EXTERNAL CORPORATE GOVERNANCE, TAX PLANNING, AND FIRM PERFORMANCE

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Abstract

We have attempted to theorize and empirically demonstrate the moderating effects of three external monitors (institutional investors, securities analysts, and external auditors) on the relationship between tax planning and firm performance. We propose that these monitors can affect either the form or the strength of that relationship. Data cover 73 companies listed in the Euronext 100 index for the period from 2008 to 2012. Empirical analyses are conducted using various statistical tools to identify the presence of moderator variables. Most importantly, results showed that institutional investors, securities analysts and external auditors moderate the form of the tax planning-performance relationship; it appears they involve themselves directly in the firms' tax decisions. Interestingly, we find evidence that these external monitors moderate the strength of the tax planning-performance relationship; that is, they may indirectly influence the effectiveness of firm tax strategic. Our results are insensitive to alternative measures of firm performance, to additional control variables and to alternative specifications. Our paper offers two contributions to corporate governance research. First, against a backdrop of increased attention on firms' tax planning, it provides empirical evidences concerning the nature and significance of the potential moderating effects of select external monitors on the relationship between tax planning and firm performance. Second, there is little attention about external monitors in research studies. In fact, this issue is not addressed in the literature within a European context using recent data.

Keywords: External Monitors, Tax Planning, Firm Performance, Moderating Variables

1. INTRODUCTION

There is a large body of empirical research that documents, firstly, the effect of corporate governance on firm performance (Belkhir, 2009; Boubaker and Nguyen, 2012; Pathan and Faff, 2013). Secondly, other studies have examined only the effect of corporate governance on the tax planning (Desai and Dharmapala 2006; Hanlon and Slemrod 2009). Recently, research works have turned their attention to provide evidence concerning the potential moderating effects of corporate governance mechanisms on the relationship between an independent variable such as tax planning and a dependent variable such as firm performance (Zemzem and Ftouhi, 2013a). The underlying premise is that managers and shareholders have divergent goals and risk preferences; thus managers tend to make strategic corporate decisions such as tax planning to maximize their utility rather than shareholders' wealth (Lanis and Richardson, 2012; Lanis et al., 2013).

In fact, previous literature shows how taxes influence firm financial decision making, as provided by Graham (2003), has considered the effect of taxes on financing choices, organizational form and restructuring decisions, payout policy, compensation policy, and risk management decisions. In this literature, taxes are viewed as one of many factors that shape these decisions. Only, taxes represent a significant cost for companies. In order to minimize the cost of taxation, tax planning becomes imperative. Indeed, corporations engage in various forms of tax planning activities to reduce tax payment. Thus, the movement of the tax function from a cost-center to a profit-center has led to more international tax planning.

To the best of our knowledge, the more recent studies were mainly based on internal governance mechanisms (e.g., board incentives), in part because of data unavailability and the complicated analysis involved. However, external governance mechanisms are more important in curbing managerial opportunism because they do not involve firm insiders and thus are less influenced by managers (Le et al., 2006). In this paper, we take a first step to assess the effectiveness of select external monitors (i.e., institutional investors, securities analysts and external auditors) on moderating the tax planning-performance relationship. Methodologically, we have attempted to distinguish between different potential types of moderating effects of external monitors.

Our paper makes several important contributions. Firstly, against a backdrop of increased attention on firms' tax planning, it provides empirical evidences concerning the nature and significance of the potential moderating effects of these external monitors on the relationship between tax planning and firm performance. Secondly, there is little attention about external monitors in research studies. In fact, this issue is not

addressed in the literature within a European context using recent data.

Following this introduction, section 2 is devoted to present previous literature and develop testable hypotheses. From that, section 3 presents the research design which details data collection, variables measurement, and models specification. Finally, findings will be discussed and summarized in section 4. In section 5, we report the robustness checks and provide concluding remarks in section 6.

2. RELATED LITERATURE AND HYPOTHESES

Previous corporate governance studies (e.g., Le et al., 2006; Abdul Wahab and Holland, 2012) have used two basic methods to identify the presence of moderator variables: Moderated Regression Analysis (MRA) and subgroup analysis. MRA can help to identify moderator variables through examination of an interaction term in a regression model. If a significant interaction is found, the conclusion has been that the hypothesized moderator variable has a moderating effect of the form, namely a quasi or pure moderator. This analytical procedure cannot help to detect the strength of moderator variables even when the interactive term is not significant. Rather, we must use the subgroup analysis to separate the moderating effects of the form and of the strength.

As Le et al. (2006), we posit that the moderating effect of the form and the moderating effect of the strength are analogous to the direct and indirect effects of external monitors, respectively. External monitors can have direct effects when they participate actively in tax strategic plan. They may have an indirect effect when they, for example, develop internal control and compensation systems to reduce managerial opportunism. The moderating effects of select external monitors, such as institutional investors, securities analysts, and external auditors, are discussed in depth in the following section.

2.1. Institutional investors

Institutional investors such as pension funds are often major shareholders with the oversight skills of professional investors, so they have the incentive and ability to monitor executives (Le et al., 2006). Prior literature has investigated several issues associated with the presence of institutional investors as a source of external monitoring (Cornett et al., 2007; Brav et al., 2008; Elyasiani and Jia, 2010; Chung and Zhang, 2011). While monitoring by outside shareholders such as institutional investors can be beneficial (Huddart, 1993), it is also costly. Such monitoring requires independent sources of information concerning managerial actions; there are also potential liquidity costs (Noe, 2002), and free-rider problems with other shareholders (Grossman and Hart, 1980).

Institutional investors may affect tax planning performance either directly or indirectly. In recent years, extensive evidence has accrued regarding the increasing importance of institutional investors in corporate decisions (Ferreira et al., 2010; Aggarwal et al., 2011; Helwege et al., 2012). In the same time, Khurana and Moser (2012) note that the firms with higher levels of institutional ownership are less tax aggressive because the institutional owners are concerned with long-term consequences of aggressive tax strategies.

The effects of monitoring on the part of institutional investors extend to financial reporting. Moore (2012) investigates whether institutional ownership levels are associated with levels of and time-series variability in book-tax differences. He suggests that institutional ownership is negatively associated with total, permanent, and temporary book-tax differences. This finding is consistent with higher levels of institutional ownership equating to more effective monitoring of management, resulting in lower book-tax differences. Therefore, we contend that institutional investors may directly affect corporate tax planning.

Alternatively, institutional investors owners have strong capacity to actively supervise executives activities and thus provide more effective monitoring of corporate governance overall (Gillan and Starks, 2003). Some empirical evidence reveals that institutions have greater influence on executive compensation contracts (Hartzell and Starks, 2003) and to limit agency problems. By reason of their large shareholdings and voting power, Chung et al. (2002) stipulate that institutional investors play an important role in monitoring and influencing managers. It can force managers to focus on economic performance and avoid opportunities for self-serving behavior. Thus, reduces opportunistic earnings management.

Many studies demonstrate that institutional investors have been shown to positively affect the quality of a firm's corporate governance and managerial performance (Parrino et al., 2003; Ferreira and Matos, 2008). Linking institutional ownership directly with firm value, Clay (2002) finds a positive association between level of investment by institutional shareholders and Tobin's Q. In the same line, other studies find results consistent with institutional investors monitoring in the financial reporting arena. They discover a negative association between institutional ownership level and earnings management (Chung et al., 2002).

Institutional investors could also influence firms indirectly through their preferences and trading with other dominant shareholders. In this context, Gomes and Novaes (2006) develop theoretical models which predict that large investors have an incentive to limit the self-serving agendas of controlling shareholders. Other research has shown that large non-controlling shareholders can enhance firm value via their monitoring activities of the largest shareholder (Laeven and Levine, 2008; Attig et al., 2009). Based on prior studies' findings, we hypothesize that institutional investors may also have indirect effects on their firms' tax performance.

Thus, we suggest the following hypotheses for testing for moderating effects institutional investors may have on the association of tax planning and firm performance.

Hypothesis 1.1 Institutional investors such as pension funds may moderate the form of the relationship between tax planning and firm performance.

Hypothesis 1.2 Institutional investors such as pension funds may moderate the strength of the relationship between tax planning and firm performance.

2.2. Securities analysts

According to Le et al. (2006), securities analysts are industry experts who specialize in collecting, analyzing, and disseminating firm-specific information to interested parties. They are recognized as external monitors in that they can overcome information asymmetry between corporate insiders and outsiders because executives can maneuver to make self-serving decisions while shareholders do not have adequate information to make judgments regarding those decisions (Comment and Jarrell, 1991; Ferris and Sarin, 2000; Boubaker and Labégorre, 2008).

In this context, Knyazeva (2007) and Yu (2008) examine the role of information intermediaries in corporate governance within the context of the effect of analyst coverage on earnings management. They found that a higher level of analyst coverage is related to less earnings management and that change of analyst coverage is negatively related to change of earnings management. In addition, the effect of analyst coverage is stronger for analysts who make better forecasts, including those from top brokerage houses and those with more experience. More generally, they suggest that the role of information intermediaries in corporate governance is potentially significant.

Added, shareholders may react to executive decisions-making and strategic vision by buying, selling, or exercising their control rights based on the information from analysts. Firm performance is affected by those reactions, particularly when performance is measured using market-based measures (Le et al., 2006). Brennan et al. (1993) find that the returns on the portfolios of firms that are followed by many analysts tend to lead those of firms that are followed by a few analysts, even when the firms are of approximately the same size. Piotroski and Roulstone (2004) examine the extent to which the financial analysts affect stock return synchronicity. They found that stock return synchronicity is positively associated with analyst forecasting activities; consistent with analysts increasing the amount of industry-level information in prices through intra-industry information transfers. In another way, the positive association is posited to be a consequence of improved intra-industry information and expertise allows them to better interpret and disseminate common information across all firms in the industry.

Additional tests show that analyst activity accelerates the incorporation of both firm specific and industry-level earnings news into prices. They found also that the analyst appears to increase stock return co-movement in one hand, on the other hand suggest that analysts facilitate the transfer of price-relevant information across peer firms. Finally, they suggest that analysts and their forecasting activities serve two roles in the price formation process: firstly, gathering and disseminate information unique to the firm. Secondly, identify and extract common information from firm, industry, and/or macro-level signals and to disseminate the value-relevant portion of such information across all firms in the industry.

In sum, securities analysts indirectly influence corporate tax planning by creating a better information environment for firms and leading to less information asymmetry. In other words, securities analysts moderate the strength of the relationship between tax planning and firm performance. Hence, we state our hypothesis in the alternative form as follows:

Hypothesis 2 Securities analysts may moderate the strength of the relationship between tax planning and firm performance.

2.3. External auditors

External auditors inspect firms' accounting reports and express an opinion as to whether financial statements are presented fairly in accordance with the applicable accounting standards. They must assert whether financial statements are free of material misstatement, whether due to error or fraud. Although empirical studies (e.g., Frankel et al., 2002; Sikka and Hampton, 2005; Freise et al., 2008; Asthana et al., 2009; Elder et al., 2013) have reported mixed finding regarding the monitoring effectiveness of external auditors, we contend that the quality of external auditors (type and industry specialization) play an important role in monitoring a firm's strategic activities such as tax planning.

Because external auditors are more concerned with opportunistic application of accounting principles that yield incoming increasing accruals, they can directly contribute to well-identified tax evasion in which financial incentives are shaped by audit, penalty, and tax rates (James, 2013). Some empirical studies stipulate that aggressive tax reporting could be constrained by external advisors, such as external auditors (Schön, 2008). Alexander et al. (2008) contend that the opportunity to engage in tax aggressiveness increases as audit independence diminishes.

Armstrong et al. (2012) show that firms may choose to use external providers for tax planning, which might weaken the link between tax director incentive compensation and measures of tax planning. Thus, external auditors may have an impact without being directly involved in the tax planning process. They may indirectly influence executives' tax decisions trough other governance activities such as designing effective internal governance mechanisms and reward systems.

Bushman and Smith (2001) contend that financial accounting is a key element to determine managers' compensation. Consequently, accurate performance measures can increase firms' profitability through incentive mechanisms. In the same line, Ting et al. (2008) consider that external auditor can be a signal for investors and they might influence disclosure. Gao and Kling (2012) measured the impact of external auditors on compliance to mandatory disclosure requirements to assess the effect of these regulatory changes. They found that auditor opinions increase the compliance to mandatory disclosure requirements. The external governance environment had a positive effect on firms' compliance to disclosure requirements. In line with this, we posit that external auditors may have either direct or indirect effects on the association between tax planning and firm performance.

Hypothesis 3.1 External auditors may moderate the form of the relationship between tax planning and firm performance.

Hypothesis 3.2 External auditors may moderate the strength of the relationship between tax planning and firm performance.

3. RESEARCH DESIGN

3.1. Sample Selection and Data Sources

The paper employs a panel dataset of firms listed on the Euronext 100 Index, which includes the 100 largest and most liquid stocks traded on Euronext during the five year period 2008-2012. A total of 37 two-digit Standard Industrial Classification (SIC) codes were represented in the sample, ranging from 10 to 95. As the nature of tax planning activities may depend on firm's expectations, regulated utilities (SIC codes 4900-4999) were excluded because they operate in an environment with specific legal and regulatory requirements. Also, in the vein of Abdul Wahab and Holland (2012), the sample is limited to non-financial firms because of the limitation of using accounting based valuation models on financial firms (SIC codes 6000-6999). Further filters were used to exclude firms with negative pretax income, extreme value of tax rates and unbalanced data. Table I presents the sample selection process which resulted in 73 firms making 365 year-end observations over the five year period with complete data for analysis.

Table I. Sample selection process

Details	*Number of companies*	*Number of observations*
Listed companies throughout the period	100	
Regulated utilities	(5)	
Finance companies	(10)	
	85	425
Negative profit before tax		(29)
Extreme value of tax rates (>1)		(9)
Unbalance data		(22)
Initial sample	73	365

We use the *Orbis* database to gather data on auditor type and percentage of stock held by institutional investors. We also obtained complementary information on tax data and financial control variables. Data regarding the number of securities analysts are collected from the *Thomson* database.

3.1. Variables Measurement

The empirical analysis in this paper is based on models that explain firm performance as a function of tax planning, external monitors and a series of control variables. Firm performance, the dependent variable that we are examining, is measured by the Return on Assets ratio (ROA). It is calculated as the net income divided by the book value of total assets. This ratio is the most used ratio to integrate accounting based performance as proxies for firm performance (Lam and Lee 2008).

The independent variable of main interest is the tax planning, which was measured using the Effective Tax Rates (ETR). It is defined as the percentage of total tax expense to pretax income. We draw on ETR in this study for two important reasons. Firstly, recent empirical tax research has found that ETR encapsulate tax planning (Armstrong et al., 2012). Secondly, ETR also denote the proxy measure of tax planning most frequently used by many academic researchers (Dyreng et al., 2008; Robinson et al., 2010; Zemzem and Ftouhi, 2013b). We next take a look at external monitors. The three mechanisms considered represent institutional ownership, securities analysts, and external auditors. Institutional ownership (IOWN) figures were identified from all shareholder owners of each sample firm, which were listed in the *Orbis* database as more than 3% owners in at least one period. The number of analysts (NA) following a firm was reported as the number of analysts' earnings estimates reported in the *Thomson* database. For a host of reasons, external audit quality is likely to be positively associated with Big 4 auditors for industrial firms. Firstly, several studies show that earnings management will be lower when the auditor is big 4 auditor (Kanagaretnam et al., 2010). Secondly, Autore et al. (2009) find higher importance for audit type where information uncertainty is higher relative to industrial firms. Finally, Healy and Palepu (2001) observe that information disclosure quality may be higher when the auditor is a brand-name auditor. However, given that our sample firms are all certified by at least one big 4 auditor, we argue that the measure of audit specialization would be more appropriate. According to the Big 4 report (2013), PWC and E&Y are the top two auditors in the tax service line. In 2012, these two firms accounted for $7.944 billion and $6.370 billion of tax services revenues, respectively. Therefore, we use PWC and E&Y as a proxy for auditor specialists by constructing a dummy variable PWCEY, which is coded 1 if the auditor is PWC, or E&Y, and 0 otherwise.

In our regressions, we control for various firm characteristics. The choice of control variables is based on Le et al. (2006) and Abdul Wahab and Holland (2012), and partly dictated by data availability. The first variable is the operating efficiency (OE), and it is computed by total wages and salaries to operating profit. More operational efficient firms are expected to be more profitable. It requires optimality in utilization of salaries and expenses. In addition, many researchers consider operational efficiency as a specific factor affecting profitability (e.g., Athanasoglou et al., 2008). Additionally, we control for firm leverage (LEV) defined as the total debt divided by the book value of equity. According to Le et al. (2006), firms with greater financial leverage may outperform less leveraged firms in good times and under perform in bad times. The third variable is firm size (SIZE), measured as the natural log of number of employees. Anderson and Fraser (2000) show that larger firms are more capable of diversifying risk,

both geographically and by industry, than small firms. Moreover, larger firms have greater access to capital markets and thus more ability to adjust to unexpected liquidity and capital shortfalls. Finally, it has been argued that firm performance is typically associated with the industry type. Hence, we code a series of dummy variables (INDDUM) to control for industry effect (results for these variables, not reported to save space, were generally significant). Industries are identified using SIC division structure.

3.2. Models specification

The initial regression incorporating the predictor variable (ETR) and related control variables is set out below with variables as defined above:

$$ROA_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 OE_{it} + \beta_3 LEV_{it} + \beta_4 SIZE_{it} + \sum_{n=5}^{13} \beta_n INDDUM_{it} + \varepsilon_{it} \quad \text{(model I)}$$

To assess the potentially impact of external monitors on the tax planning performance the above regression is extended by including the select variables IOWN, NA, and PWCEY to give model II as follows:

$$ROA_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 IOWN_{it} + \beta_3 NA_{it} + \beta_4 PWCEY_{it} + \beta_5 OE_{it} + \beta_6 LEV_{it} + \beta_7 SIZE_{it} + \sum_{n=8}^{16} \beta_n INDDUM_{it} + \varepsilon_{it} \quad \text{(model II)}$$

A third regression tests whether the relationship between tax planning and firm performance is moderated by the three sources of external monitoring. In view of that, moderating variables ETR*IOWN, ETR*NA, and ETR*PWCEY are constructed by multiplying tax planning measure by IOWN, NA, and PWCEY variables, respectively.

$$ROA_{it} = \beta_0 + \beta_1 ETR_{it} + \beta_2 IOWN_{it} + \beta_3 NA_{it} + \beta_4 PWCEY_{it} + \beta_5 ETR_{it} * IOWN_{it} + \beta_6 ETR_{it} * NA_{it} + \beta_7 ETR_{it} * PWCEY_{it} + \beta_8 OE_{it} + \beta_9 LEV_{it} + \beta_{10} SIZE_{it} + \sum_{n=11}^{19} \beta_n INDDUM_{it} + \varepsilon_{it} \quad \text{(model III)}$$

To perform the study, we followed the method for identification of moderators proposed by Sharma et al. (1981). Specifically, we used a MRA to examine whether these external monitors can affects the form of the relationship, and we used Subgroup Analysis to examine whether they influenced the strength of the relationship. The proposed framework consists of four steps discussed below:

Step 1: Determine whether the hypothesized moderator variable interacts with the predictor using the MRA procedure (see model III). If there is a significant interaction, then proceed to step 2. Otherwise, go to step 3.

Step 2: Determine whether the moderator variable is a quasi or pure moderator by testing whether it is significantly correlated with the criterion variable (ROA). If it is, then it is a quasi moderator variable. If not, it is a pure moderator variable. Both quasi and pure moderators influence the form of the predictor-criterion relationship.

Step 3: Determine if the hypothesized moderator is related to the criterion or predictor variable. If it is, it is not a moderator. If it is not related to either the predictor or criterion variable, proceed to step 4.

Step 4: Split the total sample into subgroups on the basis of the suspected moderator and test of significance for differences in predictive validity across subgroups. If significant differences exist, the variable is a homologizer. Otherwise, it is not a moderator and the analysis is concluded.

4. RESULTS

Table II reports means, standard deviations and *Pearson* correlations relating to the resulting sample of 365 firm year-end observations using the *Stata* econometric software. Our key dependent variable is performance measured by ROA ratio. The table shows that on average, sample firms generate profit in relation to its overall resources of about 5%, with a standard deviation of 5.5%. Focusing on the independent variables, the mean value of ETR is about 26%. The standard deviation is 13.75%, which highlights the dynamic nature of tax planning. For each of the three external monitors, the mean is: IOWN (12.12%), NA (20.75), and PWCEY (0.73), with standard deviations of 11.62%, 7.33, and 0.45, respectively. The firm related characteristics can be summarized as follows: the mean (standard deviation) of SIZE and OE are 4.39 (0.80) and 21.48% (13.19%), respectively. Expressed as a percentage of equity, total debt (LEV) indicates an average of 118.49% with the large standard deviation of 94.52%. Overall, these results suggest that the sample firms present large variability with respect to these measures.

Table II. Descriptive statistics and correlations

	Variables	*Mean*	*Std. Dev.*	*1*	*2*	*3*	*4*	*5*	*6*	*7*
1.	ROA (%)	5.060	5.504							
2.	ETR (%)	25.695	13.746	-0.166						
3.	IOWN (%)	12.116	11.623	0.046	-0.151					
4.	NA	20.747	7.330	-0.021	0.127	-0.125				
5.	PWCEY	0.726	0.446	-0.203	0.001	0.019	-0.101			
6.	OE (%)	21.480	13.187	0.030	0.032	-0.032	-0.151	0.024		
7.	LEV (%)	118.496	94.522	-0.213	-0.048	-0.034	0.064	0.035	-0.116	
8.	SIZE	4.399	0.802	-0.017	0.272	-0.160	0.247	0.030	0.244	0.101

Notes: N = 365; correlations greater than 0.100 are significant at the 5% level; correlations greater than 0.150 are significant at the 1% level. The table presents descriptive statistics and pairwise correlations between key regressor variables by using Pearson's correlation coefficients. The variables included are: ROA is the firms' net income divided by the book value of total assets. ETR is defined as the percentage of total tax expense to pretax income. IOWN is the percentage of firms' shares owned by intitutional shareholders with ownership stakes of ≥ 3% in at least one period in the Orbis database. NA is the number of analysts' earnings estimates reported in the Thomson database. PWCEY is a dummy variable which is coded 1 if the auditor is PWC, or E&Y, and 0 otherwise. OE is computed by total wages and salaries to operating profit. LEV is defined as the total debt divided by the book value of equity. SIZE is the natural log of number of employees.

As is apparent from the correlation matrix, multicollinearity may be an issue since the correlation coefficients between various independent and control variables are significant. An alternative way to test for multicollinearity is to compute the Variance Inflation Factor (VIF). Given this test in our subsequent analysis, the VIF statistics -none of which exceeded 5.35- are below the rule of thumb threshold of 10 (Chatterjee and Hadi, 2006). So, the problem of multicollinearity does not seem critical, and thereafter, the empirical analysis could be interpreted with greater confidence.

As described earlier, a series of regression models are intended to test for moderators of the form of the relationship between tax planning and firm performance. Before doing so, as we employed a panel structure of data, questions of heteroscedasticity and autocorrelation are raised. These tests, not reported to save space, prove significant and we estimated the models presented in Table III using Generalized Least Squares (GLS) regression. It is a technique for estimating the unknown parameters in a linear regression model. The GLS is applied when the variances of the observations are unequal (heteroscedasticity), and/or when there is a certain degree of correlation between the observations. In these cases Ordinary Least Squares (OLS) can be statistically inefficient, or even give misleading inferences.

Table III. Hierarchical regression analysis of select external monitors on the relationship between tax planning and performance

Variables	*Model I*	*Model II*	*Model III.1*	*Model III.2*	*Model III.3*
OE (%)	-0.015**	-0.001	0.000	-0.001	-0.012*
LEV (%)	-0.011***	-0.010***	-0.010***	-0.010***	-0.011***
SIZE	-0.047	-0.295***	-0.299***	-0.295**	0.084
ETR (%)	-0.066***	-0.065***	-0.036***	-0.038	-0.117***
IOWN (%)		0.011	0.072***	0.070***	0.090***
NA		0.020*	0.013	0.015	-0.043*
PWCEY		-2.570***	-2.346***	-2.389***	-4.398***
ETR*IOWN			-0.002***	-0.002***	-0.003***
ETR*NA				-0.000	0.002**
ETR*PWCEY					0.106***
Wald	564.16***	439.82***	374.98***	346.21***	215***

*Notes: N = 365; * significance at the 10% level; ** Significance at the 5% level; *** Significance at the 1% level. The table reports the results from regressions in panel data of ROA on alternatives specifications of ETRs, external monitors and control variables. Variable definitions are provided in Table II.*

Table III shows a negative and significant relationship between tax planning measure and firm performance, ETR is statistically different from zero. The control variables have generally significant coefficients which are robust to controlling for external monitors. This result is not consistent with stakeholders concerns about risk in tax or other tax planning related risks, for example, the risk related to inspection or investigation by tax authorities. But it could be explained that firms are interested in tax planning in order to improve business performance (Minnick and Noga, 2010).

The next set of results examines whether a variable is a moderator of either the form or the strength of the relationship between the predictor and dependent variable. The first step is to test whether our various moderator variables interacts with the predictor variable. In column (6) of Table III, results suggest, in conformance with our hypothesis 1.1, that institutional investors moderate the form of the tax planning-performance relationship. They appear to involve themselves directly in the tax planning activities. The positive significant coefficient with respect to IOWN is consistent with the Le et al. (2006) finding on the active and effective monitoring role played by institutional investors. Interestingly, we find evidence that securities analysts moderate the form of the tax planning-performance relationship, indicating that they may actively involve themselves in the tax decision-making process perhaps because of their interact with firms' managers. The variable NA is

negative suggesting that an increasing number of analysts is associated with lesser firm value. This result could be explained by the using of accounting-based performance. In this study, we provide the evidence on the importance of external auditors in explaining the relationship between tax planning and firm performance. Our results suggest that external auditors' specialization directly influence that relationship in accordance with hypothesis 3.1. The variable PWCEY is consistently negative and statistically significant. This suggests that auditor specialization is more effective in reducing potentially incoming-increasing earnings management (DeBoskey and Jiang, 2012).

Subsequently, we test the possibility that such external monitors moderate the strength of the relationship between tax planning and performance. In order to do so we split consecutively the sample by reference to the median value of institutional ownership and number of analysts (which were 9% and 20, respectively). Also, we split the sample at whether external auditor is PWC, or E&Y, or not. We then regressed tax rates along with our control variables on firm performance for each sub-sample. The regression models are presented in Table IV.

Table IV. Subgroup analysis of moderating effects on the relationship between tax planning and performance

Panel A: Effect of institutional investors on tax planning-performance relationship		
Variables	***institutional ownership***	
	"Low"	***"High"***
OE (%)	-0.002	-0.018
LEV (%)	-0.010***	-0.020***
SIZE	-0.290	0.060
ETR (%)	-0.046**	-0.122***
F value	3.66***	3.18***
Adjusted R^2	0.151	0.124
Difference in R^2		0.027***
	N = 180	*N* = 185
Panel B: Effect of securities analysts on tax planning-performance relationship		
Variables	***Number of analysts***	
	"Small"	***"Large"***
OE (%)	0.006	-0.045*
LEV (%)	-0.019***	-0.010***
SIZE	-0.054	0.043
ETR (%)	-0.095**	-0.085***
F value	2.63***	4.86***
Adjusted R^2	0.091	0.215
Difference in R^2	0.124***	
	N = 195	*N* = 170
Panel C: Effect of external auditors' specialization on tax planning-performance relationship		
Variables	***PWCEY***	
	"Yes"	***"No"***
OE (%)	0.014	-0.112
LEV (%)	-0.002	-0.043***
SIZE	-0.264	0.985
ETR (%)	0.013	-0.171***
F value	2.95***	6.19***
Adjusted R^2	0.081	0.320
Difference in R^2	0.239***	
	N = 265	*N* = 100

*Notes: * significance at the 10% level; ** Significance at the 5% level; *** Significance at the 1% level. . The table reports the results from regressions in cross section data of ROA on alternatives sets of ETRs and control variables. Variable definitions are provided in Table II.*

By examining Table IV (Panel A), we note that institutional investors moderate the strength of the relationship between tax planning and resulting firm performance, thus providing support for hypothesis 1.2 (a Chow test of the difference in R^2 between the two models proved to be significant). Panels B and C suggested the same possibilities for securities analysts and external auditors in conformity with expectations of hypotheses 2 and 3.2. This finding indicates that our select external monitors have an indirect effect on the tax planning-performance relationship. They might focus on general corporate governance activities by crafting effective contracts with top managers and developing effective internal control (Le et al., 2006). Interestingly, for firms certified by PWC, or E&Y the tax planning was found to be insignificant providing strong evidence that audit industry specialization constrains income-increasing earnings management.

5. ROBUSTNESS CHECKS

To further explore the validity of our hypotheses of external monitors moderating effects on the relationship between tax planning and firm performance, we perform a series of sensitivity tests consistent with those documented in the literature. Notably, we employ alternative measures of the dependent variable and additional control variables in the regressions. Qualitatively similar results to those reported in Table IV are found, and therefore are not reported in tables for space reasons.

It is presented in many textbooks that performance may reflect different things to different users. Thus, different indicators of performance should be considered. In this study, two different ratios are used: Return on Equity (ROE) and Earnings per Share (EPS). The first ratio (ROE) indicates the profitability of the capital supplied by common stockholders. It is defined as the net income divided

by the book value of equity. The second ratio (EPS) is a company's net income expressed on a per share basis. Regressing ROE onto the independent variables in models I, II and III produce in most cases qualitatively identical coefficient estimates to the results in Table IV. However, in model III, the previously significant ETR coefficient changes sign; it's now positive. When using EPS in model III, in contrast to the significant negative relationship reported in Table IV for NA, no statistically significant coefficient arises with respect to NA unlikely to the other external monitors' variables.

Next, we include insider ownership and the natural logarithm of firm age as additional control variables. This inclusion is designed to capture, first, agency theory predictions. Finkelstein and Boyd (1998) indicate that insider ownership helps to align the interests of shareholders and executives. Second, Firm age establish the timely capacity to anticipate and adapt to environmental changes, thereby enhancing the performance (Loderer and Waelchli, 2010). Results are qualitatively no different from those in Table IV and not appear to be biased for omitted firm specific characteristics.

In addition, we use the same analytical method on the sample of 425 year-end observations. This sample differs from our initial sample, since it includes all the year-end observations which meet the original sample criteria without deleting any negative pretax income or extreme ETRs data. Results did not change significantly but the overall significance of models decrease. Regressions are also carried out up by year to allow us to make a fuller picture of the link between tax planning and firm performance. Annual results suggest that ETR coefficient is no longer significant; it's not significantly different from zero. Caution should be exercised in interpreting this as evidence of a possible linkage between years. This adds strength to the need to consider several years of data when drawing conclusions on tax planning (Le et al., 2006).

6. CONCLUSIONS

This research will end by summarizing the results of the study. The research question posed by the study asked whether external monitors (e.g., institutional investors, securities analysts, and external auditors) moderate the tax planning-firm performance relationship. Most importantly, we analyze whether this external monitors influence the form (direct effect) or the strength (indirect effect) of that relationship. The analytical procedure proposed by Sharma et al. (1981) implies that the two effects are mutually exclusive. However, according to Le et al. (2006), external monitors may have both direct and indirect effects. In fact, they may have a direct effect when they influence the tax decision-making, and they may have an indirect effect by engaging in governance activities.

Our overall conclusion is that a consistent negative relationship between tax planning and firm performance holds which robust to a number of firms' specifications. Our paper offers some specific contributions concerning the efficacy of select external monitors in influencing the tax planning-performance relationship. Results showed that these corporate governance mechanisms have moderating effects of the form and the strength on the relationship between tax planning and performance. Consistent with our expectations, we find that both institutional investors and securities analysts appear to involve themselves directly in the firms' tax decisions. Also, they may indirectly influence the effectiveness of firm tax strategic. Similarly, results suggest the same evidences for external auditors.

Further, our results are robust to alternative measures of firm performance, to several additional control variables, and to a variety of alternative specifications. However, in contrast to UK findings of Abdul Wahab and Holland (2012), institutional shareholders do not appear to moderate the agency costs associated with tax planning. This difference suggests that attention should be exercised when interpreting existing research due to tax related differences that exist between countries.

In this research, we expanded our understanding of the nature and significance of the moderating effects of select external monitors on the relationship between tax planning and firm performance. One research avenue is to test whether the moderating effects are exacerbated in the presence of various managerial behaviors in different settings.

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