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ARTICLE

Multiple Large Shareholders, Identity, and Corporate Tax Avoidance

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Abstract
In recent years, the variation in firms' tax-avoidance behavior has attracted a lot of attention, both theoretically and empirically. This study investigates the governance role of multiple large shareholders in firms' tax-avoidance behavior, using a sample of Chinese state-controlled listed firms over the period 2004–2016. We find that the ownership stake of a firm's largest shareholder is negatively associated with tax avoidance among state-controlled firms. Second, other large non-state shareholders negatively affect tax avoidance of state-controlled firms. The former effect is particularly strong when the local government is the controlling shareholder. Finally, differences in institutional quality influence the largest shareholder's tendency to engage in tax avoidance in state-controlled firms. For state-controlled firms, a better institutional environment elicits more tax avoidance and thus curtails minority-investor expropriation.

摘要
近年来，企业税收筹划行为的演变吸引了理论研究和实证研究的广泛关注。本文选取 2004 年至 2016 年中国国有控股上市公司为研究对象，深入分析了多个大股东在企业税务筹划中的治理作用。研究发现，国有控股企业第一大股东的持股比例与税收筹划行为呈显著的负相关关系。其次，其他非国有性质的大股东对国有控股企业的税收筹划行为也有抑制作用，特别是当控股股东为地方政府时，该效应更为突出。研究还发现，不同的制度环境质量对国有控股企业第一大股东实施税务筹划的倾向产生影响，良好的制度环境促进了国有企业的税收筹划行为，从而降低了对中小投资者权益的侵占。

Keywords: agency conflicts; identity; multiple large shareholders; state control; tax avoidance
关键词: 多个大股东结构; 股东性质; 税收筹划; 代理冲突; 国有控制

Introduction

In recent years, the variation in firms' tax-avoidance behavior has attracted a lot of attention, both theoretically and empirically.[1] Tax avoidance, by definition, is the reduction of explicit taxes, which reflects that the firm is able to avoid paying taxes on the income that it should report to shareholders through all means (see Dyreng, Hanlon, & Maydew, 2008; Hanlon & Heitzman, 2010). Reviewing the empirical tax literature, Shackelford and Shevlin (2001) point out that insider control and other organizational factors are important, but under-studied, determinants of tax avoidance. Similarly, Hanlon and Heitzman (2010) call for more studies on the determinants of tax-avoidance behavior within an agency framework, as the underlying theory is neither well developed nor sufficiently incorporated into empirical research to date. We provide a concrete response to this call by focusing on the role of multiple large shareholders (MLS) in the tax avoidance practices of Chinese-listed state-controlled firms.

China is the largest emerging economy in the world, and the largest firms remain state-controlled in the country. The scale of China's economic growth has increased the global profile and attraction of the state capitalist model (Milhaupt & Zheng, 2015; Wright, Wood, Musacchio, Okhmatovskiy, Grosman, &

Doh, 2021). Indeed, in China, state-owned enterprises (SOEs) are estimated to contribute 23–28% of the national GDP (Zhang, 2019). Therefore, China provides an interesting backdrop for examining the impact of MLS on tax avoidance because the Chinese government, either central or local, still controls many listed firms in an environment that only weakly protects minority investors' rights (Allen, Qian, & Qian, 2005; Chen, Khan, Yu, & Zhang, 2013; Jiang, Lee, & Yue, 2010). The conflicts of interest between the state as the controlling shareholder and minority investors are likely to be especially pronounced in a tax setting, given that the dominant owner in these firms is also the tax claimant. Thus, the decision not to engage in (or limit) tax avoidance serves the government's best interests, as it will then receive the entire tax amount paid in taxes, instead of having to share (part of) it with the firm's minority investors when avoiding tax. Overall, in Chinese-listed SOEs, taxes are an implicit dividend to the controlling shareholder, and *less* tax avoidance is a tunneling practice, i.e., a transfer of resources that benefits controlling shareholders at the expense of minority shareholders (Bradshaw, Liao, & Ma, 2019; Solarino & Boyd, 2020).

Ownership by MLS exists not just in China.[2] Typically, a shareholder is categorized as 'large' if his direct and indirect voting rights equal at least 5% (e.g., Bharath, Jayaraman, & Nagar, 2013; Edmans, Fang, & Zur, 2013) or 10% (e.g., Shleifer & Vishny, 1986). Thus, a firm with MLS has at least two shareholders, controlling at least 5% (10%) of its voting rights. We refer to a firm's multiple major shareholders, apart from the largest one, as 'other MLS'. Empirical research to date has shown that MLS can play an effective governance role, such as a positive effect on a firm's market value, suggesting a reduction in minority-investor expropriation when firms have several contestable blockholders (Attig, El Ghoul, & Guedhami, 2009; Boateng & Huang, 2017; Jiang, Cai, Wang, & Zhu, 2018; Laeven & Levine, 2007; Maury & Pajuste, 2005).[3] In contrast, a number of other studies, especially on firms in Asia, have revealed a negative effect. While Faccio, Lang, and Young (2001) find that the presence of MLS increases the dividend payout ratio and constrains minority-investor expropriation in European-listed firms, they also show that it reduces the dividend payout ratio and increases collusion with the firm's largest shareholder in Asian listed firms. Similarly, Fang, Hu, and Yang (2018) show that the presence and power balance of MLS in listed Chinese firms are positively associated with excess executive compensation. Thus far, the evidence regarding the governance effects of MLS has not been unidirectional. In line with these mixed empirical findings, theorists have offered contrasting explanations for the role of MLS, i.e., monitoring versus collusion. According to one view, MLS monitor not only managers but also each other, thereby enabling better decision-making (e.g., Shleifer & Vishny, 1986, 1997). The other perspective, however, is that MLS collude with each other to expropriate value from the firm's minority investors (e.g., Pagano & Röell, 1998). However, the circumstances causing the prevalence of either of these two effects are not clear. In addition, a large fraction of Chinese-listed firms consists of both state and non-state large shareholders; however, prior empirical research has paid little attention to MLS heterogeneity and its effects on corporate decisions.[4] We are, therefore, interested in whether and how MLS influence a firm's tax-avoidance behavior in a study that accounts for differences in the identity of the firm's largest vs. other large shareholders. To develop our hypotheses, we rely on a principal–principal agency framework. As concentrated ownership strengthens management oversight, it reduces the magnitude of principal–agent problems[5], but may increase expropriation risk for minority investors.

Using data on Chinese-listed SOEs over the period 2004–2016, we test the governance role of MLS in firms' tax-avoidance behavior. We find that the stake held by the largest shareholder is negatively associated with tax avoidance in state-controlled firms. Next, the effect of other non-state MLS is negative, while that of other state-related MLS is neutral, on tax-avoidance practices in state-controlled firms. The former relationship is particularly strong when the largest shareholder is the local government. Finally, a better institutional environment curbs the largest shareholders' tendencies to rebuff tax avoidance in state-controlled firms. Hence, our study may also help explain why empirical research on the effects of MLS reveals conflicting results for Asia and Europe, considering that the protection of investor rights is generally more developed in Europe than in Asia.

Our study contributes to the growing literature on the governance role of MLS by examining their influence on tax-avoidance practices. First, while prior research has examined the effects of MLS on a firm's market value (Maury & Pajuste, 2005), the value of cash holdings (Attig, El Ghoul, Guedhami, &

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Rizeanu, 2013), corporate risk-taking (Mishra, 2011), and corporate investment efficiency (Jiang et al., 2018), among others, the joint impact of the largest, and other major shareholders on a firm's tax-avoidance practices has not been investigated as of now. Our study highlights that the proportion of voting rights controlled by the dominant owner significantly influences tax avoidance in state-controlled listed firms. Moreover, we integrate the fraction of voting rights controlled by other MLS into our analysis. As *lower* tax avoidance benefits the controlling shareholder in state-controlled firms but also represents wealth expropriation from the non-state shareholders, our results imply that other non-state MLS collude with the largest shareholder in state-controlled firms and, hence, do not insist on minimizing the tax bill, thereby exacerbating the principal–principal conflict of interest with minority investors in a tax setting. Arguably, this study is among the first to reveal that other non-state large shareholders may collude with the largest shareholders in Chinese-listed SOEs to engage in less tax avoidance. Notably, in contrast to previous studies on ownership structure and tax avoidance, such as Richardson, Wang, and Zhang (2016) and Ouyang, Xiong, and Huang (2020), which focus on *non-tax* costs, we study the separate effects of the largest state shareholders and other non-state large shareholders on the *tax cost* of tax avoidance.[6] Indeed, the nature of the expected costs related to tax avoidance is often not well defined, and researchers typically study the specific components of such costs in isolation (Wilde & Wilson, 2018). In particular, contrary to the findings of Ouyang et al. (2020), we provide new evidence on the collusion role of MLS, considering shareholder heterogeneity, because distinct types of owners have diverse objectives and motivations (Chen, Firth, & Xu, 2009; Chen, Tang, Wu, & Yang, 2021; Tang, 2020; Ye, Hou, & Huang, 2018). Second, unlike Lin, Tsai, Imamah, and Hung (2016), our results point out that it is not so much the difference in identity between the dominant and other large shareholders that matters. Indeed, other MLS may behave like controlling shareholders even when they have a different identity. Nonetheless, we find that institutional improvements can help reduce minority investors' expropriation. Overall, our study offers an important contribution to two timely topics: state versus non-state ownership of the corporate sector, and the taxing capabilities of the state, particularly in the context of emerging economies, where debt is rising due to COVID-19 policy measures.

Institutional Background

Corporate Taxation

Corporate income tax constitutes the second-largest source of tax revenue in China, next only to value-added tax (VAT). For instance, corporate income tax and VAT accounted for 22% and 39%, respectively, of the total tax revenues in 2017. However, VAT is levied on the sale of goods or services, and there exists limited scope for firms to avoid it, or for tax authorities to time its collection (Chen et al., 2021; Ye et al., 2018). In contrast, income tax is more complex in terms of both reporting and collection (Chen et al., 2021). Additionally, income tax administration and enforcement in China can be subjective, because of the considerable leeway offered by tax laws and rules (Chen et al., 2021), which provide more opportunity for tax avoidance (Ye et al., 2018).

Notably, the average effective income tax rate for Chinese-listed firms from 1994 to 2017 was 19.25%, which was not only much lower than the statutory income tax rate of 33% before the implementation of the new corporate income tax law in 2008, but also lower than the statutory tax rate of 25% after 2008 (Ye et al., 2018), indicating the possibility of corporate tax avoidance. Empirical evidence shows that the main mechanisms of corporate tax avoidance in China include location migration, income shifting through transfer mispricing, intertemporal income shifting through accrual management, and consumption bribery (Tang, 2020). Indeed, it has been shown that Chinese-listed firms reduce their tax burden primarily by taking advantage of preferential tax policies rather than aggressive tax-avoidance strategies (Tang, 2020; Ye et al., 2018). More precisely, China offers preferential tax rates to domestic firms operating in designated industries and zones, such as for firms qualifying as key software enterprises (10%), high- and new-technology enterprises (15%), and firms registered in Western China, with their main business encouraged by the government (15%).

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Additionally, firms acquiring the status of startup software enterprises can obtain a full tax exemption in the two years following their first profitable year (and a 50% reduction in the subsequent three years). In other words, tax-avoidance practices in Chinese-listed firms could be related to legal behavior.

Overall, China's unique institutional background and its position as the world's second-largest economy provide excellent opportunities to research tax-avoidance activities that the US setting cannot, for instance, the dual role of the government as a tax claimant and the controlling shareholder of SOEs, and the impact of different ownership types on the magnitude and mechanisms of tax avoidance (Tang, 2020). By focusing on the role of MLS and considering identity heterogeneity in tax-avoidance practices of Chinese-listed SOEs, our study attempts to expand the boundary of tax-avoidance studies in the Chinese context.

Ownership Structure of Chinese-Listed Firms

Prior to the major reforms in the mid-1980s, state ownership was the dominant form of corporate ownership in China. In 1990 and 1991, the Shanghai and Shenzhen stock exchanges were (re-)established and ownership reforms accelerated. However, the privatization of SOEs via these exchanges did not entail complete ownership of those firms by private investors. Instead, the state and its agencies continued to control a substantial fraction of the outstanding shares of newly listed firms (see Huyghebaert & Quan, 2009).

In addition, before the split-share reform was introduced in 2005, not all A-shares of publicly listed firms could be traded on the stock exchange. Nontradable A-shares could indeed change hands only after negotiations between the buying and selling parties. Moreover, the responsible authorities were required to approve the transfer of state-controlled nontradable shares. In 2005, a split-share reform was initiated to dismantle this dual-share structure. Instead of directly selling nontradable shares to institutional and retail investors, the reform aimed at converting nontradable shares into legitimate tradable shares after the payment of a negotiated consideration to the owners of the tradable shares.[7] Li, Wang, Cheung, and Jiang (2011) show that the average compensation involved a transfer of about 30% of the nontradable shares to the subsequent owners. To stabilize the stock market, each firm's reform plan had to include a compulsory lock-in period of 12 months for formerly nontradable shares. An owner of formerly nontradable shares could not sell more than 5% (10%) of their outstanding shares within 12 (24) months after the expiry of the lock-in period. Over time, because of the ensuing stock transfers, other shareholders were able to build up a stake of at least 5%; hence, an increasing number of listed Chinese firms obtained MLS ownership.

In November 2013, the central authority discussed the idea of deepening ongoing ownership reforms. In September 2015, new guidelines aimed at accelerating the restructuring of SOEs presented the mixed-ownership reform as the most important instrument for boosting SOE efficiency. Non-state-controlled firms were encouraged to join the process through various means, including buying stocks and convertible bonds from SOEs or conducting stock swaps with SOEs. Overall, the latter reform paved the way for listed firms to acquire MLS ownership.

Weak Institutional Context

In developed economies, with ownership and control being separated, the dominant conflict of interest in listed firms occurs between managers and shareholders (e.g., Jensen & Meckling, 1976). In emerging economies, weak institutional environments make contract enforcement more difficult and costly, which often entails ownership concentration. However, combined with poor external governance mechanisms, concentrated ownership frequently provokes conflicts of interest between large shareholders and minority investors in listed firms (e.g., Dharwadkar, George, & Brandes, 2000; Morck, Wolfenzon, & Yeung, 2005; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). Major shareholders can exercise their power to divert corporate resources from a listed firm, to the detriment of the firm's minority investors (Shleifer & Vishny, 1997; Young et al., 2008). Publicly listed firms in China typically have a major owner who

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can appoint and monitor management and simultaneously wield the power to tunnel wealth away from the firm's minority investors. As the property rights of stock market investors in China are generally not well protected owing to weak legal enforcement, dominant owners may find it worthwhile engaging in self-dealing transactions (e.g., Huyghebaert & Wang, 2012). Controlling shareholders in Chinese-listed firms tend to extract wealth by selling or buying goods or services at non-market prices, transferring company assets to other firms under their control, obtaining loans at preferential terms, and acquiring additional shares at discounted prices (Berkman, Cole, & Fu, 2009; Cheung, Rau, & Stouraitis, 2006; Jiang et al., 2010; Liao, Liu, & Wang, 2014).

Nonetheless, China has gradually implemented reforms over time, albeit with a continued role for the government in business and capital allocation. In recent years, the quality of institutions has improved significantly. Additionally, several scholars have highlighted that China's market environment and legal institutions vary significantly across provinces and municipalities (e.g., Huyghebaert & Wang, 2012; Wang, Wong, & Xia, 2008). The poor level of law enforcement in many regions can be attributed, at least in part, to a lack of qualified law professionals. Moreover, the Chinese judicial system is still treated as a part of the (local) government's administrative system, with no officially adopted doctrine for the separation of power. Unsurprisingly, prior research has revealed that conflicts between public and private interests are commonly resolved in favor of the former (see Jiang et al., 2010).

Hypotheses Development

In this section, we develop our hypotheses on the role of MLS in the tax-avoidance practices of Chinese-listed firms. To this end, we adopt a principal–principal agency perspective for state-controlled listed firms. In addition, we consider that Chinese-listed firms, regardless of the identity of their dominant owner, can have both state and non-state large shareholders.

Tax avoidance involves withholding resources from the government, thereby retaining those within the firm, which can then be used to enhance firm value (Shackelford & Shevlin, 2001; Wang, Xu, Sun, & Cullinan, 2020). Prior studies on tax avoidance generally view it as a form of value-creation behavior designed to maximize shareholder wealth (Shackelford & Shevlin, 2001; Wang et al., 2020). In the absence of effective external governance mechanisms, concentrated ownership tends to entail conflicts of interest between major or controlling shareholders and stock market investors (Dharwadkar et al., 2000; Morck et al., 2005; Young et al., 2008). This problem is especially pronounced in state-controlled firms when considering tax-avoidance behavior. Acting as both the tax claimant and dominant owner in state-controlled firms, the state has limited incentives to engage in tax avoidance. Taxes paid by SOEs can represent the expropriation of minority shareholders by the controlling shareholders (the government) (Li, Liu, & Ni, 2017). Specifically, while tax savings resulting from tax-avoidance activities must be allocated between government and minority shareholders, they can be claimed in full by the former in the absence of tax-avoidance activities (see also Bradshaw et al., 2019; Li et al., 2017; Tang, 2020). Restraining tax avoidance can then be considered a transfer of cash (value) from state-controlled firms to the state. To put it differently, tax compliance enables the state to enjoy the full tax amount instead of having to share the sheltered cash flows with the firm's other shareholders (see also Li et al., 2017). In addition, state owners are frequently criticized for political intervention and their need to help achieve government objectives (Chen, Firth, et al., 2009). More precisely, the Chinese government depends mainly on SOEs to pay more taxes to generate sufficient fiscal revenues to realize social and political objectives (Chen et al., 2021). Prior studies provide evidence that SOEs have lower incentives for tax avoidance (see, e.g., Bradshaw et al., 2019; Li et al., 2017; Tang, 2020). In line with this view, empirical research shows that state-controlled listed firms are under political pressure to pay more taxes than their non-state-controlled counterparts (see, e.g., Bradshaw et al., 2019; Chan, Mo, & Zhou, 2013; Chan, Mo, & Tang, 2016; Li et al., 2017). In this study, we argue that a larger ownership stake held by the dominant (state) owner may increase his power in the firm and, hence, may allow him to pressurize the company and its management to limit tax-avoidance.

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The above arguments result in the following conjectures:

Hypothesis 1 (H1): In Chinese state-controlled listed firms, the ownership stake held by the largest (state) shareholder is negatively associated with tax avoidance.

Recent empirical research examines the governance role of other large shareholders in curtailing the tunneling behavior of dominant shareholders. From a monitoring perspective, other large shareholders can provide valuable outside monitoring of a firm's largest shareholder, thereby mitigating minority-investor expropriation. This strand of literature suggests that other large shareholders compete for control and, hence, scrutinize the controlling shareholder (Bolton & Von Thadden, 1998), thereby reducing information asymmetries and principal–principal conflicts of interest. In contrast, from a collusion perspective, other MLS may collude with the largest shareholder and agree to opportunistically share the ensuing private benefits (Pagano & Röell, 1998). Other MLS may even exacerbate the dominant owner's tunneling behavior, thereby intensifying information asymmetries and principal–principal conflicts of interest.

A scenario wherein smaller shareholders can easily form coalitions, or control the board of directors, may not apply to China (Chen, Firth, et al., 2009; Zhang, Gao, Guan, & Jiang, 2014). Indeed, it has been documented that the largest shareholder is generally able to control the firms listed in the Chinese stock market (Chen, Firth, et al., 2009). This is because large owners play a crucial role in the appointments, remuneration, and dismissals of managers (see also Firth, Fung, & Rui, 2006). In addition, dominant owners often directly affect board composition by nominating directors who are likely to represent their best interests (Cullinan, Wang, Wang, & Zhang, 2012). In Chinese state-controlled listed firms, other large non-state-related shareholders are likely to prefer the firm to pursue more tax avoidance, but may not be powerful enough to prevent the largest shareholder from abstaining from tax avoidance. The Chinese government, the context in our study, still controls significant portions of strategic resources and retains considerable power to approve projects and allocate resources (Bu & Roy, 2015; Guo, Sarkar, Zhu, & Wang, 2020; Ma & Yasir, 2023). Consequently, non-state MLS may collude with state owners for both opportunistic and fear-motivated reasons. More precisely, while the desire for access to government contracts and other preferential benefits motivates non-state shareholders to maintain an association with the state, they also do so out of fear of losing access to existing benefits or future business opportunities; that is, the state can use both 'carrots and sticks' to ensure that minority shareholders follow its preferences. Considering the power of the state, other non-state MLS may decide to collude with the controlling shareholder and try to realize certain private benefits in return (e.g., Cheng, Lin, & Wei, 2013; Redding, 1995). Based on prior research, other non-state MLS may gain from collusion through mechanisms, such as inter-company loans and guarantees (Berkman et al., 2009; Jiang et al., 2010), preferential pricing of their shares in IPOs, or subsequent rights issues (Chen, Jian, & Xu, 2009), etc. Additionally, as previously mentioned, the Chinese government is still highly influential in assigning key resources, including operating licenses and land (e.g., Wang, 2015). Therefore, the firm paying more taxes in return for the extra-private benefits may be more acceptable to other non-state MLS. For instance, Chen et al. (2021) show that Chinese firms demonstrating less tax avoidance in the post-turnover year secure more contracts and receive more subsidies from the government in the next period, highlighting the *quid pro quo* nature of higher tax payments associated with political turnover. As other non-state MLS control a larger fraction of voting rights, it is likely to be more difficult for the dominant owner to ignore them, and simpler to negotiate side benefits in exchange for their support. Therefore, we expect the probability of collusion to increase when other non-state blockholders hold a larger ownership stake.

In contrast, other large state-related MLS do not need to collude with the dominant owner in state-controlled listed firms to obtain (extra) benefits, as they can already take advantage of their ownership ties. Moreover, other large state-related shareholders may be less interested in maximizing shareholder value or allocating resources efficiently. Indeed, like the largest owners, they may care more about social welfare and political objectives, such as maximizing employment and wages. Thus, tax avoidance is unlikely to be prioritized.

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In sum, we posit the following conjecture:

Hypothesis 2 (H2): In Chinese state-controlled listed firms, the stake held by other non-state large shareholders is negatively associated with tax avoidance.

Prior literature found that the effect of state ownership largely depends on the type of 'state owner' (Wright et al., 2021). As argued above, the government plays a dual role as tax collector and dominant owner in state-controlled listed firms. Moreover, in China's political selection system, officials capable of growing local economies are rewarded with promotions (Chen et al., 2021); consequently, local governments have an incentive to seek ways to relax budget constraints. As local governments depend on local firms to generate sufficient fiscal revenue to realize their social and political objectives, they have a clear incentive to restrict their tax-avoidance activities. Specifically, SOEs play a major role in China because of the planned-economy legacy, and local leaders can influence local SOEs to raise fiscal revenue for infrastructure investment and urban development by restricting their tax-avoidance activities (Chen et al., 2021). In other words, local governments depend on local SOEs to pay more tax revenues as a source of funds to stimulate investment and economic growth. Additionally, local governments can directly influence the behavior of local state-controlled firms through activities, such as appointing executives and directors, subsequently inciting local SOEs to abstain from tax avoidance. For example, Bradshaw et al. (2019) show that higher SOE tax rates are associated with higher SOE manager promotion frequencies. Additionally, local governments have geographical advantages and lower communication costs when interacting with local state-controlled firms, which entail a stronger capacity to inhibit tax avoidance (see, for example, Bradshaw et al., 2019; Tang, Mo, & Chan, 2017). The latter argument is consistent with the idea that local authorities exert more influence than the central government (see also Cheung, Rau, & Stouraitis, 2010; Wang et al., 2008). Therefore, we expect the effect of the ownership stake of the largest shareholder on tax avoidance to be more pronounced for local state-controlled firms. Similar to the development of H2, considering the power of the state, other non-state MLS in local SOEs may also decide to collude with the controlling shareholder for opportunistic (e.g., Cheng et al., 2013; Redding, 1995) and fear-motivated reasons (Bu & Roy, 2015; Guo et al., 2020; Ma & Yasir, 2023). As other non-state large shareholders control a larger fraction of voting rights, it is more likely difficult for the dominant owner to ignore them and easier to negotiate side benefits in exchange for their support. Therefore, we expect the probability of collusion to increase when other non-state blockholders hold a larger ownership stake.

The above arguments result in the following conjecture:

Hypothesis 3a (H3a): The negative relationship between the stake of the largest shareholder and tax avoidance is particularly strong in Chinese listed firms controlled by a local-level government.

Hypothesis 3b (H3b): The negative relationship between the stake held by other non-state large shareholders and tax avoidance is particularly strong in Chinese listed firms controlled by a local-level government.

The relationship between MLS and tax avoidance is based on the principal–principal agency tension between dominant and minority investors. In emerging economies, the severity of minority-investor expropriation tends to depend on the quality of the institutional context, with a more developed legal system granting outside investors more power through the protection of their rights and the prohibition of self-dealing (Huyghebaert & Wang, 2012; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998). Thus, agency problems between large and minority shareholders should be less severe for firms located in regions with well-developed market institutions. When the quality of institutions improves, large shareholders should be less inclined to expropriate value from minority investors. In this respect, DeBacker, Heim, and Tran (2015) study how cultural norms and enforcement policies influence illicit corporate activities and find that listed firms with owners from countries with higher corruption norms evade more taxes in the US.

As rebuffing tax avoidance represents a form of tunneling behavior by the dominant owner in state-controlled firms, we expect state-controlled firms to engage in more tax avoidance if the market

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environment is more oriented toward protecting minority-investor rights. In addition, when the rule of law is effective, the costs of expropriation tend to exceed the benefits because of the low burden of proof and/or the serious penalties enclosed in the solid enforcement of the legal code (Huyghebaert & Wang, 2012). Correspondingly, it can also be expected that other non-state MLS will behave less like dominant owners in state-controlled firms, thus curbing the collusion effect (H2).

We therefore propose the following hypotheses:

Hypothesis 4a (H4a): The negative relationship between the stake of the largest shareholder and tax avoidance in Chinese state-controlled listed firms weakens as the institutional context improves.

Hypothesis 4b (H4b): The negative relationship between the stake of other non-state large shareholders and tax avoidance in Chinese state-controlled listed firms weakens as the institutional context improves.

Methods

Sample Selection and Data Sources

We first collected data on all Chinese firms listed on the Shanghai and Shenzhen stock exchange over the period 2004–2016. We downloaded accounting information from the Wind database, a leading financial database and software service provider in China. Information on each firm's statutory tax rate was obtained from the footnotes to its annual report, which was also available in the Wind database. The ownership and corporate governance data were retrieved from the China Stock Market and Accounting Research (CSMAR) databases.

Following Chan et al. (2016) and Li et al. (2017), we excluded 480 firm-year observations (2.11% of the initial sample) of financial industry firms. Similar to Jiang et al. (2018), we removed 102 firm-year observations (0.45%) for firms without a shareholder controlling at least 5% of the voting rights, as these firms cannot exhibit conflicts of interest between controlling and minority shareholders. We also discarded 7,605 firm-year observations (33.41%) for firms whose largest shareholder controls >50% of voting rights, as other shareholders lack the power to contest the largest owner for sure.[8] Next, we excluded 2,545 firm-year observations (11.18%) with negative pre-tax income. Similar to Chen, Chen, Cheng, and Shevlin (2010), Gupta and Newberry (1997), and Li et al. (2017), we excluded 4,454 (19.57%) and 2,863 (12.58%) firm-year observations with effective tax rates greater than one or less than zero, respectively. We removed 2,209 observations (6.18%) with missing values for the key variables of interest. Finally, we retained the sample of state-controlled listed firms. Our final sample included data on 702 listed firms for the period 2004–2016 (3,648 firm-year observations).

Chinese-listed firms are required to disclose their ten largest shareholders, as well as their relationships with the controlling shareholder, in their annual reports. Based on these disclosures, it is possible that the other large shareholders in a state-controlled firm are either state-controlled or not.[9] The controlling and related large shareholders are usually viewed as a single entity – that is, the control group – because they tend to share the same interests. Therefore, we manually collected data on these related shareholders and defined a large shareholder as one who controls at least 5% of the firm's outstanding shares, either directly or indirectly (using the aggregate ownership of that large shareholder and its related shareholders).

Variables and Empirical Specification

Tax-avoidance measures

To examine a firm's tax-avoidance behavior, we relied on a number of measures developed in the literature so far (see Hanlon & Heitzman, 2010).[10] First, we computed the effective tax rate (*ETR*) as the traditional GAAP ETR, which is the ratio of total income tax expenses to pre-tax accounting income (i.e., EBT, earnings before tax). Total income tax expenses are the sum of current income tax expenses and deferred tax expenses, if any. One limitation of this commonly used measure is that it does not

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distinguish tax savings from favorable tax treatment versus aggressive tax practices (Cen, Tong, & Sun, 2017; Tang et al., 2017). For example, a firm enjoying a low statutory tax rate will exhibit a low *ETR* even if it does not engage in any tax avoidance. To disentangle such effects, we constructed the variable *ETR_M*, which is the *ETR* divided by a firm's statutory tax rate. Hence, a lower *ETR_M* value indicates greater tax avoidance. Finally, as firms likely are concerned about the actual amount paid in taxes, we also computed the cash effective tax rate (*CETR*) as current income tax expenses minus end-of-the-year taxes payable plus start-of-the-year taxes payable, divided by pre-tax accounting income. For firms that did not report deferred tax assets or liabilities, we set these assets and liabilities to zero. We also computed *CETR_M* as *CETR* divided by a firm's statutory tax rate. Arguably, our above measures are to be considered *inverse* proxies for tax avoidance since a higher tax rate indicates a lower degree of tax avoidance.

Ownership structure and control variables

Due to the complexity of ownership chains, the nominal ranking of shareholders does not always accurately reflect the actual controlling and participatory roles. If a nominal shareholder maintains a 'concerted actor' relationship with the controlling shareholder, they are more likely to collaborate with the controlling shareholder and take the same actions when exercising voting rights to protect their own interests (Hao & Gong, 2017). Therefore, to ensure accuracy, learning from Hao and Gong (2017) and Jiang et al. (2018), among others, we manually grouped together large shareholders with mutual interests as a single entity. We then aggregated their shareholdings using financial statement disclosures related to affiliated parties. *LARGEST* is computed as the proportion of outstanding shares controlled by the firm's largest shareholder, either directly or indirectly. To identify the ultimate controller for each sample firm, we traced the ownership chains disclosed in the annual report. As we expect the identity of the firm's largest shareholder to influence its tax-avoidance practices, we categorized firms based on this identity. The dummy variable *D_STATE* equals one if the largest ultimate shareholder is a government agency, and zero, otherwise. *LOCAL* is defined as a dummy variable that equals one if the firm's largest shareholder is controlled by the local government or a state agency below the provincial level, and zero otherwise. Next, *OTHER_NONSTATE* is the sum of the ownership stake(s) held by other large (>5%) shareholders that have no relationship with the government, whereas *OTHER_STATE* is the sum of the ownership stake(s) held by other large (>5%) state-related shareholders. In our study, we used 5% as the cutoff to identify large shareholders and subsequently employed 10% in a robustness check.

Next, we added the following one-year lagged control variables to our models: *PROF* (=EBIT divided by total sales), *LOSS* (=dummy variable that equals one if net income is negative), *ACCRUAL* (=net income minus operating cash flow, divided by lagged total assets), *LEVERAGE* (=net debt divided by total assets), *GROWTH* (=difference between sales and lagged sales, divided by lagged sales), *SIZE* (=natural log of market value of equity), *AGE* (=number of years that the firm has been listed), *CROSS_LISTED* (=dummy variable that equals one if the firm has B/H shares or is cross-listed abroad), and *RIGHTS* (=dummy variable that equals one if the firm implements a rights offering in the subsequent year, and zero, otherwise).

Specifically, in our study, tunneling behavior (*less* tax avoidance) in SOEs is related to the government's incentive as a controlling shareholder. Government intervention is more prominent in transitional and developing economies (La Porta, Lopez-De-Silanes, & Shleifer, 1999; Stiglitz, 2010). Therefore, to measure the quality of the regional institutional environment, we first relied on a subindex from the NERI index, as published by the National Economic Research Institute. More precisely, we used the reduction in government size (less government intervention) in a Chinese province/municipality as a proxy for marketization progress across various Chinese regions (see also Fan, Wang, & Zhu, 2016). This marketization index has been widely used by previous studies examining a Chinese context (see, for example, Li et al., 2017, among others). In addition, we utilize the business environment index at the province level in China to measure the quality of the regional business environment established by Zhang and Zhang (2022). Specifically, we employ the first-level sub-indicator, the 'Government Environment Index,' which gauges the extent of market-orientation in the relationship between the government and all enterprises within a given region (representing the new type of government-business relationships), as well as government efficiency. For each sample firm in our

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study, we used the average annual index of the province or municipality where the firm's headquarters are located. The degree of a region's marketization is a proxy for the potential conflict between the tax claimant and the state-controlling shareholder of an SOE; and a high level of marketization suggests that a region has less government intervention in the capital market and/or a better institutional environment (Fan et al., 2016; Li et al., 2017).

Finally, to eliminate the impact of outliers, we winsorized all continuous variables at the 1% and 99% levels of their distributions Table 1.

Empirical specification

To examine the relationship between MLS and tax avoidance, we relied on the following panel data model.

$$\begin{aligned}\text{Tax Rate}_{i,t} = {} & \alpha + \beta\,\text{LARGEST}_{i,t-1} + \gamma\,\text{OTHER\_NONSTATE}_{i,t-1} + \lambda\text{OTHER\_STATE}_{i,t-1} \\ & + \eta\,\text{Control Variables}_{i,t-1} + \text{Industry Dummies} + \text{Year Dummies} + \varepsilon_{i,t-1}\end{aligned} \tag{1}$$

Industry- and year-fixed effects were included to control for industry-specific and time-invariant heterogeneity. We also clustered standard errors at the firm level (firm ownership variables are rather sticky, making it difficult to include firm fixed effects), and reported robust *p*-value.

Descriptive Statistics

Table 2 presents summary statistics for our main variables in listed Chinese SOEs. As displayed in Panel A, *ETR* has an average value of 21.89%. The mean *ETR_M* of 1.06 points out that a firm's ETR is, in general, larger than its statutory tax rate (see also Chen & Luo, 2015; Tian, Si, Han, & Bian, 2016); this is to be related to the stronger tax enforcement in more recent years. Next, the C*ETR* has a mean value of 23.62%; the average *CETR_M* of 1.16 further reveals that a firm's actual tax cash outflows are larger than its tax expenses reported in its financial accounts.

As for firms' MLS, the largest shareholder, on average, controls 33.26% of outstanding shares, either directly or indirectly. The average ownership stake of other non-state MLS was 5.38%, whereas the average stake held by other state MLS was 3.70%. Together, these numbers clearly indicate that the balance of power is tilted toward the firm's largest shareholder, making it interesting to study whether and how other MLS play a governance role. For the firm-level control variables, the average return on sales is 10.50%. The ratio of total accruals to lagged total assets averages −0.80%. The average debt ratio is 35.70%, whereas sales grow at an average rate of 21.40% per annum. The mean *SIZE* is 12.61, indicating an average market capitalization of RMB 30.01 billion (median of RMB 30.16 billion). On an average, the sample firms were listed for approximately 11.03 years. Of these, 12.10% are cross listed, whereas 0.80% implement rights offerings annually.

Panel B of Table 2 shows a univariate comparison of central and local state-controlled listed firms, considering the identity of their largest shareholder (corresponding to 1,114 and 2,534 firm-year observations, respectively). We conducted both a parametric *t*-test and a non-parametric Wilcoxon rank-sum test to investigate the significance of the differences between these two groups of firms. *ETR* and *CETR* differ significantly across the subsamples, with central state-controlled firms exhibiting a significantly lower ETR. The largest shareholder controls a larger proportion of voting rights in central state-controlled firms. Other non-state and other state MLS control a larger equity stake in central state-controlled firms. Finally, almost all the control variables are distributed significantly differently across the two subsamples.

Table 3 presents the correlation matrices of the main variables. The upper half of the table displays the results for the subsample of central state-controlled firms, and the lower half shows the results for local state-controlled firms. The largest correlation (0.389) arises between *SIZE* and *AGE* in the subsample of local state-controlled firms, suggesting that multicollinearity is unlikely to pose a problem in our study. Unsurprisingly, the variance inflation factor statistics never exceed five.

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Table 1. Definition of variables

Variable	Definition
Tax-avoidance measures (inverse proxies)	
ETR	Effective tax rate, measured as total income tax expenses divided by pre-tax accounting income (i.e., EBT)
ETR_M	The ratio of ETR to the firm's statutory tax rate
CETR	Cash effective tax rate, measured as current income tax expenses plus start-of-the-year taxes payable minus end-of-the-year taxes payable, divided by pre-tax accounting income.
CETR_M	The ratio of CETR to the firm's statutory tax rate
Multiple large shareholders	
LARGEST	The fraction of outstanding shares controlled by the largest shareholder, either directly or indirectly
D_STATE	Dummy variable that equals one if the firm's largest shareholder is a government agency, and zero otherwise
LOCAL	Dummy variable that equals one if the firm's largest shareholder is controlled by the local government or a state agency below the provincial level, and zero otherwise.
OTHER_NONSTATE	The sum of the fractions of outstanding shares controlled by other large non-state-related shareholders (each controlling at least 5%) at the end of year t
OTHER_STATE	The sum of the fractions of outstanding shares controlled by other large state-related shareholders (each controlling at least 5%) at the end of year t
Firm-level control variables	
PROF	The ratio of EBIT to total sales
LOSS	Dummy variable that equals one if net income in the previous year is negative
ACCRUAL	Net income minus operating cash flow, divided by lagged total assets
LEVERAGE	Net debt to total assets
GROWTH	The difference between sales and lagged sales, divided by lagged sales
SIZE	The natural logarithm of the market value of equity (in 10,000 RMB)
AGE	Number of years that the firm has been listed
CROSS_LISTED	Dummy variable that equals one if the firm has B/H shares or is cross-listed on a foreign exchange, and zero otherwise.
RIGHTS	Dummy variable that equals one if the firm implemented a rights offering the next year, and zero otherwise

Note: This table shows the definition of all variables used in this study.

Table 2. Descriptive statistics and univariate analysis

Panel A: Summary statistics for the full sample						
Variable	N_{obs}	Mean	Median	Std. Dev.	Minimum	Maximum
Tax-avoidance measures						
ETR	3,648	21.893	19.916	11.763	1.236	64.771
ETR_M	3,648	1.063	1.004	0.549	0.060	3.225
CETR	3,648	23.618	20.241	16.086	0.953	83.910
CETR_M	3,648	1.159	0.988	0.796	0.045	4.535
Multiple large shareholders						
LARGEST	3,648	33.257	34.000	10.170	10.650	49.600
LOCAL	3,648	0.695	1.000	0.461	0.000	1.000
OTHER_NONSTATE	3,648	5.378	0.000	9.711	0.000	41.460
OTHER_STATE	3,648	3.701	0.000	7.504	0.000	29.610
Firm-level control variables						
PROF	3,648	0.105	0.108	0.092	−0.087	0.472
LOSS	3,648	0.047	0.000	0.211	0.000	1.000
ACCRUAL	3,648	−0.008	−0.014	0.086	−0.214	0.349
LEVERAGE1	3,648	0.357	0.382	0.248	−0.546	0.805
GROWTH	3,648	0.214	0.143	0.394	−0.403	2.913
SIZE	3,648	12.612	12.617	1.195	9.995	15.457
AGE	3,648	11.034	11.000	5.312	0.000	22.000
CROSS_LISTED	3,648	0.121	0.000	0.326	0.000	1.000
RIGHTS	3,648	0.008	0.000	0.090	0.000	1.000

Panel B: Univariate analysis

	CENTRAL		LOCAL			
	Mean	Median	Mean	Median	*t*-test difference	Wilcoxon difference
Tax-avoidance measures						
ETR	20.015	17.394	22.715	21.257	−2.700***	−3.863***
ETR_M	1.059	0.989	1.065	1.008	−0.006	−0.019
CETR	21.814	17.913	24.407	21.207	−2.593***	−3.294***
CETR_M	1.168	0.995	1.155	0.983	0.012	0.012
Multiple large shareholders						
LARGEST	34.392	36.280	32.757	32.910	1.635***	3.370***
OTHER_NONSTATE	5.902	0.000	5.149	0.000	0.752**	0.000**
OTHER_STATE	4.261	0.000	3.445	0.000	0.816***	0.000**
Firm-level control variables						
PROF	0.102	0.108	0.107	0.108	−0.005	−0.000
LOSS	0.062	0.000	0.040	0.000	0.022***	0.000***
ACCRUAL	0.001	−0.005	−0.012	−0.018	0.013***	0.013***
LEVERAGE	0.326	0.358	0.371	0.397	−0.046***	−0.039***
GROWTH	0.220	0.155	0.211	0.135	0.009	0.021**
SIZE	12.823	12.814	12.520	12.551	0.303***	0.263***
AGE	10.204	10.000	11.400	12.000	−1.196***	−2.000***
CROSS_LISTED	0.124	0.000	0.120	0.000	0.004	0.000
RIGHTS	0.011	0.000	0.007	0.000	0.004	0.000
No. of observations	1,114	1,114	2,534	2,534	3,648	3,648

Notes: This table presents the descriptive statistics and univariate analysis for the dependent and explanatory variables. Panel A reports the summary statistics for the full SOE sample, whereas Panel B reports the univariate tests for central SOEs and local SOEs, respectively. We use a parametric *t*-test as well as a nonparametric Wilcoxon test to investigate the significance of differences between central state-controlled and local state-controlled firms. All variables in this table are defined in Table 1. ***, **, * denote significance at the 1%, 5%, and 10% levels, respectively.

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Table 3. Correlation matrix

	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1	ETR_M	**1.000*** **	0.623***	−0.016	−0.014	−0.018	−0.066**	−0.061**	0.073**	−0.083***	−0.018	0.077***	−0.021	−0.022
2	CETR_M	0.573***	**1.000*** **	0.045	−0.008	−0.035	−0.059**	−0.017	0.029	−0.015	0.009	0.009	−0.007	0.002
3	LARGEST	0.035*	0.027	**1.000*** **	−0.029	−0.200***	−0.039	0.029	0.018	0.045	0.007	−0.200***	0.018	0.003
4	OTHER_NONSTATE	0.007	−0.001	−0.050**	**1.000*** **	−0.111***	0.140***	−0.003	−0.057*	0.076**	0.022	−0.280***	0.251***	−0.025
5	OTHER_STATE	−0.034*	−0.022	−0.081***	−0.021	**1.000*** **	0.073**	−0.034	0.172***	0.013	−0.148***	−0.149***	−0.046	−0.046
6	PROF	−0.046**	−0.033	0.080***	0.113***	0.202***	**1.000*** **	−0.010	−0.110***	0.118***	0.090***	−0.221***	0.010	−0.045
7	ACCRUAL	−0.055***	0.018	−0.008	−0.031	−0.061***	−0.032	**1.000*** **	−0.118***	0.163***	0.066**	−0.069**	−0.075**	−0.022
8	LEVERAGE	0.157***	0.097***	−0.011	−0.057***	0.056***	−0.121***	0.006	**1.000*** **	0.060**	−0.022	0.145***	0.188***	0.046
9	GROWTH	−0.029	−0.027	0.034*	0.038*	0.047**	0.066***	0.032	0.119***	**1.000*** **	−0.029	−0.155***	0.014	0.014
10	SIZE	0.005	0.040**	−0.027	0.007	−0.135***	0.107***	0.122***	−0.122***	−0.019	**1.000*** **	0.287***	0.215***	0.024
11	AGE	0.019	0.013	−0.108***	−0.204***	−0.178***	−0.177***	0.051***	0.057***	−0.048**	0.389***	**1.000*** **	0.167***	0.024
12	CROSS_LISTED	−0.099***	−0.080***	0.049**	0.304***	−0.019	0.049**	−0.002	−0.055***	−0.025	0.132***	0.130***	**1.000*** **	−0.039
13	RIGHTS	−0.023	−0.022	−0.007	−0.038*	−0.033*	0.001	−0.018	0.028	0.021	0.024	0.003	−0.031	**1.000*** **

Notes: This table reports the pairwise correlation coefficients for the dependent variables and the test variables. The right-upper triangle presents the results for the subsamples of central state-controlled listed while the left-lower triangle shows the results for the local state-controlled listed firms, respectively. All variables in this table are defined in Table 1. ***, **, * denote significance at the 1%, 5%, and 10% levels, respectively.

Results

In this section, we examine how MLS affect a firm's tax-avoidance behavior, captured by *ETR_M* and *CETR_M*. To further investigate whether these relationships are shaped by the identity of the firm's largest shareholder and the institutional environment, we also examine the effect of these two moderating factors on firms' tax-avoidance practices.

Baseline Regression Results

Table 4 presents baseline regression results. We used OLS model learning from previous studies (see Bradshaw et al., 2019; Chen et al., 2021; Li et al., 2017). We also report the results for non-state-controlled listed firms to test our prediction within our principal–principal framework, that tax avoidance will not trigger conflicting interests between non-state large shareholders and the largest shareholder. The table is structured as follows. Columns (1) and (3) use *ETR_M*, while columns (2) and (4) use *CETR_M* as the dependent variable.

Table 4 shows that ownership stakes controlled by the firm's largest shareholder are negatively associated with tax avoidance in state-controlled listed firms. Thus, these findings provide empirical support for H1, emphasizing that not only does the identity of the largest shareholder matter, but also the ownership stake that he controls.

Other non-state-related MLS with larger ownership stakes are associated with lower tax avoidance in state-controlled firms, ceteris paribus. Therefore, this finding indicates that, as their stake in the firm increases, other non-state MLS tend to collude with the largest (state) shareholder in state-controlled firms at the expense of minority investors. Together, these findings empirically support Hypotheses 2, indicating the collusion effect of other non-state large shareholders. Second, other state-related MLS do not influence tax-avoidance practices in state-controlled firms. The latter findings are also in line with Hypotheses 2, arguing that the role of other large state-related shareholders is less pronounced.[11] As 33.19% of the state-controlled sample firms have such state blockholders, we can rule out that the limited presence of *OTHER _ STATE* MLS in our sample drives this insignificance of *OTHER_STATE*. Interestingly, and unlike Lin et al. (2016), the above findings allow us to infer that the difference in identity between the largest and other large shareholders does not matter so much when explaining a firm's tax-avoidance behavior. Rather, our results consistently indicate that other non-state MLS act as the largest (state) shareholders, regardless of whether this dominant owner is state-related. These results are economically significant. The coefficient of 0.003 on *LARGEST* (and *OTHER_NONSTATE*) for the state-controlled subsample implies that a one-standard-deviation increase in the largest shareholder's stake is associated with a 2.92% (and 2.18%) increase in the CETR relative to the mean for those firms.

As further empirical support, our supplemental test on non-state-controlled listed firms in Table 4 shows that the firm's largest shareholder provokes more tax avoidance in non-state-controlled firms, and other non-state-related MLS with a larger equity stake also add to tax avoidance in non-state-controlled firms, further supporting our argument that tax avoidance as a tunneling behavior toward minority investors is lesser in SOEs than in non-SOEs. More specifically, when the major/controlling shareholder is a non-state entity, he will consider taxes as representing a significant cost to the company and, therefore, deliberate a reduction in the cash flows available for disbursing dividends to (all) shareholders, thereby inciting the firm and its management to shun those cash outflows. Alternatively, tax avoidance can increase the cash flows that can be retained within a corporation, thereby enhancing corporate solvency and the firm's ability to resist financial risk (see also Hasan, Hoi, Wu, & Zhang, 2014). Hence, this large non-state shareholder may incite management to pursue all (legal) tax-avoidance opportunities, including aggressive ones. Because a larger ownership stake held by the largest (non-state) shareholder increases a firm's power, it may put more pressure on the company and its management to engage in tax avoidance. As other non-state MLS now share the same objective as the largest shareholder with the firm's minority investors in non-state-controlled listed firms, that is, the minimization of the tax bill, they may cooperate with the dominant owner to further reduce the firm's tax payments. As non-state investors' incentives to encourage tax avoidance are likely to increase with their ownership stake, a larger stake held by other MLS has a positive influence on tax avoidance.

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Table 4. Tax avoidance in Chinese-listed firms: Baseline regression model

	State		Non-state	
	ETR_M	CETR_M	ETR_M	CETR_M
	(1)	(2)	(3)	(4)
Intercept	1.126*** (0.000)	1.148*** (0.000)	1.694*** (0.000)	1.924*** (0.000)
Multiple large shareholders				
LARGEST	0.002* (0.052)	0.003** (0.011)	−0.001 (0.141)	−0.003*** (0.007)
OTHER_NONSTATE	0.002** (0.024)	0.003* (0.082)	−0.002*** (0.002)	−0.003*** (0.002)
OTHER_STATE	−0.000 (0.777)	0.000 (0.961)	0.002 (0.270)	0.002 (0.373)
Firm-level control variables				
PROF	−0.217** (0.040)	−0.082 (0.635)	−0.190* (0.091)	0.071 (0.685)
LOSS	0.083 (0.195)	0.051 (0.546)	0.068 (0.295)	−0.007 (0.929)
ACCRUAL	−0.460*** (0.000)	−0.135 (0.414)	−0.117 (0.201)	0.148 (0.301)
LEVERAGE	0.313*** (0.000)	0.308*** (0.000)	0.166*** (0.000)	0.215*** (0.000)
GROWTH	−0.073*** (0.000)	−0.074** (0.022)	−0.034* (0.099)	−0.057** (0.049)
SIZE	−0.010 (0.356)	−0.016 (0.307)	−0.043*** (0.000)	−0.039** (0.012)
AGE	0.000 (0.840)	−0.003 (0.308)	−0.002 (0.267)	−0.008*** (0.004)
CROSS_LISTED	−0.146*** (0.000)	−0.146*** (0.001)	0.001 (0.986)	0.058 (0.400)
RIGHTS	−0.172** (0.011)	−0.183 (0.201)	−0.146** (0.029)	−0.149 (0.195)
Adjusted *R*-squared	0.052	0.044	0.037	0.038
No. of observations	3,648	3,648	4,103	4,103

Notes: This table presents the results for the relationship between MLS and tax avoidance. We use *ETR_M* and *CETR_M* as inverse proxies for tax avoidance, while columns (1), (3) use *ETR_M* and columns (2), (4) use *CETR_M* as dependent variables, respectively. Regression models include industry and year fixed effects, clustering standard errors at the firm level. All variables in this table are defined in Table 1. *p*-values are reported in parentheses underneath coefficients. ***, **, * denote significance at the 1%, 5%, and 10% levels, respectively.

As mentioned previously, the ensuing conflicts of interest between the state as the controlling shareholder and minority investors are likely to be especially pronounced in a tax setting, given that the dominant owner in those firms is also the tax claimant. Tax avoidance will not trigger conflicting interests between non-state-owned largest shareholders and other blockholders from the tax-cost perspective. Specifically, when the major/controlling shareholder is a non-state entity, taxes are a significant cost to the company. In addition, other non-state MLS share the same objective with the largest shareholder as well as the firm's minority investors in non-state-controlled listed firms, that is, the minimization of the tax bill. Thus, the principal–principal agency conflict, regarding the cost of tax avoidance, applies only to SOEs.

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Regarding the control variables, we find that more profitable firms are associated with greater tax avoidance, regardless of the identity of their dominant owner. Overall, this result indicates that better-performing firms have more incentives and resources for engaging in tax avoidance. Generally, accruals have no effect. Next, leverage reduces, while growth increases the magnitude of tax-avoidance activities in both subsamples. A larger firm size and longer listing history also enhance tax avoidance, but only for non-state-controlled firms. State-controlled firms engage in greater tax avoidance when cross-listed. Regardless of their largest shareholders, firms concerned about meeting the minimum earnings threshold to issue new shares in future equity offerings pursue more tax-induced income shifting.

Further Analysis: Moderating Effects

Table 5 presents the results for the relation between MLS and tax avoidance in state-controlled listed firms regarding moderation effects. We use *ETR_M* and *CETR_M* as inverse proxies for tax avoidance, while columns (1), (3) use *ETR_M* and columns (2), (4) use *CETR_M* as the dependent variables, respectively. Panel A and Panel B augment the baseline regression model by incorporating the interactions between the independent variables and the first moderator *LOCAL* (i.e., level of state control) and the second moderator *INS_DEP* (i.e., institutional development using marketization index of Fan et al. (2016) or business environment index of Zhang and Zhang (2022)).

As shown in Table 5, the coefficient for the interaction term *LARGEST*LOCAL* is significantly positive in columns (1) and (3), which is in line with H3a that *less* tax avoidance is more pronounced in local SOEs when *ETR_M* is used as an inverse proxy for tax avoidance.[12] However, when using *CETR_M* as an inverse proxy for tax avoidance, the coefficient for the interaction term *LARGEST*LOCAL* does not show significance in columns (2) or (4). A plausible interpretation for this could be that the estimation required for the numerator of *CETR_M*, which is the actual income tax paid in cash, might introduce some bias. Specifically, although cash ETR, based on the actual cash paid as taxes, is believed to provide a more accurate representation of the firm's tax burden (Dyreng et al., 2008), it's worth noting that the actual income tax (cash) paid to tax agencies, which constitutes the numerator of *CETR_M*, is not explicitly revealed in the cash flow statements of Chinese-listed firms. Furthermore, Chinese-listed firms do not publicize their tax reports. As highlighted by Tang (2020) in her review of tax-avoidance research in China, researchers who utilize the cash ETR measure should exercise caution due to the necessity of estimating income tax paid. As such, this bias could potentially affect the accuracy when we use *CETR_M* as a measure for the dependent variable, thereby resulting in non-significant findings.

Conversely, the interaction term *OTHER_NONSTATE*LOCAL* does not significantly influence tax avoidance in either column. The non-significance of the interaction between independent variables and the first moderator may be partially due to the constraints in our data accessibility. Specifically, Chinese-listed firms are only mandated to disclose their ten largest shareholders, which limits our scope of analysis. Additionally, the observed insignificance may be due to potential confounding effects between the state-level variable *LOCAL* and *LARGEST*.

Regarding the institutional environment, the coefficient for the interaction term *LARGEST*INS_DEP* is significantly negative in column (1), (3) and (4). This result aligns with our H4a that the propensity of the largest shareholder to abstain from tax avoidance is *less* pronounced for state-controlled firms located in regions where the local government leans more toward market-orientation. Conversely, the coefficient for the interaction term *LARGEST*INS_DEP* presented in column (2) does not exhibit significance. Similarly, the coefficients for the interaction term *OTHER_NONSTATE*INS_DEP*, as displayed in either column, also lack statistical significance. The lack of significant empirical results for certain interaction terms regarding the institutional environment might be attributed to several factors. One possible explanation is the constraints of *CETR* as the dependent variable as previously discussed. Another potential reason could be the inherent limitations of the marketization index being used and constraints in our data accessibility.

In summary, the interaction effects between the largest shareholder (*LARGEST*) and the two moderating variables are consistent with our expectations when using *ETR_M* as an inverse proxy for tax avoidance,

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Table 5. Tax avoidance in Chinese state-controlled listed firms: Moderating effects

	Panel A: Marketization index of Fan et al. (2016)		Panel B: Business environment index of Zhang and Zhang (2022)	
	ETR_M	CETR_M	ETR_M	CETR_M
	(1)	(2)	(3)	(4)
Intercept	1.166*** (0.000)	1.167*** (0.000)	1.161*** (0.000)	1.166*** (0.000)
Multiple large shareholders				
LARGEST	0.002* (0.065)	0.003** (0.011)	0.002* (0.059)	0.003** (0.012)
OTHER_NONSTATE	0.002** (0.019)	0.003* (0.086)	0.002** (0.028)	0.002* (0.098)
LARGEST*LOCAL	0.004** (0.042)	0.000 (0.965)	0.003* (0.099)	−0.000 (0.869)
OTHER_NONSTATE* LOCAL	0.001 (0.643)	0.000 (0.974)	0.001 (0.649)	0.000 (0.979)
LOCAL	−0.032 (0.129)	−0.019 (0.540)	−0.039* (0.060)	−0.026 (0.398)
LARGEST*INS_DEP	−0.004** (0.039)	0.001 (0.760)	−0.002* (0.074)	−0.004** (0.039)
OTHER_NONSTATE* INS_DEP	−0.000 (0.809)	−0.002 (0.550)	0.001 (0.233)	0.003 (0.187)
INS_DEP	−0.015 (0.404)	−0.016 (0.567)	−0.034*** (0.004)	−0.054*** (0.003)
Firm-level control variables				
PROF	−0.213** (0.044)	−0.084 (0.628)	−0.211** (0.043)	−0.070 (0.687)
LOSS	0.080 (0.216)	0.046 (0.582)	0.081 (0.212)	0.051 (0.542)
ACCRUAL	−0.476*** (0.000)	−0.143 (0.387)	−0.474*** (0.000)	−0.144 (0.384)
LEVERAGE	0.317*** (0.000)	0.311*** (0.000)	0.305*** (0.000)	0.284*** (0.000)
GROWTH	−0.073*** (0.001)	−0.074** (0.022)	−0.072*** (0.001)	−0.072** (0.026)
SIZE	−0.012 (0.298)	−0.017 (0.293)	−0.013 (0.257)	−0.018 (0.252)
AGE	0.001 (0.744)	−0.003 (0.351)	0.001 (0.536)	−0.001 (0.640)
CROSS_LISTED	−0.144*** (0.000)	−0.146*** (0.001)	−0.130*** (0.000)	−0.120*** (0.006)
RIGHTS	−0.175*** (0.009)	−0.183 (0.196)	−0.177*** (0.010)	−0.188 (0.190)
OTHER_STATE	−0.001 (0.652)	0.000 (0.934)	−0.001 (0.482)	−0.001 (0.777)
Adjusted *R*-squared	0.053	0.042	0.056	0.048
No. of observations	3,648	3,648	3,648	3,648

Notes: This table presents the results for the relation between MLS and tax avoidance in state-controlled listed firms regarding moderation effects. We use *ETR_M* and *CETR_M* as inverse proxies for tax avoidance, while columns (1), (3) use *ETR_M* and columns (2), (4) use *CETR_M* as the dependent variables, respectively. Panel A augments the baseline regression model by incorporating the interactions between the independent variables and the first moderator *LOCAL* (i.e., level of state control) and the second moderator *INS_DEP* (i.e., institutional development using marketization index of Fan et al. (2016)). Similarly, Panel B augments the baseline regression model by incorporating the interactions between the independent variables and the first moderator *LOCAL* (i.e., level of state control) and the second moderator *INS_DEP* (i.e., business environment index of Zhang and Zhang (2022)). Regression models include industry and year fixed effects, clustering standard errors at the firm level. p-values are reported in parentheses underneath coefficients. ***, **, * denote significance at the 1%, 5%, and 10% levels, respectively.

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thus corroborating our hypotheses H3a and H3b. However, the findings related to the moderating effects seem to be relatively weak with respect to the interactions between non-state large shareholders (*OTHER_NONSTATE*) and the two moderating variables. Specifically, we were unable to find substantial empirical evidences to support our hypotheses H3b or H4b. The lack of significant findings regarding the moderating effects may be partially attributed to constraints in data accessibility specific to our study.

Robustness Tests

In the first supplementary test, we used a two-stage least squares (2SLS) regression learning from Chan et al. (2016) and Hasan et al. (2014) to account for endogeneity issues such as simultaneity and omitted variables (Hill, Johnson, Greco, O'Boyle, & Walter, 2021). More precisely, in the first-stage regression, we predicted *LARGEST,* using an ordinary least squares (OLS) regression that contains two instrumental variables, i.e., the mean values of *LARGEST* and *OTHER_STATE* of all other firms among its industry peers (using two-digit industry codes to identify each firm's industry), and all firm-level control variables from the baseline model. In the second stage, we estimated the baseline model after replacing *LARGEST* with the correspondingly fitted *LARGEST* measure from the first-stage regression analysis. Specifically, the average *MLS* of all other firms in the same industry is a reasonable instrument of a firm's ownership structure. We expect a firm's ownership structure to correlate with the industry average, but it is unlikely that a firm's tax avoidance would affect the industry average ownership structure of all other firms (Jiang et al., 2018; Ouyang et al., 2020). We then tested the validity of our instrumental variables using the Cragg–Donald Wald *F* statistic test and the Sargan–Hansen test. The *F* statistics are all greater than 10, rejecting the weak instrument-null hypotheses. The Hansen *J* statistics are non-significant, indicating that these two instruments are valid (without the overidentification problem) and that our model is well specified. Table 6 presents the 2SLS empirical results. This indicates that our main conclusions remain consistent, except for a slight decline in significance.

Next, when we included listed firms that are majority-controlled by the state, we found that the effects of *LARGEST* and *OTHER_NONSTATE* become weaker for state-controlled sample firms. These findings were expected. We also explored the interaction effect between the ownership of other non-state large shareholders and of the largest state shareholders on tax avoidance in Chinese-listed SOEs. Our test suggests that the ownership of non-state large shareholders could strengthen the negative effect of the largest shareholder's ownership on tax avoidance, especially when using a modified ETR as an inverse proxy for tax avoidance.

Third, we re-ran all the models using a 10% cutoff to identify large shareholders. Our main conclusions continued to hold, although the effect of *LARGEST* was stronger, whereas that of *OTHER_NONSTATE* was slightly weaker. Alternatively, we applied a log transformation to the three ownership variables. All our earlier findings proved robust, with a small decline in significance levels. When relying on dummy variables for other large non-state and state shareholders rather than on their ownership stake, we still found that our previous results held, although the significance levels declined slightly. To further account for the possibility that the relationship between ownership stakes and tax avoidance is non-linear, we created several piecewise ownership variables yet found no support for such a non-monotone relationship.

We also found that our baseline regression results remain valid when all continuous variables were winsorized at the 5% and 95% levels of their distribution. In addition, when province-fixed effects were included, our baseline results were not affected, indicating that the observed relationships were not driven by any differences across provinces.

In addition, we applied a joint significance test (*F*-test) to examine the relationship between MLS and tax avoidance, because our baseline regression included three explanatory variables (*LARGEST* and *OTHER_NONSTATE)*. The result (not shown) suggests that the model is significant at the 0.01 level, indicating that our model is consistent.

In the final robustness check, we included additional internal corporate governance characteristics. The results, as reported in Table 7, reveal that our main results continue to hold after adding MANAGEMENT (=fraction of managerial shareholdings relative to total outstanding shares), BOARD SIZE (=natural log of the number of board members), and INDEPENDENT (=fraction of

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Table 6. Two-stage least squares regression

	Panel A – first-stage regression	Panel B – second-stage regression	
	Predicted LARGEST	ETR_M	CETR_M
	(1)	(2)	(3)
Intercept	−2.628** (0.018)	1.143*** (0.000)	1.181*** (0.000)
Multiple large shareholders			
LARGEST_MEAN	0.954*** (0.000)		
OTHER_STATE_MEAN	0.355*** (0.000)		
LARGEST		0.001 (0.178)	0.003* (0.080)
OTHER_NONSTATE	−0.161*** (0.001)	0.002** (0.028)	0.002* (0.096)
OTHER_STATE	−0.352*** (0.000)	−0.000 (0.717)	−0.000 (0.959)
Firm-level control variables			
PROF	0.318 (0.724)	−0.216** (0.041)	−0.081 (0.640)
LOSS	0.062 (0.835)	0.083 (0.197)	0.050 (0.553)
ACCRUAL	−0.585 (0.363)	−0.459*** (0.000)	−0.134 (0.419)
LEVERAGE	−0.613** (0.032)	0.313*** (0.000)	0.308*** (0.000)
GROWTH	0.176 (0.400)	−0.073*** (0.001)	−0.073** (0.023)
SIZE	0.209** (0.011)	−0.010 (0.360)	−0.016 (0.312)
AGE	−0.053*** (0.001)	0.000 (0.906)	−0.003 (0.263)
CROSS_LISTED	1.325*** (0.000)	−0.145*** (0.000)	−0.144*** (0.001)
RIGHTS	−1.309 (0.242)	−0.173** (0.011)	−0.183 (0.198)
Weak Instruments Test (*F*-statistic)	8518.353		
Hansen *J* statistic (*p*-value)	0.415		
R-squared	0.844	0.063	0.054
No. of observations	3,648	3,648	3,648

Notes: This table presents the results of a two-stage least squares regression of the relationship between MLS and tax avoidance. We use the mean value of the ownership variables(*LARGEST_MEAN, OTHER_STATE_MEAN*) based on the two-digit WIND industry code to which the firm belongs, excluding the firm's own ownership variable as instrumental variables, along with other variables potentially determining the MLS structure to predict the largest shareholding of a firm in column (1) from the first-stage regression. Panels A and B present the first-stage and second-stage results, respectively. We use *ETR_M* and *CETR_M* as inverse proxies for tax avoidance, while columns (2) use *ETR_M* and columns (3) use C*ETR_M* as dependent variables, respectively. Regression models include industry- and year-fixed effects, clustering standard errors at the firm level. *p*-values are reported in parentheses underneath coefficients. ***, **, * denote significance at the 1%, 5%, and 10% levels, respectively.

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Table 7. Tax avoidance in Chinese-listed SOEs: Role of internal corporate governance

	State		CENTRAL		LOCAL	
	ETR_M	CETR_M	ETR_M	CETR_M	ETR_M	CETR_M
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	0.934*** (0.000)	0.914*** (0.004)	1.537*** (0.000)	1.909*** (0.001)	0.577* (0.052)	0.449 (0.248)
Multiple large shareholders						
LARGEST	0.002* (0.097)	0.003** (0.018)	0.000 (0.887)	0.002 (0.445)	0.002* (0.089)	0.003* (0.079)
OTHER_NONSTATE	0.003** (0.014)	0.003* (0.066)	0.002 (0.179)	0.002 (0.575)	0.003** (0.038)	0.003* (0.097)
OTHER_STATE	−0.000 (0.705)	−0.000 (1.000)	−0.000 (0.976)	−0.002 (0.639)	−0.000 (0.815)	0.001 (0.557)
Firm-level control variables						
PROF	−0.180* (0.089)	−0.051 (0.771)	−0.326 (0.158)	−0.480 (0.183)	−0.185 (0.143)	0.049 (0.813)
LOSS	0.081 (0.211)	0.048 (0.568)	0.171* (0.080)	0.013 (0.927)	0.031 (0.722)	0.089 (0.401)
ACCRUAL	−0.436*** (0.000)	−0.112 (0.496)	−0.402** (0.043)	−0.357 (0.297)	−0.465*** (0.000)	−0.020 (0.918)
LEVERAGE	0.297*** (0.000)	0.293*** (0.000)	0.146* (0.053)	0.144 (0.204)	0.396*** (0.000)	0.386*** (0.000)
GROWTH	−0.071*** (0.001)	−0.072** (0.027)	−0.119** (0.014)	−0.038 (0.609)	−0.057** (0.016)	−0.085** (0.019)
SIZE	−0.014 (0.211)	−0.020 (0.202)	−0.023 (0.268)	−0.037 (0.249)	−0.010 (0.475)	−0.018 (0.372)
AGE	−0.001 (0.813)	−0.004 (0.242)	0.001 (0.744)	−0.009 (0.162)	−0.001 (0.697)	−0.000 (0.914)
CROSS_LISTED	−0.150*** (0.000)	−0.150*** (0.001)	−0.065 (0.286)	0.012 (0.896)	−0.177*** (0.000)	−0.213*** (0.000)

(*Continued*)

Table 7. (*Continued.*)

	State		CENTRAL		LOCAL	
	ETR_M	CETR_M	ETR_M	CETR_M	ETR_M	CETR_M
	(1)	(2)	(3)	(4)	(5)	(6)
RIGHTS	−0.173**	−0.183	−0.145	0.026	−0.200***	−0.315***
	(0.011)	(0.200)	(0.280)	(0.936)	(0.004)	(0.000)
MANAGEMENT	−0.851***	−0.652	−0.779	−1.623**	−0.651*	0.272
	(0.004)	(0.201)	(0.162)	(0.036)	(0.064)	(0.679)
BOARD SIZE	−0.008	0.010	−0.038	−0.077	0.021	0.059
	(0.881)	(0.893)	(0.717)	(0.622)	(0.739)	(0.488)
INDEPENDENT	0.820***	0.828**	0.306	0.005	1.082***	1.237***
	(0.001)	(0.021)	(0.483)	(0.994)	(0.001)	(0.004)
Adjusted *R*-squared	0.056	0.045	0.033	0.018	0.074	0.060
No. of observations	3,648	3,648	1,114	1,114	2,534	2,534

Notes: This table presents the results for the relationship between MLS and tax avoidance including the corporate governance factors in SOEs. We use *ETR_M* and *CETR_M* as inverse proxies for tax avoidance, while columns (1), (3), (5) use *ETR_M* and columns (2), (4), (6) use *CETR_M* as dependent variables, respectively. Regression models include industry- and year-fixed effects, clustering standard errors at the firm level. All variables in this table are defined in Table 1. *p*-values are reported in parentheses underneath coefficients. ***, **, * denote significance at the 1%, 5%, and 10% levels, respectively.

board seats occupied by independent directors). Moreover, we find that managerial ownership is positively associated, and the proportion of independent directors, negatively associated, with tax avoidance in state-controlled firms. Therefore, the latter finding suggests that 'independent' directors collude with dominant owners in state-controlled firms.

Discussion

In this study, we investigate the governance role of MLS in a firm's tax-avoidance behavior, using a sample of 702 Chinese-listed state-controlled firms over the period 2004–2016. We find that the ownership stake held by the largest shareholder is negatively associated with tax avoidance in state-controlled firms. This effect is particularly strong if the largest shareholder is the local government. While other large state-related shareholders have no influence, we find that other large non-state shareholders with significant ownership stakes and restrain tax avoidance in state-controlled firms. Our results indicate that other large non-state shareholders play a collusive, rather than monitoring, role in state-controlled firms. Theorists have proposed competing explanations for the effects of MLS, and few studies have developed arguments to explain when a particular effect is likely to arise. Evidently, more theoretical work on this topic is needed, and our study provides a starting point by highlighting the role of the institutional setting as an important influencer. We find that an improved institutional environment weakens the negative relationship between the largest shareholder and tax avoidance in state-controlled firms. Our findings remain valid under a battery of robustness checks using other measurements of ownership variables, adding extra control variables, and so on. Interestingly, managerial ownership is positively associated with tax avoidance in state-controlled firms. We further note that the proportion of independent directors has a significantly negative effect on the tax-avoidance practices of state-controlled firms.

Our findings have important implications for policymakers. First, our results have consequences for the ongoing mixed-ownership reforms in China (and other transitional economies). On the one hand, our results indicate that improvements in firm performance/behavior are unlikely to arise if state ownership is transferred only to other state-related blockholders. On the other hand, as other large non-state shareholders may collude with the dominant owner in state-controlled firms, governments should be aware that the expected outcomes of their ownership reforms may not necessarily manifest. Hence, our findings also call for caution regarding ownership reforms in the protection of minority rights when other non-state-related blockholders only follow the dominant owner, for example, to realize private benefits. Our results suggest that auxiliary corporate governance reforms are required. Therefore, the institutional environment should be further improved, as this clearly helps protect the rights of minority investors. In addition, stimulating managerial ownership and improving the criteria for director independence may help mitigate the expropriation risks for minority investors. Furthermore, as mixed ownership becomes increasingly common, this could yield important insights calling for future research into the role of other significant factors when state and non-state ownership differences are small (e.g., director appointment power, identities of directors, etc.). Finally, given the importance of China's debt problems, tax avoidance is of considerable interest. Similarly, rising debt levels in other emerging economies that also host a large share of SOEs, make this topic of wider general interest.

Limitations and Future Research Directions

Despite the above implications, our study has several limitations that present avenues for future research. First, we do not find strong support for the moderating effects as some results yielded statistical insignificance. Indeed, the accounting and disclosure rules for income tax in China are relatively complex, leading to a paucity of scholars using more precise information in their research. As a result, significant measurement errors may occur in the indicators of tax avoidance. For instance, Liu, Wang, and Zhao (2022) conduct a manual collection of actual current income tax expenses as disclosed in the footnotes of financial statements from Chinese A-share listed companies. They discover significant discrepancies when comparing these actual expenses to estimates made using financial statement information. Furthermore, they observe that after adjusting for this estimation error in current income tax expenses, the primary findings of several preceding studies lost their statistical significance. Similarly,

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Brühne and Jacob (2021) highlight the inherent empirical challenges in tax-avoidance research, particularly the difficulties in defining concepts and addressing potential measurement issues. They point out that the struggle to accurately measure tax avoidance, especially for non-US firms that do not report unrecognized tax benefits, is a significant issue in the literature. Despite these challenges, we maintain a positive outlook for future research opportunities that may delve deeper and enhance our understanding in this field, such as utilizing more accurate tax avoidance measures by manually collecting the actual current income tax expenses disclosed in the financial statement footnotes instead of estimating the income tax expenses and employing alternative marketization indices to address the limitations of our current research.

Second, as mentioned above, this study aims to develop arguments to motivate when a particular effect (collusion) is likely to arise in a tax setting. However, we were unable to test the theoretical mechanism because of limitations regarding data access. Thus, we call for future studies to test the exchange or spillover between the largest (state) shareholders and other non-state large shareholders. Furthermore, better measurements beyond ETRs (Blouin, 2014; Brühne & Jacob, 2021; Hanlon & Heitzman, 2010) are required in our setting, which is characterized by the unique features of China's capital markets and tax environment (Tang, 2020). In addition, tax scholars are calling for more studies on the consequences, especially the real effects, of tax avoidance, (e.g., Brühne & Jacob, 2021; Jacob, 2022). Arguably, future research on the real effects of the *reduced* tax-avoidance behavior of MLS in Chinese-listed SOEs is worth investigating to further enrich the findings of our study. In addition, studies comparing the short-and long-term real effects between MLS and tax avoidance in Chinese SOEs versus privately controlled firms may advance as well.

Data availability statement. The data that support the findings of this study are openly available in the Open Science Framework at https://osf.io/mgcru/?view_only=2c64edf854bb465482d6dea60e9182e6 Part of the derived data is available from the corresponding author on request.

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Notes

1. In this study, we do not distinguish between technically legal tax avoidance and illegal tax evasion (see also Hanlon & Heitzman, 2010). First, most of the behavior in question surrounds transactions that are often technically legal (Hanlon & Heitzman, 2010). Second, the legality of a tax-avoidance transaction is often determined only after the fact. Thus, tax avoidance captures both certain tax positions as well as uncertain tax positions that may or may not be challenged and determined illegal (Hanlon & Heitzman, 2010).
2. Laeven and Levine (2007) show that 34% of Western European listed firms have two or more large shareholders, while Claessens, Djankov, and Lang (2000) find that 32.2% of East Asian listed firms have MLS (using a 10% cutoff).
3. Likewise, Attig et al. (2013) report a positive relationship between MLS and the valuation of corporate cash holdings. The presence and power of MLS tend to reduce the cost of equity finance (Attig, Guedhami, & Mishra, 2008), enhance the information value of earnings (Boubaker & Sami, 2011), and increase corporate risk-taking (Mishra, 2011).
4. As an exception, Lin et al. (2016) show that the influence of the second-largest shareholder depends on the identity of the firm's largest shareholder. In particular, they find that other MLS increase the value of excess cash holdings, yet only in firms having the State as the largest owner and a non-government entity as the secondlargest shareholder.
5. As a result, this study does not concentrate on the role of managerial incentives in a firm's tax-avoidance behavior.
6. The *tax cost* refers to the minimization of tax burden due to engaging in tax avoidance while the *non-tax* cost refers to other costs that may arise as a result of engaging in tax avoidance activities such as reputation costs, the diversion of managers to take advantage of the opacity of complex tax strategies and implementation costs, etc. (Gallemore, Maydew, & Thornock, 2014; Wilde & Wilson, 2018).
7. The pilot program started with four companies in April 2005; another 42 and 35 companies were added in June 2005 and November 2005, respectively. So, not all listed firms implemented the reform at once.
8. In a robustness check, we also run the models in which those observations are retained in the sample (see further).
9. Consider the example of Tianma Microelectronics Co., Ltd. (000050.SZ), a state-controlled listed firm. In 2015, its largest shareholder was AVIC International Holding Corporation (with a 25.76% stake, central SOE), while its third largest shareholder (with a 7.16% stake, central SOE) and its fourth largest shareholder (with a 6.88% stake, central SOE) were related to the largest shareholder. The company's second-largest shareholder was Hubei Province Science and Technology Investment Group Co., Ltd. (with a 11.72% stake, local SOE) which was also state-controlled, yet not related to the largest shareholder. Therefore, the equity

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stake of the controlling group *LARGEST* in the year 2015 equals to 25.76% + 7.16% + 6.88% = 39.8% while the equity stake of other state-related shareholders *OTHER_STATE* equals to 11.72% plus the equity stake of other state-controlled large shareholders disclosed in 2015. Consider another example of Shenzhen Zhenye Group Co., Ltd. (000006.SZ), a state-controlled listed firm. At the end of year 2011, its largest shareholder was Shenzhen Municipal People's Government State-owned Assets Supervision and Administration Commission (with a 19.93% stake, local SOE), while its third-largest shareholder was Shenzhen Yuanzhi Investment Co., Ltd. (with a 5.81% stake, local SOE) and its sixth-largest shareholder Shenzhen Great Wall Investment Holdings Co., Ltd. (with a 3.31% stake, non-SOE) were related to the largest shareholder. The company's second-largest shareholder was Shenzhen Jushenghua Industrial Development Co., Ltd. (with a 6.68% stake, non-SOE) while its fifth-largest shareholder (with a 3.32% stake, non-SOE) and ninth-largest shareholder (with a 1.00% stake, non-SOE) were related to the second-largest shareholder, thus the equity stake of the controlling group *LARGEST* in the year 2011 equaled to 19.93% + 5.81% + 3.31% = 29.05% while the equity stake of non-state-related shareholders *OTHER_NONSTATE* equaled to 6.68% plus 3.32% plus 1.00% which equaled to 11%. The Appendix provides more details.

10. Like Li et al. (2017), we decided to not use book-tax difference (BTD) to capture tax avoidance in Chinese-listed firms for the following reasons. First, listed firms in China conduct excessive earnings management to either meet the requirements for security issuance or avoid delisting (Chen & Yuan, 2004; Haw, Qi, Wu, & Wu, 2005), introducing noise into BTD. Second, Tang and Firth (2012) show that a major part of the book-tax difference (around 80%) in Chinese-listed firms stems from the regulatory differences between financial reporting and tax reporting. Third, Chan, Lin, and Mo (2010) argue that as book-tax conformity in China has declined over time, BTD has become less informative as a measure of tax non-compliance.

11. Alternatively, when using the ratio of *OTHER_NONSTATE* to *LARGEST* to capture the relative power of non-state MLS, we further find that the higher the control contestability of other large non-state shareholders vis-à-vis the largest owner, the smaller the tax-avoidance behavior of state-controlled firms.

12. However, it is important to note that the coefficient of *LOCAL* is significantly negative, but only in Column (3) of Table 5. This may be partially due to the fact that the moderating effect could absorb some of the information from the moderating variable as well as from the original core explanatory variable. Researchers are therefore advised to focus on the interaction term when interpreting the results rather than focusing on the coefficients of the core explanatory variable or the moderating variable (Balli & Sørensen, 2013; Wooldridge, 2010). Thus, we focus on the interaction term as our primary aim is to elucidate the effect of the moderating variable, rather than the main effect following Li et al. (2022).

Appendix I

Figure A1. The composition of *LARGEST* for Tianma Microelectronics Co., Ltd. (000050.SZ) at the end of year 2015

Figure A2. The composition of *LARGEST* for Shenzhen Zhenye Group Co., Ltd. (000006.SZ) at the end of year 2011

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Table A1. The disclosed ten largest shareholders for Tianma Microelectronics Co., Ltd. (000050.SZ) at the end of year 2015

Rank	Shareholder	Identity	Stake (%)	Related party
1	AVIC International Holding Corporation	Central SOE	25.76	1,3,4
2	Hubei Province Science and Technology Investment Group Co., Ltd.	Local SOE	11.72	None
3	China Aviation Technology Shenzhen Co., Ltd.	Central SOE	7.16	1,3,4
4	China Aviation Technology International Holding Co., Ltd.	Central SOE	6.88	1,3,4
5	Shenzhen Tongchan Group Co., Ltd.	Local SOE	4.26	None
6	Chengdu Industrial Investment Group Co., Ltd.	Local SOE	2.50	None
7	Shanghai State-owned Assets Operation Co., Ltd.	Local SOE	2.37	None
8	National Social Security Fund 108 Portfolio	Other	1.79	None
9	Shanghai Zhangjiang (Group) Co., Ltd.	Local SOE	1.35	None
10	China Life Insurance Co., Ltd. – Traditional – Ordinary Insurance Products – 005L-CT001 Shenzhen	Other	1.28	None

Table A2. The re-ranked order of large shareholders for Tianma Microelectronics Co., Ltd. (000050.SZ) at the end of year 2015

Re-rank	Variable	Composition	Stake (%)
1	***LARGEST***	(I) AVIC International Holding Corporation (III) China Aviation Technology Shenzhen Co., Ltd. (IV) China Aviation Technology International Holding Co., Ltd.	39.8
2	SECOND	Hubei Province Science and Technology Investment Group Co., Ltd.	11.72
3	THIRD	Shenzhen Tongchan Group Co., Ltd.	4.26
4	FOURTH	Chengdu Industrial Investment Group Co., Ltd.	2.50
5	FIFTH	Shanghai State-owned Assets Operation Co., Ltd.	2.37
6	SIXTH	National Social Security Fund 108 Portfolio	1.79
7	SEVENTH	Shanghai Zhangjiang (Group) Co., Ltd.	1.35
8	EIGHTTH	China Life Insurance Co., Ltd. – Traditional – Ordinary Insurance Products – 005L-CT001 Shenzhen	1.28

Table A3. The disclosed ten largest shareholders for Shenzhen Zhenye Group Co., Ltd. (000006.SZ) at the end of year 2011

Rank	Shareholder	Identity	Stake (%)	Related party
1	Shenzhen Municipal People's Government State-owned Assets Supervision and Administration Commission	Local SOE	19.93	1,3,6
2	Shenzhen Jushenghua Industrial Development Co., Ltd.	Non-SOE	6.68	2,5,9
3	Shenzhen Yuanzhi Investment Co., Ltd.	Local SOE	5.81	1,3,6
4	Ma Xinqi	Domestic natural person	5.00	None
5	Shenzhen Yintong Investment Development Co., Ltd.	Non-SOE	3.32	2,5,9
6	Shenzhen Great Wall Investment Holdings Co., Ltd.	Non-SOE	3.31	1,3,6
7	China Construction Bank – Morgan Stanley China Advantage Securities Investment Fund	Other	1.18	None
8	Zheng Sue	Domestic natural person	1.14	None
9	Shenzhen Hualitong Investment Co., Ltd.	Non-SOE	1.00	2,5,9
10	Hu Zuhan	Domestic natural person	0.80	None

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Table A4. The re-ranked order of large shareholders for Shenzhen Zhenye Group Co., Ltd. (000006.SZ) at the end of year 2011

Re-Rank	Variable	Composition	Stake (%)
1	***LARGEST***	(I) Shenzhen Municipal People's Government State-owned Assets Supervision and Administration Commission (III)Shenzhen Yuanzhi Investment Co., Ltd. (VI) Shenzhen Great Wall Investment Holdings Co., Ltd.	29.05
2	SECOND	(II) Shenzhen Jushenghua Industrial Development Co., Ltd. (V) Shenzhen Yintong Investment Development Co., Ltd. (VIIII) Shenzhen Hualitong Investment Co., Ltd.	11
3	THIRD	Ma Xinqi	5.00
4	FOURTH	China Construction Bank – Morgan Stanley China Advantage Securities Investment Fund	1.18
5	FIFTH	Zheng Sue	1.14
6	SIXTH	Hu Zuhan	0.80

References

Allen, F., Qian, J., & Qian, M. 2005. Law, finance, and economic growth in China. *Journal of Financial Economics*, **77**(1): 57–116.

Attig, N., El Ghoul, S., & Guedhami, O. 2009. Do multiple large shareholders play a corporate governance role? Evidence from East Asia. *Journal of Financial Research*, **32**(4): 395–422.

Attig, N., Guedhami, O., & Mishra, D. 2008. Multiple large shareholders, control contests, and implied cost of equity. *Journal of Corporate Finance*, **14**(5): 721–737.

Attig, N., El Ghoul, S., Guedhami, O., & Rizeanu, S. 2013. The governance role of multiple large shareholders: evidence from the valuation of cash holdings. *Journal of Management & Governance*, **17**: 419–451.

Balli, H. O., & Sørensen, B. E. 2013. Interaction effects in econometrics. *Empirical Economics*, **45**: 583–603.

Berkman, H., Cole, R. A., & Fu, L. J. 2009. Expropriation through loan guarantees to related parties: Evidence from China. *Journal of Banking & Finance*, **33**(1): 141–156.

Bharath, S. T., Jayaraman, S., & Nagar, V. 2013. Exit as governance: An empirical analysis. *The Journal of Finance*, **68**(6): 2515–2547.

Blouin, J. 2014. Defining and measuring tax planning aggressiveness. *National Tax Journal*, **67**(4): 875–899.

Boateng, A., & Huang, W. 2017. Multiple large shareholders, excess leverage and tunneling: Evidence from an emerging market. *Corporate Governance: An International Review*, **25**(1): 58–74.

Bolton, P., & Von Thadden, E.-L. 1998. Blocks, liquidity, and corporate control. *The Journal of Finance*, **53**(1): 1–25.

Boubaker, S., & Sami, H. 2011. Multiple large shareholders and earnings informativeness. *Review of Accounting and Finance*, **10**(3): 246–266.

Bradshaw, M., Liao, G., & Ma, M. S. 2019. Agency costs and tax planning when the government is a major shareholder. *Journal of Accounting and Economics*, **67**(2-3): 255–277.

Brühne, A. I., & Jacob, M. 2021. *Corporate tax avoidance and the real effects of taxation: A review*. SSRN Working Paper.

Bu, N., & Roy, J. P. 2015. *Guanxi* practice and quality: A comparative analysis of Chinese managers' business-to-business and business-to-government ties. *Management and Organization Review*, **11**(2): 263–287.

Cen, W., Tong, N., & Sun, Y. 2017. Tax avoidance and cost of debt: Evidence from a natural experiment in China. *Accounting & Finance*, **57**(5): 1517–1556.

Chan, K. H., Lin, K. Z., & Mo, P. L. L. 2010. Will a departure from tax-based accounting encourage tax noncompliance? Archival evidence from a transition economy. *Journal of Accounting and Economics*, **50**(1): 58–73.

Chan, K. H., Mo, P. L., & Zhou, A. Y. 2013. Government ownership, corporate governance and tax aggressiveness: Evidence from China. *Accounting & Finance*, **53**(4): 1029–1051.

Chan, K. H., Mo, P. L. L., & Tang, T. 2016. Tax avoidance and tunneling: Empirical analysis from an agency perspective. *Journal of International Accounting Research*, **15**(3): 49–66.

Chen, D., & Luo, W. 2015. Does corporate tax avoidance influence audit pricing? *Economic Management Journal*, **3**: 98–109.

Chen, D., Jian, M., & Xu, M. 2009. Dividends for tunneling in a regulated economy: The case of China. *Pacific-Basin Finance Journal*, **17**(2): 209–223.

Chen, D., Khan, S., Yu, X., & Zhang, Z. 2013. Government intervention and investment comovement: Chinese evidence. *Journal of Business Finance & Accounting*, **40**(3-4): 564–587.

Chen, G., Firth, M., & Xu, L. 2009. Does the type of ownership control matter? Evidence from China's listed companies. *Journal of Banking & Finance*, **33**(1): 171–181.

https://doi.org/10.1017/mor.2024.11 Published online by Cambridge University Press

Chen, H., Tang, S., Wu, D., & Yang, D. 2021. The political dynamics of corporate tax avoidance: The Chinese experience. *The Accounting Review*, **96**(5): 157–180.

Chen, K. C. W., & Yuan, H. 2004. Earnings management and capital resource allocation: evidence from China's accounting-based regulation of rights issues. *The Accounting Review*, **79**(3): 645–665.

Chen, S., Chen, X., Cheng, Q., & Shevlin, T. 2010. Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, **95**(1): 41–61.

Cheng, M., Lin, B., & Wei, M. 2013. How does the relationship between multiple large shareholders affect corporate valuations? Evidence from China. *Journal of Economics and Business*, **70**: 43–70.

Cheung, Y.-L., Rau, P. R., & Stouraitis, A. 2006. Tunneling, propping, and expropriation: Evidence from connected party transactions in Hong Kong. *Journal of Financial Economics*, **82**(2): 343–386.

Cheung, Y.-L., Rau, P. R., & Stouraitis, A. 2010. Helping hand or grabbing hand? Central vs. local government shareholders in Chinese listed firms. *Review of Finance*, **14**(4): 669–694.

Claessens, S., Djankov, S., & Lang, L. H. 2000. The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, **58**(1-2): 81–112.

Cullinan, C. P., Wang, F., Wang, P., & Zhang, J. 2012. Ownership structure and accounting conservatism in China. *Journal of International Accounting, Auditing and Taxation*, **21**(1): 1–16.

DeBacker, J., Heim, B. T., & Tran, A. 2015. Importing corruption culture from overseas: Evidence from corporate tax evasion in the United States. *Journal of Financial Economics*, **117**(1): 122–138.

Dharwadkar, B., George, G., & Brandes, P. 2000. Privatization in emerging economies: An agency theory perspective. *Academy of Management Review*, **25**(3): 650–669.

Dyreng, S. D., Hanlon, M., & Maydew, E. L. 2008. Long-run corporate tax avoidance. *The Accounting Review*, **83**(1): 61–82.

Edmans, A., Fang, V. W., & Zur, E. 2013. The effect of liquidity on governance. *The Review of Financial Studies*, **26**(6): 1443–1482.

Faccio, M., Lang, L. H., & Young, L. 2001. Dividends and expropriation. *American Economic Review*, **91**(1): 54–78.

Fan, G., Wang, X., & Zhu, H. 2016. *NERI index of marketization of China's provinces*. Beijing: Economic Science Press.

Fang, Y., Hu, M., & Yang, Q. 2018. Do executives benefit from shareholder disputes? Evidence from multiple large shareholders in Chinese listed firms. *Journal of Corporate Finance*, **51**: 275–315.

Firth, M., Fung, P. M., & Rui, O. M. 2006. Corporate performance and CEO compensation in China. *Journal of Corporate Finance*, **12**(4): 693–714.

Gallemore, J., Maydew, E. L., & Thornock, J. R. 2014. The reputational costs of tax avoidance. *Contemporary Accounting Research*, **31**(4): 1103–1133.

Guo, C., Sarkar, S., Zhu, J., & Wang, Y. J. 2020. R&D investment, business performance, and moderating role of Guanxi: Evidence from China. *Industrial Marketing Management*, **91**: 55–63.

Gupta, S., & Newberry, K. 1997. Determinants of the variability in corporate effective tax rates: Evidence from longitudinal data. *Journal of Accounting and Public Policy*, **16**(1): 1–34.

Hanlon, M., & Heitzman, S. 2010. A review of tax research. *Journal of Accounting and Economics*, **50**(2–3): 127–178.

Hao, Y., & Gong, L. 2017. State and private non-controlling shareholders in SOEs and private firms, and firm performance. *Economic Research Journal*, **52**(3): 122–135.

Hasan, I., Hoi, C. K. S., Wu, Q., & Zhang, H. 2014. Beauty is in the eye of the beholder: The effect of corporate tax avoidance on the cost of bank loans. *Journal of Financial Economics*, **113**(1): 109–130.

Haw, I.-M., Qi, D., Wu, D., & Wu, W. 2005. Market consequences of earnings management in response to security regulations in China. *Contemporary Accounting Research*, **22**(1): 95–140.

Hill, A. D., Johnson, S. G., Greco, L. M., O'Boyle, E. H., & Walter, S. L. 2021. Endogeneity: A review and agenda for the methodology-practice divide affecting micro and macro research. *Journal of Management*, **47**(1): 105–143.

Huyghebaert, N., & Quan, Q. 2009. Share issuing privatizations in China: Sequencing and its effects on public share allocation and underpricing. *Journal of Comparative Economics*, **37**(2): 306–320.

Huyghebaert, N., & Wang, L. 2012. Expropriation of minority investors in Chinese listed firms: The role of internal and external corporate governance mechanisms. *Corporate Governance: An International Review*, **20**(3): 308–332.

Jacob, M. 2022. Real effects of corporate taxation: A review. *European Accounting Review*, **31**(1): 269–296.

Jensen, M. C., & Meckling, W. H. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, **3**(4): 305–360.

Jiang, F., Cai, W., Wang, X., & Zhu, B. 2018. Multiple large shareholders and corporate investment: Evidence from China. *Journal of Corporate Finance*, **50**: 66–83.

Jiang, G., Lee, C. M., & Yue, H. 2010. Tunneling through intercorporate loans: The China experience. *Journal of Financial Economics*, **98**(1): 1–20.

Laeven, L., & Levine, R. 2007. Complex ownership structures and corporate valuations. *The Review of Financial Studies*, **21**(2): 579–604.

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

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. 1998. Law and finance. *Journal of Political Economy*, **106**(6): 1113–1155.

Li, K., Wang, T., Cheung, Y.-L., & Jiang, P. 2011. Privatization and risk sharing: Evidence from the split share structure reform in China. *The Review of Financial Studies*, **24**(7): 2499–2525.

https://doi.org/10.1017/mor.2024.11 Published online by Cambridge University Press

Li, O. Z., Liu, H., & Ni, C. 2017. Controlling shareholders' incentive and corporate tax avoidance: A natural experiment in China. *Journal of Business Finance & Accounting*, **44**(5–6): 697–727.

Li, W., Song, C., Xu, S., & Yi, J. 2022. High sex ratios and household portfolio choice in China. *Journal of Human Resources*, **57**(2): 465–490.

Liao, L., Liu, B., & Wang, H. 2014. China's secondary privatization: Perspectives from the split-share structure reform. *Journal of Financial Economics*, **113**(3): 500–518.

Lin, T.-J., Tsai, H.-F., Imamah, N., & Hung, J.-H. 2016. Does the identity of multiple large shareholders affect the value of excess cash? Evidence from China. *Pacific-Basin Finance Journal*, **40**: 173–190.

Liu, H., Wang, X., & Zhao, Y. 2022. The estimated error of current income tax expense based on statement data under China accounting standards and its impact. *Management World*, **38**: 174–193.

Ma, C., & Yasir, L. 2023. Carrot or stick? CSR and firm financial performance. *Journal of Business Ethics*, **188**: 349–365.

Maury, B., & Pajuste, A. 2005. Multiple large shareholders and firm value. *Journal of Banking & Finance*, **29**(7): 1813–1834.

Milhaupt, C. J., & Zheng, W. 2015. Reforming China's state-owned enterprises: Institutions, not ownership. *Regulating the visible hand? The institutional implications of Chinese state capitalism:* 175–201. Oxford: Oxford University Press.

Mishra, D. R. 2011. Multiple large shareholders and corporate risk taking: Evidence from East Asia. *Corporate Governance: An International Review*, **19**(6): 507–528.

Morck, R., Wolfenzon, D., & Yeung, B. 2005. Corporate governance, economic entrenchment, and growth. *Journal of Economic Literature*, **43**(3): 655–720.

Ouyang, C., Xiong, J., & Huang, K. 2020. Do multiple large shareholders affect tax avoidance? Evidence from China. *International Review of Economics & Finance*, **67**: 207–224.

Pagano, M., & Röell, A. 1998. The choice of stock ownership structure: Agency costs, monitoring, and the decision to go public. *The Quarterly Journal of Economics*, **113**(1): 187–225.

Redding, G. 1995. Overseas Chinese networks: Understanding the enigma. *Long Range Planning*, **28**(1): 61–69.

Richardson, G., Wang, B., & Zhang, X. 2016. Ownership structure and corporate tax avoidance: Evidence from publicly listed private firms in China. *Journal of Contemporary Accounting & Economics*, **12**(2): 141–158.

Shackelford, D. A., & Shevlin, T. 2001. Empirical tax research in accounting. *Journal of Accounting and Economics*, **31**(1–3): 321–387.

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

Shleifer, A., & Vishny, R. W. 1997. A survey of corporate governance. *The Journal of Finance*, **52**(2): 737–783.

Solarino, A. M., & Boyd, B. K. 2020. Are all forms of ownership prone to tunneling? A meta-analysis. *Corporate Governance: An International Review*, **28**(6): 488–501.

Stiglitz, J. E. 2010. Government failure vs. market failure: Principles of regulation. In E. J. Balleisen & D. A. Moss (Eds.), *Government and markets: Toward a new theory of regulation*: 13–51. New York: Cambridge University Press.

Tang, T. Y. H. 2020. A review of tax avoidance in China. *China Journal of Accounting Research*, **13**(4): 327–338.

Tang, T. Y. H., & Firth, M. 2012. Earnings persistence and stock market reactions to the different information in book-tax differences: Evidence from China. *The International Journal of Accounting*, **47**(3): 369–397.

Tang, T., Mo, P. L. L., & Chan, K. H. 2017. Tax collector or tax avoider? An investigation of intergovernmental agency conflicts. *The Accounting Review*, **92**(2): 247–270.

Tian, G., Si, Y., Han, J., & Bian, Y. 2016. Media coverage and tax aggressiveness – A study based on corporate governance. *Journal of Management Science*, **29**: 104–121.

Wang, F., Xu, S., Sun, J., & Cullinan, C. P. 2020. Corporate tax avoidance: A literature review and research agenda. *Journal of Economic Surveys*, **34**(4): 793–811.

Wang, L. 2015. Protection or expropriation: Politically connected independent directors in China. *Journal of Banking & Finance*, **55**: 92–106.

Wang, Q., Wong, T.-J., & Xia, L. 2008. State ownership, the institutional environment, and auditor choice: Evidence from China. *Journal of Accounting and Economics*, **46**(1): 112–134.

Wilde, J. H., & Wilson, R. J. 2018. Perspectives on corporate tax planning: Observations from the past decade. *The Journal of the American Taxation Association*, **40**(2): 63–81.

Wooldridge, J. M. 2010. *Econometric analysis of cross section and panel data*. Cambridge, MA: MIT press.

Wright, M., Wood, G., Musacchio, A., Okhmatovskiy, I., Grosman, A., & Doh, J. P. 2021. State capitalism in international context: Varieties and variations. *Journal of World Business*, **56**(2): 101160.

Ye, K., Hou, W., & Huang, Z. 2018. Tax avoidance behavior of listed firms in China: Some facts and explanations. *Contemporary Accounting Review*, **11**(3): 24–46.

Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. 2008. Corporate governance in emerging economies: A review of the principal–principal perspective. *Journal of Management Studies*, **45**(1): 196–220.

Zhang, C. 2019. *How much do state-owned enterprises contribute to China's GDP and employment? (Chinese)*. Washington, DC: World Bank Group.

Zhang, M., Gao, S., Guan, X., & Jiang, F. 2014. Controlling shareholder-manager collusion and tunneling: Evidence from China. *Corporate Governance: An International Review*, **22**(6): 440–459.

Zhang, S., & Zhang, Z. 2022. Evaluation of doing business in Chinese provinces. In *Peking University Open Research Data Platform*. V3. Available from: https://opendata.pku.edu.cn/dataset.xhtml?persistentId=doi:10.18170/DVN/OCW4VZ

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