



Limits, Transparency, and Board Independence Against Tax Avoidance

Introduction

Taxes are levied by the government primarily for public service purposes (De Leon & De Leon, 2016). However, the high tax rates and narrow tax base imposed in the Philippines become burdensome for taxpayers and also decrease total government revenue collections (Diokno, 2008). It is shown in this study that foreign ownership and customer concentration both increase the levels of corporate tax avoidance practiced by firms while board independence decreases the same. Hence, we do not support the government's plan to ease foreign ownership restrictions through the amendment of the Constitution (Romualdez, 2017) because easing the current restrictions may entail decreased government revenue. Additionally, we recommend that the International Accounting Standards Board (IASB) strengthen the enforcement of the International Financial Reporting Standards 8 (IFRS 8). In this case, increased transparency in disclosures is needed to help the government prevent the use of tax havens by major conglomerates. Lastly, we support the Securities and Exchange Commission's (SEC) recommendation to have a certain minimum threshold on the proportion of independent directors in PSE-listed firms on the basis that doing so will reduce levels of tax avoidance within these firms.

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Policy Situation

Taxes are collected by authorities for the welfare of the citizens, so they serve as a means for firms to demonstrate their corporate and social responsibility (Salihu, Annuar, & Sheikh Obid, 2015). However, the high tax rates and narrow tax base imposed in the Philippines become burdensome for taxpayers. Consequently, corporations act as profit-maximizing agents and prefer to lessen their liabilities rather than comply with government requirements. Hence, profit maximization becomes the basis for firms to develop schemes that would lessen tax burdens, and these schemes may take the form of either tax avoidance or tax evasion, which are similar both in nature and with the objective of decreasing tax burdens (Dantes, 2015). These tax avoidance practices have developed over the years and have become more complex (Salihu, Sheikh Obid, & Annuar, 2013), and these imply weaknesses in corporate social responsibility standards. Additionally, the prevalence of tax avoidance may have adverse effects on the national budget, thus, hampering government projects and expenditures implementation since taxes comprise the main revenue stream of governments (Cruz, 2016). Since tax revenues are often insufficient, national governments have an incentive to attempt resolving different tax-related issues.

Given that the Association of Southeast Asian Nations (ASEAN) Economic Integration aims to establish free trade liberalization, increase foreign direct investments, and develop an intra-regional bond market within the region, there may be increased opportunities for tax avoidance (Kawai & Naknoi, 2015). The opportunities provided by conducive international trade environments, along with possible tax havens exploited by multinational corporations, suggest that foreign ownership and involvement may be correlated with tax avoidance or evasion. Therefore, there is a need to examine the role of ownership structure, specifically foreign ownership, on corporate tax planning and how this might help address stagnating tax efforts in the country.

To help understand what motivates firms to avoid taxation, we look into the various factors that have been shown in literature to affect a firm's level of corporate tax avoidance using annual firm-level data on publicly-listed Philippine firms from 2009 to 2015, focusing on foreign ownership on the basis that greater presence and extent of foreign investors will mitigate tax avoidance within the firm because such investors have the incentive to monitor management effectively, in order to earn higher returns from their investments.

Model

We use regression analysis to analyze the effects of foreign ownership on corporate tax avoidance. We also include family ownership, customer concentration, board characteristics, control variables, and industry and year dummy variables to control for market-wide fluctuations across industries and over time. Hence, we estimate the regression equation:

$$CTA_{it} = \beta_o + \gamma CTA_{i,t-1} + \beta_1 FOR_{it} + \beta_2 MC_{it} + \beta_3 FAM_{it} + \sum_p \beta_p BCHAR_{it}^p + \sum_q \beta_q CONTROL_{it}^q + \sum_r \beta_r PSE_{it}^r + \sum_s \beta_s YEAR_{it}^s + \varepsilon_{it}$$

$$CONTROL = [FSIZE, AGE, ROA, LEV^1, CAPINT]$$

$$BCHAR = [BSIZE, BIND]$$

where CTA_{it} is our measure of corporate tax avoidance (either cash ETR, long run ETR, or residual BTG¹), FOR_{it} is our measure of foreign ownership (either FOR1, FOR2, or FOR3), MC_{it} is our measure of customer concentration, FAM_{it} is our measure of family ownership (either FAM1 or FAM2), $BCHAR_{it}^p$ is our vector of board characteristics, $CONTROL_{it}^q$ is our vector of time-varying and firm-level controls, PSE_{it}^r is a vector of dummy variables based from the PSE industry classification system³, $YEAR_{it}^s$ is a vector of dummy variables from 2010 to 2015⁴, and ε_{it} represents the error term. We also follow Salihu et al. (2015) and include the past levels of the dependent variable CTA as an additional explanatory variable, in order to capture the dynamic effects present in corporate tax planning.

Given the dynamic nature of panel datasets, endogeneity issues, such as unobserved (individual effects) heterogeneity, reverse causality, and dynamic endogeneity, are concerns that need to be addressed in studies pertaining to corporate governance and taxation. Dynamic endogeneity arises because tax payment is a continuous process; this implies that corporate tax planning involves strategies that transcend a one-year plan (Salihu et al., 2015). Coincidentally, the issue on reverse causality arises because of the bidirectional relationship between tax avoidance and foreign ownership (Hasan, Kim, Teng, & Wu, 2016), that is, the level of tax avoidance may be determined using the explanatory variables, but the explanatory variables may also be determined by the level of tax avoidance. To address such issues, we estimate our models using the two-step Blundell-Bond System Generalized Method of Moments (GMM) estimator, which yields more unbiased and precise estimates and is more appropriate for studies covering relatively shorter time periods than its contemporary in the Arellano-Bond Difference GMM estimator (Roodman, 2009).

¹ We winsorize our leverage variable at the 1st and 99th percentiles to control for the effects of outliers.

² We also winsorize our tax avoidance variables at the 1st and 99th percentiles to control for the effects of outliers.

³ We use the holding firms sector as the base industry dummy in our estimations.

⁴ We use 2009 as the base year dummy in our estimations.

Results

Throughout this study, we use various measures for our tax avoidance, foreign ownership, and family ownership variables. For tax avoidance, we use the cash and the long-run effective tax rates (Dyreng, Hanlon, & Maydew, 2008), and the residual book-tax gap (Desai & Dharmapala, 2004) measures. Following Salihu et al. (2015), we use the presence and level of foreign stock ownership in the firm as well as the ratio of foreign directors within the board as measures of foreign ownership. Lastly, we also follow Chen, Chen, Cheng, and Shevlin (2010) and use the presence and level of family ownership as measures in our study.

Tables 1 to 3 report our regression results after estimating our models across our sample. All in all, we find evidence that there is a significant and positive relationship between the presence of substantial foreign ownership and corporate tax avoidance among firms listed in the Philippine Stock Exchange, as measured by the residual book-tax gap. This indicates that firms that are classified as foreign-owned firms engage in more aggressive tax avoidance schemes. Furthermore, we find that firm age, firm performance, and leverage are also significantly associated with an increase in the residual gap between book and taxable income, which indicates that older firms, more profitable firms, and more leveraged firms tend to be more aggressive in tax avoidance than others, respectively. Additionally, we also find that both customer concentration and firm performance are significantly and positively associated with greater tax avoidance, as measured by cash effective tax rate, whereas board size and board independence are significantly and negatively associated with tax avoidance, as measured by the long run effective tax rate. As robustness checks, we also use dummy variables with a 20% threshold as proxies for foreign ownership and family ownership, and find that our results are qualitatively similar.

Concluding Remarks

Recent efforts of the Bureau of Internal Revenue (BIR) has unearthed that one of the primary methods used by Philippine firms to avoid taxation is the use of inter-related party transactions, specifically the creation of fake suppliers and customers (Gonzales, 2012). Furthermore, common methods used by multinational firms to avoid taxation include offshore shell companies and the use of tax havens (Campbell, 2016). These tendencies of large firms stem from their ability to use their available resources to reduce corporate tax liabilities. Consequently, our study also shows that foreign ownership and customer concentration increases a firm's level of tax avoidance. Hence, we do not support plans of easing foreign ownership limits but recommend strengthened enforcement and implementation of transparency standards, especially those concerned with customer concentration.

Appendix

Table 1

Regression Results on CETR

	PANEL A:1:CETR			PANEL A:2:CETR		
	FOR1 (1)	FOR2 (2)	FOR3 (3)	FOR1 (1)	FOR2 (2)	FOR3 (3)
<i>Foreign Ownership</i>	0.0563 (0.0821)	0.0488 (0.0525)	-0.1524 (0.1489)	0.0295 (0.0697)	0.0346 (0.0499)	-0.0770 (0.1391)
<i>Major Customer (MC)</i>	-0.0831* (0.0437)	-0.0690** (0.0355)	-0.0554 (0.0479)	-0.0934** (0.0422)	-0.0754** (0.0366)	-0.0658 (0.0421)
<i>Family Ownership 1 (FAM1)</i>	-0.0204 (0.0531)	-0.0101 (0.0610)	-0.0720 (0.0539)	-	-	-
<i>Family Ownership 2 (FAM2)</i>	-	-	-	-0.0175 (0.0734)	0.0366 (0.0906)	0.0095 (0.0800)
<i>Board Independence (BIND)</i>	-0.1057 (0.2165)	-0.1214 (0.1287)	-0.0249 (0.2320)	-0.0596 (0.2257)	-0.0209 (0.2273)	0.0046 (0.2303)
<i>Board Size (BSIZE)</i>	-0.0935 (0.0924)	-0.1214 (0.1287)	0.0598 (0.1386)	-0.0070 (0.0083)	-0.1752 (0.1303)	-0.0147 (0.1261)
<i>Firm Size (FSIZE)</i>	-0.0032 (0.0077)	-0.0034 (0.0078)	-0.0023 (0.0087)	0.0314 (0.0083)	-0.0013 (0.0076)	-0.0043 (0.0085)
<i>Firm Age (FAGE)</i>	0.0299 (0.0204)	0.0313 (0.0218)	0.0083 (0.0243)	0.0314* (0.0180)	0.0346 (0.0243)	0.0206 (0.0215)
<i>Return on Asset (ROA)</i>	-0.5086*** (0.1907)	-0.4851*** (0.1902)	-0.4240*** (0.1811)	-0.5940*** (0.1997)	-0.5364** (0.2110)	-0.4353** (0.1858)
<i>Leverage</i>	0.0239 (0.0333)	-0.0163 (0.0280)	-0.0081 (0.0332)	0.0145 (0.0300)	0.0084 (0.0319)	0.0062 (0.0362)
<i>Capital Intensity</i>	-0.0862 (0.0619)	0.0568 (0.0655)	-0.0596 (0.0787)	-0.0709 (0.0613)	-0.0597 (0.0693)	-0.0574 (0.0666)
<i>Lagged (1) of CETR</i>	0.3632*** (0.0992)	0.3941*** (0.1112)	0.3246*** (0.0903)	0.3512*** (0.1008)	0.3700*** (0.1147)	0.3163*** (0.0914)
<i>Constant</i>	0.3669* (0.2225)	0.3937 (0.2518)	0.1264 (0.2435)	0.4174* (0.2147)	0.4107 (0.3105)	0.2120 (0.2629)
<i>Hansen</i>	0.470	0.604	0.528	0.848	0.748	0.710
AR(1)	0.012	0.013	0.014	0.012	0.014	0.013
AR(2)	0.133	0.108	0.144	0.139	0.127	0.144
# of observations	714	714	765	714	714	765
Industry dummies	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES

Note: Robust standard errors are in parentheses

*** - 1% significance level, ** - 5% significance level, * - 10% significance level

Table 2

Regression Results on LETR

	PANEL B:1:LETR			PANEL B:2:LETR		
	FOR1 (1)	FOR2 (2)	FOR3 (3)	FOR1 (1)	FOR2 (2)	FOR3 (3)
<i>Foreign Ownership</i>	0.0045 (0.0682)	0.0126 (0.0553)	-0.0992 (0.0955)	-0.0177 (0.0713)	0.0032 (0.0415)	-0.0921 (0.0831)
<i>Major Customer (MC)</i>	-0.0065 (0.0329)	-0.0016 (0.0374)	-0.0283 (0.0396)	-0.0171 (0.0337)	-0.0077 (0.0314)	-0.0284 (0.0383)
<i>Family Ownership 1 (FAM1)</i>	-0.0291 (0.0503)	-0.0430 (0.0510)	-0.0540 (0.0521)	-	-	-
<i>Family Ownership 2 (FAM2)</i>	-	-	-	-0.0148 (0.0426)	-0.0182 (0.0560)	-0.0248 (0.0512)
<i>Board Independence (BIND)</i>	0.4332*** (0.1517)	0.3800*** (0.1202)	0.3973** (0.1611)	0.3997*** (0.1287)	0.3755*** (0.1107)	0.3745* (0.1363)
<i>Board Size (BSIZE)</i>	0.1841** (0.0728)	0.1754* (0.0988)	0.1452** (0.0703)	0.1377* (0.0821)	0.1254 (0.0866)	0.1144* (0.0685)
<i>Firm Size (FSIZE)</i>	-0.0108 (0.0073)	-0.0067 (0.0087)	0.0056 (0.0057)	-0.0039 (0.0072)	-0.0012 (0.0061)	0.0048 (0.0062)
<i>Firm Age (FAGE)</i>	0.0004 (0.0172)	-0.0040 (0.0176)	-0.0091 (0.0137)	-0.0020 (0.0166)	-0.0013 (0.0161)	-0.0060 (0.0124)
<i>Return on Asset (ROA)</i>	3.2921 (3.4867)	-0.1521 (0.1565)	-0.2415 (0.1630)	-0.1071 (0.1617)	-0.1828 (0.1530)	-0.2394 (0.1576)
<i>Leverage</i>	0.0586 (0.0416)	0.0349 (0.0380)	-0.0336 (0.0494)	0.0172 (0.0345)	0.0060 (0.0327)	-0.0519 (0.0466)
<i>Capital Intensity</i>	-0.0009 (0.0522)	0.0003 (0.0571)	-0.0018 (0.0509)	0.0133 (0.0528)	0.0132 (0.0519)	0.0149 (0.0461)
<i>Lagged (1) of LETR</i>	0.3861*** (0.0566)	0.3980*** (0.0559)	0.3725*** (0.0651)	0.3774*** (0.0540)	0.3913*** (0.0529)	0.3677*** (0.0626)
<i>Constant</i>	-0.1768 (0.1872)	-0.2151 (0.2124)	-0.3548** (0.1567)	-0.2156 (0.1488)	-0.2458 (0.2124)	-0.3026* (0.1618)
<i>Hansen</i>	0.723	0.7	0.396	0.788	0.573	0.527
<i>AR (1)</i>	0.031	0.031	0.053	0.028	0.026	0.05
<i>AR (2)</i>	0.413	0.453	0.471	0.361	0.363	0.415
<i>NOBSERVATIONS</i>	808	808	860	808	808	860
<i>INDUSTRY DUMMIES</i>	YES	YES	YES	YES	YES	YES
<i>YEARDUMMIES</i>	YES	YES	YES	YES	YES	YES

Note: Robust standard errors are in parentheses

*** - 1% significance level, ** - 5% significance level, * - 10% significance level

Table 3

Regression Results on RBTG

	PANEL C:1:RBTG			PANEL C:2:RBTG		
	FOR1 (1)	FOR2 (2)	FOR3 (3)	FOR1 (1)	FOR2 (2)	FOR3 (3)
<i>Foreign Ownership</i>	0.5453 (2.2319)	1.8063* (1.0220)	-1.3503 (4.3294)	-0.6806 (1.7245)	2.0966** (0.9276)	-0.8877 (2.4899)
<i>Major Customer (MC)</i>	1.4091* (0.7940)	1.8217 (1.1655)	2.5909* (1.3763)	1.2779 (0.8052)	1.9192 (1.2513)	2.4286* (1.4406)
<i>Family Ownership 1 (FAM1)</i>	1.6683 (1.4263)	1.9743 (2.0532)	-0.8765 (2.2203)	-	-	-
<i>Family Ownership 2 (FAM2)</i>	-	-	-	0.0831 (1.7330)	1.6330 (1.8498)	-1.1664 (1.9059)
<i>Board Independence (BIND)</i>	-2.4066 (6.9016)	-0.4311 (5.8121)	3.2130 (7.6290)	-4.2450 (6.0369)	-2.9901 (7.1040)	5.0513 (6.7785)
<i>Board Size (BSIZE)</i>	0.9213 (2.7339)	2.2085 (3.3714)	0.7076 (3.5962)	0.4716 (2.5917)	2.0557 (3.0962)	0.01450 (3.6883)
<i>Firm Size (FSIZE)</i>	-0.5879** (0.2609)	-0.6567 (0.5142)	-0.0285 (0.2894)	-0.5445** (0.2491)	-0.7476** (0.3779)	-0.0801 (0.3576)
<i>Firm Age (FAGE)</i>	0.8216* (0.4217)	0.7551 (0.5724)	0.7429 (0.7808)	0.6056 (0.4457)	0.5667 (0.5199)	0.8548 (0.3828)
<i>Return on Asset (ROA)</i>	6.9064 (4.5258)	7.9765* (5.5251)	7.9641** (4.1570)	4.6858* (2.8055)	6.8495 (5.3020)	7.7381 (5.7435)
<i>Leverage</i>	2.5166*** (0.6321)	2.0987*** (0.7861)	1.5280 (0.9830)	2.3400*** (0.6039)	2.0851*** (0.6042)	1.7618** (0.8116)
<i>Capital Intensity</i>	-0.6584 (1.4227)	0.6516 (1.8731)	0.5586 (1.4926)	-0.7199 (1.4241)	-0.3541 (1.1723)	-0.0375 (1.4140)
<i>Lagged (1) of RBTG</i>	0.2923* (0.1514)	0.2328 (0.1666)	0.3528* (0.1978)	0.3123** (0.1500)	0.2755** (0.1472)	0.3333** (0.1506)
<i>Lagged (2) of RBTG</i>	0.6255*** (0.1935)	0.6773*** (0.2100)	0.4697** (0.2170)	0.6511*** (0.1749)	0.6973*** (0.2113)	0.4881** (0.2195)
<i>Constant</i>	4.9170 (6.5634)	2.2336 (9.0735)	-5.5973 (8.4866)	8.0314 (7.0234)	6.3269 (8.4736)	-4.0649 (12.9229)
<i>Hansen</i>	0.386	0.602	0.400	0.483	0.501	0.413
AR (1)	0.259	0.298	0.346	0.243	0.271	0.328
AR (2)	0.58	0.716	0.849	0.557	0.674	0.923
OF OBSERVATIONS	672	672	701	672	672	701
INDUSTRY DUMMIES	YES	YES	YES	YES	YES	YES
YEAR DUMMIES	YES	YES	YES	YES	YES	YES

Note: Robust standard errors are in parentheses

*** - 1% significance level, ** - 5% significance level, * - 10% significance level

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