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1-1-2010

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Ultimate ownership structure and corporate disclosure quality: Evidence from China

Abstract

Purpose – This study examines whether the type of ultimate controllers (i.e., private vs. state) affects corporate disclosure quality and whether the relationship between the type of ultimate controllers and corporate disclosure quality is moderated by the separation of ownership and control.

Design/methodology/approach – This study employs the data of 405 Chinese listed firms in 2005. We review annual reports to collect the data including the type of ultimate owners, cash-flow rights, and control rights. We also collect the rating of corporate disclosure quality from the Shenzhen Stock Exchange website. We run the ordered logistic regression to test the hypotheses.

Findings – We find that corporate disclosure quality is lower for firms ultimately controlled by individuals than for firms ultimately controlled by the state. We also document that the negative effect of private ultimate ownership on corporate disclosure quality is stronger for firms with high deviation of cash-flow rights and control rights.

Practical Implications – Our findings suggest that privatizing state-owned companies may increase the expropriation of minority shareholders by controlling shareholders if the privatization does not reduce the separation of cash-flow rights from control rights. Thus, it may be necessary to strengthen the governance role of minority shareholders and constrain the divergence between cash-flow rights and control rights of the ultimate owners when state-owned companies are privatized.

Originality/value – This study contributes to the literature on the expropriation of minority shareholders by examining the main effect of the type of ultimate controllers and the interactive effect of ultimate ownership type and the divergence of ownership and control on corporate disclosure quality.

Keywords Ownership, Control, Private owners, State, Corporate disclosure.

Paper type Research paper

Guoping Liu and Jerry Sun. 2010. *Managerial Finance*, 36(5), 452-467. Post-print

1. Introduction

Extant research (e.g., Jensen and Meckling, 1976; Morck, Shleifer, and Vishny, 1988; Claessens, Djankov, Fan, and Lang, 2002) suggests that there exist both incentive and entrenchment effects of highly concentrated ownership. On the one hand, controlling ownership may mitigate the conflicts of interest between shareholders and managers because large shareholders may effectively monitor managers (Shleifer and Vishny, 1986). On the other hand, large ownership may increase the conflicts of interest between controlling and minority shareholders as large shareholders may behave in their own interests (Shleifer and Vishny, 1997).

Recently, the costs of large shareholding are highlighted by a stream of research that examines the expropriation of minority shareholders and associated corporate governance issues arising from the separation of ultimate controlling shareholders' cash-flow rights (i.e., ownership) from their control rights (e.g., La Porta, Lopez-de-Silanes, and Shleifer, 1999; Claessens, Djankov, and Lang, 2000; Claessens, Djankov, Fan, and Lang, 2002; Fan and Wong, 2002; Haw, Hu, Hwang, and Wu, 2004; Attig, Fong, Gadhoun, and Lang, 2006). When ultimate controllers' ownership is lower than their control (voting) rights, they are more likely to expropriate minority shareholders because the expropriation is less restrained by their own cash-flow stake (Attig et al., 2006).

More recently, using Chinese listed firms' loan guarantees to related parties as a proxy for expropriation, Berkman, Cole, and Fu (2009) find that firms with state non-corporate controlling block holders are less likely to issue related guarantees than other firms.¹ Their findings imply that the expropriation of minority shareholders may be less for firms ultimately controlled by the state than by private owners. Berkman et al. (2009) argue that the state may be less motivated to expropriate minority shareholders than private owners since the monetary benefits from expropriation can be captured more easily and directly by private owners than by bureaucrats running a government entity. However, there is limited research in the literature to address this issue. Moreover, this issue is important because it relates to the costs and benefits of privatizing state-owned companies. Thus, it is warranted to investigate whether the type of ultimate controllers (state vs. private) affects the expropriation of minority shareholders.

To shed light on this question, this study examines whether the type of ultimate controllers affects corporate disclosure quality and whether the effect of the type of ultimate controllers is moderated by the deviation of cash-flow rights from control rights. We are interested in corporate disclosure quality because it well reflects corporate governance quality. Controlling owners who expropriate minority shareholders are more likely to obscure and delay the disclosure of related information and manipulate accounting numbers to hide the adverse effect of their expropriation on firm performance. To do so, those owners may execute their influence over board of directors to impair monitoring mechanisms. Thus, the expropriation of minority shareholders may lead to lower corporate governance quality, and then lower corporate disclosure quality.

This study focuses on the Chinese data for the following reasons: (1) Chinese listed companies have high ownership concentration, (2) a high proportion of Chinese listed companies are ultimately controlled by the state, and (3) Chinese listed companies are

required to disclose information about the ultimate ownership structure in annual reports. Using a sample of 405 listed firms across 22 industries in 2005 and the rating of corporate disclosure quality issued by the Shenzhen Stock Exchange, we find that corporate disclosure quality is lower for firms with private ultimate owners than for firms with state ultimate owners. We also find that the negative effect of private ultimate ownership on corporate disclosure quality is stronger when the deviation of cash-flow rights from control rights is large. Our findings suggest that private ultimate owners are more likely to expropriate minority shareholders than state ultimate owners, especially when cash-flow rights are highly separated from control rights.

This study contributes to the literature as follows. First, our study extends a growing corporate governance research on the expropriation of minority shareholders. Unlike prior research that focuses on the main effect of the separation of ownership from control (Claessens et al., 2000; Fan and Wong, 2002; Attig et al., 2006), this study focuses on the effects of ultimate controllers' type on corporate governance issues arising from the divergence of ownership and control. It is important to examine whether the entrenchment costs incurred by large shareholdings are higher for private-controlled firms than for state-controlled firms because it can provide implications for the costs and benefits of privatizing state-owned companies.

Second, this study adds to the extant limited accounting literature on the relationship between minority shareholders' expropriation and financial reporting quality. Unlike existing studies by Fan and Wong (2002) and Haw et al. (2004) that measure financial reporting quality by earnings-return relation and discretionary accruals and use cross-country data, our study employs a more comprehensive measure of financial reporting quality and associated corporate governance. Moreover, focusing on a country's data in our study can avoid the potential confounding effects due to different country-level institutional infrastructures.

Third, this study enriches the literature on corporate disclosure quality. Although there is a large body of research that examines the association between corporate disclosure quality and corporate governance (e.g., Ajinkya, Bhojraj, and Sengupta, 2005; Karamanou and Vafeas, 2005), to the best of our knowledge, this study is the first one to investigate the relationship among corporate disclosure quality, the type of ultimate ownership, and the divergence of cash-flow rights and control rights.

Fourth, this study also evaluates the credibility and usefulness of the rating of corporate disclosure quality issued by the Shenzhen Stock Exchange. To the best of our knowledge, our study is the first one to provide empirical evidence on assessing the rating. Our findings provide an implication to investors, Chinese securities regulators and stock exchanges, that the Shenzhen Stock Exchange's rating is credible and useful.

The remainder of the paper is organized as follows. Section 2 introduces institutional background. Section 3 reviews the literature. Section 4 develops hypotheses. Section 5 discusses the methodology. Section 6 presents empirical results. Section 7 concludes.

2. Institutional background

With the original intention of raising capital for state-owned enterprises from the public, China reopened its stock markets in the early 1990s. Thus, most Chinese listed companies originated from state-owned companies. The listed companies are mandated to have three different classes of shares, i.e., state-owned shares, legal person shares, and individual shares. State-owned shares are held by the central, provincial, or municipal governments. Legal person shares are owned by legal entities including domestic or foreign enterprises and institutions. Individual shares are publicly issued to individual persons. Obviously, state-owned shares and individual shares are ultimately owned by the state and private investors, respectively, but legal person shares could be ultimately held by either the state or individual persons.

Unlike corporate disclosure environments in other countries, corporate disclosure of Chinese listed companies has been highly regulated by the China Securities Regulatory Commission (CSRC), a government agency that officially enacts the regulations of the Chinese securities markets. Based on the corporate disclosure requirements of the CSRC, listed companies should disclose information in annual reports including company background, summary of operating results, directors' report, financial statements, material events, related companies, etc. The annual reports have the similar content and format for all listed companies. Since corporate disclosure is highly mandated, there is scarce room for Chinese listed companies to make voluntary disclosure. The special feature of the Chinese corporate disclosure environment indicates that it is vital for researchers to allow for extensive and multi-dimensional measures that can reflect the overall quality rather than only a single aspect of corporate disclosure.

3. Literature review

There is a growing literature that examines the expropriation of minority shareholders by ultimate controllers. La Porta et al. (1999) investigate ownership structures of companies from 27 countries. They find that few of the firms are widely held except in countries with strong investor protection. They also find that ultimate owners typically use superior voting rights to exercise control over the firms even when they have limited ownership. Claessens et al. (2000) examine the deviation of cash-flow rights and control rights in nine East Asian countries. They find that family-controlled firms and small firms have a large separation of ownership and control, and that managers of family-controlled firms are more likely to be the relatives of the family. These two studies suggest that the ownership structure of firms facilitates controlling shareholders to expropriate minority shareholders. More explicitly, Claessens et al. (2002) document that firm value decreases in the deviation of cash-flow rights and control rights, consistent with the entrenchment effect of large shareholdings.

Recently, Berkman et al. (2009) find that firms with state non-corporate controllers are less likely to issue loan guarantees to related parties than other firms in China, suggesting that state controllers are less likely to expropriate minority shareholders than private controllers. Chen, Firth, and Xu (2009) compare performance

of Chinese listed firms with different types of controllers. They find that private controlled firms perform worse than state-owned firms affiliated to the central government, and argue that private controllers may expropriate the income and assets of their firms away from minority shareholders. Wu, Xu, and Yuan (2009) examine whether the type of controllers affects the relationship between ownership concentration and legal investor protection in China. They find that an inverse relationship between ownership concentration and legal investor protection exists only for firms with private controllers but not for firms with state controllers, suggesting that state controlling serves as a substitute to legal investor protection.

There are several extant studies that investigate the effects of the separation of cash-flow rights from control rights on financial reporting quality and corporate information environment. Fan and Wong (2002) examine the association between earnings-return relation and ownership structure for a sample of 977 firms in seven East Asian countries.² They find that earnings-return relation is lower for firms with a high divergence between the ultimate owner's cash-flow rights and control rights. Haw et al. (2004) examine the relationship between ultimate ownership structure and income management in nine East Asian and thirteen Western European countries.³ They find that income management is positively associated with the detachment of cash-flow rights from control rights of ultimate owners, and that this association is less pronounced in countries with high statutory protection of minority rights and effective extra-legal institutions. These two studies suggest that the ultimate ownership affects earnings quality. Attig et al. (2006) examine whether the deviation of ownership and control rights is associated with information asymmetry and stock liquidity. They find that firms with a high separation of cash-flow rights and control rights have a greater information asymmetry component of their bid-ask spread and a wider quoted bid-ask spread, suggesting that the ultimate ownership structure affects corporate information environment.

Prior research also suggests that corporate disclosure can reflect corporate governance quality. Using the U.S. data, Ajinkya et al. (2005) find that the occurrence of management earnings forecasts is positively associated with board independence, a proxy for board governance quality. They also document that management earnings forecasts are more accurate and less optimistically biased for firms with greater board independence, and that firms with greater institutional ownership are less likely to issue management earnings forecasts. Moreover, Karamanou and Vafeas (2005) find that managers are more likely to issue or update earnings forecasts when firms have more effective board and audit committee structures in U.S.

4. Hypotheses

Prior research suggests that agency costs may arise from highly concentrated ownership. Shleifer and Vishny (1997) and La Porta et al. (1999) argue that high ownership concentration leads to the conflicts of interest between large and small shareholders. As large shareholders effectively control corporations, they are likely to expropriate the interest of minority shareholders. For instance, controlling shareholders

can benefit themselves by not paying out dividends, or by transferring profits to other firms under their control. Burkart, Gromb, and Panunzi (1997) develop a theoretical model that suggests an ex ante expropriation threat of tight control of large shareholders on small shareholders.

Prior literature further suggests that a likely effect of expropriating minority shareholders is that the information asymmetry between controlling shareholders and minority shareholders may increase (Attig et al., 2006). When controlling shareholders enrich themselves by executing corporate projects at the expense of minority interest, they are likely to obscure and delay the disclosure of related information. Thus, less relevant and adequate information will be disclosed when ultimate owners use their control rights to extract rent from minority shareholders. As a result, minority shareholders would not have adequate information to timely intervene and scrutinize those projects. Controlling owners may manipulate accounting numbers to hide the adverse effect of their expropriation on firm performance. Hence, controlling owners are likely to execute influence over board of directors and then impair monitoring mechanisms, resulting in low corporate disclosure quality.⁴

Berkman et al. (2009) use Chinese listed firms' loan guarantees to related parties as a proxy for expropriation, and find that related guarantees are less likely to be issued by firms with state non-corporate controlling block holders than by other firms. This suggests that private controllers may be more motivated to expropriate minority shareholders than the state because the monetary benefits from expropriation can be captured more easily and directly by private owners than by bureaucrats running a government entity. Chen, Firth, and Xu (2009) argue that it is easier for private controllers to expropriate the income and assets of Chinese listed firms away from minority shareholders because private controllers are not subject to monitoring by the state. As a result, the entrenchment effect of large shareholdings is higher for firms ultimately controlled by private owners than by the state. Thus, we hypothesize that corporate disclosure quality is lower for private-controlled firms than for state-controlled firms. The first hypothesis is formulated as follows:

H1: Corporate disclosure quality is lower for firms ultimately controlled by private owners than for firms ultimately controlled by the state.

Prior research (e.g., Grossman and Hart, 1988; Harris and Raviv, 1988; Shleifer and Vishny, 1997; La Porta et al., 1999) also suggests that the conflicts of interest between large and small shareholders are more pronounced when control rights of ultimate owners exceed their cash-flow rights. Large shareholders whose control rights are greater than their cash-flow rights may have greater incentives to extract value from minority shareholders because this expropriation is less restrained by controlling shareholders' own cash-flow stake. Claessens et al. (2002) document evidence that a deviation of ownership from control rights is negatively associated with market valuation, suggesting that the deviation leads to agency costs and thus decreases firm value. Ultimate owners seem to behave more selfishly when there is a discrepancy between control rights and cash-flow rights. Firms with a separation of ownership from control are likely to have more agency problems. Thus, the negative effect of private ultimate ownership on corporate disclosure quality may be stronger for firms with high divergence

between control rights and cash-flow rights. We develop the second hypothesis as follows:

H2: The negative effect of private ultimate ownership on corporate disclosure quality is stronger for firms with large deviation of cash-flow rights from control rights than for firms with small deviation of cash-flow rights from control rights.

5. Methodology

5.1. Ultimate ownership structure

We use Chinese data in this study because the ownership of publicly traded firms is highly concentrated in China.⁵ Moreover, the legal enforcement for protecting minority shareholders seems weak in China (Cai, 2007). As many Chinese listed companies are ultimately controlled by the state, focusing on Chinese data may increase the power of testing our hypotheses. More importantly, as required by the CSRC, Chinese publicly traded firms have started to disclose information about ultimate controlling shareholders in annual reports since 2001, thus providing us a unique opportunity to easily and clearly identify ultimate owners. Methodologically, focusing on one country's data can avoid country-level effects that may confound previous studies using cross-country data (Fan and Wong, 2002; Haw et al., 2004).⁶

Ultimate owners are those who have voting rights in the firm and who are not controlled by anyone else. In China, the ultimate owner usually controls the listed company through a pyramidal structure in which at least one company lies between the ultimate owner and the downstream listed company. For Chinese publicly traded firms, information about the ultimate owner of the largest shareholder is mandatorily released in their annual reports. Thus, we are able to identify the ultimate owner even though the largest shareholder of a listed company is not a publicly traded company.⁷ Based on the information disclosed in annual reports, we can determine whether the ultimate controller is a private owner or the state.

Following prior research (e.g., Claessens et al., 2000; Claessens et al., 2002), we identify the separation of cash-flow rights from control rights based on information about ownership and control contained in Chinese annual reports. For example, State-Owned Assets Supervision and Administration Commission of Shenzhen Municipal Government (SASACSMG) owns 100% of Shenzhen Construction Investment Holding Company, which is the largest shareholder and owns 34.8% of Shenzhen Changcheng Investment Holding. Co., Ltd., a company listed on the Shenzhen Stock Exchange. In this example, the ultimate owner is the state as SASACSMG is a government agency. The ultimate shareholder owns 34.8% of both control rights and cash-flow rights (i.e., $34.8\% \times 100\%$) of Shenzhen Changcheng Investment Holding. Co., Ltd. The equality of control rights to cash-flow rights of the ultimate controlling owner indicates no separation of cash-flow rights from control rights for this company. For another company listed on the Shenzhen Stock Exchange, Shenzhen SEG. Dashang Co., Ltd is owned 28% by its largest shareholder, Guangzhou Bouhong Investment Co. Ltd, which is owned 50% by its largest shareholder, Chengbi Li, who is an individual person. Thus, the ultimate owner of this listed company is a private owner, who owns 28% of the control rights and 14% (i.e.,

28% $\times$ 50%) of the cash-flow rights, indicating a separation of cash-flow rights from control rights. Like prior research (e.g., Claessens et al., 2000; Fan and Wong, 2002; Haw et al., 2004), we measure the deviation of cash-flow rights from control rights by the ratio of cash-flow rights to control rights, which is lower if cash-flow rights are highly detached from control rights.

5.2. *Rating of corporate disclosure quality*

We use the annual rating issued by the Shenzhen Stock Exchange to measure the quality of corporate disclosure for Chinese listed companies. The Shenzhen Stock Exchange began to assess the quality of information disclosure for listed firms since the fiscal year of 2001.⁸ The assessment is based on information disclosure activities engaged by listed firms during a fiscal year. The rating is classified into four categories including “Excellent”, “Good”, “Fair”, and “Poor”, for which we code “3”, “2”, “1”, and “0”, respectively, as the value of the dependent variable in our regression model, i.e., corporate disclosure quality.

The Shenzhen Stock Exchange rates each listed firm critically on the basis of four information disclosure quality attributes: *timeliness*, *precision*, *completeness*, and *compliance*. The timeliness of information disclosure reflects how timely periodic or transitory corporate disclosure reports are issued. The precision of information disclosure measures whether the disclosure is succinct and clear, and whether the disclosure is confused, misleading, and fraudulent. The completeness of information disclosure indicates whether information is fully disclosed or lack of disclosure. The compliance of information disclosure reveals the extent to which the disclosure is compliant with the requirements stipulated by the China Securities Regulatory Commission and the Shenzhen Stock Exchange. In addition to the above four attributes, each firm is also assessed on how quickly it replies to the Exchange’s inquiring, whether board of directors urges the firm to disclose in ways required by the Exchange, and whether the firm communicates information to the Exchange when irregular situations occur. The rating also considers whether and how many times a listed firm has received award or penalty from the China Securities Regulatory Commission or the Shenzhen Stock Exchange.

Overall, the Shenzhen Stock Exchange provides an extensive and multi-dimensional measure of corporate disclosure quality, which well reflects corporate governance quality of listed companies. To ensure the appropriateness of using this rating as a proxy for corporate disclosure quality, we will empirically evaluate the credibility and usefulness of the rating in the later text.

5.3. *Regression analysis*

First, we evaluate the rating of corporate disclosure quality issued by the Shenzhen Stock Exchange by estimating the following OLS regression model:

$$RET = \beta_0 + \beta_1 DISQ + \beta_2 EARN + \beta_3 DISC * EARN + \varepsilon \quad (1)$$

where

RET = stock return, computed as the annual stock return including dividends,
DISQ = corporate disclosure quality, coded “3”, “2”, “1”, and “0” for the quality rating of “Excellent”, “Good”, “Fair”, and “Poor” issued by the Shenzhen Stock Exchange,

EARN = *earnings*, measured as net income deflated by the beginning market value of common shares outstanding.

Model (1) is based on Easton and Harris (1991) who show a positive association between stock return and earnings, suggesting that accounting information is useful for investment decision-making. To evaluate the rating, we include *DISQ* and *DISQ*EARN* in the model. The coefficient on *DISQ* reflects the relationship between stock return and the rating, while the coefficient on *DISQ*EARN* reflects the effect of the rating on the association between stock return and earnings. If the rating is credible and useful in measuring corporate disclosure quality, we expect that firms with high rating will have higher investment value and higher usefulness of accounting information. Thus, the coefficients on *DISQ* and *DISQ*EARN* are both expected to be positive if the rating really captures corporate disclosure quality. Based on Easton and Harris (1991), we expect a positive coefficient on *EARN*.

Second, we run the following ordered logistic regression model to test our hypotheses by controlling for other factors that may affect corporate disclosure quality:

$$\begin{aligned} DISQ = & \beta_0 + \beta_1 PRIVATE + \beta_2 CASHCTRL + \beta_3 PRIVATE * CASHCTRL + \beta_4 BDIND \\ & + \beta_5 BDSIZE + \beta_6 FSIZE + \beta_7 ROE + \beta_8 MB + Industry\ dummies + \varepsilon \end{aligned} \quad (2)$$

where

PRIVATE = *private control*, coded “1” if firms are ultimately controlled by private owners and “0” otherwise,

CASHCTRL = *deviation of cash-flow rights from control rights*, measured by the ratio of cash-flow rights to control rights,

BDIND = *board independence*, measured as the proportion of independent directors on the board,

BDSIZE = *board size*, measured as the number of directors on the board,

FSIZE = *firm size*, measured as the log of total assets,

ROE = *return on equity*, measured by the ratio of net income to common equity,

MB = *market-to-book ratio*, measured by the ratio of the market value of common equity to the book value of common equity.

We include several control variables in model (2) based on the literature.⁹ Both *BDIND* and *BDSIZE* are added in model (2) since extant studies (e.g., Klein, 2002; Karamanou and Vafeas, 2005) suggest that board characteristics are associated with the quality of financial reporting. In addition, we include other firm characteristics such as *FSIZE*, *ROE*, and *MB* because prior research (e.g., Lang and Lundholm, 1993; Khanna, Palepu, and Srinivasan, 2004; Bamber and Cheon, 1998) finds that those characteristics also affect corporate disclosure quality. To control for fixed industry effects, we also add industry dummies for each industry from which there are at least 10 firms in the sample.

In model (2), we expect a negative and significant coefficient on *PRIVATE* if *H1* is supported. Since a high value of *CASHCTRL* indicates low divergence between cash-flow rights and control rights, we expect a positive and significant coefficient on the interaction term of *PRIVATE* and *CASHCTRL* if *H2* is supported. We also expect a positive coefficient on *CASHCTRL* (Haw et al., 2004). Based on prior research (e.g., Karamanou and Vafeas, 2005; Lang and Lundholm, 1993; Khanna et al., 2004; Bamber

and Cheon, 1998), we expect a positive coefficient on *BDIND*, *BDSIZE*, *FSIZE*, and *ROE*, and a negative coefficient on *MB*.

6. Empirical results

The sample selection begins by collecting corporate disclosure quality ratings of listed firms for the fiscal year of 2005 from the official website of the Shenzhen Stock Exchange (i.e., <http://www.szse.cn>). This yields a raw sample of 547 listed firms with corporate disclosure quality data available for 2005. Next, we review 2005 annual reports of the 547 firms from the Shenzhen Stock Exchange website to identify their ultimate controllers, control rights, cash-flow rights, and board information. After excluding firms that didn't provide clear and complete information about ultimate controllers or boards in their annual reports, the sample size is reduced to 461 firms. The reduced sample is then merged with the *Datastream* database from which financial data used in the analysis are collected. The final sample consists of 405 listed firms that meet the requirement of data availability for computing control variables.

Table 1 provides a breakdown of the sample firms by industry. We find that our sample involves 22 CSRC industries, of which machinery and equipment (15.80%), petrochemical and plastics (12.84%), metal and nonmetal (9.63%), medicine and biology (7.65%), information technology (6.67%), and wholesale and retail (6.17%) are the most widely represented industries in the sample.

Table 1: Breakdown of sample firms by industry

CSRC Codes	Industry Description	Frequency	Percent (%)
A	Agriculture, forestry, poultry, and fishing	11	2.72
C0	Food and drink	15	3.70
C1	Textile and clothing	19	4.69
C4	Petrochemical and plastics	52	12.84
C5	Electronics	11	2.72
C6	Metal and nonmetal	39	9.63
C7	Machinery and equipment	64	15.80
C8	Medicine and biology	31	7.65
D	Utilities	17	4.20
F	Transportation and storage	14	3.46
G	Information technology	27	6.67
H	Wholesale and retail	25	6.17
J	Real estate	18	4.44
K	Social service	18	4.44
M	Conglomerate	16	3.95
Others		28	6.91
Total	22 industries	405	100.00

Table 2 presents the descriptive statistics of variables. On average, corporate disclosure quality of our sample firms is rated between “Good” and “Fair”. The mean deviation of cash-flow rights from control rights is 0.742, which is tremendously close to 0.746, the mean deviation of a sample of 2,611 firms from the nine East Asian countries reported in Claessens et al. (2000). About 28% of the sample firms are ultimately controlled by private owners. Moreover, the mean board independence and board size are 33.3% and 9, respectively.

Table 2: Descriptive statistics

Variable	N	Mean	Median	Std	Q1	Q3
<i>DISQ</i>	405	1.73	2.00	0.75	1.00	2.00
<i>PRIVATE</i>	405	0.28	0.00	0.45	0.00	1.00
<i>CASHCTRL</i>	405	0.74	1.00	0.33	0.49	1.00
<i>BDIND</i>	405	0.35	0.33	0.05	0.33	0.36
<i>BDSIZE</i>	405	9.35	9.00	1.97	8.00	11.00
<i>FSIZE</i>	405	3.02	2.98	0.32	2.80	3.19
<i>ROE</i>	405	0.06	0.05	0.06	0.00	0.09
<i>MB</i>	405	2.00	1.68	2.40	1.15	2.30

Notes: *DISQ* is corporate disclosure quality, coded “3”, “2”, “1”, and “0” for the quality rating of “Excellent”, “Good”, “Fair”, and “Poor” issued by the Shenzhen Stock Exchange, respectively. *PRIVATE* is private control, coded “1” if firms are ultimately controlled by private owners and “0” otherwise. *CASHCTRL* is deviation of cash flow rights from control rights, measured by the ratio of cash flow rights to control rights. *BDIND* is board independence, measured as the proportion of independent directors on the board. *BDSIZE* is board size, measured as the number of directors on the board. *FSIZE* is firm size, measured as the log of total assets. *ROE* is return on equity, measured by the ratio of net income to common equity. *MB* is market-to-book ratio, measured by the ratio of the market value of common equity to the book value of common equity.

Table 3 reports the Pearson correlation coefficients among variables. We find that corporate disclosure quality is lower for firms ultimately controlled by private owners ($r=-0.15$) and firms with high divergence between ownership and control ($r=0.16$). Corporate disclosure quality is positively correlated with firm size and firm performance. The deviation of cash-flow rights from control rights is higher for firms ultimately controlled by private owners or for smaller firms. Smaller firms or higher growth firms are more likely to have private ultimate controllers. Larger firms have larger board of directors. The correlation between firm size and return on equity is 0.48. Other correlation coefficients are all less than 0.48. Since correlations between independent variables are not excessively high, multicollinearity is unlikely to be a substantive issue in this study.

Table 4 includes the results of evaluating the credibility and usefulness of the rating. Using the rating data over the period 2001 to 2005, we find positive and significant coefficients for both *DISQ* (t -statistic = 2.94, $p < .01$) and *DISQ*EARN* (t -statistic = 4.92, $p < .01$).¹⁰ These results suggest that firms with high ratings have better performance and

that their accounting information is more value relevant. Thus, the rating is credible and useful in terms of capturing corporate disclosure quality.

Table 3: Pearson correlations

Variable	<i>PRIVATE</i>	<i>CASHCTRL</i>	<i>BDIND</i>	<i>BDSIZE</i>	<i>FSIZE</i>	<i>ROE</i>	<i>MB</i>
<i>DISQ</i>	-0.15***	0.16***	0.03	0.09*	0.37***	0.39***	-0.02
<i>PRIVATE</i>		-0.44***	0.09*	-0.18***	-0.28***	0.06	0.15***
<i>CASHCTRL</i>			-0.02	0.14***	0.18***	0.03	-0.10**
<i>BDIND</i>				-0.22***	-0.03	0.02	0.02
<i>BDSIZE</i>					0.18***	0.09*	0.03
<i>FSIZE</i>						0.48***	0.02
<i>ROE</i>							0.23***

Notes: ***, **, and * indicate significance at the level of 1%, 5%, and 10% (two-tailed), respectively.

Table 4: Results on evaluating the rating

Variable	Predicted sign	Coefficient	<i>t</i> -statistic
<i>Intercept</i>	?	-0.23	-20.48***
<i>DISQ</i>	+	0.02	2.94***
<i>EARN</i>	+	0.62	5.32***
<i>DISQ</i> * <i>EARN</i>	+	0.41	4.92***
N			2,098
<i>F</i> -statistic			107.05***
Adj. R ²			13.17%

Notes: We run the OLS regression, where the dependent variable is *stock return*, computed as the annual stock return including dividends. *DISQ* is *corporate disclosure quality*, coded “3”, “2”, “1”, and “0” for the quality rating of “Excellent”, “Good”, “Fair”, and “Poor” by the Shenzhen Stock Exchange, respectively. *EARN* is *earnings*, measured as net income deflated by the beginning market value of common shares outstanding. *** indicates significance at the level of 1% (two-tailed).

Table 5 presents the results of the ordered logistic regression for testing the hypotheses. We find that the coefficient on *PRIVATE* is negative and significant ($\chi^2 = 4.09$, $p < .05$), consistent with *H1*. The results show that corporate disclosure quality is lower for firms ultimately controlled by private owners than for firms ultimately controlled by the state. This suggests that private ultimate owners are more likely to expropriate minority shareholders than the state. We also find a positive and significant coefficient on the interaction of *PRIVATE* and *CASHCTRL* ($\chi^2 = 2.82$, $p < .05$), consistent with *H2*. These results suggest that the negative effect of private ultimate ownership on corporate disclosure quality is stronger for firms with large deviation of cash-flow rights from control rights than for firms with small deviation of cash-flow rights from control rights. Thus, it is important to examine the interaction effect of private ultimate ownership and the separation of ownership and control on the expropriation of minority

shareholders. Our findings imply that the agency issues arising from the expropriation by private ultimate controllers are severer when firms' cash-flow rights are highly detached from their control rights.

Table 5: Results on testing the hypotheses

Variable	Predicted sign	Coefficient	χ^2
<i>Intercept3</i>	?	-8.73	27.90***
<i>Intercept2</i>	?	-5.36	11.13***
<i>Intercept1</i>	?	-3.07	3.68**
<i>PRIVATE</i>	-	-1.09	4.09**
<i>CASHCTRL</i>	+	0.15	0.13
<i>PRIVATE*CASHCTRL</i>	+	1.33	2.82**
<i>BDIND</i>	+	1.94	0.78
<i>BDSIZE</i>	+	0.04	0.51
<i>FSIZE</i>	+	1.36	11.54***
<i>ROE</i>	+	11.44	32.16***
<i>MB</i>	-	-0.06	1.87*
Industry dummies			Included
N			405
LR statistic			116.54***
-2 Log L			782.73

Notes: We run the ordered logistic regression, where the dependent variable is *corporate disclosure quality*, coded “3”, “2”, “1”, and “0” for the quality rating of “Excellent”, “Good”, “Fair”, and “Poor” by the Shenzhen Stock Exchange, respectively. The coefficient on *PRIVATE* is expected to be negative if corporate disclosure quality is lower for firms ultimately controlled by private individuals than for firms ultimately controlled by the state. The coefficient on *PRIVATE*CASHCTRL* is expected to be positive if the negative effect of private ultimate ownership is weaker for firms with low deviation of cash-flow rights from control rights than for firms with high deviation of cash-flow rights from control rights. ***, **, and * indicate significance at the level of 1%, 5%, and 10% (two-tailed), respectively.

We include two board governance measures, namely, board independence and board size, in the ordered logistic regression to examine the effect of board governance on corporate disclosure quality. We are interested in this issue because La Porta et al. (2000) suggest that weak investor protection leads to lower quality corporate governance compared to countries with strong investor protection regimes. Board governance mechanisms in weaker investor protection regimes like China may not be as effective as those in stronger investor protection regimes. Consistent with our concern on Chinese board governance, we find that corporate disclosure quality is not significantly associated with either board independence or board size.

We also add three financial variables including firm size, return on equity, and market-to-book ratio in the ordered logistic regression to control for the effects of other firm characteristics on corporate disclosure quality. Larger firms usually have lower

disclosure costs and more transparent information environments than smaller firms. Like Lang and Lundholm (1993), we document a positive association between corporate disclosure quality and firm size ($\chi^2 = 11.54, p < .01$). Firms with better firm performance may be more willing to disclose information. We find that corporate disclosure quality is positively associated with firm performance ($\chi^2 = 32.16, p < .01$), consistent with prior research (e.g., Lang and Lundholm, 1993; Khanna et al., 2004). High growth firms may be less willing to disclose information because proprietary information cost is higher for those firms (Bamber and Cheon, 1998). As expected, we find a negative relationship between corporate disclosure quality and market-to-book ratio, a proxy for growth opportunities ($\chi^2 = 1.87, p < .10$).

In addition, we examine the effect of the deviation of cash-flow rights from control rights on corporate disclosure quality for firms with private ultimate ownership and firms with state ultimate ownership, respectively. We run the following ordered logistic regression separately for each type of firms:

$$DISQ = \beta_0 + \beta_1 CASHCTRL + \beta_2 BDIND + \beta_3 BDSIZE + \beta_4 FSIZE + \beta_5 ROE + \beta_6 MB + \text{Industry dummies} + \varepsilon \quad (3)$$

We find that the coefficient on *CASHCTRL* in model (3) is positive and significant for firms with private ultimate ownership (non-tabulated $\chi^2 = 4.53, p < .05$), while the coefficient on *CASHCRL* is insignificant for firms with state ultimate ownership (non-tabulated $\chi^2 = 0.10$). These results suggest that large divergence between ownership and control leads to low corporate disclosure quality for firms with private ultimate ownership, but not for firms with state ultimate ownership. This finding is consistent with the notion that private ultimate owners are more likely to expropriate minority shareholders than state ultimate owners, especially when cash-flow rights are highly separated from control rights.

7. Conclusion

This study examines whether private ultimate ownership negatively affects corporate disclosure quality and whether the negative effect of private ultimate ownership on corporate disclosure quality is moderated by the deviation of cash-flow rights from control rights. Using a sample of 405 Chinese listed firms in 2005, we document a negative association between corporate disclosure quality and private ultimate ownership. We also find that corporate disclosure quality is more negatively associated with private ultimate ownership when the deviation of cash-flow rights from control rights is large. Our findings suggest that private ultimate owners are more likely to expropriate minority shareholders and that corporate governance issues arising from private large shareholdings are severer for firms with large divergence of ownership and control.

This study makes several contributions as follows. First, our study contributes to the agency theory by examining the relationship between ultimate controllers' type and the expropriation of minority shareholders, and the moderating effect of the deviation of cash-flow rights and control rights. Second, we extend the limited research on the effects of minority shareholders' expropriation on financial reporting quality by focusing on a more comprehensive measure of financial reporting quality and associated corporate

governance quality. Third, this study adds to the literature on corporate disclosure quality by examining the association between corporate disclosure quality and the expropriation of minority shareholders. Fourth, this study also provides empirical evidence on the credibility and usefulness of the rating of corporate disclosure quality issued by the Shenzhen Stock Exchange.

This study also provides some implications for public policy making. First, it may be necessary to strengthen the governance role of minority shareholders, especially when ultimate controllers are private owners and cash-flow rights are highly separated from control rights, so that minority shareholders can effectively monitor controlling shareholders to protect their interests. Second, since the expropriation of minority shareholders by private ultimate controllers is magnified when ownership is highly detached from control, it may be necessary to constrain the divergence between cash-flow rights and control rights of the ultimate owners especially in countries with great state-owned economy like China, which is increasingly privatizing state-controlled firms. Third, it may be valuable for Chinese securities regulators or stock exchanges to officially rate the corporate disclosure quality of Chinese listed companies.

References

- Ajinkya, B., Bhojraj, S. and Sengupta, P. (2005), "The association between outside directors, institutional investors and the properties of management earnings forecasts", *Journal of Accounting Research*, Vol.43, pp. 343-376.
- Attig, N., Fong, W., Gadhoun, Y. and Lang, L. (2006), "Effects of large shareholding on information asymmetry and stock liquidity", *Journal of Banking & Finance*, Vol. 30, pp. 2875-2892.
- Bamber, L. and Cheon, Y. (1998), "Discretionary management earnings forecast disclosures: antecedents and outcomes associated with forecast venue and forecast specificity choices", *Journal of Accounting Research*, Vol. 36, pp.167-190.
- Berkman, H., Cole, R. A. and Fu, L. J. (2009), "Expropriation through loan guarantees to related parties: Evidence from China", *Journal of Banking & Finance*, Vol. 33, pp. 141-156.
- Burkart, M., Gromb, D. and Panunzi, F. (1997), "Large shareholders, monitoring, and the value of the firm", *Quarterly Journal of Economics*, Vol. 112, pp. 693-728.
- Bushman, R. and Piotroski, J. (2006), "Financial reporting incentives for conservative accounting: The influence of legal and political institutions", *Journal of Accounting and Economics*, Vol. 42, pp. 107-148.
- Cai, H. (2007), "Bonding, law enforcement and corporate governance in China", *Stanford Journal of Law, Business & Finance*, Vol.13, pp. 82-120.
- Chen, G., Firth, M., and Xu, L. (2009), "Does the type of ownership control matter? Evidence from China's listed companies", *Journal of Banking & Finance*, Vol. 33, pp.171-181.
- Claessens, S., Djankov, S. and Lang, L. (2000), "The separation of ownership and control in East Asian corporations", *Journal of Financial Economics*, Vol. 58, pp. 81-112.
- Claessens, S., Djankov, S., Fan, J. P. H. and Lang, L. (2002), "Disentangling the incentive and entrenchment effects of large shareholdings", *Journal of Finance*, Vol. 57, pp. 2741-2771.
- Easton, P. D. and Harris, T. S. (1991), "Earnings as an explanatory variable for returns", *Journal of Accounting Research* Vol. 29, pp. 19-36.
- Fan, J. P. H. and Wong, T. J. (2002), "Corporate ownership structure and the informativeness of accounting earnings in East Asia", *Journal of Accounting and Economics*, Vol. 33 , pp. 401-425.
- Grossman, S., and Hart, O. (1988), "One-share, one-vote, and the market for corporate control", *Journal of Financial Economics*, Vol. 20, pp.175-202.
- Harris, M. and Raviv, A. (1988), "Corporate governance: voting rights and majority rules", *Journal of Financial Economics*, Vol. 20, pp. 203-235.
- Haw, I., Hu, B., Hwang L. and Wu, W. (2004), "Ultimate ownership, income management, and legal and extra-legal institutions", *Journal of Accounting Research*, Vol. 42, pp. 423-462.
- Jaggi, B., Leung, S. And Gul, F. (2009), "Family control, board independence and earnings management: Evidence based on Hong Kong firms", *Journal of*

- Accounting and Public Policy*, Vol. 28, pp. 281-300.
- Jensen, M. and Meckling, W. (1976). "Theory of the firm: managerial behaviour, agency costs, and ownership structure", *Journal of Financial Economics*, Vol. 3, pp. 305-360.
- Karamanou, I. and Vafeas, N. (2005), "The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis", *Journal of Accounting Research*, Vol. 43, pp. 453-486.
- Khanna, T., Palepu, K. G. and Srinivasan, S. (2004), "Disclosure practices of foreign companies interacting with U.S. markets", *Journal of Accounting Research*, Vol. 42, pp. 475-508.
- Klein, A. (2002), "Audit committee, board of director characteristics, and earnings management", *Journal of Accounting and Economics*, Vol. 33, pp. 375-400.
- La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (1999), "Corporate ownership around the world", *Journal of Finance*, Vol. 54, pp. 471-518.
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R. (2000), "Investor protection and corporate governance", *Journal of Financial Economics*, Vol. 58, pp. 3-27.
- Lang, M. and Lundholm, R. (1993), "Cross-sectional determinants of analyst ratings of corporate disclosures", *Journal of Accounting Research*, Vol. 31, pp. 246-271.
- Shleifer, A. and Vishny, R. (1986), "Large shareholders and corporate control", *The Journal of Political Economy*, Vol. 94, pp. 461-488.
- Shleifer, A. and Vishny, R. (1997), "A survey of corporate governance", *Journal of Finance*, Vol. 52, pp. 737-783.
- Wu, S., Xu, N. and Yuan, Q. (2009), "State control, legal investor protection, and ownership concentration: Evidence from China", *Corporate Governance: An International Review*, Vol. 17, pp. 176-192.
- Wysocki, P. (2005), "Assessing earnings and accruals quality: U.S. and international evidence", Working paper, MIT Sloan School of Management.

Endnotes:

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¹ Other firms include firms with state corporate block holders, private block holders, or foreign block holders, among which state corporate block holders are also ultimately controlled by the state.

² The seven East Asian countries include Hong Kong, Indonesia, Malaysia, Singapore, South Korea, Taiwan, and Thailand.

³ The nine East Asian countries include Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand. The thirteen Western European countries include Austria, Belgium, Finland, France, Germany, Ireland, Italy, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

⁴ Jaggi, Leung, and Gul (2009) find that the monitoring effectiveness of independent corporate boards is moderated in family-controlled firms.

⁵ The mean control rights and cash-flow rights of our sample firms are 40.11% and 30.20%, respectively, which are greater than the 9 East Asia countries except for the cash-flow rights of Thailand (Claessens, Djankov, and Lang, 2000).

⁶ Fan and Wong (2002) focus on seven countries' data and earnings-return relation. A concern on comparing earnings-return relation across countries is that stock prices are not equally informative across countries (Bushman and Piotroski 2006). Haw et al. (2004) use 22 countries' data and discretionary accruals to measure earnings management. Wysocki (2005) finds that accrual quality is not an appropriate measure of earnings quality in non-U.S. countries. Likewise, it is unclear whether the Jones model used for computing discretionary accruals perform equally well across countries.

⁷ Prior studies identify ultimate owners by only using data limited for listed firms, which may lead to measurement errors if the ultimate owner owns an unlisted firm who is the largest shareholder of the downstream listed company (Haw et al. 2004).

⁸ Shanghai Stock Exchange, another Chinese stock exchange, does not assess the corporate disclosure quality of its listed companies.

⁹ All continuous variables in the regression are winsorized at 1% and 99%.

¹⁰ We also estimate model (1) by using a dummy variable, which is coded "1" for the rating of "Excellent" and "Good" and "0" otherwise. We find that the coefficients on *DISQ* and *DISQ*EARN* are positive and significant (non-tabulated *t*-statistic = 2.12, $p < .05$, and *t*-statistic = 6.01, $p < .01$), similar to the results when *DISQ* is coded "3", "2", "1", and "0" for the rating of "Excellent", "Good", "Fair", and "Poor", respectively.