Dividend Policy, Foreign Ownership, and Expropriation in Chinese Listed Firms

Abstract

We study the relationships between dividend policy and two corporate governance phenomena, respectively, in Chinese listed firms: expropriation of minority shareholders by controlling shareholders through inter-corporate loans and the presence of foreign institutional investors among the largest shareholders. By examining publicly available accounting and financial data for all domestically listed non-financial firms during the period 2003-2006, when expropriation through inter-corporate loans was rampant in China, we find that expropriation is associated with low payout levels, as predicted by agency theory. We also find that the presence of large foreign institutional shareholders is associated with higher payout levels, consistent with previous studies of the role of foreign institutional investors in emerging markets. However, unlike previous studies, we conclude from causality tests that foreign investors probably do not play an active role in promoting high dividends but instead self-select into Chinese firms that pay high dividends.

1. Introduction

One important manifestation of the increasing integration of the global economy in the past several decades has been the gradual opening of developing countries' securities markets to international investors. As a result of this trend, international institutional investment has proliferated in emerging markets. While the growth potential of emerging market corporations offers foreign portfolio investors a tantalizing prospect of high returns, foreign investors face information disadvantages because of geographic distance, language barriers, and cultural differences. At the same time many emerging markets are characterized by weak protection of minority shareholder rights, which places foreign institutional shareholders at risk and gives them a heightened incentive for vigilance in looking after their investments. This raises the question of whether foreign shareholders play an active role in monitoring local firms and improving their governance practices and policies. This study specifically investigates the relationships among dividend policy, foreign ownership, and expropriation of minority shareholders in Chinese listed firms.

In 2002, China partially opened its domestic stock market to foreign investors by launching a Qualified Foreign Institutional Investor (QFII) scheme. Before then, the only options available to foreign investors seeking exposure to Chinese equities were to invest in stocks listed in Hong Kong or on other foreign exchanges or to buy so-called B shares denominated in foreign currency, the supply of which was quite limited. The QFII reform opened the A share market, which accounts for the vast majority of domestically listed shares, to foreign investors for the first time. Since then the rapidly growing Chinese economy has attracted a wide variety of institutional investors—investment banks, pension funds, insurance firms, sovereign wealth funds, and others—from around the world. Foreign institutions that successfully apply for QFII status are granted a quota that they can use to buy equities or

other domestic financial products.[1] The system has been gradually expanded, and as of June 2014 there were 264 international financial institutions with QFII status.[2]

Because of the quota system, foreign institutional investors have not come to play as large a role in the Chinese stock market as in other emerging markets with a more liberal approach to foreign investment. Only 1.5% of the market value of A shares was held by QFIIs in 2013.[3] Foreign institutional investors in China have the status of dispersed outsiders with very limited control over the firms they invest in. While there is a growing literature examining the impact of foreign shareholding in other emerging markets that are more open to foreign investors (Desender et al., 2014; Baba, 2009; Kim et al., 2010; Jeon et al., 2011), the role of foreign portfolio investors in China is not well known.

We focus on a period—2003-2006—when expropriation of minority shareholders by controlling shareholders through inter-corporate loans was a widespread problem in China (Jiang et al., 2010). In this form of expropriation, controlling shareholders openly "borrow" substantial cash amounts from listed firms without notification, explanation, and schedule of payback. The transfers appear on the books of listed firms as "other accounts receivable", and Jiang et al. (2010) show that this accounting item constitutes a feasible proxy for self-interested borrowing by controlling shareholders during the period we study in this paper.[4] As a result, this period offers a natural experiment to study whether expropriation through inter-corporate loans influences the dividend policy of Chinese listed firms. In contrast to other dividend policy studies that measure corporate governance quality through ratings available

[1] See Walter and Howie (2006) for details on QFII as well as the history of the Chinese domestic stock market.
[2] The complete list is available on the website of the China Securities Regulatory Commission (CSRC): http://www.csrc.gov.cn/pub/zjhpublic/G00306208/201407/t20140707_257368.htm (retrieved on April 30, 2015).
[3] South China Morning Post, November 11, 2013: "QFII quota tipped to make up 10 pc of Chinese market".
[4] A crackdown at the end of 2006 lessened the severity of the problem without eliminating it entirely. See for example the article "A long-term mechanism must be built to fundamentally solve the problem of expropriation by controlling shareholders" by Zhang Hong and Rong Hua, which was published on the website of the State-owned Assets Supervision and Administration Commission (SASAC) in September 2008 and is currently available here: http://finance.sina.com.cn/stock/marketresearch/20080814/10335199251.shtml (retrieved on April 30, 2015).

only for selected firms (e.g. Mitton, 2004), our approach allows us to use data for all listed firms.

Another advantage of focusing on the link between Qualified Foreign Institutional Investors and dividend policy during this period is that such investors paid no withholding taxes in China on either dividends or capital gains, lessening the relevance of tax-based explanations for dividend policy and simplifying the interpretation of the empirical findings.[5] Moreover, during this period it was very rare for firms to use share repurchases as an alternative to paying dividends (Zhou and Zeng, 2003), obviating the need to make assumptions about the role of share repurchases in dividend policy and adjust for it in the data analysis. Our sample thus affords a unique opportunity for exploring the intersection of foreign shareholding, expropriation of minority shareholders, and corporate dividend policy.

Dividend policy plays an important role in mitigating agency conflicts between insiders (e.g. managers and controlling shareholders) and outside investors. Dividend payouts to shareholders reduce the amount of cash under insiders' control and consequently limit the opportunities for insiders to spend cash inefficiently or divert it to themselves at the expense of outside shareholders (Jensen, 1986; Easterbrook, 1984). Another important theoretical perspective on dividends is that they can be a substitute for poor legal protection of shareholders (La Porta et al., 2000). This perspective may be particularly relevant in the Chinese setting. The Chinese institutional environment is characterized by concentrated ownership structures, relationship-based business networks, insider control, and high levels of government and political influence (Chen et al., 2012; Claessens et al., 2000; Fan and Wong, 2002). Foreign shareholders are confronted with a significant information asymmetry vis-à-

[5] See e.g. "QFII and Capital Gains Tax – a current topic for financial institutions" (2012), a report by PwC. http://www.pwccn.com/webmedia/doc/634675174056809613_rcs_qfii_cgt_mar2012.pdf (retrieved on April 30, 2015). QFIIs may, of course, face home-country taxes on dividends and capital gains from China. However, being institutional investors, many of them channel much of their dividend and capital income through to end clients from around the world who may have very diverse tax incentives. We therefore consider it unlikely that specific tax incentives systematically drive the dividend preferences of the foreign institutional investors in our dataset.

vis managers and other firm insiders. They can reduce the risks associated with this information disadvantage by investing in well-managed firms with a reputation for equitable treatment of shareholders. Following this line of thought, we argue that Chinese listed firms can use dividend payouts to establish a reputation for moderation in expropriating the wealth of outside investors and thereby attract foreign institutional investment.

Using data from 1291 publicly listed Chinese firms covering the years 2003-2006 (for a total of 4960 firm-year observations), we find that when foreign shareholders are present among the ten largest shareholders of a listed firm, the firm is likely to pay higher dividends. Causality tests indicate that this association is probably not due to foreign shareholders actively inducing firms to increase dividends but rather to a self-selection of foreign investors into high-dividend-paying firms. These results, which are robust to various dividend measures and controls, support our argument that in an institutional environment with weak investor protection, firms can attract foreign investors by using dividends to signal a commitment to good corporate governance. In addition, consistent with agency theory, we find that firms with a high level of expropriation in the form of inter-corporate loans tend to pay lower dividends and are less likely to pay dividends at all.

This study contributes to the literature in different ways. First, while there is a substantial body of literature on the impact of international ownership on corporate governance, prior research has focused on governance aspects such as firm restructuring (Ahmadjian and Robbins, 2005), dismissing poorly performing CEOs (Aggarwal et al., 2011), firm performance (Aggarwal et al., 2011; Douma et al., 2006), and board monitoring (Desender et al., 2014). The relationship between foreign institutional investment and corporate dividend policy has received less attention. This is remarkable as dividends, unlike accruals, cannot be easily falsified or manipulated and are thus an attractive variable to study,

particularly in emerging markets which often have unreliable accounting and auditing practices.[6]

Second, in the small but growing literature on the impact of foreign institutional investment on corporate dividend policy in emerging markets, existing studies imply that foreign shareholders play an active role in providing enhanced monitoring and improving corporate governance quality in countries with poorly developed legal institutions (Desender et al. 2014; Baba, 2009; Kim et al., 2010; Jeon et al., 2011). While these insights are valuable, prior studies have focused mainly on Japan and Korea. To date there has been little research on the impact of foreign institutional investors on dividend policy in China, where foreign shareholders are subject to tighter restrictions in their access to local securities markets and where there is a relatively high risk of expropriation by controlling shareholders. Our results suggest that in China, too, foreign ownership is associated with enhanced governance quality, but for different reasons. In this way our study complements the existing literature on the impact of foreign institutional investment in emerging markets.

The remainder of this paper proceeds as follows. In Section 2 we review prior literature on dividend policy and develop our hypotheses. In Section 3 we introduce the research design and methodology. Results are presented in Section 4, and Section 5 concludes.

2. Theoretical framework and hypotheses

2.1 Foreign investment and corporate governance in Chinese listed firms

[6] In China, for example, there have been several examples of publicly listed firms that have used inaccurate bank statements (with or without collusion of the bank) to deceive auditors. In fact, contrary to intuition, faking cash balances seems to be one of the easier ways to distort corporate accounts. For an egregious example, see Deloitte's resignation letter to Longtop Financial Technologies from May 2011, which is registered with the SEC: http://www.sec.gov/Archives/edgar/data/1412494/000095012311052882/d82501exv99w2.htm. Retrieved on April 30, 2015.

The corporate governance environment in China has evolved rapidly in the last several decades. The key features of the corporate governance system that are relevant to the present study can be briefly summed up as follows. First, a majority of listed firms are majority-owned by state institutions, which often have close ties to the listed firms they control for historical reasons (Jiang et al., 2010). This sets China apart from many other Asian countries, where families tend to play a large role as owners. Second, legal institutions for the enforcement of ownership rights remain relatively underdeveloped, although the degree of underdevelopment varies by region (Li and Qian, 2013). Third, as previously described, the access of foreign investors to the Chinese domestic stock market is subject to strict control through the QFII system, and the overall role of foreign investment is small—although companies do have the option of gaining access to foreign financing by listing in Hong Kong or other international stock exchanges. Fourth, around the time period that we study, the Chinese stock market had only very few sophisticated domestic institutional investors that could play a role in monitoring management and controlling shareholders (Tenev et al., 2002).

2.2 Corporate dividend policy

Under idealized conditions, investors ought to be indifferent to dividend policy, and firms could simply distribute to shareholders any residual cash left over from earnings once capital expenditure had been accounted for, without giving any further thought to the amount paid out (Miller and Modigliani, 1961). In reality, however, shareholders do seem to care about dividends, as reflected in the stock price movements that tend to follow unexpected dividend announcements. The finance literature attempts to explain the puzzle of corporate dividend policy using primarily two lines of reasoning: signaling and agency conflicts (See Baker, 2009, for an overview of all the different schools of thought on dividend policy). Signaling explanations are based on the assumption that firm insiders (e.g. managers;

controlling shareholders) know more than outsiders (e.g. minority shareholders) about the firm's growth opportunities. Given the information asymmetries between insiders and outsiders, the former may signal future profitability by increasing dividends today (Lintner, 1956; Miller and Rock, 1985). Moreover, many firms maintain a regular pattern of dividend payments because investors prefer such regularity for psychological reasons (Graham and Kumar, 2006; Shefrin, 2009). Signaling needs to be costly in order to be reliable. The cost of signaling can arise from a higher tax rate on dividends than on capital gains. [7] As there were no withholding taxes in China on either dividends or capital gains in the period considered in this study, tax-based explanations of dividend behavior are less relevant for our purposes. Therefore, we investigate foreign shareholding, expropriation and dividends of Chinese listed firms using agency theory.

Agency theory acknowledges the existence of conflicts between outside investors and insiders (managers; controlling shareholders) of the firm. Outside investors struggle to benefit from their investment because insiders (managers and controlling shareholders) prefer to keep cash in the firm or divert it to themselves. Thus, dividends are used by outside investors to mitigate the agency costs associated with the deployment of free cash flow (Easterbrook, 1984; Jensen, 1986). Within the agency theory perspective, two lines of thought can be distinguished. First, the outcome model suggests that dividends are the result of a collective effort by shareholders to extract cash from the firm despite the resistance of those who control it (Easterbrook, 1984;; Faccio et al., 2001). Under an effective system of legal protection for shareholders, outside investors can use their legal rights to force firm managers to pay dividends (Adjaoud and Ben Amar, 2010; La Porta et al., 2000). Second, the substitution model suggests that firms operating in an environment with relatively weak legal protection of

[7] Tax preference theory suggests that dividend policy is tailored to minimize the total tax bill of shareholders. Such tax considerations may vary according to the regulatory regime under which the firm and its investor clientele operate (Black, 1976; Miller and Scholes, 1978; Saadi et al., 2009). In general, if dividends are taxed higher than capital gains, shareholders should have a preference for low dividends, and vice versa.

shareholders can use dividends as a substitute for such protection. By consistently and voluntarily paying high dividends, firms can demonstrate their commitment to good corporate governance standards, which in turn enables them to attract investors and raise external finance (La Porta et al., 2000).

2.3 Expropriation and dividends

Since the institutional environment of China is characterized by high ownership concentration and underdeveloped legal enforcement, the private benefits acquired from expropriation of minority shareholders' rights are relatively large in Chinese listed firms. Consequently, several China-based studies have provided evidence that strong insider control and poor minority investor protection lead to a less generous dividend policy. For example, Zhang (2008) find that board domination by management in Chinese listed firms is associated with lower dividends. Su et al. (2014), in an empirical study of domestically listed Chinese firms covering the period 2004-2008, find that related-party transactions that are damaging to minority shareholders are associated with lower dividends. These findings are consistent with the agency theory prediction that conflicts between controlling shareholders and minority shareholders will be reflected in lower dividends, because those who control the firm prefer not to share the wealth of the firm with outside investors. [8]

[8] In addition, corporate dividend policy may be influenced by the nature of shares held by controlling shareholders. For example, Chen et al. (2009) study the period 1990-2004 and note that during that period, shares held by governments and state agencies are usually non-tradable. Thus, controlling shareholders would sometimes prefer high dividends as a means of diverting part of the proceeds from overpriced IPOs or secondary offerings to themselves, since they were not able to achieve this by selling shares. While we find the arguments of Chen et al. (2009) intriguing, we lean a priori towards the more conventional expectation that expropriation is associated with lower dividends. During the time period we study (2003-2006), the CSRC launched a process of converting non-tradable shares into tradable shares with the end goal of abolishing the non-tradable share category entirely, a process that has since been completed. The fact that controlling shareholders during this time period knew that their non-tradable shares would likely become tradable before long would have limited their incentive to pay high dividends for expropriation purposes. Dividends are, after all, a relatively inefficient means of expropriation since they must be shared with minority shareholders. A controlling shareholder who desires to divert funds can reasonably be expected to explore other channels first and use dividends as a last resort.

During the period considered in our study (2003-2006), expropriation through inter-corporate loans was quite common in China. In these cases, controlling shareholders "borrow" substantial cash amounts from the listed firm, in broad daylight so to speak, without notification, explanation, and schedule of payback. The transfers appear in the accounts as "other accounts receivable" (Jiang et al., 2010). Such transactions represent a transfer of value from minority shareholders to controlling shareholders, i.e. expropriation of the former by the latter. This form of expropriation is often carried out by a cash-strapped state-owned enterprise that owns a majority stake in the listed firm.[9] Therefore, in this study, we focus on expropriation through inter-corporate loads and formulate the following hypothesis:

Hypothesis 1. There is a negative association between expropriation through inter-corporate loans and dividends.

2.4 Foreign shareholding and dividends

The outcome model

While corporate dividend policy in emerging markets reflects the impact of agency problems between insiders (e.g. managers and controlling shareholders) and outsiders (e.g. minority shareholders), foreign institutional shareholders can be expected to play an active role in reducing information asymmetry and promoting high payouts (Easterbrook, 1984; Faccio et al., 2001). Foreign investors are typically sophisticated institutional investors with resources and skills that allow them to collect value-relevant, firm-specific information (Gul et al. 2010). In particular, in the context of China, almost all foreign institutional investors

[9] While regulators and the central government recognize the damage posed to the financial markets by minority shareholder expropriation, cracking down on the phenomenon has been difficult because of the social pressures faced by local governments to prop up ailing state-owned enterprises (Tang, 2006). The practice of expropriation through inter-corporate loans finally ended in December 2006 after a long series of government rules and directives (Jiang et al., 2010).

come from developed markets endowed with good capabilities.[10] Because such investors hold only a relatively small part of shares, they are short-term oriented and prefer dividends to retained earnings (Douma et al., 2006).

Further, being independent from management and controlling shareholders, foreign institutional investors may enhance monitoring and transparency of invested firms (Gul et al., 2010; He et al., 2013). For example, Aggarwal et al. (2011) find that international institutional investment tends to lead to subsequent improvement in governance in a broad range of countries. More specifically, Baba (2009) finds that foreign institutional ownership is associated with higher dividends in Japan, and Kim et al. (2010) and Jeon et al. (2011) report similar findings for South Korea. Foreign institutional investors face considerable risks when investing in China. In particular, most Chinese listed firms are controlled by state-owned entities, which have less incentive to keep dividends high, especially since dividends are not the main source of return received by the state from listed firms.[11] Thus, foreign institutional investors are likely to make an active effort to promote dividend payments.

The substitution model

As discussed earlier the substitution model of dividend policy suggests that firms that wish to attract investment from outsiders may want to proactively pay high dividends as a way of signaling their commitment to good corporate governance. This incentive is stronger in emerging markets like China where formal legal protection of minority shareholders is imperfectly developed (La Porta et al., 2000). Compared with domestic investors, foreign investors face geographical and cultural distance and have less knowledge of local conditions,

[10] The vast majority of the Qualified Foreign Institutional Investors in China are from North America, Western Europe, or Hong Kong.

[11] Taxes paid by listed firms are significantly higher than dividends. For example, from 2006 until 2010, firms controlled by the State-owned Assets Supervision and Administration Commission (SASAC) paid 168.6 billion yuan in total dividends but 5 trillion in taxes (South China Morning Post, February 23, 2011: "State firms to hand over more profits to Beijing").

which magnifies the conflict of interest and information asymmetry between the management and the foreign investors (Desender et al., 2014; Buckley, 1997). Moreover, foreign institutional shareholders in China hold a relatively small stake, and their ability to effectively monitor management is limited by higher coordination costs and information asymmetry problems (Douma et al., 2006). Thus, potential foreign investors will be looking for assurances that they will not be harmed by their own disempowered status as minority shareholders. Having limited knowledge of local conditions, such investors may be particularly sensitive to signals of firm governance quality. Investing in firms with a historical pattern of generous dividend payments may help to convince them that their money will not be expropriated (Kim & Yi, 2015; Jiraporn et al., 2006).

The outcome and substitution models yield the same testable hypothesis pertaining to foreign ownership:

Hypothesis 2. There is a positive association between foreign ownership and dividends.

Note that since even firms that do not face significant expropriation issues do have dividend policies, the link between foreign shareholders and dividend policy should be easily observable independently of any link between foreign ownership and expropriation, provided that expropriation is controlled for in the analysis. The outcome and substitution models of dividend policy differ with respect to the direction of causality in the link between foreign ownership and dividend policy. In the Results section of this paper we will attempt to disentangle the causality issue.

3. Methodology and data

3.1 Data and Sample

The dataset consists of all non-financial firms listed on the Shanghai and Shenzhen stock exchanges during the time period of 2003-2006. We focus on this period for two reasons. First, in identifying "foreign institutional investors", we restrict attention to Qualified Foreign Institutional Investors, the first of which were approved in 2003. Second, according to Jiang et al. (2010), the phenomenon of expropriation through inter-corporate loans was prevalent until and including 2006, that is, using "other account receivables" as a proxy for expropriation works best through 2006. We believe that the inclusion of the expropriation variable in our analysis of the impact of foreign ownership on dividends is important because it is a way to control for corporate governance problems and isolate the impact of foreign institutional ownership on dividends, as opposed to the impact on corporate governance in general.

We retrieve accounting and shareholder information from the Chinese CSMAR database using the following criteria. First, we select all firms listed on the Shenzhen and Shanghai stock exchanges for which complete information is available during the period 2003-2006. Second, following standard practice in the literature, we exclude financial firms because such firms may have different incentives for paying dividends. Third, we exclude a few firms that are listed in CSMAR as being ultimately foreign-controlled, reasoning that these firms are effectively foreign subsidiaries and cannot be compared to ordinary listed firms with respect to the impact of QFII ownership. Applying these criteria results in the final sample of 4960 firm-year observations.

3.2 Variable measurement

3.2.1 Dividends. Open-market share repurchases have become an increasingly popular alternative method (besides dividend payments) for firms to return excess cash to shareholders in many countries over the last decade and have even overtaken dividends in

volume in the United States, accounting for 60% of cash returned to shareholders by listed American firms in 2013.[12] We follow previous empirical studies on the dividend policy of Chinese listed firms (Zhang, 2008; Chen et al., 2009; Su et al., 2014) in not making any adjustments for the impact of share repurchases on dividend policy in view of the fact that share repurchases were a highly uncommon means of disbursing cash to shareholders during the time period we are studying.

The approach taken to share repurchases by the Company Law of China in both its original version from 1993 and its updated 2005 edition is that the law prohibits firms from buying their own shares back by default in accordance with a principle of capital preservation (Gu, 2010, pp 279-280). However, the Company Law does permit firms to repurchase shares in special circumstances.[13] As these special circumstances include the purpose of reducing registered capital, it might seem at first glance that buybacks could be a viable alternative to dividend payments for firms with large amounts of excess cash. In practice the attractiveness of buybacks is limited sharply by several factors. First, firms are not allowed to hold treasury shares with a view to selling the shares back to the market later, but must cancel repurchased shares and write down the company's registered capital immediately after the repurchase. Since issuing shares is associated with considerable regulatory and bureaucratic hurdles in China, very few firms that have managed to issue shares in the first place are interested in undoing the process through a repurchase (Zhou and Zeng, 2003). Second, since share repurchases entail a reduction of the company's registered capital, such transactions are subject to strict creditor protection provisions under the Company Law, which makes them more complicated to implement than dividends.[14] As a result of these impediments, share repurchases were hardly ever used by Chinese listed firms as an alternative to dividends during the period studied here, although they were occasionally used for the purpose of

[12] The Economist, September 13, 2014, "The repurchase revolution".
[13] Article 149 of the 1993 Company Law; Article 143 of the 2005 Law.
[14] The creditor provisions are in Article 178 of the 2005 Law.

changing a company's share class structure.[15] Therefore, in this study, we consider only cash dividends and measure corporate dividend policy by two variables: dividend yield and dividend payer. *Dividend yield* is common dividends over the market value of equity. *Dividend payer* is a dummy equal to one if the firm pays dividends, and zero otherwise. In the robustness check, we add two additional measures. *Dividend payout* refers to the payout ratio, i.e. dividends divided by net earnings. *Dividend to total assets* ratio is calculated using dividends over total assets.

3.2.2 Expropriation. Similar to Jiang et al. (2010), we use other receivables (OREC) to measure expropriation through inter-corporate loans, which was a prevalent practice during the period considered in this study. From a research point of view, what makes OREC interesting in this context is that they provide a directly observable proxy for a phenomenon—expropriation—that is generally clandestine and elusive. While OREC do not necessarily all represent lending to the controlling shareholder, and while the lending may occasionally have a legitimate business purpose, Jiang et al. (2010) demonstrate that this accounting item is a feasible proxy for self-interested borrowing by controlling shareholders in historical data from China. By using related-party lending as a proxy for expropriation (and hence corporate governance quality), we offer an alternative to the approach taken by Mitton (2004) who uses more subjective composite corporate governance ratings developed by Credit Lyonnais. In addition, using accounting data available for all listed Chinese firms (as opposed to ratings available only for selected firms) enables us to collect a larger dataset. *OREC* is measured by other accounts receivables over total assets.

3.2.3 Foreign shareholding. In this study, we identified foreign shareholding via the QFII list published by the CSRC. We chose not to include non-QFII foreign investors for two reasons. First, since the nationality or origin of shareholders is not provided explicitly in

[15] See Gu (2010), p. 260, on the buyback of B shares and Walter and Howie (2006), p. 180, on the buyback of non-tradable state shares (a share class that has since become obsolete).

CSMAR, identifying all foreign shareholders involves some guesswork. By matching the official list of QFIIs against the CSMAR list of shareholders, however, we were able to produce a reliable identification of these particular foreign shareholders. Second, by restricting attention to QFIIs, we avoid including industrial investors in the dataset and make sure that only institutional investors are included. It is not uncommon for foreign industrial firms to make strategic investments in China within their own industry, subject to case-by-case approval by the authorities. As such investors may have very different dividend preferences than portfolio investors, including them would obscure the impact of foreign institutional investors on dividend policy.

In the CSMAR database, the names of particular institutional shareholders are not always recorded in the same way and with the same level of detail. This can make it impossible to verify whether a particular shareholder is exactly identical to an entity that appears on the official QFII list or is an affiliated entity or subsidiary within the same corporate group as the QFII entity. For the purpose of coding our data for the *foreign shareholder* dummy variable, we have assigned QFII status not only to entities that match the official name (in either English or Chinese) of a QFII exactly but also to affiliated entities. The CSMAR database also contains numerous typos and other minor irregularities in shareholder names recorded in the Latin alphabet.[16] Even the official QFII list published by the CSRC is not error-free ("Julius Bear" for "Julius Baer").[17] We have been aware of these issues and done thorough follow-up checks after the initial automated name search in order not to let QFIIs slip through the cracks on account of typos in the source data.

The official QFII list available on the CSRC website includes the English and Chinese names of institutions that are currently approved as QFIIs along with the date of approval. It

[16] For example, the word "Melinda" in the name "Bill & Melinda Gates Foundation" variously appears as MRLINDA, MELINADA, MELLNDA, and MELIND, in addition to MELINDA; the bank UBS frequently appears as USB, etc.

[17] http://www.csrc.gov.cn/pub/zjhpublic/G00306208/201407/t20140707_257368.htm. Retrieved on February 1, 2015.

does not include institutions that held QFII status in the past but subsequently lost it for some reason (e.g. Lehman Brothers, which went bankrupt in 2008). In order to minimize the risk of overlooking institutions that enjoyed QFII status during the period 2003-2006 but later lost it, we used the QFII list provided by Walter and Howie (2006) for reference in addition to the currently available official list from the CSRC. The Walter and Howie (2006) QFII list was current as of April 17, 2006.[18]

In this study, foreign *shareholder* is a dummy variable equal to 1 if at least one of the largest ten shareholders is foreign (including Hong Kong and Taiwan) and 0 otherwise,. *% Foreign shares* is the proportion of shares held by the foreign shareholders thus identified; if there are more than one foreign shareholder among the ten largest in any given firm, the percentages for these shareholders are added up. In addition to strictly foreign institutions, the QFII list also comprises institutions from Hong Kong, Macau, and Taiwan, which are also considered as foreign shareholders in our main analysis.

3.2.4 Control variables. We control for the following variables that have been demonstrated to influence corporate dividend policy in the literature. *Market to book* is the ratio of the market value of equity to the book value of equity. *Firm size* is measured by the natural logarithm of total assets. *Cash flow* is calculated by cash and cash equivalents divided by total assets. *ROE* is the after-tax return on equity. *Leverage* is total liabilities divided by total assets. *Intangible assets* is calculated as intangible assets divided by total assets. Our industry controls are based on the 13-industry official classification announced in 2001 by the Chinese Securities Regulatory Commission (CSRC).[19] Since we use panel data, we also include year dummy variables to control for year effects.

[18] Table 11.1 in Walter and Howie (2006).
[19] A Chinese-language breakdown of the classification framework is available at http://biz.sse.com.cn/cs/zhs/xxfw/flgz/html/t0079.htm (retrieved on March 8, 2015).

4. Results

4.1. Descriptive statistics

Table 1 (Panel A and B) and Table 2 show basic descriptive statistics for the dataset. As can be seen in Panel A of Table 1, 11.7% of the firm-years in our sample count as having foreign investment by our definition. Panel B compares dividend-paying and non-dividend-paying firms. Each group comprises roughly 50% of the dataset. As one would expect, non-dividend-paying firms are much less profitable on average than dividend-paying firms. Non-dividend paying firms also have significantly more expropriation (as proxied by OREC) and significantly less foreign ownership than dividend-paying firms.

… Insert Table 1 around here…

… Insert Table 2 around here…

The correlation matrix (Table 2) gives a first indication of the plausibility of our hypotheses. In fact the correlations are as expected: foreign ownership and OREC are, respectively, positively and negatively correlated with the dividend yield at highly significant levels. At first glance it might seem surprising that the table shows a positive correlation of 0.099 between the market-to-book value and OREC. After all, from the perspective of the stock market, expropriation by controlling shareholders destroys firm value. However, high OREC does not necessarily imply that a company is unprofitable or otherwise in bad shape. On the contrary, this type of abuse by controlling shareholders is more likely to take place in firms that generate relatively high free cash flows and hence are able to lend excess cash to the controlling shareholder, typically a state-owned enterprise. It is therefore far from obvious a priori what the correlation between OREC and the market-to-book value will be like across the dataset.

4.2. Regression models and results

Since dividends are censored data (loss-making Chinese firms do not have a dividend policy that can be observed because they are not allowed to pay dividends),[20] we use a tobit regression model as our main tool for examining the impact of expropriation and foreign ownership on dividends. Tobit models are regression models designed for situations where the dependent variable is constrained in some way (Amemiya, 1984). Since we are using panel data, we use a tobit model with random effects to help control for firm-level heterogeneity. The dependent variable is the dividend yield. Naturally there are other ways of measuring dividend policy besides the dividend yield, and we will turn to those subsequently for robustness tests, but we use the dividend yield for our initial test as it is arguably an important metric from the point of view of investors. In addition we also run random probit models to test whether the explanatory variables can predict whether a company pays dividends or not. In the probit models, the dependent variable takes the value 1 if the dividend yield is higher than 0 (i.e. if the company pays a dividend in the particular year) and 0 otherwise. Among the control variables we include our proxy for minority shareholder expropriation, OREC, and the market-to-book ratio, which by itself is an indicator of how well the company is governed according to stock market consensus. The function of these control variables is to help isolate the relationship between foreign ownership and dividend policy and avoid contamination from possible direct linkages between foreign ownership and valuation or other indicators of governance quality. Results are summarized in Table 3.

…Insert Table 3 around here…

[20] Interestingly, the Company Law of 2005 does not contain any article that explicitly and unambiguously forbids loss-making firms from declaring dividends; however, Article 167 seems to imply that dividends must be paid out of the after-tax profits in any given year.

Model 1 and Model 3 use the dummy variable for foreign ownership, i.e. the variable that takes the value 1 if a large foreign shareholder is present and zero otherwise. Model 2 and Model 4 use the percentage of foreign ownership instead. First, Hypothesis 1 predicts a negative association between expropriation through inter-corporate loans and dividends. Model 1 and Model 2 suggest that OREC is negatively associated with the dividend yield at a statistically highly significant level. OREC is also strongly negatively associated with the probability of a company paying dividends at all, as shown in Model 3 and Model 4. Thus, hypothesis 1 is supported. This is consistent with the agency theory perspective that an agency conflict that leads to expropriation of minority shareholders by controlling shareholders should also be manifested in controlling shareholders restricting dividends because these must be shared with minority shareholders.

Second, we test the association between foreign shareholding and dividends. Model 1 and Model 2 suggest that Chinese listed firms pay higher dividends when foreign institutional investors are present, and when such investors hold more shares. Model 3 and Model 4 suggest that Chinese listed firms are more likely to pay dividends when foreign institutional investors are present, and when such investors hold more shares. All these evidence support Hypothesis 2, which predicts a positive association between foreign shareholding and dividends.

4.3. Robustness tests

In addition to the main analysis reported above, we conduct the following robustness tests. First, for the purpose of the preceding test we counted Qualified Foreign Institutional Investors from Hong Kong and elsewhere within “Greater China” as foreign investors. Perhaps such Greater China investors do not have the same independence of controlling shareholders or the same monitoring incentives as truly foreign shareholders from overseas

because of the lower geographic, cultural, and linguistic barriers they face compared to overseas investors. To address this concern, we run the previous regressions again after excluding QFIIs from Hong Kong, Macau, and Taiwan from the list of foreign shareholders. Results are summed up in Table 4 Panel A. Both hypotheses are supported with this alternative definition of foreign shareholders. In fact effect sizes have increased slightly as a result of the narrower definition of foreign ownership.

Second, the preceding tobit and probit models were all random effects models. Since we are using short panel data (only four years) and the panel data are unbalanced (some firms do not have data for all four years), running the tests with random effects may not be appropriate because of the relatively poor performance of maximum likelihood estimation under such circumstances. Therefore, as a robustness test, we also run the regressions without assuming random effects. The results are in Table 4 Panel B. Note that for the purpose of this and the subsequent robustness tests, we revert to the original definition of foreign shareholders (i.e. we include Hong Kong, etc.). The results in Table 5 are in line with the previous results, but the *OREC* and *Foreign shareholder* coefficients are now all significant at at least the 1% level.

As a final robustness test, we estimate models with alternative measures of dividend policy other than the dividend yield. First we use a random tobit model with the payout ratio, defined as the proportion of net earnings paid out as dividends, as the dependent variable. Next we use a fixed effects tobit model with dividends scaled by assets as the dependent variable. Results are in Table 4 Panel C. Again the negative association between OREC and dividends is highly significant, consistent with Hypothesis 1. Intriguingly, though the coefficient of the foreign shareholder dummy has the expected sign when either the payout ratio or dividend/assets are used as the dependent variable (models no. 1 and no. 3, respectively), it is not statistically significant. However, the coefficient for the percentage of

foreign ownership is highly robust to the alternative dividend measures (model no. 2 and no. 4). On the whole, the weight of evidence suggests that there is a positive association between dividends and foreign ownership, as predicted by Hypothesis 2.

…Insert Table 4 around here…

4.4. Causality

Though the tests in the previous section show a positive association between foreign ownership and dividends, they do not by themselves indicate the direction of causality. Do foreign institutional investors exert an active influence on dividends, or do they simply choose to invest in firms that pay high dividends to begin with? If the former is the case, this will lend support to the outcome model of dividend policy with respect to the role of foreign institutional investors. If the latter is the case, the practical implication is that Chinese firms can attract foreign investors by proactively paying high dividends, which supports the substitution model of dividend policy. Of course, the positive association we have found might also be due to a mixture of both effects.

To test for causality, we take advantage of the panel structure of the data to examine the impact of changes in foreign ownership on subsequent dividend decisions. First, we run regressions in which the dependent variable is the change in dividend yield from year to year while each independent variable likewise represents a change over the same period. The results are presented in Panel A of Table 5. The reason we do not use lagged values for the independent variables is that the annual dividend is proposed by the board of directors and approved at the annual meeting of shareholders several months after the end of the year associated with that dividend payment in the data. In other words, there is always a lag of at least several months from the time a change in foreign ownership occurs until the annual

dividend is decided. Since the difference variables are not censored any more, we use OLS with random effects instead of the tobit model used in the previous tests.

Second, we investigate whether dividend yield drives more investments from institutional foreign shareholders rather than the other way around. Following the suggestions of Granger (1969), we conduct this causality test using the following equations:

$$\Delta \text{Foreignshareholder}_{j,t} = \alpha + \beta_1 \Delta \text{Dividendyield}_{j,t-1} + \beta_2 \Delta \text{OREC}_{j,t-1} + \emptyset \text{Controls} + \varepsilon_{j,t-1}$$

$$\Delta \%\text{Foreignshares}_{j,t} = \alpha + \beta_1 \Delta \text{Dividendyield}_{j,t-1} + \beta_2 \Delta \text{OREC}_{j,t-1} + \emptyset \text{Controls} + \varepsilon_{j,t-1}$$

where all variables, including the vector of control variables, are defined as in our previous analysis. These leads-lags tests are in line with those in Aggarwal et al. (2011). If foreign institutional investors play an active role in inducing firms to pay higher dividends, the annual change in our foreign ownership indicators can be expected to be positively associated with the change in the dividend yield (the outcome model). In contrast, if firms that proactively pay high dividends will attract more foreign shareholders, the increase of dividend yield would lead to subsequent increase of foreign shareholdings (the substitution model). Table 5 Panel A partially supports the outcome model, indicating that when the firm has a foreign institutional investor for the first time, it will pay more dividends subsequently. In contrast, Table 5 Panel B partially supports the substitution model. We find that increases in dividend yields lead to subsequent increases of the proportion of foreign shares, while the opposite is not true. The results (not reported) are similar when using the non-Greater China definition of foreign shareholders. Combined, our causality tests suggest that both the outcome model and the substitution model are relevant in explaining the association between foreign shareholding and dividend policy of Chinese listed firms. The outcome model is valid when Chinese listed firms have foreign institutional investors for the first time.

…Insert Table 5 around here…

6. Conclusion and discussion

This study investigates the relationships among dividend policy, foreign ownership, and expropriation of minority shareholders in Chinese listed firms during the period 2003-2006, when expropriation through inter-corporate loans was rampant in China. We find a negative association between dividends and expropriation by controlling shareholders through inter-corporate loans, which is consistent with the literature that poor corporate governance (here represented by expropriation through inter-corporate loans) is associated with lower dividends. Moreover, we find a significant positive association between foreign ownership and dividends in Chinese listed firms. Qualified Foreign Institutional Investors in China are investors who have gone through an application process to obtain a special permission to invest in domestically listed Chinese firms, most of which are state-controlled. Possibly the skewed power balance that results from this system makes foreign minority shareholders liable to assume a passive role in corporate governance. If so, our results support the relevance of the substitution model of dividend policy in emerging markets, with important implications for firms that wish to raise finance from poorly protected outsiders. Other things equal, firms can attract foreign institutional investment through the signaling value of their dividend policy.

As foreign portfolio investment in China can be expected to continue to grow in pace with the steady liberalization of the Chinese capital markets and play an increasingly important role in the Chinese corporate governance system, future research should expand and update the dataset used in this study and examine more comprehensively the linkages between foreign ownership and the performance and policies of Chinese listed firms.

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Table 1. Descriptive statistics

Panel A: Total sample (N=4960)

	Mean	Median	SD	Max	Min
Dividend yield	0.075	0.011	0.111	0.500	0.000
OREC	0.070	0.026	0.116	0.620	0.000
Foreign shareholder	0.117	0.000	0.321	1.000	0.000
% Foreign shares	0.002	0.000	0.009	0.206	0.000
Market to book	2.537	1.994	2.619	24.091	-2.966
Firm size	7.414	7.334	1.003	11.017	4.999
Cash flow	0.150	0.122	0.113	0.561	0.002
ROE	0.031	0.058	0.281	1.038	-1.670
Leverage	0.560	0.551	0.265	1.964	0.084
Intangible assets	0.036	0.018	0.051	0.283	0.000

Panel B: Comparison of dividend-paying firms and non-dividend-paying firms (N=4960)

	Paying firms (Dividends>0; N=2508)			*Non-paying firms (Dividends=0; N=2452)*			*Mean differences (t-statistic)*
	Mean	Median	SD	Mean	Median	SD	
Dividend yield	0.148	0.100	0.116	0.000	0.000	0.000	
OREC	0.026	0.013	0.037	0.115	0.059	0.147	29.870***
Foreign shareholder	0.171	0.000	0.376	0.062	0.000	0.240	-11.950***
% Foreign shares	0.003	0.000	0.009	0.001	0.000	0.007	-8.380***
Market to book	2.334	1.979	1.457	2.745	2.014	3.409	5.552***
Firm size	7.720	7.620	0.994	7.101	7.061	0.911	-24.029***
Cash flow	0.178	0.148	0.120	0.121	0.099	0.098	-18.816***
ROE	0.096	0.083	0.061	-0.036	0.020	0.383	-16.969***
Leverage	0.486	0.502	0.181	0.636	0.607	0.312	20.777***
Intangible assets	0.027	0.015	0.038	0.046	0.023	0.060	13.687***

*, **, *** denote significance at the 5%, 1%, and 0.1% levels, respectively. The sample period is 2003-2006.

Table 2. Correlations

	1	2	3	4	5	6	7	8	9	10
1. Dividend yield	1.000									
2. OREC	-0.288 ***	1.000								
3. Foreign shareholder	0.206 ***	-0.117 ***	1.000							
4. % Foreign shares	0.165 ***	-0.081 ***	0.601 ***	1.000						
5. Market to book	-0.027	0.099 ***	-0.022	-0.013	1.000					
6. Firm size	0.298 ***	-0.348 ***	0.306 ***	0.206 ***	-0.182 ***	1.000				
7. Cash flow	0.256 ***	-0.256 ***	0.013	-0.002	0.000	-0.059 **	1.000			
8. ROE	0.215 ***	-0.181 ***	0.070 ***	0.054 ***	-0.342 ***	0.091 ***	0.114 ***	1.000		
9. Leverage	-0.231 ***	0.489 ***	-0.052 ***	-0.019	0.006	-0.041 **	-0.336 ***	0.010	1.000	
10. Intangible assets	-0.144 ***	0.143 ***	-0.050 ***	-0.007	0.046 **	-0.194 ***	-0.165 ***	-0.060 ***	0.073 ***	1.000

*, **, *** denote significance at the 5%, 1% and 0.1% levels, respectively.

Table 3. Determinants of dividend policy

Dependent variables	Dividend yield		Dividend payer	
Estimation method	Random tobit		Random probit	
Sample	1291 firms		1291 firms	
	Model 1	*Model 2*	*Model 3*	*Model 4*
OREC	-0,815***	-0,813***	-9,076***	-9,055***
Foreign shareholder	0,018**		0,224*	
% Foreign shares		0,768**		9,352*
Market to book	0,004**	0,004**	0,040*	0,040*
Firm size	0,061***	0,061***	0,745***	0,752***
Cash flow	0,199***	0,199***	1,974***	1,963***
ROE	0,525***	0,527***	4,810***	4,828***
Leverage	-0,304***	-0,307***	-3,860***	-3,889***
Intangible assets	-0,261***	-0,265***	-4,407***	-4,485***
Year dummies	Included	Included	Included	Included
Industry dummies	Included	Included	Included	Included
Wald chi-square statistic	1376,21***	1378,01***	587,62***	584,93***
nr, Observations	4960	4960	4960	4960

*, **, *** denote significance at the 5%, 1% and 0,1% respectively. See Table 1 for variable definitions. The sample period is 2003-2006.

Table 4. Robustness checks

Panel A: Determinants of dividend policy (overseas QFII)

Dependent variables	Dividend yield		Dividend payer	
Estimation method	Random tobit		Random probit	
Sample	1291 firms		1291 firms	
	Model 5	*Model 6*	*Model 7*	*Model 8*
OREC	-0,814***	-0,813***	-9,060***	-9,033***
Foreign shareholder	0,020**		0,266*	
% Foreign shares		1,159***		22,333**
Market to book	0,004**	0,004***	0,039*	0,038*
Firm size	0,061***	0,061***	0,745***	0,743***
Cash flow	0,199***	0,200***	1,968***	1,969***
ROE	0,526***	0,527***	4,809***	4,791***
Leverage	-0,305***	-0,306***	-3,864***	-3,846***
Intangible assets	-0,262***	-0,262***	-4,417***	-4,412***
Year dummies	Included	Included	Included	Included
Industry dummies	Included	Included	Included	Included
Wald chi-square statistic	1378,95***	1385,99***	588,90***	591,84***
nr, Observations	4960	4960	4960	4960

*, **, *** denote significance at the 5%, 1% and 0,1% respectively. *Foreign shareholder* is a dummy equal to one if at least one of the largest ten shareholders is foreign (***excluding*** Hong Kong and Taiwan) and zero otherwise; identified via QFII (Qualified Foreign Institutional Investor) database; *% Foreign shares* is the proportion of shares held by foreign shareholders identified above. See Table 1 for other variable definitions. The sample period is 2003-2006.

Panel B: Tobit and probit models without random effects

Dependent variables	Dividend yield		Dividend payer	
Estimation method	Fixed tobit		Fixed probit	
Sample	1291 firms		1291 firms	
	Model 9	*Model 10*	*Model 11*	*Model 12*
OREC	-1,024***	-1,021***	-7,614***	-7,600***
Foreign shareholder	0,023***		0,191**	
% Foreign shares		0,960***		5,058**
Market to book	0,003**	0,003**	0,017	0,019
Firm size	0,050***	0,051***	0,439***	0,449***
Cash flow	0,227***	0,228***	1,526***	1,514***
ROE	0,569***	0,569***	3,647***	3,651***
Leverage	-0,262***	-0,264***	-2,293***	-2,316***
Intangible assets	-0,276***	-0,284***	-3,047***	-3,093***
Year dummies	Included	Included	Included	Included
Industry dummies	Included	Included	Included	Included
Wald chi-square statistic	2963,54***	2968,17***	2362,17***	2359,53***
nr, Observations	4960	4960	4960	4960

*, **, *** denote significance at the 5%, 1% and 0,1% respectively. See Table 1 for variable definitions. The sample period is 2003-2006.

Panel C: Alternative measures of dividend policy

Dependent variables	Dividend payout		Dividend/total assets	
Estimation method	Random tobit		Fixed effects tobit	
Sample	1291 firms		1291 firms	
	Model 13	*Model 14*	Model15	Model 16
OREC	-21,795***	-21,740***	-1,304***	-1,301***
Foreign shareholder	0,229		0,012	
% Foreign shares		19,677**		1,240***
Market to book	0,342***	0,341***	0,031***	0,031***
Firm size	1,232***	1,216***	0,087***	0,086***
Cash flow	6,109***	6,098***	0,410***	0,410***
ROE	9,887***	9,865***	0,969***	0,967***
Leverage	-8,104***	-8,096***	-0,693***	-0,692***
Intangible assets	-9,804***	-9,899***	-0,485***	-0,490***
Year dummies	Included	Included	Included	Included
Industry dummies	Included	Included	Included	Included
Wald chi-square statistic	1004,07***	1009,10***	1651,62***	1661,15***
nr, Observations	4960	4960	4960	4960

*, **, *** denote significance at the 5%, 1% and 0,1% respectively. Dividend payout is calculated by common dividends over net earnings. See Table 1 for other variable definitions. The sample period is 2003-2006.

Table 5: Causality tests

Panel A: Regression of changes in foreign shareholding on changes of dividend

Dependent variables	Δ Dividend yield	
Estimation method	Random OLS	
Sample	1291 firms	
	Model 17	*Model 18*
Δ OREC	0,019**	0,020**
Δ Foreign shareholder	0,012**	
Δ % Foreign shares		0,234
Δ Market to book	0,001***	0,001***
Δ Firm size	0,004	0,004
Δ Cash flow	0,099***	0,099***
Δ ROE	0,015***	0,016***
Δ Leverage	-0,030***	-0,031***
Δ Intangible assets	0,038	0,035
Year dummies	Included	Included
Industry dummies	Included	Included
Within group R-square	0,012	0,011
Between group R-square	0,124	0,120
nr, Observations	4756	4756

*, **, *** denote significance at the 5%, 1% and 0,1% respectively. See Table 1 for variable definitions. The sample period is 2003-2006.

Panel B: Granger causality tests

Dependent varaibles	Δ Foreign shareholder	Δ %Foreign shares
	Model 19	*Model 20*
Δ Foreign shareholder $_{t-1}$	0,446***	
Δ % Foreign shares $_{t-1}$		-0,154**
Δ Dividend yield $_{t-1}$	0,248	0,003***
Δ OREC $_{t-1}$	-0,243	*0,002***
Δ Market to book $_{t-1}$	0,038**	0,000**
Δ Firm size $_{t-1}$	1,029***	0,002***
Δ Cash flow $_{t-1}$	0,881**	0,002
Δ ROE $_{t-1}$	0,293**	0,00**
Δ Leverage $_{t-1}$	-1,456***	-0,002***
Δ Intangible assets $_{t-1}$	-0,807	-0,001
Year dummies	Included	Included
Industry dummies	Included	Included
(Pseudo) R-squares	0,097	0,030
Estimation method	Random probit	Random regression
Nr. Observations	4567	4567
Sample	1276 firms	1276 firms