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How does the market for corporate control impact tax avoidance? evidence from international M&A laws

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Abstract

Income taxes are a major expense for profitable corporations, oftentimes 25 percent or more of pretax income. This study exploits a setting – the market for corporate control – to test competing agency-based and risk-based explanations of corporate tax planning. Exploiting the staggered enactment of M&A laws across countries that increased the threat of takeover as an exogenous shock that allows a powerful difference-in-differences design, we find a significant reduction in tax avoidance following the takeover law passage. Our analysis suggests that reduced management private benefits consumption (i.e., rent extraction), rather than managerial effort aversion or increased risk concerns associated with aggressive tax strategies, is the likely mechanism through which takeover laws impact tax avoidance. Collectively, our findings extend the literature by highlighting the role of the corporate control market in shaping cross-sectional variation in corporate tax avoidance.

Keywords: International M&A laws; Takeover threat; Tax avoidance; Corporate governance

JEL codes: G34; K22; H25; H26; M41

1 Introduction

The market for corporate control plays an important role in reallocating resources and stimulating financial development. A large literature in financial economics suggests that corporate takeovers can serve as an effective governance mechanism in disciplining managers and aligning their interests with those of shareholders (e.g., Jensen and Ruback 1983). However, the endogenous nature of the level of actual takeover activities poses a significant challenge to establishing the causal link between the takeover market and corporate outcomes. Our study takes advantage of the staggered enactments of takeover acts worldwide (hereafter, international M&A laws) as a natural experiment to examine the effect of the market for corporate control on tax avoidance. Corporate taxes are a major expense for profitable corporations and prior literature has offered agency-based and risk-based explanations for cross-sectional variation in tax avoidance with somewhat mixed results (see Hanlon and Heitzman (2010) and Wilde and Wilson (2018) for summaries). The M&A setting allows a powerful causal test of these competing predictions.

In the late 1990s and early 2000s, many countries passed M&A laws that aimed at promoting an active market for corporate control and fostering takeover activities. These M&A laws are regarded as effective legislation in establishing a clear regulatory M&A framework, creating a transparent bidding process, and streamlining M&A procedures (Nenova 2006). Typically, these laws include provisions designed to ease the regulatory burden of bidders in completing takeover transactions (e.g., the squeeze-out rule) as well as provisions that are

intended to improve information disclosure and protect minority shareholder interests from wealth expropriation by corporate insiders or outside bidders (e.g., the mandatory bid rule). The passage of these M&A laws led to a substantial increase in takeover activities and a significant improvement in corporate governance (Nenova 2006; Lel and Miller 2015; Glendening, Khurana, and Wang 2016). The staggered enactment of M&A laws across countries provides a shock to the takeover threat that is exogenous to firm-level incentives for tax avoidance. Thus these M&A law enactments offer a powerful difference-in-differences (DiD) setting to test competing explanations offered in the literature for observed tax planning by mitigating endogeneity and self-selection concerns common in prior cross-sectional studies of corporate tax avoidance.

We posit that managers adjust their tax planning strategies following the passage of M&A laws as the increased takeover threat changes managerial cost-benefit tradeoffs associated with tax planning. One obvious benefit of avoiding taxes is increased tax savings, which accrue to shareholders as well as effort-averse managers if they are motivated and compensated for engaging in tax avoidance activities (Chen and Chu 2005; Hanlon and Heitzman 2010). Facing increased takeover threat and heightened career concerns after the passage of M&A laws, managers may have greater incentives to act in the interest of shareholders (Lel and Miller 2015), and thus are expected to undertake more tax planning activities for greater tax savings. We label this the *effort-aversion agency* prediction.

Alternatively, the complex nature of tax activities provides opportunities for managers to obtain private benefits in the form of rent extraction and resource diversion (Desai and

Dharmapala 2006, 2009). Increased managerial discipline arising from takeover threat following the passage of takeover laws can generate disincentives for managers to undertake opportunistic tax activities as it is now more costly for managers to extract rent and divert resources. We label this the *private-benefits agency* prediction. Moreover, a more active market for corporate control may discourage managers from managing taxes aggressively, because greater uncertainty in firm performance resulting from aggressive tax strategies increases the likelihood of takeovers (Rego and Wilson 2012; Hasan et al. 2014; Guenther, Matsunaga, and Williams 2017; Schneider and Spalt 2017; Badertscher, Katz, Rego, and Wilson 2019) and exposes managers to greater risk of losing jobs (Kaplan and Minton 2012; Peters and Wagner 2014; Lel and Miller 2015). We label this the *risk channel* prediction.

In sum, as the M&A laws are expected to change the cost-benefit tradeoffs of corporate managers in avoiding tax in different ways, we are able to test the competing predictions of corporate tax planning changes following the passage of the M&A laws: the effort-aversion agency problem predicts an increase in tax avoidance while the private-benefit agency and risk channel predictions suggest a decrease.

To investigate the effect of M&A laws on tax avoidance, we construct a sample in 1994–2006, which consists of treatment firms from 11 countries that passed M&A laws and control firms from 17 countries that did not pass such laws. Following prior studies, we measure tax avoidance using the three-year average of GAAP-based effective tax rates adjusted by a country's statutory corporate tax rate. Our DiD design compares the degree of tax avoidance before and after the enactment of M&A laws for firms that are subject to the M&A

laws, relative to firms that are not. Our analysis controls for firm and year fixed effects as well as an array of country-level variables that may affect tax avoidance as documented by prior studies, including book-tax conformity (Atwood, Drake, Myers, and Myers 2012), statutory corporate tax rates, corporate board reforms (Fauver, Hung, Li, and Taboada 2017), rule of law (Kaufmann, Kraay, and Mastruzzi 2010), and GDP growth. In an alternative specification, we further control for a set of previously documented determinants of tax avoidance at the firm level. Under both specifications, we find a statistically significant reduction in corporate tax avoidance following the passage of M&A laws.

We conduct a number of tests to bolster the causal inferences of our analysis. First, we employ alternative measures of tax avoidance, including a measure based on cash effective tax rates and measures scaled by cash flows (to mitigate concerns pre-tax income reflects any accruals or earnings management) or total assets (to allow inclusion of loss firm-year observations). Second, we assess the robustness of our results by using firms from the U.S. and U.K., the two largest economies that enacted M&A laws prior to our sample period, as an alternative control group, by employing a PSM sample to alleviate concerns that pre-existing differences in observable characteristics between the treatment and control firms drive our results, and by excluding firms from Japan that constitutes the bulk of the control sample. Third, we restrict the sample to the enacting countries only to ensure that changes in the non-enacting countries are not driving our results. Lastly, to mitigate the concern that other changes coinciding with the M&A law enactment may confound our results, we control for an additional set of country-level variables including passage of financial reforms (Abiad, Detragiache, and

Tressel 2008), restrictions in short-selling (Jain, Jain, McInish, and McKenzie 2013), enforcement of insider trading laws (Bhattacharya and Daouk 2002), and corporate governance reforms (Kim and Lu 2013). We continue to find robust results in these sensitivity tests.

To assess the parallel trends assumption underlying our DiD design, we examine the dynamic effect of M&A law enactment. We find no differences in tax avoidance between the enacting and nonacting samples during the three years prior to the passage of M&A laws. We also perform two placebo tests and find no changes in tax avoidance following the pseudo enactment years defined during the pre- or post-enactment periods. In addition, we test the key assumption underlying our identification strategy that increased takeover threat is the mechanism through which M&A laws lead to decreases in corporate tax avoidance. We find a larger decline in the degree of tax avoidance following the passage of M&A laws in countries with greater ex-post growth in takeover activities. This result suggests that the effect of M&A laws in reducing tax avoidance varies systematically across countries with different levels of takeover threat.

Our finding of reduced tax avoidance following the enactments of M&A laws rejects the *effort-aversion agency* prediction of increased tax avoidance by effort-averse managers. We next investigate whether the observed decrease in tax avoidance after the passage of the M&A laws can be explained by the private-benefits agency prediction and/or the risk channel prediction. The *private-benefits agency* prediction suggests a greater decrease in tax avoidance among firms with more severe pre-law agency problems as these firms likely benefit more from improved managerial discipline from the takeover market. We follow Khurana and Wang

(2019) and use the average increase in CEO pay-performance sensitivity (PPS) in the post-law period to capture the improvement in board monitoring effectiveness. We also use the degree of earnings management to measure the severity of pre-law agency conflicts, as prior literature suggests that complex and opaque tax avoidance activities increase the latitude for other means of rent diversion and elevate earnings manipulation to mask the rent diversion (Desai and Dharmapala 2006, 2009; Chen, Chen, Cheng, and Shevlin 2010; Kim, Li, and Zhang 2011). We follow prior studies on earnings management (e.g., Leuz, Nanda, and Wysocki 2003; Haw, Hu, Hwang, and Wu 2004) and use the level of discretionary accruals estimated by the modified Jones' (1991) model in the year prior to the M&A law enactment to proxy for the severity of a firm's pre-law earnings management. Consistent with the prediction, we find that firms in countries with a greater increase in PPS or firms with more severe pre-law earnings management experience a greater decrease in tax avoidance following the passage of M&A laws.

The *risk channel* prediction suggests a greater decrease in tax avoidance among riskier firms as the increased threat of losing jobs in the event of a takeover discourages their managers from taking risky tax management strategies. We measure firm risk using the volatility of firm-specific weekly returns over the year and the volatility of operating cash flows over the past five years prior to the passage of the M&A laws. Our analysis shows that treatment firms with both high and low risk experience a similar reduction in tax avoidance after the M&A laws were enacted. This result suggests that increased risk concerns associated with tax avoidance activities are unlikely the mechanism explaining our results. Taken together, our analyses

suggest that the private-benefits consumption of tax avoidance is the key mechanism that dominates the effort-aversion agency problem and risk considerations in shaping the cross-sectional variation in corporate tax avoidance following the passage of M&A laws.

Lastly, we investigate whether legal enforcement affects the effectiveness of the M&A laws. The law and finance literature suggests that institutional quality, such as enforcement, plays a critical role in determining the effects of regulatory changes (La Porta et al. 1998, 2000). Employing two country-level indices as our enforcement proxies: the *Anti-director Rights* index from La Porta, Lopez-De-Silanes, and Shleifer (2006), and the *Rule of Law* index from Kaufmann et al. (2010), we find a stronger effect of M&A laws in restricting managerial tax avoidance activities in countries with stronger institutions of legal enforcement.

Our study makes a number of contributions. First, we contribute to the literature examining the impact of the takeover market and, in particular, the consequences of international M&A laws, on corporate decisions and policies. A few studies document significant real effects of enacting M&A laws, including enhanced managerial discipline (Lel and Miller 2015), increased dividend payouts (Glendening et al. 2016), elevated accounting conservatism (Khurana and Wang 2019), and reduced stock price crash risk and earnings management (Balachandran et al. 2018; Sul 2019). We extend this line of research by focusing on tax avoidance, an important but previously ignored corporate decision in this setting. Our study sheds light on an unintended consequence of M&A regulations that are designed to open up the market for corporate control but inadvertently also impacts corporate taxpaying behavior.

Second, we add to the literature on the role of corporate governance, specifically the disciplining role of corporate takeovers in corporate tax planning. Despite the importance of understanding the determinants and implications of corporate tax avoidance, existing research offers competing predictions and provides mixed evidence on how corporate governance influences tax avoidance (Desai and Dharmapala 2006; Armstrong et al. 2015; Klassen, Lisowsky, and Mescall 2017; Wilde and Wilson 2018). By exploiting the staggered enactment of M&A laws across countries as an exogenous shock to takeover threat that alters managerial incentives, our study addresses endogeneity issues common in prior work and documents a causal effect of the market of corporate control on tax planning activities. More importantly, our setting enables us to differentiate the alternative incentives that shape managerial tax planning decisions by suggesting that the private-benefits agency problem dominates the effort-aversion agency conflicts and risk considerations in affecting tax avoidance.

Third, our study extends the limited research on international tax issues. Prior literature that investigates cross-sectional variation in tax avoidance mostly focuses on firms in a single country. Atwood et al. (2012) show that cross-country differences in tax systems impact the extent to which firms avoid taxes. De Simone (2016) finds that affiliates of multinational companies engage in more tax-motivated income shifting following the adoption of International Financial Reporting Standards (IFRS) for unconsolidated financial reporting. We advance this line of inquiry by providing evidence suggesting that enacting M&A laws across countries enhances managerial discipline and thus weakens managers' ability to undertake opportunistic tax avoidance. In a related study, Li, Maydew, Willis, and Xu (2019) find that

corporate governance changes caused by worldwide board reforms are associated with lower corporate tax avoidance. Our study differs from Li et al. by focusing on the effect of the market for corporate control, an important *external* governance mechanism that incentivizes managers to maximize shareholder value (Grossman and Hart 1982; Jensen 1986).

2 Related literature and hypothesis development

2.1 International M&A laws

Historically, takeover and restructuring activities outside of the U.S. have been less successful due to a lack of clear rules governing the takeover process and the resulting information frictions in the takeover market (Holmstrom and Kaplan 2001). In the late 1990s and early 2000s, many countries around the world passed legislation to promote M&A activities. These M&A laws were enacted to attract domestic and foreign capital, increase the country's competitiveness in the global market, and promote more efficient capital allocation (Nenova 2006; Lel and Miller 2015). These laws establish a clear set of legal frameworks governing takeover activities, which have significantly reduced regulatory uncertainty, increased government transparency, and improved investor protection. For example, under the Austrian Takeover Act, bidders are required to publicly disclose their intention to take control of a target firm once they obtain 30% of the control rights, and bidders can compel the target shareholders to tender their shares after obtaining 90% of the voting rights. The M&A laws also contain enhanced disclosure requirements aiming at increasing shareholder rights during the takeover process. As strong investor rights are an essential building block of developed capital markets, M&A laws can facilitate takeover activities by improving investor protection

during the bidding process and attracting foreign capital (Bris and Cabolis 2008). In Chile, for example, the Tender Offer Act establishes that when the target company has several classes of shares with different voting rights, the tender must be extended to all classes in proportion. The Chilean takeover law also prohibits any activity of an executive that may modify the target company's value or interests during the tender offer.

Notably, the international M&A laws differ from the U.S. state takeover laws. For instance, the widespread antitakeover mechanisms in the U.S. such as poison pills or staggered boards are often prohibited in Austria and Brazil. Countries outside of the U.S. also enact M&A laws with provisions unique to their institutional features (Khurana and Wang 2019). In general, the takeover acts are regarded as effective means to alleviate regulatory uncertainty and reduce the costs and inefficiencies associated with corporate takeovers (Gordon 2003; Nenova 2006). Consistent with the intended consequences of the takeover laws, Lel and Miller (2015) find that both domestic and cross-border takeover activities have risen substantially after the laws are enacted. This increase in takeover activities is particularly evident among poor-performing firms along with increased propensity to replace poorly performing CEOs.

In line with the notion that the threat of takeover prompted by M&A laws serves as an effective disciplinary mechanism, a few recent studies have documented significant economic consequences of enacting M&A laws. For example, Glendening et al. (2016) find that both the likelihood and the amount of dividends decrease significantly after the initiation of an M&A law in a country. Their results suggest that the enactment of M&A laws, by strengthening the market for corporate control, lowered the need for firms to convey their commitment to

shareholders' interests through costly dividend payments. Khurana and Wang (2019) show that elevated takeover threat following the enactments of M&A laws increases accounting conservatism through changes in capital structure and investment decisions as well as improvements in board monitoring. In addition, Balachandran et al. (2018) and Sul (2019) provide evidence on the effect of international M&A laws on stock price crash risk and earnings management.

2.2 Hypothesis development

We expect that following the passage of M&A laws, the increased takeover threat prompts managers to adjust their tax planning strategies because takeover threats likely change managers' cost-benefit tradeoffs associated with tax management. One obvious benefit of tax avoidance is greater tax savings. Effort-averse managers may be more willing to undertake tax avoidance activities when their interests are better aligned with those of the shareholders. An active corporate control market provides an effective governance mechanism to discipline managers and reduce the conflicts of interests between managers and shareholders (Fama and Jensen 1983; Jensen and Ruback 1983). Supporting the disciplinary role of the market for corporate control, Lel and Miller (2015) show that the enactment of M&A laws increases sensitivity of CEO turnover to poor firm performance. From this perspective, we predict that increased takeover threat from the passage of M&A laws better aligns the interests of managers and shareholders and thus increases managers' incentives to undertake tax avoidance activities for tax savings – the *effort-aversion agency* prediction.

On the other hand, Desai and Dharmapala (2006) suggest that the complex nature of many tax avoidance activities can provide managers with the tools and justifications for opportunistic behavior and resource diversion. External shareholders, who may be unable to prevent managers from using tax avoidance to extract rents, will price protect themselves and bid down the share price (Chen et al. 2010). In line with this view, Desai, Dyck, and Zingales (2007) document an increase in market value among Russian firms targeted by tax enforcement. If M&A laws are effective in improving managerial discipline and reducing agency problems, managers will find it more costly to reap private benefits from their tax avoidance activities. We thus predict a reduction in tax avoidance after M&A laws are passed – the *private-benefit agency* prediction.

The enactment of M&A laws is likely to change costs associated with tax avoidance as well. The costs of tax avoidance typically include the potential penalty imposed by tax authorities, litigation, and political risk, costs of implementing tax transactions, and potential price discount imposed by external shareholders for rent extraction. For example, studies suggest that investments in tax reduction increase the riskiness of a firm by reducing transparency and increasing uncertainty regarding the firm's future cash flows or by taking tax positions that are more likely to be overturned by tax authority (e.g., Hope, Ma, and Thomas 2013; Guenther et al. 2017; Dyreng, Hanlon, and Maydew 2018). More volatile conditions and increased uncertainty expose managers of these firms to greater risk of losing jobs (Kaplan and Minton 2012; Peters and Wagner 2014). These career concerns likely become more severe after a country passes its M&A laws (Lel and Miller 2015), to the extent that risky firms are more

likely to be targeted and taken over (Schneider and Spalt 2017). Therefore, we predict that the increased career concerns following the passage of M&A laws will provide disincentives for managers to engage in tax avoidance activities – the *risk channel* prediction.

Taken together, while the passage of M&A laws may motivate effort-averse managers to avoid more taxes for greater tax savings by better aligning their interest with the shareholders, it may also discourage managers from avoiding taxes by reducing the associated private benefits or by heightening firm risk due to increased takeover likelihood. A priori, it is unclear whether the M&A laws lead to a higher or lower level of tax avoidance. We therefore propose the following hypothesis in the null form:

H: Passage of M&A laws leads to no change in the level of corporate tax avoidance.

3 Sample, data, and research design

3.1 The sample

We obtain data on the enactments of M&A laws around the world from Lel and Miller (2015). In identifying whether a country has M&A laws and when the laws were enacted, Lel and Miller (2015) employ various sources such as financial law publications (e.g., *International Financial Law Review* and *International Comparative Legal Guide*), the national regulatory websites, and prior studies (e.g., Nenova 2006). Lel and Miller (2015) describe information on the takeover laws and their sources for each country in Table A1 of their Appendix. We collect the statutory corporate tax rate for each sample country from the OECD Tax Database, KPMG LLP online summary, PricewaterhouseCoopers LLP's online information, Coopers & Lybrand

LLP's worldwide tax summary guides, and local primary regulators. Financial data are obtained from Worldscope.

To ensure each enacting country has at least three years in both pre- and post-law periods, we restrict our sample period to 1994–2006.¹ We exclude from the sample the enactment year and the first year after the enactment of M&A laws to avoid overlapping observations from both the pre- and post-law periods as our tax avoidance variable is computed based on a three-year rolling window. In addition, we require each sample firm to have at least one observation in both pre- and post-law periods.² After excluding firms from financial industries (SIC codes 6000-6999) and countries having less than 50 observations, we arrive at a treatment sample consisting of 5,929 firm-year observations representing 865 unique firms from 11 countries/economies that enacted their M&A laws (the enacting sample hereafter) and a control sample consisting of 20,530 firm-year observations representing 3,189 unique firms from 17 countries that had not enacted M&A laws by 2006 (the non-enacting sample hereafter).³ All firm-level continuous variables are winsorized at the 1st and 99th percentiles.

Table 1 presents the sample distribution separately for the enacting and non-enacting samples. Among the enacting countries, as shown in Panel A, Germany contributes the largest number of firm-year observations with 1,426 for 189 unique firms, and the Philippines contributes the least with 135 observations for 21 unique firms. Panel B reports the sample

¹ As indicated in Table 10, our results are robust to restricting the sample period to that prior to the implementation of the EU Takeovers Directive in 2004.

² For the control sample, we require each firm to have at least one year before and after 1998, the median enactment year of the enacting countries.

³ Our sample selection criteria result in an exclusion of one enacting country (Sri Lanka) and five non-enacting countries identified by Lel and Miller (2015) from our sample. Results are robust when we follow Lel and Miller (2015) and include these six countries.

distribution for the non-enacting countries. Japan provides the largest number of observations (12,209 for 2,053 unique firms) and Hungary has the smallest (74 for 13 unique firms).

– Insert Table 1 around here –

3.2. Measuring tax avoidance

Following previous literature on tax avoidance (e.g., Chen et al. 2010; Atwood et al. 2012; Chyz et al. 2013; Armstrong et al. 2015; Chen et al. 2019), our primary measure of tax avoidance, *TAXAVOID*, is calculated based on GAAP effective tax rates (ETRs) and adjusted by each country's statutory corporate tax rate. Specifically, *TAXAVOID* is measured as the country's statutory corporate tax rate less income tax expense divided by pre-tax income before extraordinary items. Because one-year measures of tax avoidance are highly volatile and are not predictive of a firm's long-term tax avoidance (Dyreng et al. 2008), we follow Atwood et al. (2012) and sum each element in computing *TAXAVOID* over the previous two years and the current year.⁴

We also employ several alternative tax avoidance measures, including the cash taxes-based measure (*Cash-based TAXAVOID*) and the measures scaled by cash flows (*Cash-flow scaled TAXAVOID*) or total assets (*Assets-scaled TAXAVOID*).⁵ While the cash-flow scaled measure helps rule out possible effects of changes in accounting policies that may affect pre-tax income but have no effect in a firm's tax avoidance behavior, the assets-scaled measure allows us to add back into the sample the years with negative pre-tax income that are excluded

⁴ We exclude observations with negative summed pre-tax income before extraordinary items. Results are similar if we require each of the three years to have positive pre-tax income.

⁵ We use GAAP-based ETRs instead of cash-based ETRs as the primary measure of tax avoidance because about half of our sample firms miss reporting tax payments, which significantly reduces the sample size (firm-year observations drop to 13,048 from 26,459) and may lead to sample-selection bias.

in calculating ETR-based *TAXAVOID* measures. Higher values of these tax avoidance measures indicate a greater degree of tax avoidance.

3.3 Research design

Following Lel and Miller (2015), Glendening et al. (2016), and Khurana and Wang (2019), we employ a DiD regression model to examine the effect of M&A law passages on tax avoidance:

$$TAXAVOID_{i,j,t} = \beta_0 + \beta_1 TREAT_i \times POST_j + \sum \beta_k X_{i,j,t} + \gamma_i + \lambda_t + \mu_{i,j,t}, \quad (1)$$

where i denotes firms, j denotes countries, and t denotes years. *TREAT* is an indicator variable that equals one for firms from countries that enacted M&A laws during the sample period, and zero otherwise. *POST* is an indicator variable that equals one after the M&A laws become effective in the country, and zero for pre-law years in the enacting countries as well as for non-enacting countries. X represents a vector of control variables. To capture the within-firm and within-year change in tax avoidance between treatment and benchmark firms when countries enact M&A laws, we include a full set of group effects (firm fixed effects, γ) and time effects (year or industry-year fixed effects, λ). In our design, the standalone variable *TREAT* is absorbed by firm fixed effects, and *POST* is omitted because of collinearity with $TREAT \times POST$. We cluster the standard errors at the country-industry level.⁶

The key coefficient of interest is the DiD estimator of β_1 on $TREAT \times POST$, which captures the change in tax avoidance for firms in countries that enacted their M&A laws relative

⁶ We do not use the country-level clustering scheme in our primary analyses because Petersen (2009) shows that standard errors based on fewer than approximately 40 clusters are likely to suffer from small sample bias. As discussed in Section 4.7, our results are robust to using alternative clustering schemes.

to firms in countries that never passed such laws. A positive β_I indicates increased tax avoidance following the passage of M&A laws, consistent with the effort-aversion agency prediction, while a negative β_I indicates decreased tax avoidance after the laws were enacted, consistent with the private-benefits agency prediction and/or the risk channel prediction.

To mitigate potential omitted-variables problems, we follow previous studies on tax avoidance and control for a vector of country-level variables, including: (1) level of required book-tax conformity (*BTAXC*), as in Atwood et al. (2012); (2) statutory corporate tax rate at the country-year level (*TAXRAT*); (3) an indicator variable for the post-period of country-level board reforms (*BDReform*), as in Fauver et al. (2017); (5) annual rule of law index (*Rule of Law*) as a proxy for a country's institutional quality, as in Kaufmann et al. (2010); and (6) growth of GDP per capita (*GDPG*).

In an alternative specification, we additionally control for a vector of previously documented firm-level determinants of tax avoidance. We initially exclude these firm-level variables as they may be endogenously affected by the takeover law enactment. To further mitigate this endogeneity concern, we lag them by two years so that they are measured in the first year of the three-year rolling window over which the dependent variable of *TAXAVOID* is summed. The firm-level variables are (1) *ROA*, measured as pre-tax income divided by total assets; (2) absolute value of discretionary accruals (*/DACC/*), estimated from the modified Jones' model; (3) accounting conservatism (*CSCORE*), estimated from the approach in Khan and Watts (2009); (4) capital expenditures scaled by total assets (*CAPEX*); (4) sales growth (*SALGR*), measured as net sales in the year less net sales in the previous year, divided by net

sales in the previous year; (5) research and development expenditures scaled by total assets (*R&D*); (6) an indicator variable for non-zero international operating income to capture multinational operations (*MULT*); (7) cash holdings (*CASH*), measured as total cash divided by total assets; (8) financial leverage (*LEV*), measured as the ratio of total debt to total assets;⁷ (9) capital intensity (*PPE*), measured as property, plant and equipment divided by total assets; (10) ratio of intangible assets to total assets (*INTANG*); and (11) firm size (*SIZE*), measured as the natural logarithm of total assets in million U.S. dollars.

3.4 Descriptive statistics

Table 1 provides summary statistics of the country-level statutory corporate tax rate (*TAXRAT*) and our tax avoidance measure (*TAXAVOID*). The degree of tax avoidance varies across countries, with a highest value of 0.158 in India and a lowest of 0.004 in Chile, among the enacting countries. Among the non-enacting countries, China has the highest value of tax avoidance at 0.130, whereas Korea (South) has the lowest at -0.029.

Table 2 report descriptive statistics of alternative tax avoidance measures and variables used in our primary analyses for enacting and non-enacting countries, respectively. Firms in the enacting and non-enacting countries avoid tax, on average, by 9.4 percent and 4.3 percent of their pre-tax income (*TAXAVOID*), respectively. The corresponding numbers are 8.7 percent and 4.4 percent when tax avoidance is measured based on tax payments (*Cash-based*

⁷ Khurana and Wang (2019) find an increase in leverage and a reduction in capital spending following the M&A law enactment. To shed light on whether adjustments in corporate financing and investment decisions are plausible economic channels by which the M&A law enactment reduces tax avoidance, we investigate whether the decrease in tax avoidance is greater when firms increase leverage and curtail capital expenditures more. In untabulated analysis we find insignificant differences of the effect of M&A enactment on tax avoidance across subsamples with above-sample-median or below-sample-median changes in leverage or capital expenditures. These results suggest that adjustments in leverage and capital investment are unlikely the channels through which M&A law enactments reduce tax avoidances.

TAXAVOID). Regarding *Cash-flow scaled TAXAVOID* (*Assets-scaled TAXAVOID*), tax avoidance by our sample firms represents 4.4 (0.598) percent and 1.5 (0.218) percent of operating cash flows (total assets) for the two samples, respectively. In addition, *POST* has a mean value of 0.564, indicating that 56.4% of firm-years in the enacting sample are in the post-law period.

– Insert Table 2 around here –

4 Empirical results

4.1 Effect of M&A laws on tax avoidance

Table 3 presents the regression results of testing the effect of M&A laws on tax avoidance. Column (1) is the baseline regression including only the variable of interest, $TREAT \times POST$, and the firm and year fixed effects. Columns (2) and (3) additionally include country-level and firm-level controls. Column (4) replaces the year fixed effects with industry-year fixed effects to control for the potential effects of industry-level confounding events or regulatory changes. We find that the coefficient on $TREAT \times POST$ is negative and significant at the 1% level in all columns, suggesting that tax avoidance decreases following the takeover law enactments. Regarding the economic significance of the effect of the takeover law, the DiD coefficient in column (3) suggests that the treatment firms experience a decline in tax avoidance by approximately 6.1 percent of their pre-tax income relative to the benchmark firms following the takeover law passages. This decline in tax avoidance does not support the effort-aversion agency prediction of increased tax avoidance following the enactment of M&A laws.

Regarding the country-level control variables in column (2), we find that tax avoidance is negatively associated with book-tax conformity (*BTAXC*) and GDP growth (*GDPG*), and is positively associated with the statutory tax rate (*TAXRAT*) and the rule of law (*Rule of Law*). For the firm-level controls in column (3), tax avoidance is positively associated with profitability (*ROA*), multinational operations (*MULT*), and capital intensity (*PPE*), but is negatively associated with capital expenditure (*CAPEX*), intangible assets (*INTANG*), and firm size (*SIZE*). These results are generally consistent with those reported by prior studies (e.g., Atwood et al. 2012; Li et al. 2019).

– Insert Table 3 around here –

4.2 Alternative measures, alternative samples and additional country-level controls

To ensure that our primary results are robust, we employ alternative tax avoidance measures and use alternative samples. We also control for additional country-level variables that can be correlated with both tax avoidance and takeover law passage. We present these results in Panels A through D of Table 4.

4.2.1 Alternative tax avoidance measures

In this section, we perform a set of tests using alternative measures of tax avoidance. First, we use a measure, *Cash TAXAVOID*, based on the cash effective tax rate. Specifically, *Cash TAXAVOID* is calculated as the country's statutory corporate tax rate less the income taxes actually paid divided by pre-tax income. As many companies do not report actual income taxes paid, our sample size based on this measure reduces to 13,048 from 26,459. Second, we employ an alternative tax avoidance measure, *Cash-flow scaled TAXAVOID*, by replacing pre-

tax income with cash flows from operations as the denominator which mitigates concern with any concurrent changes in conservatism (Khurana and Wang 2019) or other earnings management. Third, we follow Henry and Sansing (2018) and employ an assets-scaled measure, *Assets-scaled TAXAVOID*. Specifically, *Assets-scaled TAXAVOID* is calculated as the product of the country's statutory corporate tax rate and pre-tax income before extraordinary items less income tax expense, scaled by lagged total assets. Using this measure, allows us to add back into the sample the years with negative pre-tax income that are excluded because of the calculation of *TAXAVOID*. For these three measures, we sum each element in their computation over the previous two years and the current year, as one-year measures of tax avoidance are highly volatile and are not predictive of a firm's long-term tax avoidance (Dyreng et al. 2008).

Panel A in Table 4 presents the results based on the three alternative tax avoidance measures. For each measure, we report results of two regression specifications: one that does not include the lagged firm-level controls, and one that includes these controls. We find that the coefficients on $TREAT \times POST$ are all negative and significant at the 1% level across the columns. The economic significance is given directly by the estimated DiD coefficient: For *Cash-based TAXAVOID* the coefficient is -0.041 and for *Cash-flow scaled TAXAVOID* it is -0.066 comparable to the estimated coefficient on *TAXAVOID* in Table 3 of -0.061. For the non-ETR based measure, the estimated DID coefficient on *Asset-scaled TAXAVOID* is -0.321.

4.2.2 Alternative samples

First, in our primary analysis, we follow Lel and Miler (2015), Glendening et al. (2016) and Khurana and Wang (2019) and employ firms from non-enacting countries as the control

firms. Alternatively, we use as an alternative control group firms from the U.S. and U.K., which represent the largest economies that enacted M&A laws prior to our sample period, and re-estimate Eq. (1). As indicated in columns (1) and (2) of Table 4, Panel A, we find that the coefficient on $TREAT \times POST$ remain negative and significant at the 1% level.

Second, we employ a PSM sample to mitigate any incomparability between our treatment firms from the enacting countries and the control firms from the non-enacting countries. We provide a description of the PSM procedure in Appendix B. The procedure results in a PSM sample of 10,930 firm-year observations. Panel A of Appendix B reports the covariate balance metrics of the PSM sample. Except for *ROA* and *INTANG*, all the other covariates are not significantly different between the treatment and control firms. Columns (3) and (4) of Table 4, Panel A present regression results based on the PSM sample. Similar to that reported in our primary analysis, the coefficient on $TREAT \times POST$ is significantly negative. Thus, our PSM analysis suggests that our findings are unlikely to be driven by pre-existing observable differences in firm characteristics between our treatment and control samples.

Third, we perform an analysis excluding firms from Japan. As indicated in Table 1, Japan consists of the largest number of observations in the non-enacting sample (59.5%). Columns (5) and (6) of Table 4, Panel B report that the coefficient on $TREAT \times POST$ remains significantly negative after excluding Japanese firms.

4.2.3 Enacting sample only

To ensure that the observed reduction in tax avoidance under our DiD design is not driven by changes in the nonacting sample, we perform an analysis using the enacting sample

only. In doing so, we replace year fixed effects with *POST* and exclude the interaction term of $TREAT \times POST$ from Eq. (1). Under this specification, the variable of interest is *POST*, which captures the change in tax avoidance among the enacting sample firms following the M&A law enactment. Results are reported in Panel C of Table 4. In columns (1) and (2), we use the entire sample period of 1994–2006, whereas in columns (3) and (4), we restrict the sample period to a short event window of three years pre and post the M&A law enactment for each enacting country. We find a significantly negative coefficient on *POST* in all columns, suggesting a reduction in tax avoidance in firms from the enacting countries following their takeover law enactment.

4.2.4 Additional country-level controls

M&A law adoption coincides with several country-level changes that may influence firms' tax planning strategies, leading to a spurious correlation between takeover law passage and tax avoidance. To strengthen our identification strategy, we additionally control for an array of country-level variables that may confound our treatment effect. Specifically, we construct four country-level indicator variables, including: (1) *FINReform*, which captures the passage of financial reforms, as in Abiad et al. (2008); *ShortSell*, which captures the restrictions of short-selling as in Jain et al. (2013); (3) *ITEnforce*, which captures the enforcement of insider trading laws as in Bhattacharya and Daouk (2002); and (4) *CGReform*, which captures the passage of corporate governance reforms as in Kim and Lu (2013). Panel D of Table 4 reports results of this analysis. In columns (1) through (4), we include these variables in the regression one at a time, and in column (5) we include all of them in one regression. In column (6), we

additionally include the lagged firm-level controls. We find that the coefficients on *FINReform* and *ITEnforce* are significantly negative, suggesting that the passage of financial reforms and the enforcement of insider trading laws are associated with a reduction in tax avoidance. More importantly, the coefficient on our variable of interest, $TREAT \times POST$, remains similar in magnitude and significantly negative, suggesting that the effect of the takeover laws on tax avoidance is unlikely to suffer from bias of correlated omitted variables.

– Insert Table 4 around here –

4.3 Assessing parallel trends assumption

A key assumption underlying our DiD design is that the treatment and control samples exhibit parallel trends without the treatment effect of the M&A laws (Bertrand, Duflo, and Mullainathan 2004). In this section, we perform two sets of analyses to assess this parallel trends assumption.

First, we perform a test to examine the dynamic effect of M&A laws. Specifically, we create three indicator variables, *Year -1* (*Year -2*, *Year -3*), that capture the first (second, third) year prior to the enactment of M&A laws in a country. Because the dependent variable of *TAXAVOID* is computed as three-year sums, for the M&A law enactment year and the first year after the enactment, we define these two years as *Transition Year 1* and *Transition Year 2*, respectively. We then replace year fixed effects with these year indicators and interact them with *TREAT*. As in Eq. (1), these year indicators are omitted because of collinearity with their interactions with *TREAT*.

Panel A of Table 5 presents the results. We first perform an analysis using the enacting sample only and report the results in columns (1) and (2). For both specifications with and without including firm-level controls, we find that the coefficients on *Year -3*, *Year -2*, *Year -1*, and *Transition Year 1* are all insignificant, but the coefficient on *Transition Year 2* is significantly negative.⁸ Importantly, the coefficient on *POST* is significantly negative. In columns (3) and (4), we report results including both the enacting and non-enacting samples. Similar to the results in columns (1) and (2), the coefficients on $TREAT \times Year -3$, $TREAT \times Year -2$, $TREAT \times Year -1$, and $TREAT \times Transition Year 1$ are all insignificant. The coefficient on $TREAT \times Transition Year 2$ is insignificant when the firm-level controls are not included but becomes significantly negative when these controls are included. More importantly, the coefficient on $TREAT \times POST$ remains significantly negative under both specifications. Overall, these results suggest that the enacting and non-enacting samples exhibit a similar trend in tax avoidance during the three years prior to the passage of M&A laws. In addition, these results do not support an anticipation effect as firms do not change tax avoidance before the takeover law passage.

Second, we conduct two placebo tests to further assess the assumptions underlying our DiD design. We first perform a placebo test that restricts the analysis to four years in the pre-law period ($[-6, -5]$ vs. $[-2, -1]$). In doing so, we set the pseudo enactment year as the fourth year prior to the actual M&A law enactment year. We restrict the control sample period to

⁸ Note that as *Transition Year 2* captures the first year after the M&A enactment in a country, *TAXAVOID* in this year is computed based on information summed over the year prior to the M&A law enactment, the enactment event year, and the first year after the enactment.

1994–2001, the same period over which the treatment sample period spans. The second placebo test restricts the analysis to four years in the post-law period ([+1, +2] vs. [+5, +6]) and sets the pseudo enactment year as the fourth year after the actual M&A law enactment year. Similarly, we restrict the control sample period to 1999–2009, the same period over which the treatment sample spans in this test. In both tests, we exclude the pseudo-event year and the first year after the pseudo enactments because our tax avoidance measure, *TAXAVOID*, is computed using observations in both the pre- and post-pseudo enactment periods for these years. In the absence of actual M&A law passage, we expect the enacting and non-enacting samples to exhibit no difference in tax avoidance. Consistent with this prediction, Table 5, Panel B indicates insignificant coefficients on $TREAT \times POST$ in both placebo tests. Overall, the analyses in Table 5 suggest that our results are unlikely to be driven by pre-existing trends between the treatment and control samples in corporate tax avoidance.

– Insert Table 5 around here –

4.4 M&A laws and takeover threat

A key argument in our primary analysis is that the increased takeover threat after the M&A law enactments disciplines managers from undertaking opportunistic tax activities. In this section, we examine whether the effect of M&A laws in reducing tax avoidance varies across countries with different levels of takeover threat. Following Khurana and Wang (2019), we measure takeover threat as the actual *ex-post* growth in takeover activities following the passage of M&A laws, where takeover activity growth is calculated as the difference in the total number of completed mergers and acquisitions between four years before and four years

after the enactment year, divided by the total number of completed mergers and acquisitions in the four years before the enactment year. We then partition the enacting countries into subsamples with high or low growth in actual takeover activities (high $\Delta Takeover$ versus low $\Delta Takeover$), based on the median growth in takeover activities around M&A law enactments, and include firms from the non-enacting countries in both subsamples as the control sample. We present results of this analysis in Table 6. Columns (1) and (2) report results without including the firm-level controls and columns (3) and (4) report those with the firm-level controls. We find a significant effect of M&A law passages in reducing tax avoidance in each subsample. Importantly, the effect of M&A laws in reducing tax avoidance is stronger for firms in countries with high $\Delta Takeover$ than for firms in countries with low $\Delta Takeover$. Tests indicate that the coefficient on $TREAT \times POST$ is significantly different between the subsamples with high $\Delta Takeover$ and low $\Delta Takeover$. Overall, Table 6 provides evidence in support of the argument that the takeover threat associated with M&A law enactment is the driving force that disciplines managers from undertaking opportunistic tax management activities.

– Insert Table 6 around here –

4.5 Private-benefits agency prediction versus risk channel prediction

In this section, we investigate the mechanisms through which the enactment of M&A laws leads to the decrease in corporate tax avoidance. Our analysis shows that corporate tax avoidance declines after a country enacts its M&A laws. The reduction in tax avoidance following takeover law enactments may result from increased takeover threat lowering private

benefits consumption of rent extraction and resource diversion masked and facilitated by complex tax transactions (Desai and Dharmapala 2006) (the *private-benefits agency* prediction). Alternatively, a more active market for corporate control may provide disincentives for managers to undertake tax avoidance because the increased uncertainty of firm performance resulting from such aggressive tax strategies increases the likelihood of takeovers (Rego and Wilson 2012; Hasan et al. 2014; Guenther et al. 2017; Schneider and Spalt 2017) (the *risk channel* prediction). We perform a number of analyses to explore whether our results are consistent with these predictions.

4.5.1 The private-benefits agency prediction

Prior research suggests that tax avoidance activities reduce corporate transparency and provide managers with opportunities and means to divert economic resources for expropriation (Desai and Dharmapala 2006, 2009). A more active takeover market following M&A law passages creates incentives and pressure for corporate directors to step up more efforts to monitor managers and discipline them from opportunistic tax behavior (Lel and Miller 2015; Khurana and Wang 2019). In line with this argument, Lel and Miller (2015) find that poorly performing CEOs are more likely to be replaced and directors face higher risk of losing their jobs following takeover law passages. Therefore, the private-benefits agency prediction suggests that tax avoidance declines to a larger extent for firms with greater improvement in board monitoring after enactments of M&A laws and/or with greater pre-law agency problems. We conduct the following two tests to examine whether our results are consistent with the private-benefits agency prediction.

First, we follow Khurana and Wang (2019) and use the country-level post-law growth in executive pay for performance sensitivity (ΔPPS) as a proxy for improvement in board monitoring effectiveness. Specifically, ΔPPS is measured as the average year-to-year change in CEO pay-performance sensitivity for each country in the post-law period, where CEO pay-performance sensitivity is computed as the estimated coefficient on industry-adjusted return on assets in a regression by country and year relating the natural logarithm of total annual CEO compensation (in 2005 U.S. dollars) on industry-adjusted return on assets as well as firm size, leverage, market-to-book ratio, and daily stock return volatility. We then partition the enacting countries into two subsamples based on the country-level median growth in CEO pay-performance sensitivity (High versus Low ΔPPS), and include firms from the non-enacting countries in both subsamples as the control firms. The private-benefits agency prediction suggests a greater decline in corporate tax avoidance following the M&A law enactments among firms in countries with a greater increase in CEO pay-performance sensitivity.

Panel A, Table 7 presents results of this analysis. We report the specification excluding firm-level control variables in columns (1)-(2) and that including firm-level control variables in columns (3)-(4). In both specifications, we find a significant effect of M&A law passages in reducing tax avoidance for each subsample, but that the effect is larger for the high ΔPPS subsample than for the low ΔPPS subsample. These results are consistent with the private-benefits agency prediction that the effect of M&A laws in reducing tax avoidance is stronger for firms in countries with greater improvement in board monitoring following the M&A law passage.

Second, following prior studies on earnings management (e.g., Leuz, Nanda, and Wysocki 2003; Haw et al. 2004), we use the level of discretionary accruals estimated by the modified Jones' (1991) model in the year prior to the M&A law enactment ($/DACC_{t-1}/$) to proxy for the degree of a firm's pre-law earnings management. Prior research suggests that tax avoidance activities facilitate managerial resource diversion, along with increased earnings manipulation that is designed to mask the diversion (Chen et al. 2010; Desai and Dharmapala 2006, 2009; Kim et al. 2011). For example, complex tax shelters, such as Enron's Project Steele, allow managers to manipulate earnings while preventing outside shareholders from understanding the sources (Desai and Dharmapala 2009). Therefore, under the private-benefits agency prediction, firms with more pre-law earnings management are expected to experience a greater decrease in tax avoidance following takeover law adoptions.

Panel B of Table 7 presents results of this analysis. We partition the treatment sample into two subsamples based on the firm-level median $/DACC_{t-1}/$ (High versus Low $/DACC_{t-1}/$). In both specifications with and without including firm-level control variables, we find that the effect is larger for the high $/DACC_{t-1}/$ subsample than for the low $/DACC_{t-1}/$ subsample, and that the difference is significant across the two subsamples. Collectively, Table 6 provides evidence supporting the private-benefits agency prediction and suggests that the enactments of M&A laws lead to a greater reduction in tax avoidance for firms in countries with greater improvement in board monitoring and for firms with more severe pre-law agency problems.

– Insert Table 7 around here –

4.5.2 The risk channel prediction

Prior research argues that tax avoidance is risky and increases the volatility of firm performance (Rego and Wilson 2012; Hope et al. 2013; Guenther et al. 2017; Dyreng et al. 2018). If corporate tax avoidance results in greater performance uncertainty, tax avoidance is expected to decline more for firms with greater risk after the enactment of M&A laws, because the increased career concerns associated with performance uncertainty provide incentives for managers to engage in less risky tax management strategies. To test this prediction, we construct two proxies for firm risk, $STDR_{t-1}$ and $STDCF_{t-1}$, to capture volatility of firm-specific stock returns and operating cash flows, respectively. We estimate the expanded market model of Jin and Myers (2006) that regresses firm weekly stock returns on the local and U.S. contemporaneous weekly market index returns as well as firm returns lagged and led by two weeks, and use the natural logarithm of one plus the residual returns to proxy for firm-specific returns. $STDR_{t-1}$ is calculated as the standard deviation of a firm's specific weekly residual returns over the year. Similarly, $STDCF_{t-1}$ is calculated as the standard deviation of cash flows from operations scaled by total assets over the past five years. Both measures are calculated in the year prior to the M&A law passages.

Table 8 presents the regression results of testing the risk channel prediction. We partition the treatment sample based on medians of the two firm-level risk proxies, $STDR_{t-1}$ and $STDCF_{t-1}$, and report these results in Panels A and B, respectively. In both specifications with and without including firm-level control variables, we find that the effect of takeover laws in reducing tax avoidance is significant in all four subsamples.⁹ Moreover, the differences

⁹ Guenther et al. (2017) show that the volatility of cash tax rate is associated with future stock volatility. Accordingly, we re-estimate the regressions in Table 8 using the cash-based tax avoidance measure (*Cash*

between the high and low risk subsamples are insignificant at the conventional levels, regardless of using $STDR_{t-1}$ or $STDCF_{t-1}$ as the partitioning variable. These results are therefore inconsistent with the risk channel prediction and suggest that the effect of takeover laws on tax avoidance is unlikely to vary with the level of firm risk.

– Insert Table 8 around here –

4.6 Role of legal enforcement

The law and finance literature suggests that institutional quality, such as enforcement, plays a critical role in determining the effects of regulatory changes (La Porta et al. 1998, 2000). For example, Bhattacharya and Daouk (2002) find that it is enforcement, rather than existence of insider trading laws, that leads to a reduction in firms' cost of capital. In this section we investigate whether legal enforcement plays a role in determining the effect of M&A laws in disciplining managerial behavior. In doing so, we employ two country-level indices as our enforcement proxies: the *Anti-director Rights* index from La Porta et al. (2006), and the *Rule of Law* index from Kaufmann et al. (2010).^{10,11} Higher values for the two indices denote stronger enforcement.

TAXAVOID) as the dependent variable, and find similar results. We do not use the cash-based tax avoidance measure as our primary dependent variable because, as noted earlier, many sample firms do not report cash taxes over our sample period, which may create sample-selection bias.

¹⁰ As defined by La Porta et al. (2006), the *Anti-director Rights* index is formed by adding one when: (1) the country allows shareholders to mail their proxy vote; (2) shareholders are not required to deposit their shares prior to the General Shareholders' Meeting; (3) cumulative voting or proportional representation of minorities on the board of directors is allowed; (4) an oppressed minorities mechanism is in place; (5) the minimum percentage of share capital that entitles a shareholder to call for an Extraordinary Shareholders' Meeting is less than or equal to ten percent (the sample median); or (6) when shareholders have preemptive rights that can only be waived by a shareholders meeting. The index ranges from zero to six. The *Rule of Law* index captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence (Kaufmann et al. 2010).

¹¹ Alternatively, we use the comprehensive legal enforcement index compiled by La Porta et al. (2006), i.e., *investor_pr*, which is measured as the first principal component of private enforcement and anti-director rights. We find similar results.

We investigate the role of legal enforcement by partitioning our sample countries into high and low enforcement subsamples based on the sample median of the two enforcement proxies. We then re-estimate *Eq. (1)* for the two subsamples separately. Panels A and B of Table 9 present results of the partition analysis by *Anti-director Rights* and *Rule of Law*, respectively. In both specifications with and without including firm-level controls, we find that the coefficient on $TREAT \times POST$ is significant across all columns. Importantly, the coefficient is larger for the high enforcement subsample than for the low enforcement subsample, regardless of whether *Anti-director Rights* or *Rule of Law* is used as the enforcement proxy. The differences in the coefficient across the high and low enforcement subsamples are statistically significant at the 5% level or better. Collectively, we find a stronger effect of M&A laws in restricting managerial tax avoidance activities in countries with stronger institutions of legal enforcement.

– Insert Table 9 around here –

4.7 Additional robustness checks

We perform an array of additional tests to check the robustness of our primary results. First, many of our sample firms have international operating income that are generated from operations in foreign countries, so controlling for the home country statutory tax rate and *MULT* in regressions may not adequately capture the global trend in statutory tax rate or the potential effects of multinational operations in tax avoidance. We thus re-estimate *Eq. (1)* by

excluding firms with non-zero international income (i.e., $MULTI = 1$).^{12,13} Second, to ensure that our results are not driven by changes in sample composition over time, we construct a constant sample using a two-year window that requires each firm to have an observation in each year (i.e., constant sample, $[-2, +2]$). We also restrict the nonacting sample for this analysis to 1995-2005 over which the enacting sample spans. Third, to rule out the potential effects of the 2004 EU Takeover Directive on our results, we perform two robustness checks: one that restricts the sample period to years prior to 2004, and the other that excludes all EU countries from our sample. Excluding post-2003 years also helps rule out the possible effect of 2005 mandatory adoption of International Financial Reporting Standards (IFRS) in many countries. Fourth, we exclude firms from Taiwan and Ireland as M&A laws in the two countries include tax related provisions. Specifically, Taiwan's M&A laws introduce tax benefits to acquirers and new types of mergers, and Ireland's laws allow for takeover agreements which could reduce stamp duty taxes. Fifth, our measure of *TAXAVOID* is computed over a three-year rolling window. To address the time-series correlation in *TAXAVOID*, we use an annual-based tax avoidance measure (*Annual TAXAVOID*). In doing so, we add back into the sample the law enactment year and the year following the enactment that are excluded for computing the three-year summed *TAXAVOID*. Finally, we use various clustering schemes to adjust standard errors of regression coefficients. Throughout our analysis, we use robust standard errors clustered by

¹² We code *MULTI* as zero for firms with missing international income. In our treatment sample (benchmark sample), 55.5% (53.5%) report missing international income. To rule out the possibility of observations with missing reported international income driving our results, we exclude firm-year observations with missing international income and continue to find robust results (untabulated).

¹³ In untabulated results, we also exclude firms with non-zero international sales generated from operations in foreign countries and find consistent results.

country-industry to evaluate the significance of regression coefficients. Alternatively, we cluster the standard errors by country, firm, industry, or year. We also use two-way clustering schemes by firm-year or country-year. Results are robust to these alternative clustering schemes. For brevity, we only report the results clustered by firm. Clustering standard errors by firm also helps to address the potential time-series correlation in *TAXAVOID* induced by the three-year rolling window in its calculation.

We present results of these analyses in Table 10. For each robustness check, we report results with and without including firm-level controls. We find that the coefficient on *TREAT* $\times$ *POST* remains negative and significant at the 5% level or better throughout.

– Insert Table 10 around here –

5 Conclusions

Our study examines the effect of the market for corporate control on corporate tax avoidance. Exploiting the staggered initiation of M&A laws across countries in the late 1990s and early 2000s as an exogenous increase in takeover threat, we find a significant reduction in the degree of corporate tax avoidance after countries enacted the M&A laws. This result rejects the effort-aversion agency prediction of increased tax avoidance by effort-averse managers in our setting. Our analysis suggests that the reduction in tax avoidance stems from alleviated agency conflicts between managers and shareholders that reduce managers' private benefits consumption masked and facilitated by complex tax avoidance activities. In contrast, we find no evidence in support for increased risk concerns associated with tax avoidance activities as a mechanism explaining our results. In sum, our study contributes to the growing research on

the economic consequences of international M&A laws. Our findings also extend the literature by highlighting the role of agency problems of private benefits consumption in shaping the cross-sectional variation in corporate tax avoidance.

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References

- Abiad, A., Detragiache, E., & Tressel, T. (2008). A new database of financial reforms. IMF working paper. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1316734
- Armstrong, C.S., Blouin, J.L., Jagolinzer, A.D., & Larcker, D.F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, 60(1), 1-17.
- Atwood, T.J., Drake, M.S., Myers, J.N., & Myers, L.A. (2012). Home country tax system characteristics and corporate tax avoidance: International evidence. *The Accounting Review*, 87(6), 1831-1860.
- Austin, P.C. (2011). An introduction to propensity score methods for reducing the effects of confounding in observational studies. *Multivariate Behavioral Research*, 46(3), 399-424.
- Badertscher, B., Katz, S., Rego, S.O., & Wilson, R.J. (2019). Conforming tax avoidance and capital market pressure. *The Accounting Review*, 96(6), 1-30.
- Balachandran, B., Duong, H.N., Luong, H., & Nguyen, L. (2020). Does takeover activity affect stock price crash risk? Evidence from international M&A laws. *Journal of Corporate Finance*, 64, 101697.
- Bertrand, M., Duflo, E., & Mullainathan, S. (2004). How much should we trust differences-in-differences estimates? *The Quarterly Journal of Economics*, 119(1), 249-275.
- Bhattacharya, U., & Daouk, H. (2002). The world price of insider trading. *The Journal of Finance*, 57(1), 75-108.
- Bris, A., & Cabolis, C. (2008). The value of investor protection: Firm evidence from cross-border mergers. *The Review of Financial Studies*, 21(2), 605-648.
- Chen, K.-P., & Chu, C.C. (2005). Internal control versus external manipulation: A model of corporate income tax evasion. *The Rand Journal of Economics*, 36(1), 151-164.
- 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.
- Chen, S., Huang, Y., Li, N., & Shevlin, T. (2019). How does quasi-indexer ownership affect corporate tax planning? *Journal of Accounting and Economics*, 67(2), 278-296.
- Chyz, J.A., Ching Leung, W.S., Zhen Li, O., & Meng Rui, O. (2013). Labor unions and tax aggressiveness. *Journal of Financial Economics*, 108(3), 675-698.

- De Simone, L. (2016). Does a common set of accounting standards affect tax-motivated income shifting for multinational firms? *Journal of Accounting and Economics*, 61(1), 145-165.
- Desai, M.A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, 79(1), 145-179.
- Desai, M.A., & Dharmapala, D. (2009). Earnings management, corporate tax shelters, and book-tax alignment. *National Tax Journal*, 169-186.
- Desai, M.A., Dyck, A., & Zingales, L. (2007). Theft and taxes. *Journal of Financial Economics*, 84(3), 591-623.
- Dyreng, S.D., Hanlon, M., & Maydew, E.L. (2008). Long-run corporate tax avoidance. *The Accounting Review*, 83(1), 61-82.
- Dyreng, S.D., Hanlon, M., & Maydew, E.L. (2018). When does tax avoidance result in tax uncertainty? *The Accounting Review*, 94(2), 179-203.
- Fama, E.F., & Jensen, M.C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-325.
- Fauver, L., Hung, M., Li, X., & Taboada, A.G. (2017). Board reforms and firm value: Worldwide evidence. *Journal of Financial Economics*, 125(1), 120-142.
- Glendening, M., Khurana, I.K., & Wang, W. (2016). The market for corporate control and dividend policies: Cross-country evidence from M&A laws. *Journal of International Business Studies*, 47(9), 1106-1134.
- Gordon, J.N. (2003). An American perspective on the new german anti-takeover law. Working paper. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=336420.
- Grossman, S., & Hart, O. (1982). Corporate financial structure and managerial incentives. University of Chicago Press, Chicago, IL.
- Guenther, D.A., Matsunaga, S.R., & Williams, B.M. (2017). Is tax avoidance related to firm risk? *The Accounting Review*, 92(1), 115-136.
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50(2-3), 127-178.
- Hasan, I., Hoi, C.K., 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., Hu, B., Hwang, L.S., & Wu, W. (2004). Ultimate ownership, income management, and legal and extra-legal institutions. *Journal of Accounting Research*, 42(2), 423-462.
- Henry, E., & Sansing, R. (2018). Corporate tax avoidance: Data truncation and loss firms. *Review of Accounting Studies*, 23(3), 1042-1070.
- Holmstrom, B., & Kaplan, S.N. (2001). Corporate governance and merger activity in the united states: Making sense of the 1980s and 1990s. *Journal of Economic Perspectives*, 15(2), 121-144.
- Hope, O.-K., Ma, M.S., & Thomas, W.B. (2013). Tax avoidance and geographic earnings disclosure. *Journal of Accounting and Economics*, 56(2-3), 170-189.
- Jensen, M.C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76 (2), 323-329.
- Jensen, M.C., & Ruback, R.S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial Economics*, 11(1-4), 5-50.
- Jain, A., Jain, P.K., Mcinish, T.H., & McKenzie, M. (2013). Worldwide reach of short selling regulations. *Journal of Financial Economics*, 109(1), 177-197.
- Jin, L., & Myers, S.C. (2006). R2 around the world: New theory and new tests. *Journal of Financial Economics*, 79(2), 257-292.
- Jones, J.J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193-228.
- Kaplan, S.N., & Minton, B.A. (2012). How has CEO turnover changed? *International review of Finance*, 12(1), 57-87.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). The worldwide governance indicators, methodology and analytical issues. Working paper. The World Bank. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1682130.
- Khurana, I.K., & Wang, W. (2019). International mergers and acquisitions laws, the market for corporate control, and accounting conservatism. *Journal of Accounting Research*, 57(1), 241-290.
- Kim, J.B., Li, Y., & Zhang, L. (2011). Corporate tax avoidance and stock price crash risk: Firm-level analysis. *Journal of Financial Economics*, 100(3), 639-662.

- Kim, E.H., & Lu, Y. (2013). Corporate governance reforms around the world and cross-border acquisitions. *Journal of Corporate Finance*, 22, 236-253.
- Klassen, K.J., Lisowsky, P., & Mescall, D. (2017). Transfer pricing: Strategies, practices, and tax minimization. *Contemporary Accounting Research*, 34(1), 455-493.
- La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (2006). What works in securities laws? *Journal of Finance*, 61(1), 1-32.
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113-1155.
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1-2), 3-27.
- Lel, U., & Miller, D.P. (2015). Does takeover activity cause managerial discipline? Evidence from international M&A laws. *Review of Financial Studies*, 28(6), 1588-1622.
- Leuz, C., Nanda, D., & Wysocki, P.D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69(3), 505-527.
- Li, Q., Maydew, E.L., Willis, R.H., & Xu, L. (2019). Taxes and director independence: Evidence from board reforms worldwide. Working paper. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2860362.
- Nenova, T. (2006). Takeover laws and financial development. Working paper. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=935491.
- Peters, F.S., & Wagner, A.F. (2014). The executive turnover risk premium. *The Journal of Finance*, 69(4), 1529-1563.
- Petersen, M.A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. *Review of Financial Studies*, 22(1), 435-480.
- Rego, S.O., & Wilson, R. (2012). Equity risk incentives and corporate tax aggressiveness. *Journal of Accounting Research*, 50(3), 775-810.
- Rosenbaum, P.R., & Rubin, D.B. (1984). Reducing bias in observational studies using subclassification on the propensity score. *Journal of the American Statistical Association*, 79(387), 516-524.
- Schneider, C., & Spalt, O. (2017). Acquisitions as lotteries? The selection of target-firm risk and its impact on merger outcomes. *Critical Finance Review*, 6(1), 77-132.

Sul, E. (2019). Takeover threats, job security concerns, and earnings management. Working paper. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3034948.

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

Appendix A Variable definitions

Variable	Definition
Tax avoidance variables	
<i>TAXAVOID</i>	Tax avoidance measure, computed as the country's statutory corporate tax rate (<i>TAXRAT</i>) less total income tax expense (WC01451) divided by pre-tax income before extraordinary items (pre-tax income (WC01401) less extraordinary credit (WC01253) plus extraordinary charge (WC01254)). Each element in the computation is summed over the previous two years and the current year. A higher value indicates a greater degree of tax avoidance. Source: Worldscope; the statutory corporate tax rate (<i>TAXRAT</i>) is hand collected from the OECD Tax Database, KPMG LLP online summary, PricewaterhouseCoopers LLP's online information, Coopers & Lybrand LLP's worldwide tax summary guides, and local primary regulators.
<i>Cash-based TAXAVOID</i>	Cash-based tax avoidance measure, computed as the country's statutory corporate tax rate (<i>TAXRAT</i>) less the income taxes actually paid (WC04150) divided by pre-tax income before extraordinary items (pre-tax income (WC01401) less extraordinary credit (WC01253) plus extraordinary charge (WC01254)). Each element in the computation is summed over the previous two years and the current year. A higher value indicates a greater degree of tax avoidance. Source: As indicated in <i>TAXAVOID</i> .
<i>Cash-flow scaled TAXAVOID</i>	Cash-flow scaled tax avoidance measure, computed as the country's statutory corporate tax rate (<i>TAXRAT</i>) less total income tax expense (WC01451) divided by net cash flows from operations (WC04860). Each element in the computation is summed over the previous two years and the current year. A higher value indicates a greater degree of tax avoidance. Source: As indicated in <i>TAXAVOID</i> .
<i>Assets-scaled TAXAVOID</i>	Assets-scaled tax avoidance measure, computed as the product of the country's statutory corporate tax rate (<i>TAXRAT</i>) and pre-tax income before extraordinary items (pre-tax income (WC01401) less extraordinary credit (WC01253) plus extraordinary charge (WC01254)) less total income tax expense (WC01451), scaled by lagged total assets (WC02999) times one hundred. Each element in the computation is summed over the previous two years and the current year. A higher value indicates a greater degree of tax avoidance. Source: As indicated in <i>TAXAVOID</i> .
<i>Annual TAXAVOID</i>	Annual measure of tax avoidance, computed as the country's statutory corporate tax rate (<i>TAXRAT</i>) less total income tax expense (WC01451) divided by pre-tax income before extraordinary items (pre-tax income (WC01401) less extraordinary credit (WC01253) plus extraordinary charge (WC01254)) in the year. A higher value indicates a greater degree of tax avoidance. Source: As indicated in <i>TAXAVOID</i> .
Firm-level controls	
<i>TREAT</i>	Indicator variable that equals one for firms from countries that enacted M&A laws during the sample period, and zero otherwise. Source: Lel and Miller (2015).
<i>POST</i>	Indicator variable that equals one in years after a country enacts its M&A laws, and zero for pre-law years in the enacting countries as well as for non-enacting countries. Source: Lel and Miller (2015).

<i>ROA</i>	Pre-tax income (WC01401) divided by total assets (WC02999). Source: Worldscope.
<i>/DACC/</i>	Absolute value of discretionary accruals estimated by year and industry (two-digit-SIC code) from the modified Jones' model that regresses total accruals (WC01250-WC04860) on the growth of sales (WC01001) net of the change in accounting receivables (WC02051), property, plant & equipment (WC02501), and operating cash flows (WC04860) from the previous year, the current year, and the next year. Source: Worldscope.
<i>CSCORE</i>	Firm-year measure of accounting conservatism, estimated by the Khan and Watts (2009) approach. Specifically, we estimate the following cross-sectional regression by year for each country: $E_{i,t} = \beta_0 + \beta_1 D_{i,t} + \eta_1 MKV_{i,t} + \eta_2 MB_{i,t} + \eta_3 LEV_{i,t} + D_{i,t} (\eta_4 MKV_{i,t} + \eta_5 MB_{i,t} + \eta_6 LEV_{i,t}) + RET_{i,t} (\mu_0 + \mu_1 MKV_{i,t} + \mu_2 MB_{i,t} + \mu_3 LEV_{i,t}) + D_{i,t} * RET_{i,t} (\lambda_0 + \lambda_1 MKV_{i,t} + \lambda_2 MB_{i,t} + \lambda_3 LEV_{i,t}) + \zeta$, where where E is net income before extraordinary items (WC01551) scaled by total assets (WC02999), RET is the market adjusted annual stock returns (WC08801), D is the bad news indicator that equals one for negative RET and zero otherwise, MKV is the natural logarithm of market value (WC07210), MB is the market-to-book ratio (WC09704), and LEV is the debt-to-equity ratio ((WC03051+WC03251)/WC03501). $CSCORE = \lambda_0 + \lambda_1 MKV_{i,t} + \lambda_2 MB_{i,t} + \lambda_3 LEV_{i,t}$. Source: Worldscope.
<i>CAPEX</i>	Capital expenditures (WC04601) divided by total assets (WC02999). Source: Worldscope.
<i>SALGR</i>	Sales growth, measured as net sales (WC01001) in the year less net sales in the previous year, divided by net sales in the previous year. Source: Worldscope.
<i>R&D</i>	R&D expenditures (WC01201) divided by total assets (WC02999). Source: Worldscope.
<i>MULT</i>	Indicator variable that equals one if the firm reports non-zero international operating income (WC07126), and zero otherwise. International operating income is defined as operating income generated from operations in foreign countries before adjustments and eliminations. Source: Worldscope.
<i>CASH</i>	Total cash (WC02001) divided by total assets (WC02999). Source: Worldscope.
<i>LEV</i>	Financial leverage, measured as the ratio of total debt to total assets [(WC03051+WC03251)/WC02999]. Source: Worldscope.
<i>PPE</i>	Capital intensity, measured as property, plant and equipment (WC02501) divided by total assets (WC02999). Source: Worldscope.
<i>INTANG</i>	Intangible assets (WC02649) divided by total assets (WC02999). Source: Worldscope.
<i>SIZE</i>	Natural logarithm of total assets (WC07230) (in million U.S. Dollars). Source: Worldscope.

Country-level controls

<i>BTAXC</i>	Country-level book-tax conformity based on the conditional variance of current tax expense for a given level of pre-tax book income in a given country-year, following Atwood, Drake, and Myers [2010]. Source: Worldscope.
<i>TAXRAT</i>	Country-level statutory corporate tax rate. Source: the OECD Tax Database, KPMG LLP online summary, PricewaterhouseCoopers LLP's online information, Coopers & Lybrand LLP's worldwide tax summary guidelines, and local primary regulators for each sample country.
<i>BDReform</i>	Indicator variable that equals one starting the year in which board reforms became effective in the country, and zero otherwise. Source: Fauver et al. (2017).
<i>Rule of Law</i>	Yearly index of rule of law as a proxy for a country's institutional quality. Source: The Worldwide Governance Indicators.
<i>GDPG</i>	Growth of GDP per capita. Source: The Worldwide Governance Indicators.
<i>FINReform</i>	Annual index of financial reforms, which is a broad measure of the multidimensional nature of financial reforms and varies over years. Higher values represent more financial liberalization. Source: Abiad et al. (2010).
<i>ShortSell</i>	Indicator variable that equals one when there are restrictions on short selling in a country in a given year, and zero otherwise. Source: Jain et al. (2013).
<i>ITEnforce</i>	Indicator variable that equals one starting the year in which insider-trading laws were enforced in a country for the first time, and zero otherwise. Source: Bhattacharya and Daouk (2002).
<i>CGReform</i>	Indicator variable that equals one starting the year in which the country passed a corporate-governance reform, and zero otherwise. Source: Kim and Lu (2013).

Partitioning variables

ΔPPS	Average year-to-year change in CEO pay-performance sensitivity for a given country in the post-law period, where CEO pay-performance sensitivity is computed as the estimated coefficient in a regression relating the natural logarithm of total annual CEO compensation (in 2005 U.S. dollars) on industry-adjusted return on assets as well as firm-level controls (firm size, leverage, market-to-book ratio, and daily stock return volatility) for all firms in a country-year. Source: Khurana and Wang (2019).
$\Delta Takeover$	Country-level variable of takeover activity growth measured as the difference in the total number of completed mergers and acquisitions between four years before and four years after the M&A law enactment year, divided by the total number of completed mergers and acquisitions in the four years before the enactment year. Source: Khurana and Wang (2019).

<i>STDR</i>	Standard deviation of a firm's weekly returns $((RI_t - RI_{t-1})/RI_t)$ calculated over the year prior to the passage of M&A laws. Firm-specific returns are estimated from the expanded market model of Jin and Myers (2006). Source: Datastream.
<i>STDCF</i>	Standard deviation of cash flows from operations (WC04860) scaled by total assets (WC02999), calculated over the past five years prior to the passage of M&A laws. Source: Worldscope.
<i>Anti-director Rights</i>	Country-level anti-director rights index. Source: La Porta et al. (2006).

Appendix B The propensity-score-matching (PSM) procedure

This appendix describes the propensity-score-matching (PSM) procedure. We first estimate a logistic model to predict the probability of being a treatment firm, using the treatment sample from the enacting countries and the control sample from the non-enacting countries over 1994–2006. The prediction model regresses the likelihood of being a treatment firm on the firm-level control variables (i.e., *ROA*, */DACC/*, *CSCORE*, *CAPEX*, *SIZE*, *SALGR*, *R&D*, *MULT*, *CASH*, *LEV*, *PPE*, *INTANG*, and *SIZE*) and three country-level institutional variables (*BTAXC*, *Rule of Law*, and *GDPG*). Following prior studies (Rosenbaum and Rubin 1984; Austin 2011), we start with a caliper width equal to 30% of the standard deviation of the propensity score (yielding a caliper width of approximately 0.05) without replacement. We then narrow the width until we find that most of the differences of covariates between the matched samples are insignificant. This arrives at a largest caliper width of 0.0005. Our procedure results in a PSM sample of 10,930 firm-year observations. Below reports the covariate balance metrics. See Appendix A for the variable definitions. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Variable	Enacting sample (<i>N</i> = 5,465)	Non-enacting sample (<i>N</i> = 5,465)	Diff.	<i>t</i> -stats.
<i>ROA</i>	0.099	0.095	0.005***	2.71
<i>/DACC/</i>	0.048	0.048	0.000	0.46
<i>CSCORE</i>	0.054	0.058	-0.004	-0.85
<i>CAPEX</i>	0.076	0.075	0.001	0.64
<i>SALGR</i>	0.152	0.154	-0.002	-0.28
<i>R&D</i>	0.007	0.006	0.000	0.79
<i>MULT</i>	0.125	0.121	0.004	0.67
<i>CASH</i>	0.109	0.108	0.001	0.51
<i>LEV</i>	0.230	0.231	-0.001	-1.01
<i>PPE</i>	0.393	0.398	-0.005	-1.35
<i>INTANG</i>	0.032	0.038	-0.006***	-4.15
<i>SIZE</i>	5.293	5.283	0.010	0.27
<i>BTAXC</i>	0.229	0.226	0.003	1.25
<i>Rule of Law</i>	0.820	0.814	0.006	0.41
<i>GDPG</i>	0.040	0.040	0.000	0.54

Table 1 Sample distribution and summary statistics by country

Economy	#Firm-Years	#Firms	M&A Law Year	<i>TAXRAT</i>	<i>TAXAVOID</i>
Panel A: Enacting countries					
Austria	264	40	1998	0.336	0.094
Chile	435	54	2000	0.155	0.004
Germany	1,426	189	2002	0.506	0.137
India	771	126	1997	0.374	0.158
Indonesia	460	68	1998	0.321	0.047
Ireland	263	31	1997	0.293	0.084
Malaysia	994	136	1998	0.291	0.046
New Zealand	197	32	2001	0.331	0.045
Pakistan	282	47	2000	0.335	0.007
Philippines	135	21	1998	0.331	0.101
Taiwan	702	121	2002	0.265	0.143
<u>Total/Mean</u>	5,929	865	1998	0.349	0.094
Panel B: Non-enacting countries					
Argentina	117	24		0.341	0.014
Brazil	510	71		0.328	0.093
China	536	87		0.330	0.130
Czech Republic	85	17		0.305	0.040
Denmark	676	70		0.326	0.038
France	2112	238		0.362	0.003
Greece	173	51		0.368	-0.013
Hungary	74	13		0.178	0.047
Israel	107	20		0.358	0.005
Japan	12,209	2,053		0.456	0.048
Korea (South)	1302	192		0.294	-0.029
Mexico	443	52		0.343	0.078
Norway	337	41		0.274	0.078
Peru	101	17		0.296	0.003
Portugal	211	29		0.347	0.048
Thailand	1179	156		0.300	0.076
Turkey	358	58		0.363	0.039
<u>Total/Mean</u>	20,530	3,189		0.404	0.043

Table 1 presents the sample distribution by country over 1994–2006, which consists of 11 enacting countries/economies that enacted their M&A laws and 17 countries that never enacted M&A laws by 2006. The enactment years of M&A laws are obtained from Lel and Miller (2015). *TAXRAT* is the country-level statutory corporate tax rate. *TAXAVOID* is the tax avoidance variable. See Appendix A for the variable definitions.

Table 2 Descriptive statistics

Variable	N	Mean	STD	25%	Median	75%
Panel A: Enacting countries						
<i>TAXAVOID</i>	5,929	0.094	0.188	0.006	0.075	0.182
<i>Cash-based TAXAVOID</i>	3,880	0.087	0.249	0.019	0.114	0.221
<i>Cash-flow scaled TAXAVOID</i>	5,605	0.044	0.459	-0.013	0.109	0.237
<i>Assets-scaled TAXAVOID</i>	7,060	0.598	1.636	-0.094	0.415	1.212
<i>POST</i>	5,929	0.564	0.496	0.000	1.000	1.000
<i>ROA</i>	5,929	0.104	0.092	0.042	0.080	0.134
<i>/DACC/</i>	5,929	0.049	0.046	0.016	0.036	0.066
<i>CSCORE</i>	5,929	0.057	0.275	-0.044	0.040	0.137
<i>CAPEX</i>	5,929	0.077	0.083	0.027	0.053	0.097
<i>SALGR</i>	5,929	0.154	0.319	0.009	0.096	0.219
<i>R&D</i>	5,929	0.006	0.019	0.000	0.000	0.001
<i>MULT</i>	5,929	0.123	0.329	0.000	0.000	0.000
<i>CASH</i>	5,929	0.106	0.113	0.025	0.066	0.151
<i>LEV</i>	5,929	0.227	0.171	0.074	0.220	0.346
<i>PPE</i>	5,929	0.397	0.208	0.234	0.373	0.535
<i>INTANG</i>	5,929	0.032	0.069	0.000	0.002	0.026
<i>SIZE</i>	5,929	5.252	1.934	4.008	5.289	6.453
<i>BTAXC</i>	5,929	0.227	0.135	0.090	0.230	0.340
<i>TAXRAT</i>	5,929	0.349	0.114	0.280	0.340	0.390
<i>BDReform</i>	5,929	0.243	0.429	0.000	0.000	0.000
<i>Rule of Law</i>	5,929	0.793	0.806	0.280	0.762	1.565
<i>GDPG</i>	5,929	0.042	0.034	0.018	0.044	0.065
Panel B: Non-enacting countries						
<i>TAXAVOID</i>	20,530	0.043	0.219	-0.022	0.038	0.128
<i>Cash-based TAXAVOID</i>	9,168	0.044	0.278	-0.038	0.068	0.200
<i>Cash-flow scaled TAXAVOID</i>	19,378	0.015	0.507	-0.046	0.119	0.243
<i>Assets-scaled TAXAVOID</i>	25,994	0.218	1.297	-0.202	0.144	0.620
<i>ROA</i>	20,530	0.068	0.076	0.022	0.045	0.087
<i>/DACC/</i>	20,530	0.041	0.040	0.014	0.029	0.054
<i>CSCORE</i>	20,530	0.025	0.214	-0.044	0.017	0.089
<i>CAPEX</i>	20,530	0.059	0.068	0.019	0.041	0.073
<i>SALGR</i>	20,530	0.098	0.277	-0.016	0.044	0.132
<i>R&D</i>	20,530	0.010	0.020	0.000	0.000	0.010
<i>MULT</i>	20,530	0.170	0.375	0.000	0.000	0.000
<i>CASH</i>	20,530	0.146	0.113	0.063	0.120	0.199
<i>LEV</i>	20,530	0.253	0.183	0.098	0.237	0.380
<i>PPE</i>	20,530	0.350	0.188	0.210	0.325	0.462
<i>INTANG</i>	20,530	0.027	0.063	0.001	0.004	0.017
<i>SIZE</i>	20,530	5.648	1.845	4.319	5.508	6.898
<i>BTAXC</i>	20,530	0.263	0.100	0.200	0.280	0.340
<i>TAXRAT</i>	20,530	0.404	0.077	0.340	0.420	0.480
<i>BDReform</i>	20,530	0.305	0.461	0.000	0.000	1.000
<i>Rule of Law</i>	20,530	1.052	0.555	1.136	1.294	1.318
<i>GDPG</i>	20,530	0.023	0.028	0.004	0.015	0.031

Table 2 presents the descriptive statistics of the variables used in the primary analysis. Panels A and B are for enacting and non-enacting countries, respectively. All firm-level continuous variables are winsorized at the 1 and 99 percentiles.

Table 3 The effect of M&A laws on tax avoidance

	Dep Var = <i>TAXAVOID</i>			
	(1)	(2)	(3)	(4)
<i>TREAT</i> × <i>POST</i>	-0.083^{***} (-8.46)	-0.058^{***} (-5.79)	-0.061^{***} (-6.08)	-0.061^{***} (-6.38)
<i>BTAXC</i>		-0.167 ^{***} (-6.89)	-0.151 ^{***} (-6.25)	-0.134 ^{***} (-5.56)
<i>TAXRAT</i>		0.522 ^{***} (10.20)	0.513 ^{***} (10.16)	0.489 ^{***} (9.97)
<i>BDReform</i>		-0.008 (-1.27)	-0.008 (-1.34)	-0.011 [*] (-1.80)
<i>Rule of Law</i>		0.065 ^{***} (3.09)	0.084 ^{***} (3.85)	0.072 ^{***} (3.34)
<i>GDPG</i>		-0.289 ^{***} (-4.34)	-0.207 ^{***} (-3.17)	-0.153 ^{**} (-2.50)
<i>ROA</i>			0.119 ^{***} (3.45)	0.129 ^{***} (3.66)
<i> DACC </i>			0.023 (0.52)	0.018 (0.44)
<i>CSCORE</i>			0.001 (0.12)	0.001 (0.11)
<i>CAPEX</i>			-0.062 ^{**} (-2.09)	-0.044 (-1.45)
<i>SALGR</i>			0.001 (0.10)	-0.002 (-0.31)
<i>R&D</i>			0.009 (0.05)	-0.055 (-0.29)
<i>MULT</i>			0.015 [*] (1.67)	0.012 (1.54)
<i>CASH</i>			0.024 (0.90)	0.033 (1.24)
<i>LEV</i>			-0.010 (-0.41)	-0.007 (-0.29)
<i>PPE</i>			0.094 ^{***} (2.92)	0.104 ^{***} (3.18)
<i>INTANG</i>			-0.168 ^{***} (-2.90)	-0.175 ^{***} (-2.96)
<i>SIZE</i>			-0.020 ^{***} (-4.77)	-0.022 ^{***} (-5.65)
Firm FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	No
Industry-year FEs	No	No	No	Yes
Observations	26,459	26,459	26,459	26,459
Adjusted <i>R</i> ²	0.313	0.321	0.326	0.332

Table 3 presents the regression results on the effect of M&A laws on tax avoidance. See Appendix A for the variable definitions. The *t*-stats. reported in parentheses are based on standard errors clustered by country-industry. ^{***}, ^{**}, and ^{*} indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 4 Alternative measures, alternative samples, and additional country-level controls**Panel A: Alternative measures of tax avoidance**

Dep Var =	<i>Cash-based TAXAVOID</i>		<i>Cash-flow scaled TAXAVOID</i>		<i>Asset-scaled TAXAVIOD</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>TREAT</i> × <i>POST</i>	-0.037^{**} (-2.25)	-0.041^{**} (-2.40)	-0.072^{***} (-3.13)	-0.066^{***} (-2.82)	-0.300^{***} (-3.42)	-0.321^{***} (-4.10)
<i>BTAXC</i>	0.074 (1.64)	0.062 (1.43)	0.069 (1.24)	-0.027 (-0.48)	-1.323 ^{***} (-5.74)	-0.861 ^{***} (-4.22)
<i>TAXRAT</i>	0.946 ^{***} (11.03)	0.904 ^{***} (11.08)	0.121 (0.88)	0.259 [*] (1.89)	3.702 ^{***} (7.39)	3.145 ^{***} (7.39)
<i>BDReform</i>	0.006 (0.50)	0.010 (0.77)	-0.022 (-1.46)	-0.021 (-1.45)	-0.115 ^{**} (-2.55)	-0.109 ^{***} (-2.61)
<i>Rule of Law</i>	0.036 (0.87)	0.070 [*] (1.71)	-0.056 (-1.19)	-0.039 (-0.86)	0.011 (0.06)	0.046 (0.28)
<i>GDPG</i>	-0.156 (-1.36)	-0.006 (-0.05)	-0.559 ^{***} (-3.51)	-0.291 [*] (-1.81)	1.009 [*] (1.82)	-0.430 (-0.89)
Firm controls	No	Yes	No	Yes	No	Yes
Firm FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	13,048	13,048	24,983	24,983	33,054	33,054
Adjusted <i>R</i> ²	0.300	0.308	0.301	0.312	0.378	0.424

Panel B: Alternative samples

Dep Var =	Using U.S. and U.K. firms as control sample		PSM sample		Excluding Japan	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>TAXAVOID</i>						
<i>TREAT</i> × <i>POST</i>	-0.096^{***} (-8.47)	-0.101^{***} (-7.59)	-0.031^{***} (-2.72)	-0.035^{***} (-3.14)	-0.023^{**} (-2.26)	-0.031^{***} (-2.91)
<i>POST</i>			0.005 (1.15)	0.005 (1.22)		
<i>BTAXC</i>		-0.080 ^{***} (-3.23)	-0.070 ^{**} (-2.37)	-0.065 ^{**} (-2.21)		0.123 ^{***} (3.25)
<i>TAXRAT</i>		0.033 (0.71)	0.477 ^{***} (7.24)	0.446 ^{***} (6.84)		0.000 (0.01)
<i>BDReform</i>		0.026 ^{***} (3.63)	0.020 ^{**} (2.51)	0.019 ^{**} (2.47)		0.003 (0.64)
<i>Rule of Law</i>		0.050 (1.65)	0.013 (0.53)	0.017 (0.71)		-0.036 (-1.10)
<i>GDPG</i>		-0.004 (-0.83)	-0.246 ^{***} (-2.97)	-0.216 ^{***} (-2.59)		-0.006 (-0.77)
Firm controls	No	Yes	No	Yes	No	Yes
Firm FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	36,235	36,235	10,930	10,930	14,250	14,250
Adjusted <i>R</i> ²	0.234	0.242	0.385	0.388	0.345	0.350

Table 4 continued

Panel C: Enacting sample only

Dep Var = <i>TAXAVOID</i>	Enacting sample, 1994–2006		Enacting sample, [-3, +3]	
	(1)	(2)	(3)	(4)
<i>POST</i>	-0.027 *** (-3.05)	-0.022 ** (-2.41)	-0.031 *** (-3.39)	-0.026 *** (-2.94)
<i>BTAXC</i>	-0.023 (-0.64)	-0.025 (-0.70)	0.048 (1.08)	0.052 (1.17)
<i>TAXRAT</i>	0.495*** (6.76)	0.471*** (6.37)	0.413*** (3.97)	0.439*** (4.18)
<i>BDReform</i>	-0.001 (-0.05)	-0.002 (-0.14)	0.014 (0.89)	0.013 (0.81)
<i>Rule of Law</i>	-0.004 (-0.13)	-0.007 (-0.22)	-0.078* (-1.90)	-0.094** (-2.36)
<i>GDPG</i>	-0.299*** (-3.99)	-0.310*** (-3.86)	-0.244*** (-3.05)	-0.301*** (-3.49)
Firm controls	No	Yes	No	Yes
Firm FEs	Yes	Yes	Yes	Yes
Observations	5,929	5,929	3,709	3,709
Adjusted R^2	0.364	0.367	0.422	0.426

Table 4 continued

Panel D: Controlling for additional country-level variables

	Dep Var = <i>TAXAVOID</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
<i>TREAT</i> × <i>POST</i>	-0.055^{***} (-5.56)	-0.058^{***} (-5.65)	-0.046^{***} (-4.83)	-0.058^{***} (-5.70)	-0.045^{***} (-4.58)	-0.051^{***} (-5.11)
<i>FINReform</i>	-0.155 ^{***} (-3.51)				-0.153 ^{***} (-3.39)	-0.168 ^{***} (-3.77)
<i>ShortSell</i>		-0.002 (-0.20)			0.004 (0.33)	0.001 (0.13)
<i>ITEnforce</i>			-0.037 ^{***} (-3.39)		-0.037 ^{***} (-3.30)	-0.034 ^{***} (-3.28)
<i>CGReform</i>				0.001 (0.07)	0.003 (0.30)	0.012 (1.19)
<i>BTAXC</i>	-0.159 ^{***} (-6.66)	-0.167 ^{***} (-6.88)	-0.162 ^{***} (-6.74)	-0.167 ^{***} (-6.88)	-0.154 ^{***} (-6.48)	-0.139 ^{***} (-5.85)
<i>TAXRAT</i>	0.572 ^{***} (11.10)	0.520 ^{***} (9.87)	0.512 ^{***} (10.07)	0.521 ^{***} (10.04)	0.563 ^{***} (10.48)	0.554 ^{***} (10.60)
<i>BDReform</i>	-0.009 (-1.48)	-0.008 (-1.31)	-0.006 (-0.98)	-0.008 (-1.05)	-0.008 (-1.08)	-0.013 [*] (-1.71)
<i>Rule of Law</i>	0.082 ^{***} (3.99)	0.065 ^{***} (3.09)	0.057 ^{***} (2.68)	0.065 ^{***} (2.90)	0.071 ^{***} (3.25)	0.085 ^{***} (3.82)
<i>GDPG</i>	-0.265 ^{***} (-3.96)	-0.290 ^{***} (-4.32)	-0.308 ^{***} (-4.54)	-0.288 ^{***} (-4.34)	-0.282 ^{***} (-4.11)	-0.192 ^{***} (-2.87)
Firm controls	No	No	No	No	No	Yes
Firm FEs	Yes	Yes	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	26,459	26,459	26,459	26,459	26,459	26,459
Adjusted <i>R</i> ²	0.322	0.321	0.322	0.321	0.323	0.327

Table 4 presents the regression results on the effect of M&A laws on tax avoidance using alternative samples, alternative tax avoidance measures, and adding additional country-level controls. Panel A reports results using alternative tax avoidance measures, Panel B reports results using alternative samples, Panel C reports results using the treatment sample only, and Panel D reports results with controlling for additional country-level variables. See Appendix A for the variable definitions. The *t*-stats. reported in parentheses are based on standard errors clustered by country-industry. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 5 Assessing parallel trends assumption**Panel A: Testing the dynamic effect of M&A laws**

Dep Var = <i>TAXAVOID</i>	Dynamic effect of M&A laws			
	Enacting sample only		Enacting and nonacting samples	
	(1)	(2)	(3)	(4)
<i>Year -3</i>	-0.002 (-0.20)	0.001 (0.08)		
<i>Year -2</i>	-0.005 (-0.47)	-0.000 (-0.01)		
<i>Year -1</i>	-0.013 (-1.11)	-0.008 (-0.73)		
<i>Transition Year 1</i>	-0.020 (-1.49)	-0.013 (-1.04)		
<i>Transition Year 2</i>	-0.033** (-2.29)	-0.024* (-1.73)		
<i>POST</i>	-0.037*** (-2.69)	-0.027** (-2.02)		
<i>TREAT</i> × <i>Year -3</i>			0.011 (1.01)	0.013 (1.27)
<i>TREAT</i> × <i>Year -2</i>			-0.007 (-0.62)	-0.002 (-0.17)
<i>TREAT</i> × <i>Year -1</i>			-0.016 (-1.42)	-0.012 (-1.03)
<i>TREAT</i> × <i>Transition Year 1</i>			-0.020 (-1.55)	-0.019 (-1.55)
<i>TREAT</i> × <i>Transition Year 2</i>			-0.023 (-1.58)	-0.025* (-1.81)
<i>TREAT</i> × <i>POST</i>			-0.022* (-1.71)	-0.025** (-2.01)
<i>BTAXC</i>	-0.001 (-0.03)	-0.002 (-0.05)	-0.220*** (-6.55)	-0.200*** (-6.62)
<i>TAXRAT</i>	0.492*** (6.33)	0.464*** (6.04)	0.613*** (11.64)	0.620*** (11.70)
<i>BDReform</i>	0.002 (0.22)	-0.000 (-0.04)	0.008* (1.71)	0.008 (1.57)
<i>Rule of Law</i>	-0.015 (-0.49)	-0.020 (-0.66)	0.044** (2.19)	0.064*** (3.09)
<i>GDPG</i>	-0.253*** (-3.81)	-0.265*** (-3.82)	-0.374*** (-5.13)	-0.271*** (-3.96)
Firm controls	No	Yes	No	Yes
Firm FEs	Yes	Yes	Yes	Yes
Observations	7,228	7,228	27,758	27,758
Adjusted <i>R</i> ²	0.357	0.360	0.315	0.320

Table 5 continued

Panel B: Placebo tests

Dep Var = <i>TAXAVOID</i>	Placebo tests			
	Pre-law		Post-law	
	[-6, -5] vs. [-2, -1]		[+1, +2] vs. [+5, +6]	
	(1)	(2)	(3)	(4)
<i>TREAT</i> × <i>POST</i>	-0.021 (-1.30)	-0.016 (-0.98)	0.005 (0.46)	0.005 (0.40)
<i>BTAXC</i>	-0.088 (-1.57)	-0.061 (-1.13)	0.004 (0.19)	0.007 (0.36)
<i>TAXRAT</i>	0.661*** (5.75)	0.597*** (5.27)	0.444*** (4.77)	0.413*** (4.49)
<i>BDReform</i>	0.126*** (4.51)	0.113*** (4.05)	-0.005 (-0.74)	-0.005 (-0.68)
<i>Rule of Law</i>	0.048 (0.43)	0.002 (0.02)	0.043* (1.69)	0.042 (1.62)
<i>GDPG</i>	-0.392*** (-3.53)	-0.271** (-2.35)	0.024 (0.30)	0.018 (0.22)
Firm controls	No	Yes	No	Yes
Firm FEs	Yes	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes	Yes
Observations	10,730	10,730	37,369	37,369
Adjusted <i>R</i> ²	0.416	0.421	0.296	0.297

Table 5 presents the regression results of assessing the parallel trends assumption. Panel A reports results of the dynamic effect of M&A laws on tax avoidance. *Year -1* (*Year -2*, *Year -3*) is a year indicator capturing the first (second, third) year prior to the enactment of M&A laws in a country. *Transition Year 1* (*Transition Year 2*) is the event year of (the first year after) the M&A law enactment as the dependent variable of *TAXAVOID* is computed as three-year sums pre- and post-law enactment for these two years. Panel B reports results of two placebo tests, whereas in columns (1) and (2) ((3) and (4)) the pseudo-enactment year is the fourth year before (after) the passage of M&A laws in a country. We exclude the pseudo-enactment year and the year following pseudo enactment in each placebo test to avoid using information in both pre- and post-pseudo enactment periods in computing *TAXAVOID*. See Appendix A for the variable definitions. The *t-stats.* reported in parentheses are based on standard errors clustered by country-industry. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 6 M&A laws and takeover threat

Dep Var = <i>TAXAVOID</i>	Partition by <i>ex-post</i> takeover activity growth ($\Delta Takeover$)					
	Excluding firm-level controls			Including firm-level controls		
	High $\Delta Takeover$ (1)	Low $\Delta Takeover$ (2)	Diff. (1) – (2)	High $\Delta Takeover$ (3)	Low $\Delta Takeover$ (4)	Diff. (3) – (4)
<i>TREAT</i> × <i>POST</i>	-0.074*** (-4.64)	-0.048*** (-4.67)	-0.026* (-1.86)	-0.076*** (-4.97)	-0.052*** (-4.94)	-0.024* (-1.69)
<i>BTAXC</i>	-0.195*** (-6.55)	-0.201*** (-7.04)		-0.180*** (-5.99)	-0.182*** (-6.37)	
<i>TAXRAT</i>	0.455*** (6.41)	0.393*** (6.74)		0.470*** (6.91)	0.396*** (6.91)	
<i>BDReform</i>	-0.012 (-1.40)	-0.006 (-0.85)		-0.018** (-2.22)	-0.006 (-0.88)	
<i>Rule of Law</i>	0.067** (2.50)	0.063*** (2.79)		0.086*** (3.25)	0.074*** (3.23)	
<i>GDPG</i>	-0.237*** (-2.62)	-0.299*** (-3.95)		-0.127 (-1.46)	-0.216*** (-2.88)	
Firm controls	No	No		Yes	Yes	
Firm FEs	Yes	Yes		Yes	Yes	
Year FEs	Yes	Yes		Yes	Yes	
Observations	22,245	24,744		22,245	24,744	
Adjusted R^2	0.322	0.319		0.327	0.323	

Table 6 presents the regression results of the effect of M&A law enactments on ex-post takeover activities. The treatment sample is partitioned into countries with high and low takeover activity growth (high versus low $\Delta Takeover$) based on the median country-level growth in takeover activities after M&A law enactments. The control sample in both high and low subsamples consists of firms from the non-enacting countries. See Appendix A for the variable definitions. The *t-stats.* reported in parentheses are based on standard errors clustered by country-industry. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 7 Testing the private-benefits agency prediction

Panel A: Partition analysis by pay-performance sensitivity growth

Dep Var = <i>TAXAVOID</i>	Partition by pay-performance sensitivity growth (ΔPPS)					
	Excluding firm-level controls			Including firm-level controls		
	High ΔPPS	Low ΔPPS	Diff.	High ΔPPS	Low ΔPPS	Diff.
	(1)	(2)	(1) – (2)	(3)	(4)	(3) – (4)
<i>TREAT</i> × <i>POST</i>	-0.085*** (-6.19)	-0.038*** (-3.12)	-0.047*** (-2.94)	-0.093*** (-6.76)	-0.036*** (-2.94)	-0.056*** (-3.51)
<i>BTAXC</i>	-0.191*** (-6.80)	-0.179*** (-6.10)		-0.170*** (-6.03)	-0.166*** (-5.69)	
<i>TAXRAT</i>	0.587*** (9.14)	0.530*** (8.94)		0.606*** (9.64)	0.562*** (9.17)	
<i>BDReform</i>	-0.015** (-1.97)	-0.020*** (-2.99)		-0.017** (-2.34)	-0.022*** (-3.43)	
<i>Rule of Law</i>	0.088*** (3.28)	0.065*** (2.69)		0.104*** (3.86)	0.090*** (3.67)	
<i>GDPG</i>	-0.228*** (-2.66)	-0.256*** (-3.45)		-0.115 (-1.39)	-0.152** (-2.07)	
Firm controls	No	No		Yes	Yes	
Firm FEs	Yes	Yes		Yes	Yes	
Year FEs	Yes	Yes		Yes	Yes	
Observations	22,812	23,717		22,812	23,717	
Adjusted <i>R</i> ²	0.321	0.308		0.326	0.314	

Panel B: Partition analysis by pre-law earnings management

Dep Var = <i>TAXAVOID</i>	Partition by pre-law earnings management ($ DACC_{t-1} $)					
	Excluding firm-level controls			Including firm-level controls		
	High $ DACC_{t-1} $	Low $ DACC_{t-1} $	Diff.	High $ DACC_{t-1} $	Low $ DACC_{t-1} $	Diff.
	(1)	(2)	(1) – (2)	(3)	(4)	(3) – (4)
<i>TREAT</i> × <i>POST</i>	-0.080*** (-6.99)	-0.059*** (-5.10)	-0.021* (-1.80)	-0.081*** (-6.85)	-0.061*** (-5.21)	-0.020* (-1.73)
<i>BTAXC</i>	-0.136*** (-5.31)	-0.129*** (-5.18)		-0.112*** (-4.43)	-0.105*** (-4.30)	
<i>TAXRAT</i>	0.493*** (8.23)	0.485*** (8.31)		0.530*** (8.59)	0.495*** (8.40)	
<i>BDReform</i>	-0.017** (-2.47)	-0.014** (-1.98)		-0.020*** (-2.98)	-0.016** (-2.32)	
<i>Rule of Law</i>	0.068*** (2.67)	0.064** (2.56)		0.086*** (3.32)	0.083*** (3.28)	
<i>GDPG</i>	-0.247*** (-3.06)	-0.269*** (-3.35)		-0.150* (-1.90)	-0.174** (-2.22)	
Firm controls	No	No		Yes	Yes	
Firm FEs	Yes	Yes		Yes	Yes	
Year FEs	Yes	Yes		Yes	Yes	
Observations	25,425	26,192		25,425	26,192	
Adjusted <i>R</i> ²	0.297	0.300		0.301	0.305	

Table 7 presents the regression results on testing the private-benefits agency prediction under which M&A law enactments affect tax avoidance. In Panels A and B, the treatment sample is respectively partitioned into subsamples of treatment countries with above versus below median growth in the sensitivity of CEO pay to firm performance (High versus Low ΔPPS) and subsamples of treatment firms with above versus below median of pre-law earnings management as measured by $|DACC|$ in the year prior to M&A-law enactments (Low versus High $|DACC_{t-1}|$). The control sample in both high and low subsamples consists of firms from the non-enacting countries. See Appendix A for the variable definitions. The *t-stats.* reported in parentheses are based on standard errors clustered by country-industry. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 8 Testing the risk channel prediction

Panel A: Partition analysis by stock return volatility

Dep Var = <i>TAXAVOID</i>	Partition by pre-law stock return volatility (<i>STDR_{t-1}</i>)					
	Excluding firm-level controls			Including firm-level controls		
	High <i>STDR_{t-1}</i> (1)	Low <i>STDR_{t-1}</i> (2)	Diff. (1) – (2)	High <i>STDR_{t-1}</i> (3)	Low <i>STDR_{t-1}</i> (4)	Diff. (3) – (4)
<i>TREAT</i> × <i>POST</i>	-0.066^{***} (-5.14)	-0.060^{***} (-4.96)	-0.006 (-0.46)	-0.073^{***} (-5.46)	-0.055^{***} (-4.55)	-0.018 (-1.25)
<i>BTAXC</i>	-0.196 ^{***} (-6.83)	-0.166 ^{***} (-6.06)		-0.178 ^{***} (-6.21)	-0.147 ^{***} (-5.41)	
<i>TAXRAT</i>	0.492 ^{***} (8.00)	0.555 ^{***} (9.49)		0.529 ^{***} (8.28)	0.577 ^{***} (9.74)	
<i>BDReform</i>	-0.015 ^{**} (-2.25)	-0.013 ^{**} (-2.03)		-0.017 ^{**} (-2.58)	-0.016 ^{**} (-2.48)	
<i>Rule of Law</i>	0.093 ^{***} (3.81)	0.075 ^{***} (2.83)		0.110 ^{***} (4.44)	0.096 ^{***} (3.64)	
<i>GDPG</i>	-0.256 ^{***} (-3.44)	-0.251 ^{***} (-3.23)		-0.166 ^{**} (-2.28)	-0.134 [*] (-1.76)	
Firm controls	No	No		Yes	Yes	
Firm FEs	Yes	Yes		Yes	Yes	
Year FEs	Yes	Yes		Yes	Yes	
Observations	22,656	23,172		22,656	23,172	
Adjusted <i>R</i> ²	0.317	0.312		0.322	0.318	

Panel A: Partition analysis by cash flow volatility

Dep Var = <i>TAXAVOID</i>	Partition by pre-law cash flow volatility (<i>STDCF_{t-1}</i>)					
	Excluding firm-level controls			Including firm-level controls		
	High <i>STDR_{t-1}</i> (1)	Low <i>STDR_{t-1}</i> (2)	Diff. (1) – (2)	High <i>STDR_{t-1}</i> (3)	Low <i>STDR_{t-1}</i> (4)	Diff. (3) – (4)
<i>TREAT</i> × <i>POST</i>	-0.062^{***} (-4.85)	-0.064^{***} (-6.22)	0.002 (0.15)	-0.061^{***} (-4.71)	-0.065^{***} (-6.09)	0.004 (0.35)
<i>BTAXC</i>	-0.182 ^{***} (-6.48)	-0.182 ^{***} (-6.62)		-0.162 ^{***} (-5.79)	-0.166 ^{***} (-6.05)	
<i>TAXRAT</i>	0.548 ^{***} (9.17)	0.496 ^{***} (8.71)		0.569 ^{***} (9.27)	0.522 ^{***} (9.02)	
<i>BDReform</i>	-0.016 ^{**} (-2.44)	-0.013 [*] (-1.91)		-0.018 ^{***} (-2.80)	-0.014 ^{**} (-2.20)	
<i>Rule of Law</i>	0.094 ^{***} (3.75)	0.078 ^{***} (3.15)		0.114 ^{***} (4.53)	0.099 ^{***} (3.94)	
<i>GDPG</i>	-0.232 ^{***} (-3.10)	-0.282 ^{***} (-3.67)		-0.130 [*] (-1.78)	-0.179 ^{**} (-2.35)	
Firm controls	No	No		Yes	Yes	
Firm FEs	Yes	Yes		Yes	Yes	
Year FEs	Yes	Yes		Yes	Yes	
Observations	23,000	22,979		23,000	22,979	
Adjusted <i>R</i> ²	0.312	0.317		0.318	0.322	

Table 8 presents the regression results on testing the risk channel prediction under which M&A law enactments affect tax avoidance. In Panels A and B, the treatment firms are partitioned into high and low risk subsamples based on the firm-level medians of *STDR_{t-1}* and *STDCF_{t-1}*, respectively, in the years prior to the enactments of M&A laws. The control sample in both high and low subsamples consists of firms from the non-enacting countries. See Appendix A for the variable definitions. The *t*-stats. reported in parentheses are based on standard errors clustered by country-industry. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 9 Role of country-level legal enforcement

Panel A: Partition analysis by Anti-director Rights

Dep Var = <i>TAXAVOID</i>	Partition by <i>Anti-director Rights</i>					
	Excluding firm-level controls			Including firm-level controls		
	High (1)	Low (2)	Diff. (1) – (2)	High (3)	Low (4)	Diff. (3) – (4)
<i>TREAT</i> × <i>POST</i>	-0.096*** (-6.85)	-0.041*** (-3.26)	-0.055*** (-2.95)	-0.095*** (-6.77)	-0.051*** (-3.88)	-0.044** (-2.27)
<i>BTAXC</i>	-0.207*** (-5.99)	-0.168*** (-4.20)		-0.206*** (-5.80)	-0.151*** (-3.89)	
<i>TAXRAT</i>	0.593*** (7.09)	0.459*** (5.36)		0.582*** (7.31)	0.395*** (4.73)	
<i>BDReform</i>	-0.009 (-0.83)	0.025** (2.57)		-0.012 (-1.12)	0.022** (2.40)	
<i>Rule of Law</i>	0.066** (2.00)	0.027 (1.07)		0.082** (2.47)	0.032 (1.25)	
<i>GDPG</i>	-0.149 (-1.35)	-0.231*** (-2.77)		-0.122 (-1.13)	-0.129 (-1.53)	
Firm controls	No	No		Yes	Yes	
Firm FEs	Yes	Yes		Yes	Yes	
Year FEs	Yes	Yes		Yes	Yes	
Observations	15,605	10,159		15,605	10,159	
Adjusted <i>R</i> ²	0.324	0.347		0.325	0.354	

Panel A: Partition analysis by Rule of Law

Dep Var = <i>TAXAVOID</i>	Partition by <i>Rule of Law</i>					
	Excluding firm-level controls			Including firm-level controls		
	High (1)	Low (2)	Diff. (1) – (2)	High (3)	Low (4)	Diff. (3) – (4)
<i>TREAT</i> × <i>POST</i>	-0.089*** (-6.54)	0.001 (0.05)	-0.090*** (-3.69)	-0.089*** (-6.51)	-0.006 (-0.29)	-0.083*** (-3.35)
<i>BTAXC</i>	-0.155*** (-4.73)	-0.133*** (-3.12)		-0.126*** (-3.82)	-0.120*** (-2.66)	
<i>TAXRAT</i>	0.555*** (7.99)	0.094 (0.82)		0.528*** (8.31)	0.060 (0.50)	
<i>BDReform</i>	-0.004 (-0.49)	-0.001 (-0.06)		-0.007 (-0.81)	-0.001 (-0.10)	
<i>Rule of Law</i>	0.138*** (3.54)	0.021 (0.74)		0.162*** (4.35)	0.024 (0.84)	
<i>GDPG</i>	-0.553*** (-4.17)	-0.005 (-0.06)		-0.433*** (-3.34)	0.015 (0.18)	
Firm controls	No	No		Yes	Yes	
Firm FEs	Yes	Yes		Yes	Yes	
Year FEs	Yes	Yes		Yes	Yes	
Observations	20,573	5,886		20,573	5,886	
Adjusted <i>R</i> ²	0.319	0.335		0.326	0.337	

Table 9 presents the regression results on testing the role of country-level legal institutions. Panel A reports the results for subsamples of countries with *Anti-director Rights* above versus below the sample median. Panel B reports the results for subsamples of countries with the average *Rule of Law* over 1996-2006 above versus below the sample median. See Appendix A for the variable definitions. The *t*-stats. reported in parentheses are based on standard errors clustered by country-industry. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.

Table 10 Additional robustness checks

Dep Var = <i>TAXAVOID</i>	Excluding firm-level controls			Including firm-level controls		
	$TREAT \times POST$ (<i>t-stats.</i>)	Obs.	Adj. R ²	$TREAT \times POST$ (<i>t-stats.</i>)	Obs.	Adj. R ²
1. Excluding firms with international income	-0.054*** (-5.11)	22,244	0.332	-0.056*** (-5.32)	22,244	0.336
2. Constant sample, [-2, +2]	-0.028*** (-2.89)	12,281	0.360	-0.029*** (-2.91)	12,281	0.363
3. Year < 2004	-0.051*** (-3.20)	17,159	0.387	-0.055*** (-3.64)	17,159	0.398
4. Excluding EU countries	-0.073*** (-6.28)	20,838	0.326	-0.076*** (-6.38)	20,838	0.328
5. Excluding Taiwan & Ireland	-0.048*** (-4.53)	25,494	0.316	-0.050*** (-4.72)	25,494	0.320
6. Using <i>Annual TAXAVOID</i>	-0.032*** (-4.43)	28,834	0.270	-0.033*** (-4.64)	28,834	0.273
7. Standard errors clustered by firm	-0.058*** (-6.87)	26,459	0.321	-0.061*** (-7.09)	26,459	0.326

Table 10 presents regression results on additional robustness checks. See Appendix A for the variable definitions. The *t-stats.* reported in parentheses are based on standard errors clustered by country-industry. ***, **, and * indicate significance at the 1%, 5%, and 10% two-tailed levels, respectively.