Foreign controlling shareholders: The ultimate tax decision maker?

Deepanshi Arora and Neeru Chaudhry*

January 15, 2025

Abstract

We investigate the relationship between foreign promoter ownership and tax aggressiveness from a principal-principal agency viewpoint, considering the benefit of the agency conflicts between controlling and minority shareholders. Using a sample of publicly listed non-financial firms, we find that the firms with foreign promoter owners as controlling shareholders positively affect the effective tax rates. Companies owned by foreign promoters pay more taxes and evade taxes less frequently. To ensure the reliability of our results and account for any potential endogeneity, we perform several tests. The study shows that when foreign controlling shareholders are in minority, there is a negative association between them and tax aggressiveness, however, when they are in majority, the association becomes positive. The presence of foreign controlling shareholders on tax aggressiveness strengthens when firms are larger in size and younger in age. Foreign controlling shareholders have a stronger positive impact on tax payments for companies that are financially flexible, have more stock liquidity, and have high-quality information. The results are pertinent to both foreign investors who make investments in India enterprises and businesses that operate in foreign capital markets.

Keywords: Tax avoidance; controlling shareholders, foreign promoters, corporate governance

JEL Classification: G12, G30, G34, H26

*Deepanshi Arora (email Deepanshi.Arora@dms.iitd.ac.in) and Neeru Chaudhry (email Neeru.Chaudhry@dms.iitd.ac.in) are from the Department of Management Studies at the Indian Institute of Technology Delhi. Deepanshi Arora is grateful to receive financial support from the University Grants Commission, India.

Address for correspondence: Deepanshi Arora, Department of Management Studies, Indian Institute of Technology Delhi, Vishwakarma Bhawan, Shaheed Jeet Singh Marg, Hauz Khas, New Delhi 110016, India.

1. Introduction

Tax payments consume a significant share of a firm's pretax earnings. Corporations are therefore highly motivated to use tax aggressiveness to lower their tax liabilities (Ouyang et al., 2020). Corporate tax aggressiveness is the lowering of corporate taxes through corporate tax planning that covers both legal and illegal activities (Frank et al., 2009; Chen et al., 2010; Richardson et al., 2016). Tax savings and increased profits are the advantage of a firm engaging in tax aggressiveness. However, by participating in such risk taking strategies corporations ignore the non-tax costs, especially those arising from agency problems (Chen et al., 2010). Studies (see, for example Chen et al., 2010; Chan et al., 2016) offer empirical evidence that companies use tax avoidance to conceal their tunneling activities, taking advantage of the agency conflicts between controlling shareholders and minority shareholders as well as the lax corporate governance environment.

A firm's participation in tax avoidance is based on the interests of the shareholders and the managers. The separation of ownership and control leads to the agency conflicts. According to recent research, the agency conflict between controlling and minority shareholders (Type II: principal-principal issue) is more common in corporate finance issues in many nations than the traditional agency problem between shareholders and managers (Type I: principal and agent issues) (Gomes, 2000).

Studies show that the agency conflicts are highly associated with ownership patterns. For example, see Jensen and Meckling (1976); Morck et al. (1988); Stulz, (1988); and Shleifer and Vishny (1997). Based on these studies, the agency theory checks the effect of ownership structure on different corporate decisions and determines that firms behave differently in different markets.

There is a dispersed ownership structure in the capital markets of developed nations such as the United States and United Kingdom. Information asymmetry and agency problems between the principal and the agents occur in dispersed ownership (Jensen and Meckling, 1976). However, concentrated ownership is prevalent in the capital markets of emerging nations like India (Bertrand et al., 2002). The conflict of interest between the majority and minority shareholders is the agency problem in a concentrated ownership situation. In the Indian setting, promoters who possess a controlling stake have more voting rights than minority shareholders (Chen et al., 2010). This kind of agency conflict is prevalent in the nation where minority shareholders have limited control in the corporate decisions and ownership is concentrated in few hands (Demsetz and Lehn, 1985). Such problem occurs in countries with weak corporate governance practices and lax legal enforcement that does not shield minority shareholders from expropriation (La Porta et al., 1988). Controlling shareholders will illegally transfer the profits for their own benefit in the presence of lax corporate regulations and lax enforcement of governance processes, which will obscure accounting figures and reduce transparency. Moreover, dominating shareholders (promoters) will transfer or tunnel the profits from companies with low cash flow rights to firms to companies with high cash flow rights (Bertrand et al., 2002). Transfers can be made in a variety of ways, such as by offering loans with high or low interest rates or by influencing transfer pricing.

As a result, risky tax planning techniques will be more likely to be used by promoters. The public nature of controlling shareholders create special agency conflicts and raises issues related to differential non-tax costs, such as the costs resulting from the manager's hidden actions and hence differential tax aggressiveness (Chen et al., 2010). Tunnelling hinders the expansion of the equity market and overall financial development by decreasing returns to minority/outside shareholders. As a result, the accounting figures are manipulated, and transparency is affected.

(Chan et al., 2016; Lo et al., 2010). In contrast, the high ownership level also guarantees that concentrated owners will not expropriate minority shareholders due to long term interest and focus on establishing the reputation of the firm (Gomes, 2000).

Theoretically, controlling shareholder ownership generates twin effects on corporate tax aggressiveness. Based on the two distinct effects of concentrated ownership, there can be a positive or negative relationship between ownership and tax aggressiveness. Our first argument deals with the entrenchment effect of concentrated ownership. As per the entrenchment effect, shareholders have the power to entrench the minority shareholders, when the voting rights of the majority shareholders increases (Morck et al., 1988; Fan and Wong, 2002). The likelihood of controlling owners using tax aggressiveness and expropriating the minority shareholders will increase (Desai and Dharmapala, 2006). The alignment effect of concentrated ownership, however, is the second argument. According to the alignment effect viewpoint, agency costs decrease, and the problem of entrenchment is reduced when controlling owner's shareholdings increase. Because of this, the majority shareholders interests coincide with those of minority shareholders, which lessens the controlling owner's opportunistic actions and their motivation to engage in tax aggressiveness.

On the one hand, the controlling owners have the motivation and ability to interfere with tax saving strategies and increase their profits by taking advantage of the minority shareholders. On the other hand, promoters or controlling shareholders have long term stake in the business and they refrain from engaging in tax aggressiveness due to government scrutiny and potential harm to their reputation. Fan and Wong (2002) document that concentrated owners have an incentive alignment impact that is superior to the entrenchment effect. This means that the majority owners can better align with the interests of minority shareholders (Fan and Wong, 2002). It is unclear how

controlling shareholders affects corporate tax behavior, therefore, providing us with the motivation to conduct this study.

Due to the presence of larger and dominating controlling shareholders in India, there is a greater concern about agency problems or conflicts between the interests of the principal and the agent. In Indian firms, 75.3% of the controlling stakes lie with a particular person or family (Allen et al., 2012). Nearly half of the shares in listed companies are owned by the controlling shareholders, according to the OECD report on the ownership structure of the Indian corporations. As a result, controlling shareholders are going to have a lot of say in the decision making of the firm. By transferring or tunneling the profits for their personal gain at the expense minority shareholders, the controlling shareholders can expropriate the minority ones (Bertrand et al., 2002). The family owners can either actively manage the business and make it better (Nagar and Sen, 2016) or they can tunnel the earnings to benefit themselves (Bertrand et al., 2002). In contrast, U.S. corporations often have fewer agency conflicts (La Porta et al., 1998). It is unclear if controlling shareholders in the Indian capital market expropriate minority shareholders or benefit them.

To examine the impact of ownership pattern on tax aggressiveness, we examine the effect of foreign promoter ownership on corporate tax aggressiveness in publicly traded firms in India. Taking advantage of the agency conflicts between controlling and the minority shareholders and the lack of effective corporate governance (Chan et al., 2016), we investigate the effects of foreign promoter ownership on tax avoidance from principal-principal agency perspective. Foreign institutional investors play a crucial role in encouraging positive reforms in the corporate governance practices in countries with weaker investor protection (Aggarwal et al., 2011). The reduction in agency conflicts, enhancement in the disclosure quality, and enforcement of good

governance practices by foreign shareholders have a significant effect on the tax strategies of the firm (Huizinga and Nicodeme, 2006; Hasan et al., 2022).

We measure *FRGN_PROM* as the proportion of equity shares owned by foreign controlling owners. The effective tax rate (*ETR*), which is calculated as the cash taxes paid by a firm as a ratio of the profit before taxes, is used to measure tax aggressiveness. Using a sample of 13,014 firmyear observations during the 2001-2023 study period, we find that tax aggressiveness declines with increasing foreign promoter ownership. Companies owned by foreign promoters pay more taxes and engage in less tax avoidance strategies. Our results hold up well to a variety of robustness and endogeneity tests. We also note that when foreign controlling shareholders are in minority, there is a negative association between them and tax aggressiveness, however, when they are in majority, the association becomes positive. The empirical analysis finds that the existence of foreign controlling owners have a stronger effect on tax aggressiveness in firms that are younger and larger in size. Foreign controlling owners have a stronger positive impact on tax payments of companies that are financially unconstrained, have more stock liquidity, and good information quality.

This study adds to the finance literature in multiple ways. Firstly, our study contributes to the body of research that looks at the impact of ownership by controlling shareholders on tax avoidance (for example, see Chen et al., 2010; Badertscher et al., 2013; Chan et al., 2013; Khurana and Moser, 2013; McGuire et al., 2014; Khan et al., 2017; Richardson et al., 2016; Chen et al., 2019; Bradshaw et al., 2019; Hasan et al., 2022). By examining the unique ownership environment faced by Indian companies, our study extends and enhances this body of literature by examining the effect of foreign controlling shareholders on tax aggressiveness. According to our research, foreign promoter owners tend to be less aggressive when it comes to taxes. Furthermore, when

corporations are financially constrained and information quality is poor, the inverse association between foreign ownership and tax aggressiveness strengthens.

Secondly, we contribute to the expanding literature on foreign ownership (Lang et al., Aggarwal et al., 2011; Agarwal and Chaudhry, 2022). The existing research on foreign investors focuses on firm performance, corporate governance, dividend policies, stock market reactions, and corporate investment (Li et al., 2011; Chen et al., 2010; Agarwal and Chaudhry, 2022). We add to this body of work by analyzing the cost and benefit of foreign ownership in case of concentrated shareholders and emphasizing how foreign controlling shareholders affect corporate tax aggressiveness. We find a negative relationship between corporate tax aggressiveness and ownership by foreign promoters. The analysis provides useful insights to the regulators who are interested in strengthening the corporate governance mechanisms for minority shareholders.

Finally, our study complements the earlier ownership studies conducted in India. Prior research on ownership structure has concentrated on the performance and decision making of firms connected to business groups (Khana and Palepu, 2000; Jameson et al., 2014). This study measures the impact of controlling shareholders on the firm's risky tax strategies using the distinct context of promoter ownership, particularly foreign promoter ownership.

The remainder of the paper proceeds as follows. Section 2 provides with Indian ownership structure, theoretical framework, reviews the related literature and develops the main hypothesis of the paper. Section 3 explains the sample data and the research methodology. Section 4 presents and discusses regression results and endogeneity tests. Section 5 performs additional analysis. Section 6 concludes the paper.

2. Background and Literature Review

2.1 Ownership structure in India

Unlike the developed nations, the unique feature of ownership landscape in the Indian capital market is the presence of promoters and non-promoters (OECD, 2020). Promoter refers to the individuals, group of individuals, family members or corporations that established the company (founders) or have majority control through shareholdings and management positions (controlling shareholders) in the company. However, the non-promoters refer to the outsiders with minority shareholdings. According to Companies Act, 2013 (sub section (69) of Clause (2)), a promoter is defined as a person "who has been named as such in a prospectus or identified by the company in the annual return." Furthermore, the promoter in the position of shareholder or director has control over the affairs of the corporation either directly or indirectly and has influence over the board of directors.

Promoters are important players in the Indian capital market. The average percentage of shares held by the promoters has been consistent throughout at roughly 50% since 2001. Given the relative dominance of promoters in the ownership structure, they must retain at least 20% of the post issue capital for three years and lock in their shareholding for a year following listing to ensure a promoter has 'skin in the game' (SEBI, 2018)¹. If promoters prioritize their own interests over those of minority shareholders, this dominance could be detrimental to the interest of minority shareholders. Nonetheless, promoters may benefit the business as they are the informed owners and help resolve the agency problem if the conflict of interest is well properly managed (OECD report). The Custodian Model (Trusteeship Model) and Monarch Model (Raja Model) are the two

¹ https://www.sebi.gov.in/legal/regulations/may-2018/sebi-listing-obligations-and-disclosure-requirement-amendment-regulations-2018_38898.html

business management models used in India. The self-interest of the promoters or controlling shareholders takes precedence over those of minority shareholders in the monarch model. The prevalence of promoter-led companies in India may be detrimental to minority shareholders. interests and result in agency conflicts between majority and minority. Given the dominance of promoter led companies in India, this can be detrimental to the interest of the minority shareholders and cause the agency conflict between majority and minority shareholders. The Gandhian Principles, however, are the foundation of the Custodian approach. This approach views the controlling shareholders as trustees who act in the best interest of all parties involved. The promoters prioritize the interests of stakeholders over their own (Kotak Committee Report, SEBI 2017).

India has observed increase in equity shareholdings by foreign promoters. As of June (2024), 8.3% of the NSE-listed firms are owned by foreign promoters, including non-resident Indians.² The Government of India (GOI) in consultation with the Reserve Bank of India revised the Foreign Exchange Management (Transfer or Issue of any Foreign Security) Regulations in response to attract more investment from the foreign entities.³ These amendments permitted the non-residents, including Non-Resident Indians (NRIs), to purchase shares company listed on a recognized stock exchange through a registered broker under the FDI scheme.⁴ Considering the regulatory changes, foreign promoters are able to increase the proportion of their ownership. India's established primary and secondary markets have also drawn an increasing number of foreign institutional investors (FIIs). The number of shares held by foreign institutional investors in India has steadily increased over the past ten years (OECD, 2020).

² https://nsearchives.nseindia.com/web/sites/default/files/inline-files/India_Ownership_Report_Jun_2024.pdf

³ https://pib.gov.in/PressReleasePage.aspx?PRID=1853679

⁴ https://rbi.org.in/scripts/NotificationUser.aspx?Id=8383&Mode=0

2.2 Related Literature and Hypothesis Development

Prior literature shows that different ownership structures have varying effects on corporate tax planning (for example, see Mills and Newberry, 2001; Desai and Dharmapala, 2009; Chen et al., 2010; Badertscher et al., 2013; Chan et al., 2013; Khurana and Moser, 2013; McGuire et al., 2014; Khan et al., 2017; Richardson et al., 2016; Chen et al., 2019; Bradshaw et al., 2019; Wang et al., 2020; Cao et al., 2021; Hasan et al., 2022).

Chen et al. (2010) document that family owned firms engage in less tax aggressiveness than non-family owned firms. The study explains that family firms are more worried about their reputation and the possible penalties and fines that could result from scrutinization by the taxation officials. In addition, taxes benefit the shareholders while are cost to the corporations (Chen et al., 2010). However, Bradshaw et al. (2019) investigate how controlling shareholders contribute to tax avoidance. The authors find that state owned enterprises (SOEs) participate less in tax aggressiveness compared to non-state owned enterprises. The study suggests that taxes are dividend to the controlling shareholders while constitute cost to other shareholders. Consequently, shifting money from other owners, reducing tax avoidance will eventually benefit the controlling shareholders in SOEs. McGuire et al. (2014) investigate the impact of dual class shares on tax avoidance and finds that dual class managers engage less in tax incentives. Outside shareholders won't encourage the dual class managers to pursue tax-saving measures because of the separation of ownership and control. Private equity backed firms are more tax aggressive than non-private equity backed firms (Badertscher et al., 2013). Khurana and Moser (2009) show that corporations with larger proportion of short term institutional investors are more tax aggressive compared to long term institutional investors. Short term investors engage more in tax avoidance to maximize the firm value in the short run.

Richardson et al. (2016) find a non-linear relationship between concentrated ownership and tax avoidance. The study suggests a U-shaped pattern whereby tax avoidance increases at lower levels due to the entrenchment effect, and at higher levels, the link turns out to be negative due to retrenchment effect. According to the argument, the study shows that as voting rights increase, dominating shareholders have more entrenched power and will take advantage of minority shareholders by exploiting their wealth through tax avoidance.

In nations where controlling shareholders own enough shares to have their interests upheld, there exists an agency conflict between the dominant shareholders and minority shareholders (Shleifer and Vishny, 1997; Jiang et al., 2010). Increasing the concentrated ownership above a certain level will lessen the motivation for tax aggressiveness and the opportunistic actions of the dominant shareholders (Richardson et al., 2016). Because controlling shareholders have the authority and motivation to discipline management, concentrated ownership helps in reducing the managerial agency problem when the investor protection is weak (Grossman and Hart, 1988). The alignment effect, however, suggests that the controlling owners are dedicated to enhancing the company's reputation and refraining from expropriating the minority shareholders (Gomes, 2000).

To examine the effects of ownership structure on tax aggressiveness in different settings, we concentrate on foreign promoter ownership. As in countries with weaker investor protection, foreign institutional investors are crucial in promoting constructive changes in corporate governance mechanisms (Aggarwal et al., 2011). To improve the quality of governance, FIIs provide their investee companies with strong shareholder protection and other good governance practices. Foreign holdings are positively linked with the valuation of the firm (Sarkar and Sarkar, 2011). Shareholder protection, voluntary disclosure or improving the disclosure quality, and accounting comparability are the good governance practices used by foreign institutional investors

(Tsang et al., 2019). Due to superior information gathering and processing information capabilities, foreign promoters can effectively address the problems of information asymmetry and agency conflicts (Lang et al., 2003). Increasing foreign ownership also opens new markets, allows shareholders to take use of new resources, liberalizes policies, and above all provide tax incentives, which motivate the foreign investors to participate or invest in host countries (Salihu et al., 2015). Furthermore, due to their superior performance, increased voluntary disclosure, and higher efficiency, these foreign owned firms are desirable for majority of emerging nations seeking rapid growth and development (Salihu et al., 2015).

Tax avoidance is positively associated with foreign ownership (Kinney and Lawrence, 2000). The study shows that after regulating the earnings management, foreign owed firms employ profit shifting to reduce the tax payments. In contrast, Huizinga and Nicodeme (2006) use a sample of European nations to show that nations with larger levels of foreign ownership also have higher tax rates. Hasan et al. (2022) provide how foreign institutional investors actively participate in corporate tax avoidance through institutional distance. Institutional distance between the host and home countries results from the fact that business norms and regulations in other countries can differ significantly from those in the home country.

These studies suggest that the presence of foreign shareholders reduces agency conflicts, enhances disclosure quality, and enforces good governance practices, all of which may have a significant effect on the tax strategies of the firm. Thus, we investigate how the firm's tax avoidance behavior is impacted by the agency conflict between controlling and minority shareholders. We hypothesize that increasing the proportion of equity shareholdings by foreign promoters in a firm reduces corporate tax aggression. Specifically, ownership by foreign promoters is negatively associated with tax aggressiveness.

2.3 Theoretical perspective

Tax aggressiveness is defined as an activity that lowers the firm's tax obligations (Dyreng et al., 2008). From complete tax compliance to legal tax sheltering and unlawful tax evasion, there is a spectrum of actions to lower the tax liabilities. (Hanlon and Heitzman, 2010). Businesses become more aggressive with taxes as they shift away from tax compliance. As per the agency theory, the firm's tax aggressive behavior is predicted by the separation of ownership and management (Badertscher et al., 2013). Tax avoidance being one of the risky tax strategies raises the companies after tax cash flows. But when tax authorities find out about such strategies, they impose fines, penalties which harms the reputation of the firm (Hanlon and Slemrod, 2009). As per the agency theory, agents preferred level of tax avoidance will be different from what is preferred by the principal. Due to the investment in well diversified portfolios, principals are assumed to be risk neutral by the traditional principal agency theory. All stakeholders are not covered by such risk neutrality (Jensen and Meckling, 1976). It is anticipated that shareholders holding a larger proportion of stake in the equity are expected to be more risk averse due to the investment being concentrated in a few firms (Shleifer and Vishny, 1986). Concentrated shareholders may favor less tax aggressiveness than diversified owners because larger shareholders are risk averse and aggressive taxation is a risky strategy (Kovermann and Velte, 2019).

Legitimacy theory, in contrast to agency theory, is concerned with the relationship between the company and the society at large. One way businesses fulfill their social responsibility is by paying taxes to the communities in which they operate (Williams, 2007). Any risky strategy which engages a firm into tax avoidance is considered social irresponsibility (Christensen and Murphy, 2004). Prior studies (Lanis and Richardson, 2012; Huseynov and Klamm, 2012) shows a negative association between tax aggressiveness and corporate social responsibility. Both the government and public are represented by the taxation authority. The government uses the money it receives from corporations to improve the general welfare of the public. To justify their existence and ensure their continued survival in society, corporations are expected to be socially responsible. Therefore, by adhering to tax regulations, paying their fair share of taxes, and refraining from engaging in risky tax strategies, companies are considered socially responsible. Consequently, an empirical investigation of the agency and legitimacy theory in relation to tax avoidance is necessary due to the conflicting results in the previous literature.

3. Data and Research Methodology 3.1 Data

The financial data on Indian firms is obtained from the Prowess dx database. The sample excludes observations with negative or zero taxes paid and profit before tax. Observations with *ETR* less than zero or greater than one, or those with missing data required to calculate control variables are also dropped from the sample. *NSE500* firms' data is collected from NSE website.⁵ The final sample contains 13,014 firm-year observations from 1,920 unique firms for the period from 2001 to 2023.

3.2 Research Methodology

There are several measures that have been used in the literature to indicate the extent to which companies save taxes or avoid taxes. We use cash effective tax rate (*ETR*), which is computed as the ratio of cash taxes paid divided by profit before tax. This measure has been widely used in literature as a proxy of tax aggressiveness (Dyreng et al., 2017; Chen et al., 2010; Hasan

⁵ https://www.nseindia.com/products-services/indices-nifty500-index

et al., 2022). Higher (lower) *ETR* values imply that the firm is less (more) involved in tax avoidance. To test our main hypothesis that the corporate effective tax rates (*ETR*) are increasing over time, we estimate the pooled ordinary least square (OLS) model, which is shown below.

$$LNETR_{it} = \beta_0 + \beta_1 FRGN_PROM_{it} + \beta_2 LEV_{it} + \beta_3 FIRMSIZE_{it} + \beta_4 DIVIDEND_{it} + \beta_5 FIRMAGE_{it} + \beta_6 FRGN_SALES_{it} + \beta_7 LNCF_{it} + \beta_8 LNPPE_{it} + \beta_9 LNCAPEX_{it} + \beta_{10} INTANGIBLES_{it} + \beta_{11} ADVERTISING_{it} + Industry Dummies + Year Dummies + \varepsilon_{it}$$

... (1)

where *ETR* is the corporate effective tax rate, defined as the cash taxes paid divided by profit before taxes, *LNETR* is the natural log of *ETR*, and *FRGN_PROM* means the proportion of equity shareholdings held by foreign controlling shareholders. Following Chen et al. (2010); Richardson et al. (2016); Hasan et al. (2022), in our regression model we control for long-term debt divided by total assets (*LEV*), natural log of the book value of total assets (*FIRMSIZE*), whether a firm pays a dividend (*DIVIDEND*), listing age (*FIRMAGE*), *FRGN_SALES* as indicator variable taking value one if a firm reports foreign sales, and zero otherwise, natural log of cash flow from operating activities scaled by total assets (*LNCF*), natural log of property, plant, and equipment to total assets (*PPE*), natural log of the amount spent on capital assets scaled by property, plant, and equipment (*LNCAPEX*). We also control for year and industry fixed effects. We estimate Model (1) using ordinary least squares (OLS) method and cluster heteroskedastically robust standard errors by firm. We also control industry and year- fixed effects. All continuous variables are winsorized at the 1st and 99th percentile. Detailed definitions of all variables are provided in the Appendix.

4. Empirical Results4.1 Summary Statistics

Table 1 presents the descriptive statistics of the sample. Approximately 50% of the sample belongs to the manufacturing sector. *ETR* varies from 11.557 (2002) to 18.046 (2019) as shown in Panel B. The sample mean (median) *ETR* and *FRGN_PROM* is 13.753 (11.363) and 10.672 (0.000), respectively as shown in Panel C. The correlation coefficient between *FRGN_PROM* and *ETR* is positive and statistically significant at the 5% level as shown in Panel D.

[Insert Table 1 here]

Figure 1 shows the mean ownership by foreign promoters. The graph shows that the proportion of shares owned by foreign promoters dropped from the year 2001 to 2007. Then the average level of foreign promoter ownership increased during the year 2019-20.

[Insert Figure 1 here]

4.2 Regression Results

Table 2 presents the results obtained by estimating the Model (1). In Column (1), the coefficient on *FRGN_PROM* is positive and statistically significant at the 1% significance level. These results support our main hypothesis that the foreign promoter ownership positively impacts the effective tax rate (*ETR*) of a firm as shown in Column (1). We also note that effective tax rate reduces with leverage, firm size, capital expenditure and increases with dividend, firm age, foreign sales, cash flows, and property, plant and equipment.

Next, we examine the impact of foreign controlling shareholders on long run tax avoidance behavior. For this purpose, we calculate three-year ETR (ETR3) in year t by summing taxes paid in year t, t - 1, and t - 2 and dividing it by the sum of profit before taxes earned over these three years. Similarly, we calculate five-year *ETR* (*ETR5*). We estimate Model (1) by using log forms of *ETR3* and *ETR5* as the explanatory variables (*LNETR3* and *LNETR5*). The results thus obtained are shown in Columns (2) and (3), respectively. The coefficients on *LNETR3* and *LNETR5* are positive and statistically significant at the 1% level, respectively. These results suggest that companies with foreign shareholder ownership avoid lesser taxes in a longer period. Following Peterson (2009), we perform Fama and Macbeth (1973) regression to address the concerns related to autocorrelation within the firm that can result in biased results. The coefficient on *FRGN_PROM* is positive and statistically significant at 1% significance level as shown in Column (4).

Additionally, we examine the association between foreign promoter ownership and tax aggressiveness by performing the empirical analysis on the sample of foreign controlling firms. The coefficient on $FRGN_PROM$ is positive and statistically significant across Columns (5) – (7) supporting the hypothesis that foreign promoter ownership negatively affects the tax aggressiveness.

[Insert Table 2 here]

4.3 Robustness Tests

4.3.1 Breakpoint Analysis

In Table 3, we examine whether foreign promoter ownership effects on tax aggressiveness varies with the size of the equity shareholding. Based on the definition of controlling shareholders, as per the Companies Act, 2013 we bifurcated ownership into various breakpoints. We consider 10% as the first breakpoint level. A minimum of 10% of the shareholding is required to qualify as

minority shareholders as per Section 395 of the Companies Act, 1956.⁶ At least 51% of the equity shareholding indicates majority shareholding, therefore we consider 51% as another breakpoint level. As per Section 114(2) of the Companies Act, 2013, 75% shareholder approval is required to pass any special resolution.⁷ Therefore, following Agarwal and Chaudhry (2022), we consider 26% as the next breakpoint.

Our results show a negative and statistically significant association between foreign promoter ownership and tax aggressiveness when the foreign ownership is less than 10% and between 10-26% level as shown in Column (1) and (2) of Table 3. Further, we find when the foreign promoters have majority ownership (either between 26-51% or >51%) then the relationship is positive and statistically significant as shown in Column (3) and (4), respectively. This indicates that firms with higher foreign promoter ownership tends to pay more taxes than firms with lower foreign promoter ownership.

[Insert Table 3 here]

4.3.2 NSE500 Listed Firms

Next, we investigate the association between foreign promoter ownership and tax aggressiveness for *NSE500* listed firms. As in India, NSE is the first and major stock exchange index used as a benchmark index to evaluate the performance of the firm. Therefore, we expect that the foreign controlling shareholders may invest more in *NSE500* firms.

In Column (5), we added an interaction term (*NSE500*FRGEN_PROM*) in the main regression Model (1). *NSE500* is defined as a dummy variable taking value one in case a firm is listed with *NSE500* and zero otherwise. The coefficient on *NSE500* is positive and statistically

⁶ https://www.mca.gov.in/content/mca/global/en/acts-rules/companies-act/companies-act-1956.html

⁷ https://www.mca.gov.in/Ministry/pdf/CompaniesAct2013.pdf

significant at 1% level of significance as shown in Column (5). This means that firm's constituent of *NSE500* are less tax aggressive in nature. Then, we find that the coefficient on the interaction term is positive and statistically significant at 5% level of significance. This means that foreign controlling shareholders prefer to invest more in *NSE500* listed firms and therefore reduce the tax aggressive practices of the firm.

Additionally, we examine the association between foreign promoter ownership and tax aggressiveness by performing the empirical analysis on the sample of *NSE500* listed firms. The coefficient on *FRGN_PROM* is positive and statistically significant as shown in Column (6). Therefore, the foreign promoters consider the major stock exchange index while investing in the firm.

4.3.3 Alternate Ownership Measures

In our main analysis, we focus on foreign promoter ownership, which we measure as the proportion of equity shareholdings held by the foreign promoters in the firm. In this subsection, we examine how different ownership patterns affect tax aggressiveness including total promoter ownership, domestic promoter ownership, domestic institutional investors, foreign institutional investors, and government controlled firms. These results are reported in Table 4.

First, we use overall promoter ownership (*PROM*), which is the total proportion of shares held by the promoters in the firm. We use it as the independent variable in Model (1) in place of *FRGN_PROM*. The results, reported in Column (1), shows that the coefficient on *PROM* is positive (statistically significant at the 1% level), suggesting that the promoter owner firms involve less in tax aggressiveness.

Secondly, we use domestic promoter ownership (*DOM_PROM*), which is the proportion of equity shareholdings owned by domestic promoters. We estimate Model (1) using *DOM_PROM* as the key explanatory variable. The results, reported in Column (2), shows that coefficient on *DOM_PROM* is positive but statistically significant at 5% level of significance. The findings suggest that domestic promoter owned firms avoid lesser taxes.

Additionally, we also looked at how institutional investors (domestic institutional investors and foreign institutional investors) impact corporate tax aggressiveness. We use *INST_INV* (equity ownership held by domestic investors), *FII* (proportion of equity stake held by foreign institutional investors). The coefficient on *FII* is positive and statistically significant as shown in Column (3). However, the coefficient on *INST_INV* is positive and statistically significant at 10% level as shown in Column (4). The results indicate that domestic institutional investors impact the tax strategies of the firm. Lastly, we also check whether government ownership influences tax aggressiveness by regressing *GOVT* (proportion of shares held by the government) on *LNETR* in Model (1). The coefficient on *GOVT* is positive but statistically insignificant as shown in Column (5). The implies that the effective tax rate is not influenced by government owned enterprises.

In sum, the results shown above provide strong evidence which supports our main conjecture that increasing the equity stake by controlling owners (promoters) in a firm positively influences the effective tax rate. The presence of domestic promoters and domestic institutional investors is negatively associated with corporate tax aggressiveness.

[Insert Table 4 here]

4.3.3 Endogeneity Tests

This section addresses the possibility that ownership can be endogenously determined (Loderer and Martin, 1997; Cho, 1998; Demsetz and Villalonga, 2001, Agarwal and Chaudhry, 2022). The notion that foreign promoter ownership has a positive influence on the effective tax rates is supported by our primary findings. Our baseline model is vulnerable to endogeneity issues such as omitted variables, selection biasness, and reverse causality, even if it includes a number of control variables. The existing studies (see, Khan et al., 2017; Li et al., 2021) show that ownership and tax evasion co-exist, suggesting that firms with companies that are less tax aggressive tends to attract more foreign controlling shareholders, which further curbs tax avoidance. We use lagged values of the variables used in the Model (1), two stage least square regression estimation, two stage GMM, and system GMM to address concerns related to endogeneity.

4.3.3.1 Impact of Lagged Values

In accordance with Aggarwal et al. (2011), we employ lagged values of foreign promoter ownership and other control variables in the Model (1). All the independent variables are lagged by one year (t-1) to examine the association between explanatory variables and future tax aggressive measures. Table 5 displays the outcomes of OLS estimation using lagged values. The coefficient on *LNETR* is positive and statistically significant at 1% level of significance as shown in Column (1). The results suggest the firms with foreign controlling shareholders have a negative impact on long term corporate tax aggressiveness (*LNETR3* and *LNETR5*) as shown in Columns (2) and (3), respectively, which is consistent with the baseline regression model. Consequently, the findings indicate that the firm's corporate tax aggressiveness during the t period is negatively impacted by changes in the foreign promoter shareholdings during the t-1 period.

[Insert Table 5 here]

4.3.3.2 Two Stage Least Square (2SLS) Estimation

Next, we use the two stage least square estimation to address the endogeneity concerns. The two requirements that the valid instrument variable must meet are relevance and exogeneity assumption. As per the relevant condition, the instrumental variable must be correlated with the endogenous explanatory variable (FRGN PROM). However, according to the exogeneity criterion, the instrument variable must be exogenous, which means it should not correlate with the error term in the regression equation and does not directly influence the dependent variable (LNETR). The existing literature (see, Liu et al., 2014; Kabir et al., 2020; Agarwal and Chaudhry, 2022) indicates that industry average can function as an exogenous variable for firm level endogenous variables. The industry average proportion of equity shares held by the foreign controlling shareholders, excluding the firm itself, is the first instrumental variable (IV_I) that we use. The second instrument variable that we use is the industry's standard deviation of proportion of foreign controlling shareholders in the previous three years. Therefore, if other companies in the industry have a larger proportion of foreign shareholdings, we anticipate that a firm will likely have more foreign controlling shareholders. Additionally, the inherent volatility in foreign promoter ownership that affects the firm level foreign promoter ownership is reflected in the industry's standard deviation

The Wooldridge robust regression F(1, 2979) test statistics is 6.873 (statistically significant at the 1% level). These results indicate that the tax variable (*LNETR*) be treated as an endogenous variable. The hypothesis that the instrument variables are weak is rejected at the 1% level of statistical significance (with *F*-statistics of 4.954). An insignificant score of 1.085 on the χ^2 test statistics indicates that the model is not over specified. Overall, the findings (Panel A) from the diagnostic tests support the validity of IV_1 and IV_2 as instruments to be used in the 2SLS model.

Columns (1) and (2) in Table 6 report results for the first and second stage of the 2SLS model, respectively. The two instrument variables (IV_1 and IV_2) and the control variables in Model (1) are regressed on the foreign controlling shareholders ($FRGN_PROM$) in the first stage. The coefficients on both the instrument variables are statistically significant at 1% and 5%, respectively. Using the fitted values of $FRGN_PROM$ derived from the first-stage regression results, we estimate Model (1) in the second stage. The coefficient on $FRGN_PROM$ thus obtained is positive and statistically significant at the 5% level. The 2SLS results verify that our findings are robust to endogeneity problems that may arise because of bias in omitted variables.

[Insert Table 6 here]

4.3.3.3 GMM (Two stage GMM and Arellano and Bond System GMM estimation)

The generalized method of moments developed by Arellano and Bond (1991) and Blundell and Bond (1998) can be applied to dynamic panel data models. Endogeneity issues caused by simultaneity, dynamic endogeneity, and unobserved heterogeneity can be addressed by the GMM model (Wintoki et al., 2012). In order to eliminate endogeneity, this model internally transforms the data (where the variables past value is subtracted from its present value). By doing so, the number of observations reduce and enhances the efficiency of the GMM model (Wooldridge, 2012). In order to account for the endogenous link, this technique uses lagged values of the dependent variable.

We use a two stage GMM to address this source of endogeneity. We use IV_1 and IV_2 for estimating the GMM model. The industry average proportion of equity shares held by the foreign

controlling shareholders excluding the firm itself, is IV_1 , and the industry's standard deviation of proportion of foreign controlling shareholders over the last three years, is IV_2 which we use to estimate the GMM model. Panel B summarizes the findings of the diagnostic test for two stage GMM estimation. At the 1% level of significance, the GMM *C*- statistic of 7.206 is statistically significant. This implies that *FRGN_PROM* can be used as an endogenous variable in our model. The hypothesis that the instrument variables are weak is rejected at the 1% level of statistical significance (with *F*-statistics of 4.954). The model is correctly specified and the instrument variables are legitimate, as indicated by the statistically insignificant Hansen's *J*-statistic of 0.403. As seen in Column (3), we find that the coefficient on IV_1 is negative and statistically significant at 1% level of significance, whereas the coefficient is positive and statistically significant at 5% level of significance, as per the results of second stage. Therefore, the findings are resilient to the endogeneity issues.

Additionally, we have used the second order transformation, also known as the system GMM, in order to prevent the possible loss of data resulting from internal transformation, as recommended by Arellano and Bover (1995). By using "forward orthogonal deviations" the system GMM takes advantage of the dynamic panel data. Rather subtracting the variable's past observations, it subtracts the average of all future available observations of a particular variable (Roodman, 2009). The external instruments are not necessary with this methodology, since it relies on a set of instrument variables from the panel itself (Wintoki et al., 2012).

To confirm the consistency of the model, we perform a number of diagnostic tests, including the Hansen test to access the validity of the instrument variable and AR(2) to look at the autocorrelation in the error term. There is no second order autocorrelation in the error terms, as

indicated by the statistically insignificant AR(2) z-value of 1.51. The accuracy and precision of the estimations using the system GMM technique are ensured by the model's lack of second order autocorrelation. The statistical insignificance of the Hansen *J*-test indicates that there is no correlation between the error term and the model's instruments. The system GMM result is shown in Column (5). At the 1% level of significance, we record that the lagged values of *LNETR* are positive and statistically significant. Furthermore, the coefficient on *FRGN_PROM* is positive and statistically significant at 5% level of significance. Our results agree with the baseline regression results. As a result, the findings hold up well against different autocorrelation problems and other dynamic endogeneity challenges.

5. Role of Firm Characteristics

In this section, we estimate how the effects of foreign promoter ownership on tax aggressiveness vary with firm characteristics. These firm characteristics affect the environment surrounding a firm and the agency conflicts, thus affecting the firm's tax planning.

We divided the sample based on firm size, firm age, dividend payment, financial constraints and stock illiquidity. We split the firms into subsamples based on the sample industry median of firm specific variables including *FIRMSIZE* (which is the book value of the total assets), *FIRMAGE* (which is calculated as the difference between the listing year and given year), *DIVIDEND* (indicator variable taking value one if a firm pays dividend and zero otherwise), *WW* (measure of financial constraint), *ILLIQ* (which measures the stock illiquidity following Dechow and Dichev, 2002 and McNichols, 2002). We estimate the regression Model (1) separately for the two subsamples and examine how the *FRGN_PROM* relation varies across the two subsamples. These results are presented in Table 7.

We observe that the positive effect of foreign promoter ownership on effective tax rates is significant and more pronounced among larger, younger, less dividend paying firms, financially unconstrained firms, firms with more stock liquidity, and good information quality as shown in Panel (A) to (F). These findings indicate that the impact of foreign promoter ownership on tax strategies of firms is stronger for firms with good information quality, less financial constraints, and more stock liquidity.

[Insert Table 7 here]

6. Conclusion

This paper examines whether foreign promoter ownership impacts the corporate tax aggressiveness of a firm using a sample of publicly listed Indian firms. For the sample period from 2001 to 2023, we provide consistent and robust evidence that the presence of foreign controlling shareholders is negatively related to corporate tax aggressiveness. This means that tax aggressiveness decreases with an increase in foreign promoter ownership in the firm. We perform robust tests to validate our main findings and find that when foreign controlling shareholders are in majority, then firms make more tax payments. Further, we find that the results strengthens for the top 500 firms listed on National Stock Exchange.

In addition, the effect of foreign promoter ownership on tax aggressiveness strengthens when the information quality is good, firms are less financially unconstrained and have higher stock liquidity. We also document that firms with the effect of foreign controlling shareholders on tax planning strategies is more pronounced when the firms are larger in size and younger in age. To ensure the robustness of our results and account for any potential endogeneity, we perform several tests including two stage least square regression analysis, two stage GMM, and system GMM. Overall, our study provides insights information to investors who carefully assess corporations according to their corporate governance practices, such as agency concerns and minority shareholder protection. These findings are highly relevant to the companies that actively participate in international capital markets as well as overseas investors who want to make wellinformed decisions about investing in Indian corporations. Additionally, regulators and policymaker can use the data as a practical guide to establish regulations that effectively discourage tax aggressive strategies and strengthen governance framework for minority shareholders. This is especially important in situations when laws and regulations are not consistently enforced and investor protection measures are inadequate. The insights provided in this study can be immensely useful for emerging economies, which are characterized by fast growth but face institutional challenges.

References

- Aggarwal, R., Erel, I., Ferreira, M., and Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, 100(1), 154-181.
- Allen, F., Chakrabarti, R., De, S., and Qian, M. (2012). Financing firms in India. *Journal of Financial Intermediation*, 21(3), 409-445.
- Arellano, M., and Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies*, 58(2), 277-297.
- Badertscher, B. A., Katz, S. P., and Rego, S. O. (2013). The separation of ownership and control and corporate tax avoidance. *Journal of Accounting and Economics*, 56(2-3), 228-250.
- Balakrishnan, K., Blouin, J. L., and Guay, W. R. (2019). Tax aggressiveness and corporate transparency. *The Accounting Review*, 94(1), 45-69.
- Bertrand, M., Mehta, P., and Mullainathan, S. (2002). Ferreting out tunneling: An application to Indian business groups. *The Quarterly Journal of Economics*, *117*(1), 121-148.
- Blundell, R., and Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87(1), 115-143.
- Bradshaw, M., Liao, G., and 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.
- Cao, Y., Feng, Z., Lu, M., and Shan, Y. (2021). Tax avoidance and firm risk: evidence from China. *Accounting and Finance*, 61(3), 4967-5000.
- Chan, K. H., Mo, P. L. L., and Tang, T. (2016). Tax avoidance and tunneling: Empirical analysis from an agency perspective. *Journal of International Accounting Research*, 15(3), 49-66.
- Chan, K. H., Mo, P. L., and Zhou, A. Y. (2013). Government ownership, corporate governance and tax aggressiveness: evidence from China. *Accounting and Finance*, 53(4), 1029-1051.
- Chen, F., Hope, O. K., Li, Q., and Wang, X. (2018). Flight to quality in international markets: investors' demand for financial reporting quality during political uncertainty events. *Contemporary Accounting Research*, 35(1), 117-155.
- Chen, S., Huang, Y., Li, N., and Shevlin, T. (2019). How does quasi-indexer ownership affect corporate tax planning? *Journal of Accounting and Economics*, 67(2-3), 278-296.
- Chen, X., Cheng, Q., and Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, 95(1), 41-61.
- Christensen, J., and Murphy, R. (2004). The social irresponsibility of corporate tax avoidance: Taking CSR to the bottom line. *Development*, 47(3), 37-44.
- Dechow, P. M. and Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(s-1), 35-59
- Demsetz, H., and Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, 7(3), 209-233.
- Desai, M. A., and Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal* of *Financial Economics*, 79(1), 145-179.
- Desai, M. A., and Dharmapala, D. (2009). Corporate tax avoidance and firm value. *The review of Economics and Statistics*, *91*(3), 537-546.
- Dyreng, S. D., Hanlon, M., and Maydew, E. L. (2008). Long-run corporate tax avoidance. *The Accounting Review*, 83(1), 61-82

Dyreng, S. D., Hanlon, M., Maydew, E. L., and Thornock, J. R. (2017). Changes in corporate effective tax rates over the past 25 years. *Journal of Financial Economics*, *124*(3), 441-463

Fama, E. F. and MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. Journal of Political Economy, 81(3), 607-636

- Fan, J. P., and Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics*, *33*(3), 401-425.
- Frank, M. M., Lynch, L. J., and Rego, S. O. (2009). Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review*, 84(2), 467-496.
- Gassen, J., and Schwedler, K. (2010). The decision usefulness of financial accounting measurement concepts: Evidence from an online survey of professional investors and their advisors. *European Accounting Review*, 19(3), 495-509.
- Gomes, A. (2000). Going public without governance: Managerial reputation effects. *The Journal of Finance*, 55(2), 615-646.
- Gomes, A. (2000). Going public without governance: Managerial reputation effects. *The Journal of Finance*, 55(2), 615-646.
- Grossman, S. J., and Hart, O. D. (1988). One share-one vote and the market for corporate control. *Journal* of *Financial Economics*, 20, 175-202.
- Hanlon, M. and Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2-3), 127-178
- Hanlon, M., and Slemrod, J. (2009). What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement. *Journal of Public Economics*, 93(1-2), 126-141.
- Hasan, I., Kim, I., Teng, H., and Wu, Q. (2022). The effect of foreign institutional ownership on corporate tax avoidance: International evidence. *Journal of International Accounting, Auditing and Taxation*, 46, 100440.
- Huizinga, H., and Nicodème, G. (2006). Foreign ownership and corporate income taxation: An empirical evaluation. *European Economic Review*, 50(5), 1223-1244.
- Huseynov, F. and Klamm, B. K. (2012). Tax avoidance, tax management and corporate social responsibility. *Journal of Corporate Finance*, 18(4), 804-827
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323-329.
- Jiang, G., Lee, C. M., and Yue, H. (2010). Tunneling through intercorporate loans: The China experience. *Journal of Financial Economics*, 98(1), 1-20.
- Khan, M., Srinivasan, S., and Tan, L. (2017). Institutional ownership and corporate tax avoidance: New evidence. *The Accounting Review*, 92(2), 101-122.
- Khanna, T., and Palepu, K. (2000). Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *The Journal of Finance*, 55(2), 867-891.
- Khurana, I. K., and Moser, W. J. (2013). Institutional shareholders' investment horizons and tax avoidance. *The Journal of the American Taxation Association*, 35(1), 111-134.
- Kinney, M., and Lawrence, J. (2000). An analysis of the relative US tax burden of US corporations having substantial foreign ownership. *National Tax Journal*, *53*(1), 9-22.
- Kovermann, J. and Velte, P. (2019). The impact of corporate governance on corporate tax avoidance—A literature review. *Journal of International Accounting, Auditing and Taxation*, *36*, 100270
- La Porta, R., Lopez-de-Silanes, F., and Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471-517.
- Lang, M. H., Lins, K. V., and Miller, D. P. (2003). ADRs, analysts, and accuracy: Does cross listing in the United States improve a firm's information environment and increase market value? *Journal of Accounting Research*, 41(2), 317-345.
- Lanis, R. and Richardson, G. (2012). Corporate social responsibility and tax aggressiveness: An empirical analysis. *Journal of Accounting and Public Policy*, 31(1), 86-108

- Lo, A. W., Wong, R. M., and Firth, M. (2010). Tax, financial reporting, and tunneling incentives for income shifting: An empirical analysis of the transfer pricing behavior of Chinese-listed companies. *Journal of* the American Taxation Association, 32(2), 1-26.
- McGuire, S. T., Wang, D., and Wilson, R. J. (2014). Dual class ownership and tax avoidance. *The Accounting Review*, 89(4), 1487-1516.
- McNichols, M. F. (2002). Discussion of the quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(s-1), 61-69
- Mills, L. F., and Newberry, K. J. (2001). The influence of tax and nontax costs on book-tax reporting differences: Public and private firms. *Journal of the American Taxation Association*, 23(1), 1-19.
- Morck, R., Shleifer, A., and Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20, 293-315.
- Nagar, N. and Sen, K. (2016). How does regulation affect the relation between family control and reported cash flows? Comparative evidence from India and the United States. *Corporate Governance: An International Review*, 24(5), 490-508
- Ouyang, C., Xiong, J., and Huang, K. (2020). Do multiple large shareholders affect tax avoidance? Evidence from China. *International Review of Economics and Finance*, 67, 207-224.
- Richardson, G., Wang, B., and Zhang, X. (2016). Ownership structure and corporate tax avoidance: Evidence from publicly listed private firms in China. *Journal of Contemporary Accounting and Economics*, 12(2), 141-158.
- Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *The Stata Journal*, *9*(1), 86-136.
- Salihu, I. A., Annuar, H. A., and Obid, S. N. S. (2015). Foreign investors' interests and corporate tax avoidance: Evidence from an emerging economy. *Journal of Contemporary Accounting and Economics*, 11(2), 138-147.
- Sarkar, J., and Sarkar, S. (2000). Large shareholder activism in corporate governance in developing countries: Evidence from India. *International Review of Finance*, 1(3), 161-194.
- Shleifer, A., and Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783.
- Stulz, R. (1988). Managerial control of voting rights: Financing policies and the market for corporate control. *Journal of Financial Economics*, 20, 25-54.
- Tsang, A., Xie, F., and Xin, X. (2019). Foreign institutional investors and corporate voluntary disclosure around the world. *The Accounting Review*, 94(5), 319-348.
- Wang, F., Xu, S., Sun, J., and Cullinan, C. P. (2020). Corporate tax avoidance: A literature review and research agenda. *Journal of Economic Surveys*, 34(4), 793-811.
- Williams, D. F. (2007). Tax and corporate social responsibility. KPMG, London.
- Wintoki, M. B., Linck, J. S., and Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, 105(3), 581-606.
- Wooldridge, J. M. (1996). Introductory Econometrics: A Modern Approach 3rd ed.



Figure1: Foreign Promoter Ownership

This figure presents the annual means and median equity ownership held by foreign controlling shareholders (promoters). The foreign controlling firms are those with at least one foreign controlling shareholder. The sample period for this study is from 2001 to 2023.

Table 1: Sample Distribution by Industry and Year

This table presents descriptive statistics and summary statistics of all the variables used in the study. The effective tax rate (*ETR*) is the ratio of cash taxes paid by profit before tax and *FRGN_PROM* is the proportion of shareholdings owned by foreign promoters in a company. *ETR* varies between 0 and 1. *LNETR* is the natural log of *ETR*, *FRGN_PROM* is the proportion of shareholdings owned by foreign promoters in a company. *ETR* varies between 0 and 1. *LNETR* is the natural log of *ETR*, *FRGN_PROM* is the proportion of shareholdings owned by foreign promoters in a company, *LEV* is long-term debt divided by total assets, *FIRMSIZE* is the natural log of the book value of total assets, *DIVIDEND* is equal to one if a firm pays a dividend and zero otherwise, *FRGN_SALES* is one (zero) for firms with (without) foreign operations, *FIRMAGE* is the age calculated by taking the difference between the listing year and the given year, *CF* is cash flow from operating activities scaled by total assets, *LNCF* is the natural log of *CF*, *PPE* is the ratio of property, plant, and equipment to total assets, *LNPPE* is the natural log of *PPE*, *CAPEX* is the amount spent on fixed assets scaled by property, plant, and equipment, *LNCAPEX* is the natural log of *CAPEX*. All continuous variables are winsorized at the 1st and 99th percentile. The sample period is from 2001 to 2023.

Panel A: This panel presents distribution of the sample by industry. Columns (1) and (3) reports mean *ETR* and *FRGN PROM*, and Columns (2) and (4) reports median *ETR* and *FRGN PROM*.

	(1)	(2)	(3)	(4)
	Mean	Median	Mean	Median
	ETR	ETR	FRGN PROM	FRGN PROM
Accommodation and Food service activities	11.481	8.593	33.644	37.315
Administrative and support service activities	16.566	11.886	34.946	26.090
Agriculture, Forestry and Fishing	9.142	7.652	30.284	35.700
Arts, entertainment and recreation	0.207	0.2074	6.650	6.650
Construction	14.169	12.309	22.976	6.650
Diversified	13.152	10.311	26.518	10.840
Education	10.790	13.333	8.841	9.040
Electricity, gas, steam and air conditioning supply	2.994	0.697	14.164	6.800
Financial and insurance activities	12.153	9.722	19.292	12.040
Human health and social work activities	13.654	14.013	11.273	2.080
Information and communication	15.304	13.896	32.958	29.580
Manufacturing	15.484	14.744	29.138	22.140
Mining and quarrying	14.626	13.659	18.475	19.995
Other service activities	16.484	8.115	3.665	3.665
Professional, scientific and technical activities	22.043	21.034	33.512	21.760
Transportation and storage	13.751	10.540	38.088	36.800
Wholesale and retail trade	17.888	17.100	33.918	28.800
Panel B:This panel presents distribution of the sample by ye	ar.			
2001	13.005	9.430	30.834	29.030
2002	11.557	8.763	30.886	29.955
2003	12.543	9.166	29.874	26.000
2004	14.968	11.880	31.528	26.950
2005	14.870	11.765	30.198	26.000
2006	14.757	10.856	32.147	28.595
2007	13.348	10.284	27.909	20.495
2008	14.366	11.885	27.384	20.100
2009	14.709	11.054	27.444	20.470
2010	15.219	12.697	28.118	20.335
2011	16.219	15.114	27.869	19.575
2012	14.970	13.642	29.128	19.910
2013	15.546	15.349	28.591	18.210
2014	16.046	14.939	29.324	20.495
2015	15.010	13.595	29.364	20.900
2016	16.218	15.980	29.315	20.585
2017	16.682	16.828	28.058	19.375
2018	16.268	15.793	27.965	18.360
2019	18.046	17.406	27.401	16.770
2020	15.693	14.873	29.316	20.950
2021	14.122	13.515	28.753	20.500
2022	14.964	14.918	28.423	20.115
2023	15.309	15.293	29.041	21.485

Panel C: This panel reports the summary statistics of all the variables used in the study.						
	(1)	(2)	(3)	(4)	(5)	
	Mean	Median	25th Percentile	75th Percentile	Std Dev	
ETR	13.753	11.363	4.830	19.754	12.155	
LNETR	-2.483	-2.175	-3.031	-1.622	1.247	
FRGN_PROM	10.672	0.000	0.000	7.530	21.060	
LEV	0.264	0.242	0.093	0.395	0.200	
FIRMSIZE	7.506	7.362	5.913	8.934	2.129	
DIVIDEND	0.515	1.000	0.000	1.000	0.500	
FRGN_SALES	0.580	1.000	0.000	1.000	0.494	
FIRMAGE	12.515	12.000	5.000	20.000	9.858	
CF	0.052	0.053	-0.002	0.113	0.106	
LNCF	-2.722	-2.492	-3.180	-2.006	1.071	
PPE	0.236	0.207	0.060	0.374	0.192	
LNPPE	-2.150	-1.560	-2.742	-0.979	1.701	
CAPEX	0.243	0.216	0.065	0.382	0.194	
LNCAPEX	-2.023	-1.500	-2.577	-0.949	1.526	

Panel D: This panel repo	rts the Pearson (Sp	earman) corre	elation coeffic	eients in the lo	ower (upper) t	riangle. Signi	ficant coeffici	ents (at the 59	6 level) are sh	own in bold.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) ETR		0.076	-0.335	-0.023	-0.190	0.016	0.009	0.027	-0.195	-0.197
(2) FRGN_PROM	0.058		-0.001	0.113	-0.106	0.064	0.085	0.063	0.022	0.010
(3) <i>LEV</i>	-0.010	-0.013		0.069	0.073	-0.046	-0.025	0.011	0.314	0.314
(4) FIRMSIZE	-0.043	0.116	-0.044		-0.483	0.374	0.157	0.166	0.099	0.092
(5) DIVIDEND	-0.199	-0.138	0.021	-0.459		-0.346	-0.025	-0.225	-0.139	-0.123
(6) FRGN_SALES	0.008	0.101	-0.022	0.328	-0.346		0.012	0.245	0.323	0.315
(7) FIRMAGE	0.030	0.064	-0.019	0.145	-0.012	0.019		-0.028	-0.084	-0.074
(8) <i>CF</i>	-0.007	0.027	-0.862	0.054	-0.064	0.071	-0.007		0.353	0.354
(9) <i>PPE</i>	-0.206	0.044	0.086	0.043	-0.094	0.245	-0.069	0.139		0.976
(10) LNCAPEX	-0.103	0.078	0.013	0.021	-0.159	0.380	-0.063	0.155	0.747	

Table 2: Foreign Controlling Shareholders and Tax Aggressiveness

The table reports the OLS results, where the dependent variable is the natural log of effective tax rate (*LNETR*). *LNETR3/5* is the three/five year *ETR*. *FRGN_PROM* is the percentage of shares owned by foreign promoters, respectively. *LEV* is long-term debt divided by total assets, *FIRMSIZE* is the natural log of the book value of total assets, *DIVIDEND* is equal to one if a firm pays a dividend and zero otherwise, *FIRMAGE* is the age calculated by taking the difference between the listing year and the given year, *FRGN_SALES* as indicator variable taking value one if a firm reports foreign sales, and zero otherwise, *CF* is cash flow from operating activities scaled by total assets, *LNCF* is the natural log of *CF*, *LNPPE* is the natural log of the ratio of property, plant, and equipment to total assets, *LNCAPEX* is the natural log of the amount spent on fixed assets scaled by property, plant, and equipment, All continuous variables are winsorized at the 1st and 99th percentile. The sample period is from 2001 to 2023. Statistical significance at the 1, 5, and 10% levels is indicated by ***, **, and *, respectively. *t*-Statistics (in parentheses) are calculated based on heteroscedasticity-robust standard errors, which are clustered by firm.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Foreign Contro	lling Shareholder	Ownership		Only Foreign Co	ntrolling Shareho	lder Ownership
	LNETR	LNETR3	LNETR5	LNETR	LNETR	LNETR3	LNETR5
	(Baseline			(Fama and MacBeth			
	regression)			regression)			
FRGN PROM	0.245	0.255	0.230	0.274	0.157	0.251	0.266
	(3.299)***	(4.858)***	(4.679)***	(3.230)***	(1.795)*	(3.852)***	(4.457)***
LEV	-2.108	-0.114	0.000	-2.431	-2.484	-0.328	-0.073
	(-25.061)***	(-1.894)*	(0.003)	(-13.075)***	(-17.077)***	(-2.952)***	(-0.803)
FIRMSIZE	-0.072	-0.039	-0.032	-0.058	-0.041	-0.039	-0.043
	(-8.455)***	(-7.812)***	(-7.049)***	(-5.764)***	(-3.215)***	(-4.685)***	(-5.503)***
DIVIDEND	0.691	0.113	0.033	0.815	0.812	0.177	0.059
	(20.903)***	(5.316)***	(1.769)*	(11.946)***	(13.412)***	(4.171)***	(1.478)
FIRMAGE	0.005	0.000	-0.002	0.005	0.002	-0.003	-0.005
	(4.233)***	(0.282)	(-1.850)*	(3.659)***	(0.925)	(-1.459)	(-2.529)**
FRGN_SALES	0.066	0.049	0.036	0.041	0.053	0.084	0.090
	(1.998)**	(2.107)**	(1.685)*	(1.127)	(0.795)	(1.576)	(1.649)*
LNCF	0.061	0.011	0.008	0.028	0.061	-0.000	0.010
	(5.055)***	(1.287)	(1.061)	(1.213)	(2.968)***	(-0.000)	(0.807)
LNPPE	0.031	0.072	0.065	-0.017	-0.065	0.022	0.013
	(0.667)	(1.710)*	(1.578)	(-0.107)	(-1.045)	(0.414)	(0.260)
LNCAPEX	-0.126	-0.099	-0.084	-0.081	-0.046	-0.083	-0.063
	(-2.601)***	(-2.380)**	(-2.037)**	(-0.508)	(-0.659)	(-1.580)	(-1.256)
				(0.754)			
Constant	-12.848	-1.879	1.802	-12.402	-6.752	3.771	8.053
	(-5.134)***	(-1.142)	(1.085)	(-4.348)***	(-1.396)	(1.059)	(2.179)**
Ν	13,014	8,934	7,095	13,014	5,382	3,799	3,087
$Adj-R^2R^2$	0.254	0.065	0.074	(0.385)	0.340	0.110	0.139
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 3: Robustness Tests

The table reports the OLS results, where the dependent variable is the natural log of effective tax rate (*LNETR*). *FRGN_PROM* is the percentage of shares owned by foreign promoters, respectively. *LEV* is long-term debt divided by total assets, *FIRMSIZE* is the natural log of the book value of total assets, *DIVIDEND* is equal to one if a firm pays a dividend and zero otherwise, *FIRMAGE* is the age calculated by taking the difference between the listing year and the given year, *FRGN_SALES* as indicator variable taking value one if a firm reports foreign sales, and zero otherwise, *CF* is cash flow from operating activities scaled by total assets, *LNCF* is the natural log of *CF*, *LNPPE* is the natural log of the ratio of property, plant, and equipment to total assets, *LNCAPEX* is the natural log of the amount spent on fixed assets scaled by property, plant, and equipment. All continuous variables are winsorized at the 1st and 99th percentile. The sample period is from 2001 to 2023. Statistical significance at the 1, 5, and 10% levels is indicated by ***, **, and *, respectively. *t*-Statistics (in parentheses) are calculated based on heteroscedasticity-robust standard errors, which are clustered by firm.

	(1)	(2)	(3)	(4)	(5)	(6)
Variable	FRGN	FRGN	FRGN	FRGN	LNETR	LNETR(only
(FRGN_PROM)	(0-10%)	(10-26%)	(26-51%)	(>51%)	(NSE500)	NSE500)
FRGN PROM	-0.075	-0.114	0.144	0.111	0.001	0.004
	(-1.999)**	(-1.983)**	(3.052)***	(2.143)**	(1.297)	(3.055)***
NSE500					0.289	
					(6.285)***	
NSE500*FRGNPROM					0.003	
					(2.448)**	
LEV	-2.132	-2.150	-2.139	-2.129	-2.003	-1.968
	(-25.127)***	(-25.616)***	(-25.467)***	(-25.311)***	(-23.784)***	(-9.692)***
FIRMSIZE	-0.071	-0.068	-0.070	-0.070	-0.113	-0.071
	(-8.301)***	(-7.993)***	(-8.166)***	(-8.254)***	(-10.745)***	(-3.747)***
DIVIDEND	0.686	0.685	0.684	0.689	0.696	0.744
	(20.653)***	(20.560)***	(20.481)***	(20.822)***	(21.390)***	(6.880)***
FIRMAGE	0.005	0.005	0.005	0.005	0.006	0.006
	(4.000)***	(3.662)***	(3.837)***	(4.002)***	(4.644)***	(1.765)*
FRGN_SALES	0.073	0.075	0.074	0.071	0.075	0.054
	(2.194)**	(2.249)**	(2.239)**	(2.137)**	(2.261)**	(0.617)
LNCF	0.062	0.063	0.062	0.062	0.049	0.125
	(5.097)***	(5.173)***	(5.133)***	(5.101)***	(4.080)***	(4.406)***
LNPPE	0.027	0.026	0.025	0.030	0.035	-0.018
	(0.583)	(0.538)	(0.528)	(0.625)	(0.746)	(-0.230)
LNCAPEX	-0.125	-0.124	-0.122	-0.126	-0.122	-0.105
	(-2.547)**	(-2.505)**	(-2.496)**	(-2.578)***	(-2.493)**	(-1.300)
Constant	-12.168	-11.237	-11.794	-11.993	-13.685	-13.041
	(-4.873)***	(-4.546)***	(-5.535)***	(-5.605)***	(-5.469)***	(-2.054)**
Observations	13,014	13,014	13,014	13,014	13,014	2,619
$Adj-R^2$	0.253	0.253	0.254	0.253	0.263	0.340

Table 4: Alternate Ownership Measures

The table reports the OLS results, where the dependent variable is the natural log of effective tax rate (*LNETR*). *PROM* is the proportion of shareholdings owned by promoters in a company. *DOM_PROM* is the percentage of shares owned by domestic promoters, respectively. *FII* and *INST_INV* is the proportional equity stake held by foreign and domestic institutional investors. *GOVT* is the proportional equity stake held by state-owned enterprises. *LEV* is long-term debt divided by total assets, *FIRMSIZE* is the natural log of the book value of total assets, *DIVIDEND* is equal to one if a firm pays a dividend and zero otherwise, *FIRMAGE* is the age calculated by taking the difference between the listing year and the given year, *FRGN_SALES* as indicator variable taking value one if a firm reports foreign sales, and zero otherwise, *CF* is cash flow from operating activities scaled by total assets, *LNCF* is the natural log of *CF*, *LNPPE* is the natural log of the ratio of property, plant, and equipment to total assets, *LNCAPEX* is the natural log of the amount spent on fixed assets scaled by property, plant, and equipment. All continuous variables are winsorized at the 1st and 99th percentile. The sample period is from 2001 to 2023. Statistical significance at the 1, 5, and 10% levels is indicated by ***, **, and *, respectively. *t*-Statistics (in parentheses) are calculated based on heteroscedasticity-robust standard errors, which are clustered by firm.

	(1)	(2)	(3)	(4)	(5)
Variable $OWN \rightarrow$	PROM	DOM_PROM	FII	INST_INV	GOVT
OWN	0.003	0.135	0.290	0.400	1.233
	(4.230)***	(2.450)**	(1.653)*	(3.605)***	(1.350)
LEV	-2.277	-2.248	-2.349	-2.262	-1.978
	(-37.515)***	(-36.463)***	(-26.172)***	(-33.967)***	(-23.360)***
FIRMSIZE	-0.069	-0.073	-0.037	-0.084	-0.066
	(-10.569)***	(-10.749)***	(-3.450)***	(-9.614)***	(-7.665)***
DIVIDEND	0.713	0.716	0.767	0.746	0.624
	(29.305)***	(29.281)***	(20.325)***	(27.787)***	(19.033)***
FIRMAGE	0.004	0.005	0.011	0.005	0.006
	(4.008)***	(4.301)***	(6.828)***	(4.899)***	(4.781)***
FRGN SALES	0.051	0.052	0.083	0.068	0.086
_	(2.027)**	(2.051)**	(2.283)**	(2.463)**	(2.642)***
LNCF	0.022	0.022	0.057	0.033	0.071
	(2.711)***	(2.665)***	(4.684)***	(3.736)***	(5.657)***
LNPPE	0.044	0.040	0.007	0.026	0.059
	(1.088)	(0.992)	(0.149)	(0.628)	(1.209)
LNCAPEX	-0.142	-0.135	-0.087	-0.116	-0.149
	(-3.436)***	(-3.217)***	(-1.782)*	(-2.745)***	(-2.982)***
Constant	-11.094	-11.758	-23.975	-13.163	-14.263
	(-5.182)***	(-5.425)***	(-7.597)***	(-5.922)***	(-5.575)***
N	28,307	27,634	14,748	24,994	11,768
$Adj-R^2$	0.264	0.259	0.287	0.271	0.225
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes

Table 5: Impact of Lagged Values

The table reports the OLS results, where the dependent variable is the natural log of effective tax rate (*LNETR*). *LNETR3/5* is the three/five year *ETR*. *FRGN_PROM* is the percentage of shares owned by foreign promoters, respectively. *LEV* is long-term debt divided by total assets, *FIRMSIZE* is the natural log of the book value of total assets, *DIVIDEND* is equal to one if a firm pays a dividend and zero otherwise, *FIRMAGE* is the age calculated by taking the difference between the listing year and the given year, *FRGN_SALES* as indicator variable taking value one if a firm reports foreign sales, and zero otherwise, *CF* is cash flow from operating activities scaled by total assets, *LNCF* is the natural log of *CF*, *LNPPE* is the natural log of the explanatory variable is taken in the table. All continuous variables are winsorized at the 1st and 99th percentile. The sample period is from 2001 to 2023. Statistical significance at the 1, 5, and 10% levels is indicated by ***, **, and *, respectively. *t*-Statistics (in parentheses) are calculated based on heteroscedasticity-robust standard errors, which are clustered by firm.

	(1)	(2)	(3)	(4)	(5)	(6)
	Foreign Contr	olling Shareholder Ow	nership	Only Foreig	n Controlling Shareh	older Firms
	LNETR	LNETR3	LNETR5	LNETR	LNETR3	LNETR5
	(Baseline regression)					
L.FRGN PROM	0.002	0.003	0.002	0.002	0.002	0.003
	(2.932)***	(4.706)***	(4.748)***	(1.915)*	(3.244)***	(4.100)***
L.LEV	-2.275	-0.226	-0.027	-2.491	-0.551	-0.126
	(-24.287)***	(-3.411)***	(-0.539)	(-14.871)***	(-4.303)***	(-1.376)
L.FIRMSIZE	-0.059	-0.041	-0.033	-0.042	-0.040	-0.039
	(-6.747)***	(-7.362)***	(-7.367)***	(-3.229)***	(-4.574)***	(-5.100)***
L.DIVIDEND	0.512	0.177	0.043	0.583	0.232	0.066
	(15.053)***	(7.231)***	(2.375)**	(9.528)***	(4.869)***	(1.718)*
L.FIRMAGE	0.006	0.001	-0.001	0.002	-0.002	-0.004
	(4.444)***	(1.015)	(-1.216)	(0.624)	(-0.977)	(-2.083)**
L.FRGN SALES	0.036	0.053	0.041	0.025	0.047	0.071
	(1.085)	(2.117)**	(1.836)*	(0.383)	(0.877)	(1.290)
L.LNCF	0.106	0.002	0.000	0.121	-0.006	0.006
	(8.497)***	(0.240)	(0.021)	(6.275)***	(-0.369)	(0.505)
L.LNPPE	0.063	0.075	0.075	-0.008	0.015	0.026
	(1.489)	(2.060)**	(1.745)*	(-0.150)	(0.310)	(0.498)
L.LNCAPEX	-0.172	-0.102	-0.098	-0.146	-0.080	-0.080
	(-3.910)***	(-2.780)***	(-2.266)**	(-2.344)**	(-1.587)	(-1.475)
Constant	-13.593	-3.058	0.761	-5.209	2.417	6.679
	(-5.195)***	(-1.777)*	(0.450)	(-1.033)	(0.639)	(1.747)*
N	10,219	8,279	6,541	4,416	3,625	2,962
$Adj-R^2$	0.268	0.078	0.073	0.340	0.136	0.113
Year FE	YES	Yes	Yes	Yes	Yes	Yes
Industry FE	YES	Yes	Yes	Yes	Yes	Yes

Table 6: Endogeneity Tests

The table presents the results obtained from the endogeneity tests. The main dependent variable is the natural log of effective tax rate (*LNETR*), *FRGN_PROM* is the percentage of shares owned by foreign promoters, respectively. IV_1 is the average industry ownership of foreign controlling shareholders, excluding the firm itself. IV_2 is the industry standard deviation of foreign controlling shareholders over the last 3 years. *LEV* is long-term debt divided by total assets, *FIRMSIZE* is the natural log of the book value of total assets, *DIVIDEND* is equal to one if a firm pays a dividend and zero otherwise, *FIRMAGE* is the age calculated by taking the difference between the listing year and the given year, *FRGN_SALES* as indicator variable taking value one if a firm reports foreign sales, and zero otherwise, *CF* is cash flow from operating activities scaled by total assets, *LNCF* is the natural log of *CF*, *LNPPE* is the natural log of the ratio of property, plant, and equipment to total assets, *LNCAPEX* is the natural log of the amount spent on fixed assets scaled by property, plant, and equipment. All continuous variables are winsorized at the 1st and 99th percentile. The sample period is from 2001 to 2023. Statistical significance at the 1, 5, and 10% levels is indicated by ***, **, and *, respectively. *t*-Statistics (in parentheses) are calculated based on heteroscedasticity-robust standard errors, which are clustered by firm.

Panel A: The panel presents the results from the diagnostic tests for 2SLS estimation

Test of Endogeneity H0 = Variables are exogenous Robust regression F(1, 2979) = 6.873 (p = 0.008)

Test of Weak Instruments H0 = Instruments are weak F(2, 2980) = 4.954 (p = 0.007)

Test for Over-Identifying Restrictions H0 = Instruments are valid Sargan χ^2 (1) = 1.085 (p = 0.297) Basmann χ^2 (1) = 1.081 (p = 0.298)

Panel B: The panel presents the results from the diagnostic tests for GMM estimation

Test of Endogeneity H0 = Variables are exogenous GMM *C*-statistic χ^2 (1) score = 7.206 (p = 0.007)

Test of Weak Instruments H0 = Instruments are weak F(2, 2980) = 4.954 (p = 0.007)

Test for Over-Identifying Restrictions H0 = Instruments are valid Hensen's J χ^2 (1) = 0.403 (p = 0.525) Panel C: The panel presents the results from the diagnostic tests for Arellano and Bond System GMM estimation Arellano-Bond test for AR(1) z-value = -6.18 (p = 0.000) Arellano-Bond test for AR(2) z-value = 1.51 (p = 0.132) Hansen test χ^2 (1) = 2.03 (p = 0.567)

estimation	ents results of endogeneity t	ests meruding two stage is	cast square estimation,	two stage Olvini, and Are	finano and Dona System Givini	
	(1)	(2)	(3)	(4)	(5)	
	2SLS-1	regression	(GMM	System GMM	
	First stage	Second stage	First stage	Second stage	Arellano and Bond	
L.LNETR					0.534	
					(5.28)***	
FRGN_PROM		3.425		3.583	0.001	
		(2.086)**		(2.159)**	(2.11)**	
IV_1	-0.302***		-0.302***			
	(-2.67)		(-2.67)			
IV_2	0.453**		0.453**			
	(2.37)		(2.37)			
LEVERAGE	-18.822***	-1.508	-0.188***	-1.473	-1.079	
	(-9.00)	(-4.573)***	(-9.00)	(-4.440)***	(-5.01)***	
FIRMSIZE	1.264***	-0.112	0.013***	-0.115	-0.033	
	(4.95)	(-4.778)***	(4.95)	(-4.823)***	(-4.43)***	
DIVIDEND	-2.708***	0.777	-0.027***	0.780	0.292	
	(-3.15)	(12.567)***	(-3.15)	(12.395)***	(4.14)***	
FIRMAGE	0.271***	0.014	0.003***	0.014	0.000	
	(7.40)	(2.901)***	(7.40)	(2.956)***	(0.55)***	
FRGN SALES	4.064***	-0.066	0.041***	-0.072	0.005	
—	(5.30)	(-0.844)	(5.30)	(-0.905)	(0.19)	
LNCF	0.633***	0.042	0.006***	0.040	0.042	
	(2.73)	(2.415)**	(2.73)	(2.317)**	(4.44)***	
LNPPE	-2.735*	0.117	-0.027*	0.124	0.012	
	(-1.98)	(1.560)	(-1.98)	(1.627)	(0.037)	
LNCAPEX	1.228	-0.168	0.012	-0.171	-0.064	
	(0.87)	(-2.622)***	(0.87)	(-2.627)***	(-1.68)	
Constant	569.55***	-30.980	5.695***	-31.879	-2.483	
	(7.72)	(-3.091)***	(7.72)	(-3.145)***	(-1.13)	
N	12,997	12,997	12,997	12,997	11,055	
Adj-R ²	0.101	0.013	0.101	0.013	-	
Industry FE	YES	YES	YES	YES	YES	
Year FE	YES	YES	YES	YES	YES	

Panel D: The panel presents results of endogeneity tests including two stage least square estimation, two stage GMM, and Arellano and Rond System GMM

Table 7: Firm Characteristics

The table reports the OLS results, where the dependent variable is the natural log of effective tax rate (*LNETR*). *FRGN_PROM* is the percentage of shares owned by foreign promoters, respectively. The entire sample is split into subsamples based on firm characteristics, financial constraints, and information quality. All continuous variables are winsorized at the 1st and 99th percentile. The sample period is from 2001 to 2023. Statistical significance at the 1, 5, and 10 % levels is indicated by ***, **, and *, respectively. *t*-Statistics (in parentheses) are calculated based on heteroscedasticity-robust standard errors, which are clustered by firm.

(1) (2) Panel A: The full sample is divided into subsamples (below and above the industry median) based on the size, which is measured by the total book value of the assets.

5		
	Large firms	Small firms
FRGN PROM	0.269	0.176
—	(3.399)***	(1.076)
Controls	Yes	Yes
N	8,788	4,226
$Adj-R^2$	0.289	0.203
Panel B: The full sample is divided into age and incorporation age, which is the	subsamples (below and above the in year when the firm gets listed on the	dustry median) based on the listing
uge und meerporation uge, which is the	Older firms	Younger firms
FRGN PROM	0.186	0.362
I non_I nom	(2, 252)**	(3 068)***
Controls	Ves	Yes
N	6 593	6 287
$Adi-R^2$	0.246	0.269
Panel C. The full sample is divided into	subsamples (below and above the ju	ndustry median) based on the dividend
payment, which is whether a firm pays	more dividend or less	reastry meaning sussed on the arrhadita
· · · · · · · · · · · · · · · ·	More dividend paying firms	Less Dividend paying firms
FRGN PROM	0.240	0.312
	(1.452)	(4.255)***
Controls	Yes	Yes
N	5.359	7.655
$Adj-R^2$	0.188	0.213
Panel D: The full sample is divided into	o subsamples (below and above the i	ndustry median) based on the measure
of financial constraint, which is calcula	ted by following Whited and Wu (20	06).
`	Financially constrained firms	Financially unconstrained firms
FRGN PROM	0.256	0.241
	(1.542)	(2.408)**
Controls	Yes	Yes
N	1,995	3,137
$Adj-R^2$	0.270	0.285
Panel E: The full sample is divided into	o subsamples (below and above the i	ndustry median) based on the measure
of stock illiquidity, which is calculated	by following Dechow and Dichev (2)	002).
	High stock illiquidity	Low stock illiquidity
FRGN PROM	0.266	0.330
—	(2.809)***	(3.337)***
Controls	Yes	Yes
Ν	5,122	5,366
$Adj-R^2$	0.269	0.256
Panel F: The full sample is divided into s	subsamples (below and above the indu	ustry median) based on stock illiquidity,
which is calculated following McNicho	ls (2002).	

More accruals	Less accruals			
0.294	0.310			
(3.181)***	(2.999)***			
Yes	Yes			
	More accruals 0.294 (3.181)*** Yes	More accruals Less accruals 0.294 0.310 (3.181)*** (2.999)*** Yes Yes		

Ν	5,007	5,464
$Adj-R^2$	0.272	0.255

Appendix: `	Variable	Definition
-------------	----------	------------

Variable Name	Definition
ACCRUALS	These are the absolute accruals following Dechow and Dichev (2002) and McNichols
	(2002).
BUS_GRP	Indicator variable taking value one if
CAPEX/LNCAPEX	CAPEX is the amount spent on fixed assets scaled by property, plant, and equipment.
	LNCAPEX is the natural log of CAPEX.
DIVIDEND	One for firms that pay dividend and zero otherwise
DIVIDEND	The dividend is the dummy variable that is equal to one for firms paying the dividend and
	zeroes for firms not paying any dividend
DOM_PROM	Proportion of shares held by domestic promoters
ETR/LNETR	Cash taxes paid by a firm divided by profit before taxes, <i>LNETR</i> is the natural log of <i>ETR</i>
ETR/LNETR	Cash taxes paid by a firm divided by profit before taxes, <i>LNETR</i> is the natural log of <i>ETR</i>
FII	Proportion of shares held by the foreign institutional investors
FIRMAGE	Difference between a listing year and any given year
FIRMSIZE	Natural log of the book value of total assets
FRGN_PROM	Proportion of shares held by foreign promoters
FRGN_SALES	One if a firm reports foreign income and zero otherwise
GOVT	One for government owned enterprises and zero otherwise
INST_INV	Proportion of equity shares held by the institutional investors
IV_1	IV_1 is the average industry ownership of foreign controlling shareholders, excluding the firm
	itself.
IV_2	IV_2 is the industry standard deviation of foreign controlling shareholders over the last 3
	years.
LEV	Long-term debt divided by total assets
LNCF	Natural log of cash flow from the operating activities scaled by the total assets
LNETR3/5	Natural log of the sum of cash taxes paid over a three/five year period divided by the sum
	of the profit before taxes earned over that period
LNPPE	Natural log of the amount spent on plant, property and equipment scaled by total assets.
NSE500	NSE500 is defined as a dummy variable taking value one in case a firm is listed with NSE500
	and zero otherwise.
PROM	Proportion of equity held by the promoters of a firm
WW Index	The degree of financial constraints calculated by following Whited and Wu's (2006)