it-1}) represents earnings-per-share deflated by price at the beginning of year *t*. *R* (R_{it}) denotes inter-announcement stock returns measured from May of year *t* to April of year *t*+1. *ROA* is defined as a company's net income divided by total assets. *LEV* is the company's leverage ratio, measured as total debts divided by total assets. *SIZ* is the natural log of a company's total assets. *NTA* is the proportion of a company's non-tradable shares.

4.3 Multivariate Analysis

Hypothesis of this study states that there is a negative association between the proportion of non-tradable shares and earnings conservatism. Table 4 reports the estimation results of equation (1). As expected, the interaction coefficients β_5 is significantly negative at the 1% level (-0.031; $t=-2.80$). The results support our hypothesis. Specifically, they show that, after controlling for company-specific attributes including company size, leverage and profitability, companies with higher non-tradable shares have lower earnings conservatism.

⁷ Watts and Zimmerman (1990) and Wong and Wong (2001) discuss and explain the problems that emerge in empirical research within the positive accounting tradition when "correlated omitted variables" are not properly identified and controlled for.

Table 4. Regression result of earnings conservatism

$$\begin{aligned} \frac{X_{it}}{P_{it-1}} = & \alpha_0 + \beta_1 D_{it} + \beta_2 R_{it} + \beta_3 D_{it} R_{it} + \beta_4 NTA_{it} R_{it} + \beta_5 NTA_{it} D_{it} R_{it} + \beta_6 SIZE_{it} R_{it} \\ & + \beta_7 SIZE_{it} D_{it} R_{it} + \beta_8 LEV_{it} R_{it} + \beta_9 LEV_{it} D_{it} R_{it} + \beta_{10} ROA_{it} R_{it} \\ & + \beta_{11} ROA_{it} D_{it} R_{it} + \varepsilon_{it} \end{aligned} \quad (1)$$

Variables	Pred.Sign	Coef.	t-Stat.
<i>INTERCEPT</i>	?	0.036***	22.84
<i>D</i>	?	-0.001***	-3.67
<i>R</i>	-	-0.101***	-4.94
<i>D*R</i>	+	0.223***	2.99
<i>NTA*R</i>	?	0.002	0.15
<i>NTA*R*D</i>	-	-0.031***	-2.80
<i>SIZE*R</i>	?	0.007***	4.87
<i>SIZE*R*D</i>	-	-0.010*	-1.91
<i>LEV*R</i>	?	-0.003***	-5.77
<i>LEV*R*D</i>	+	0.001	0.21
<i>ROA*R</i>	?	0.462***	25.99
<i>ROA*R*D</i>	+	0.611***	31.37
<i>F value</i>		131.07***	
<i>Adj.R²(%)</i>		18.70	
<i>No. of obs</i>		7353	

^a Note. *, **, and *** indicate significance at the 10, 5, and 1 percent levels.

^b X_{it} / P_{it-1} is company i 's earnings-per-share deflated by the price at the beginning of the year t ; R_{it} is company i 's compounded monthly return over the 12-month period. D is a dummy variable for bad news, code one if R_{it} is negative; and zero otherwise. NTA is the proportion of a company's non-tradable shares. SIZ is the natural log of a company's total assets. LEV is the company's leverage ratio, measured as total debts divided by total assets. ROA is defined as a company's net income divided by total assets.

Furthermore, as demonstrated in prior studies, institutional factors are associated with agency conflicts, particularly those arising from information asymmetry, so they create different levels of demand for earnings conservatism (Watts, 2003b). As expected, we find that the incremental effects of profitability (+0.611; $t=31.37$) and company size (-0.010; $t=-1.91$) on earnings conservatism are significant with predicted sign. However, although the direction is as predicted, the interaction of leverage (+0.001; $t=0.21$) is not significant. This last result may be because banks, which are government-owned, also do not demand earnings conservatism.

4.4 Alternative Model of Earnings Conservatism by Ball and Shivakumar (2005)

To check for the robustness of our results, we also apply the alternative empirical model of earnings conservatism developed by Ball and Shivakumar (2005) to test our hypothesis. Ball

and Shivakumar (2005) measure earnings conservatism as the asymmetric timeliness of accruals in economic loss recognition relative to economic gain recognition. They use operating cash flows to proxy for economic losses and gains during the year. We extend the Ball and Shivakumar (2005) model by incorporating the link between earnings conservatism and company-specific attributes to test our hypotheses as follows:

$$\begin{aligned}
 ACC_{it} = & \alpha_0 + \beta_1 CFOD_{it} + \beta_2 CFO_{it} + \beta_3 CFOD_{it} CFO_{it} + \beta_4 NTA_{it} CFO_{it} \\
 & + \beta_5 NTA_{it} CFOD_{it} CFO_{it} + \beta_6 SIZE_{it} CFO_{it} + \beta_7 SIZE_{it} CFOD_{it} CFO_{it} \\
 & + \beta_8 LEV_{it} CFO_{it} + \beta_9 LEV_{it} CFOD_{it} CFO_{it} + \beta_{10} ROA_{it} CFO_{it} \\
 & + \beta_{11} ROA_{it} CFOD_{it} CFO_{it} + \varepsilon_{it}
 \end{aligned} \tag{2}$$

where

- ACC_i is the mean of total accruals of company i multiplied by -1 and standardized by beginning period total assets. Accruals are defined as earnings before exceptional items and extra-ordinary items minus cash from operations;
- CFO_{it} is operating cash in year t dividend by beginning total assets;
- $CFOD_{it}$ is a dummy variable set equal to one if CFO_{it} is negative and zero otherwise.

The result of equation (2) is given in Table 5. The results based on the model of Ball and Shivakumar (2005) are largely consistent with our findings documented above. The interaction coefficients β_5 is significantly negative at the 1% level (-0.709; $t=-2.60$). Again, they show that Chinese companies with higher non-tradable shares supply less earnings conservatism. Therefore, hypothesis is supported, using an alternative empirical model of earnings conservatism.

As expected, we find that the incremental effects of profitability (+3.401; $t=12.42$) and company size (-0.250; $t=-2.23$) on earnings conservatism are significant with the predicted sign. However, the interaction of leverage (+0.168; $t=1.64$) is statistically different from zero.

Table 5. Regression result of alternative model of earnings conservatism

$$\begin{aligned}
 ACC_{it} = & \alpha_0 + \beta_1 CFOD_{it} + \beta_2 CFO_{it} + \beta_3 CFOD_{it} CFO_{it} + \beta_4 NTA_{it} CFO_{it} \\
 & + \beta_5 NTA_{it} CFOD_{it} CFO_{it} + \beta_6 SIZE_{it} CFO_{it} + \beta_7 SIZE_{it} CFOD_{it} CFO_{it} \\
 & + \beta_8 LEV_{it} CFO_{it} + \beta_9 LEV_{it} CFOD_{it} CFO_{it} + \beta_{10} ROA_{it} CFO_{it} \\
 & + \beta_{11} ROA_{it} CFOD_{it} CFO_{it} + \varepsilon_{it}
 \end{aligned} \tag{2}$$

Variables	Pred. Sign	Coef.	t-Stat.
<i>INTERCEPT</i>	?	0.009***	3.11
<i>CFOD</i>	?	0.012**	2.36
<i>CFO</i>	+	0.030	0.30
<i>CFOD*CFO</i>	+	0.391**	2.54
<i>NTA*CFO</i>	?	0.231	1.48
<i>NTA*CFO*CFOD</i>	-	-0.709***	-2.60
<i>SIZE*CFO</i>	?	-0.011	-1.03
<i>SIZE*CFO*CFOD</i>	-	-0.250**	-2.23
<i>LEV*CFO</i>	?	-0.158*	-1.78
<i>LEV*CFO*CFOD</i>	+	0.168	1.64
<i>ROA*CFO</i>	?	-2.990***	-11.20
<i>ROA*CFO*CFOD</i>	+	3.401***	12.42
<i>F value</i>		36.56***	
<i>Adj.R²(%)</i>		12.61	
<i>No. of obs</i>		2264	

^a Note. *, **, and *** indicate significance at the 10, 5, and 1 percent levels.

^b ACC_{it} is the mean of total accruals of company i multiplied by -1 and standardized by beginning period total assets.; CFO_{it} cash from operations in year t standardized by beginning period total assets. D is a dummy variable for bad news, code one if CFO_{it} is negative; and zero otherwise. NTA is the proportion of a company's non-tradable shares. SIZ is the natural log of a company's total assets. LEV is the company's leverage ratio, measured as total debts divided by total assets. ROA is defined as a company's net income divided by total assets.

5. Concluding Remarks

Summarizing, the findings demonstrate an important link between the corporate ownership structure for Chinese listed companies and earnings conservatism. Consistent with Bushman and Piotroski (2006) and LaFond (2005), these results indicate that earnings conservatism decreases with the presence of higher levels of non-tradable shares. Companies with state and concentrated ownership structures are more likely to depend on private communication to reduce information asymmetry and resolve agency problems internally, thereby creating low demand for earnings conservatism. Furthermore, the regression results show that companies with smaller size and higher profitability report more conservatively.

Collectively, the evidence in this study shows consistently that differences in earnings

conservatism arise from differential information demands. More specifically, the level of earnings conservatism is an equilibrium outcome of forces set in motion by market participants acting in their own self-interest, and reflecting differences in demand for conservative financial reporting. Accounting reporting practices for Chinese companies are focused more often on meeting the needs of the major shareholder (i.e. the Chinese Communist Party) rather than the needs of investors.

China has been undergoing a guided transition from a planned economy to a market-oriented economy but the market economy remains under the ultimate control of the Communist Party. We simply have a longer and deeper version of Lenin's New Economic Policy and, although many do get rich, Communist social relationships and expectations still largely predominate (Zinoviev, 1985). This is especially the case when we consider the higher levels of power within organizations. We recall that China started its reform efforts in the late-1970s under Deng Xiaoping in an environment where few elements of a well functioning financial market were in place. The evidence shows that China's institutional transition is far from complete and will remain incomplete as long as preserving the dominant involvement of government remains the overriding objective of those in power. In such an environment, the demand for conservatism by minority shareholders remains less important and unlikely to be adequately met. This may or may not trouble Westerners and other non-Chinese used to a free-market system of the conventional type where capitalist business relationships are the norm.

In 2005, the China Securities Regulatory Commission announced an initiative to convert non-tradable shares into tradable shares. The new initiative (called "Administrative Measures on the Split Share Structure Reform of Listed Companies") provides ground rules to allow for the conversion of the shares. Many investors and analysts view this as a significant reform that will continue to shift the balance of share ownership from state ownership to public ownership by minority shareholders. Future research may investigate the effectiveness of this split-share structure reform and examine whether the diffused ownership structure affects the attitudes of management and demands of stakeholders for earnings conservatism.

Acknowledgements

We would like to thank Professor Ray Ball and the journal editor Dr G. Wickramasinghe and the two anonymous reviewers.

References

- Agrawal, A. (1990). Large shareholders and the monitoring of managers: the case of antitakeover charter amendments. *Journal of Financial and Quantitative Analysis*, 25(2), 143-161
- Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31(3), 377-397
- Ahmed, A., Billings, B., Morton, R., & Stanford-Harris, M. (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. *The Accounting Review*, 77(4), 867-890
- Allen, F., Qian, J., & Qian, M. (2005). Law, finance, and economic growth in China. *Journal of Financial Economics*, 77(1), 57-116
- Ball, R., Kothari, S., & Robin, A. (2000). The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics*, 29(1), 1-51
- Ball, R., Robin, A., & Wu, J. (2003). Incentives versus standards: properties of accounting income in four East Asian countries. *Journal of Accounting and Economics*, 36(1-3), 235-270
- Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of Accounting and Economics*, 39(1), 83-128
- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics*, 24(1), 3-37
- Beaver, W., & Ryan, S. (2005). Conditional and unconditional conservatism: concepts and modeling. *Review of Accounting Studies*, 10(2-3), 269-309
- Berle, A., & Means, G. (1932). *The modern corporation and private property*. New York City, NY: Harcourt, Brace and World
- Bushman, R., & Piotroski, J. (2006). Financial reporting incentives for conservative accounting: the influence of legal and political institutions. *Journal of Accounting and Economics*, 42(1-2), 107-148
- Chen, S., Sun, Z., & Wang, Y. (2002). Evidence from China on whether harmonized accounting standards harmonize accounting practices. *Accounting Horizons*, 16(3), 183-197
- Chau, G. K., & Gray, S. J. (2002). Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore. *The International Journal of Accounting*, 37(2), 247-265

- Cotter, J. (1998). Utilisation and restrictiveness of covenants in Australian private debt contracts. *Accounting and Finance*, 38(2), 181-196
- De Alessi, L. (1974). An economic analysis of government ownership and regulation: theory and the evidence. *Public Choice*, 19(1), 1-42
- Demsetz H., & Lehn, K. (1985). The structure of corporate ownership. *Journal of Political Economy*, 93(6), 1155–1177
- Estrin, S., & Perotin, V. (1991). Does ownership always matter? *International Journal of Industrial Organization*, 9(1), 55–73
- Fama, E.F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(2), 288-307
- Fan, J., Wong, T. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics*, 33(3), 401-425
- Fields, T., Lys, T., & Vincent, L. (2001). Empirical research on accounting choice. *Journal of Accounting and Economics*, 31(1-3), 255-307
- Green, S. (2003). *China's stockmarket*. London: The Economist
- Gupta, N. (2005). Partial privatization and firm performance. *Journal of Finance*, 60(2), 987-1015
- Han, S.-Y. (1976). *Wind in the tower: Mao Tse Tung and the Chinese revolution 1949-1976*. London: Jonathon Cape
- Jaggi, B., & Low, P. (2000). Impact of culture, market forces, and legal system on financial disclosures. *International Journal of Accounting*, 35(4), 1113-1155
- Jensen, M., Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360
- Kang, J. K. & Shivdasani, A. (1997). Corporate restructuring during performance declines in Japan. *Journal of Financial Economics*, 46, 29-65
- LaFond, R. (2005). *The influence of ownership structure on earnings conservatism, timeliness and informativeness of stock prices: a international comparison*. Working Paper, University of Wisconsin-Madison, October.

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471-517

La Pora, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113-1155

Lin, Z., & Chen, F. (1999). Applicability of the conservatism accounting convention in China: empirical evidence. *The International Journal of Accounting*, 34(4), 517-537

Mak, Y. T., & Li, Y. (2001). Determinants of corporate ownership and board structure: evidence from Singapore. *Journal of Corporate Finance*, 7(3), 235-256

McKinnon, J. L., & Dalimunthe, L. (1993). Voluntary disclosure of segment information by Australian diversified companies. *Accounting and Finance*, 33(1), 33-50

Meggison, W., Netter, J. M. (2001). From state to market: a survey of empirical studies on privatization. *Journal of Economic Literature*, 39(2), 321-389

Pae, J., Thornton, D., & Welker, M. (2005). The link between earnings conservatism and the price-to-book ratio. *Contemporary Accounting Research*, 22(3), 693-717

Shi, S., & Weisert, D. (2002). Corporate governance with Chinese characteristics. *The China Business Review*, 29(5), 40-44

Shleifer, A., & Vishny, R. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(3), 461-488

Shleifer, A., & Vishny, R. (1994). Politicians and firms. *Quarterly Journal of Economics*, 109(4), 995-1025

Shleifer, A., & Vishny, R. (1998). *The grabbing hand: government pathologies and their cures*. Cambridge, MA: Harvard University Press

Steiner, T.L. (1996). A reexamination of the relationships between ownership structure, firm diversification, and Tobin's Q. *Journal of Business and Economics*, 35(4), 39-48

Tang, Q., Chow, C., & Lau, A. (1999). Auditing of state-owned enterprises in China: Historic development, current practice and emerging issues. *The International Journal of Accounting*, 34(2), 173-187

Tenev, S., Zhang, C., & Brefort, L. (2002). *Corporate governance and enterprise reform in China- building the institutions of modern markets*. Washington DC: World Bank and International Finance Corporation

- Tian, L., & Estrin, S. (2008). Retained state shareholding in Chinese PLCs: does government ownership always reduce corporate values? *Journal of Comparative Economics*, 36(1), 74-89
- Watts, R. L. (2003a). Conservatism in accounting part I: explanations and implications. *Accounting Horizons*, 17(3), 207-221
- Watts, R. L. (2003b). Conservatism in accounting part II: evidence and research opportunities. *Accounting Horizons*, 17(4), 287-301
- Watts, R. L., & Zimmerman, J. (1986). *Positive accounting theory*. Englewood Cliffs, NJ: Prentice-Hall
- Watts, R. L., & Zimmerman, J. (1990). Positive accounting theory: a ten year perspective. *The Accounting Review*, 65(1), 131-156
- Wei, Z., Xie, F., & Zhang, S. (2005). Ownership structure and firm value in China's privatized firms. *Journal of Financial Quantitative Analysis*, 40(1), 87-108
- Wong, J., & Wong, N. (2001). The investment opportunity set and acquired goodwill. *Contemporary Accounting Research*, 18(1), 173-196
- Xiang, B., & Zhang, G. (1996). *Large shareholder expropriation and corporate ownership structure*. EA/PACAP Financial conference and CPA annual meetings.
- Zinoviev, A. (1985). *The reality of communism*. London: Paladin Books
- Žižek, S. (2010). *Living in the end times*. London and New York City, NY: Verso

Copyright Disclaimer

Copyright reserved by the author(s).

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).