Executive Compensation and Tax Haven Subsidiaries

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This paper analyzes the links between corporate tax avoidance, specifically for firms having subsidiaries in tax haven countries, and executive incentive compensation. Our study finds that incentive compensation is related to firms' tax sheltering decisions. We find that executive equity-based compensation positively affects the likelihood of having tax-haven subsidiaries and provide empirical evidence that incentive compensation helps to align owners and managers' incentives, which in turn, causes managers to be more aggressive about tax avoidance. Our results also show firms with higher ROAs, higher stock returns, and larger firms, are more likely to have subsidiaries in tax haven countries, while executive age and sales growth do not affect the likelihood of having tax-haven subsidiaries.

INTRODUCTION

In recent years, some corporations have reported increasing profits and higher executive management compensation, but have paid minimal or no federal income taxes. Generally accepted accounting principles in the United States (US GAAP) allow managers to choose between alternative methods when preparing and reporting financial information in their financial statements. The Internal Revenue Code allows tax sheltering alternatives and tax deductions that defer the payment of taxes when managers choose certain methods to report taxable income. This tax planning is referred to as tax avoidance and is a legal reduction in taxes (Gravelle, 2013). Extensive research has viewed taxes as one of many factors that shape the decisions on firms' financial and organizational decisions and compensation policies (Graham, 2003; Rego, 2003; Zimmerman, 1983). This paper is a correlation study which examines the links between corporate tax avoidance and management compensation specifically for firms with subsidiaries in tax haven countries and examines how these tax avoidance opportunities interact with executive compensation.

In our study, we examine compensation on a cash basis, equity basis and in total and find that the incentive compensation structure is related to firms' tax sheltering decisions. We find that executive equity-based compensation is positively related to the likelihood of having tax-haven subsidiaries but cash-based and total compensation does not impact the likelihood of having tax-haven subsidiaries. Our definition of a "tax-haven" is taken from the United States (U.S.) General Accounting Office (GAO) 2004 report and generally refers "to countries that have no or nominal taxes". The GAO referred to the Organization of Economic Co-operation and Development (OECD) to determine if a country should be considered a tax haven. The OECD has established four criteria for tax haven countries which are

countries having no or nominal taxes, no effective exchange of information with foreign tax authorities, a lack of transparency, and no requirement for a substantive local presence (GAO, 2004).

Our results also show that larger firms, firms with higher ROAs, and higher stock returns are more likely to have subsidiaries in tax haven countries, while executive age and sales growth do not affect the likelihood of having subsidiaries in tax-haven countries. This paper makes a number of contributions. First, it presents empirical results that further our understanding of how incentive compensation affects tax sheltering. We also contribute to the large and growing literature on the effects of incentive compensation and contribute to the tax avoidance literature on the debate about who benefits from firms tax planning. Finally, we extend the traditional tax avoidance literature on individuals to encompass the corporate sector.

The next section reviews the relevant literature. In the third section, we present the research design and describe the sample and data. Results are reported in the fourth section. Finally, we provide concluding remarks in section five.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Tax Avoidance and Firm Value

Board of directors and managers continually strive to reduce or avoid taxes in order to achieve increased shareholder wealth and firm value. One of the many ways that managers use to defer or avoid taxes is through expatriation where income is shifted from the US to a country in a lower tax jurisdiction. When, and if, firms repatriate (i.e., bring back to the US) these shifted funds, the firms will incur a tax liability. While corporations may have normal business operations in these foreign countries, prior research has found that there are incentives for managers to reduce their tax liability through the shifting of income to subsidiaries in countries with lower tax rates (Chang et. al., 2013; Rego, 2003; Rousslang, 1997). Chang et al. (2013) also indicate that this shifting of income may occur even if the firm does not have business operations in that country. A recent article in the popular press claims that eighteen of the largest US companies that use tax havens are avoiding over $92 billion in US taxes (Citizens for Tax Justice, 2013). This is figure in a minimum estimate as all firms do not report this tax liability as the Securities and Exchange Commission only requires companies to disclose information on their significant subsidiaries (e.g., 10 percent of total assets or income) and allows companies to claim that calculating this tax liability is not practicable (Citizens for Tax Justice, 2013; GAO, 2004). The Citizens for Tax Justice (2013) study also implies that other companies that do not provide tax saving information may be avoiding taxes of approximately $363 billion.

Academic research has examined issues surrounding tax avoidance as well. Cloyd, et al., (2003) investigate whether the share prices of expatriating firms react positively to initial announcements of intentions to expatriate to tax haven countries by analyzing the statistical significance of each firm's abnormal returns around the inversion announcement, and do not detect obvious shareholder benefits from expatriations. They find company expatriations have significant negative announcement period returns but no statistically significant market reaction, which suggests that existing costs of expatriating might be sufficient to dissuade future expatriation.

Desai and Dharmapala (2009) find that the average effect of tax avoidance on firm value is not significantly different from zero; however, the effect is positive for well-governed firms as predicted, while there is no significant effect for firms that are less well-governed. Desai and Dharmapala (2006) argue that incentive compensation appears to be a significant determinant of tax avoidance activity. In particular, higher-powered incentives are associated with lower levels of tax sheltering for the typical firm, in a manner that is consistent with technological complementarities between sheltering and diversion.

Garrod and Rees (1998) and Bodnar and Weintrop (1997) document that earnings, net assets, and stock returns are higher for multinational firms because of the additional growth opportunities but this increase is not restricted to their multinational operations. Harris (1993) provides evidence that US firms shift income and invest more in foreign countries after the Tax Reform Act of 1986. Chang et al. (2013)

finds that domestic operating income and investment income are positively associated with firm value. The findings from these studies provide mixed evidence on tax avoidance but generally indicate that firm value increases as firm tax liability decreases which implies that there are incentives for firms to engage in tax avoidance activities. We extend this literature by examining how executive compensation structure relates to tax avoidance.

Executive Compensation and Firm Value

Numerous researchers have addressed the agency costs generated by the separation of ownership and control. Managerial pay (specifically, chief executive officer pay) has been suggested to improve the alignment of managers' incentives with the interests of shareholders (Jensen and Meckling, 1976). Jensen and Murphy (1990) argue that CEO and shareholder interests can be aligned through a variety of compensation mechanisms. Stock-based compensation, such as restricted stock and stock option grants, aligns managerial and shareholder interests, motivating shareholder wealth creation (Hall and Murphy, 2002).

On the other hand, although board of directors state that they award equity-based compensation to boost the ownership of managers in order to reduce agency problems, executives might not have the same goal. Ofek and Yermack (2000) document that boards use equity compensation for incentives, whereas managers respond by selling shares for risk diversification. These conflicting goals could lead to opposing decisions for the firm overall when managers make decisions for their personal and/or short-term goals while boards are more concerned about the long-term future of the company. Furthermore, previous literature document managerial opportunism of U.S. firms. Hsieh and Sharma (2011) provide evidence that CEOs of firms announcing employee layoffs are more likely to receive stock options in advance of value-enhancing layoff announcements and subsequent to value-destroying layoff announcements to maximize their stock-based compensation value.

CEO stock-based compensation can reward past behavior as well as future performance. The form of the compensation contract has the ability to affect important managerial decisions. Existing empirical evidence has focused on examining the relation between managerial incentives and the efficiency of managerial investment and operation decisions. Bliss and Rosen (2001) find that compensation influences important investment decisions such as corporate merger. Datta et. al. (2001) find that executive stock option grants provide effective and strong motivation for managers to make value-maximizing acquisition decision. Hall and Liedtka (2005) find the evidence of a relationship between managerial self-interest and information technology outsourcing. Murphy (1997) finds that stock-based compensation provides incentives for CEOs to take appropriate actions in downsizing, which produce the highest benefits for shareholders and society. Henderson et al. (2010) find evidence that firms undergoing layoffs substitute equity-based compensation for bonus compensation to avoid the heightened public scrutiny associated with both layoffs and high executive compensation levels.

These studies imply that "incentive compensation helps align the incentives of agents and principals and leads managers to be more aggressive about increasing firm value through tax avoidance" (Desai et al., 2006). This leads to our hypothesis:

> *H_1: Executive equity-based compensation positively affects the likelihood of having tax-haven subsidiaries*

DATA AND METHODOLOGY

Data

We use the 100 largest publicly traded federal contractors in fiscal year 2001 identified in the United States (U.S.) General Accounting Office (GAO) 2004 report, *Information on Federal Contractors That Are Incorporated Offshore* (GAO-04-293) and the 100 largest publicly traded federal contractors and 100 largest publicly traded U.S. corporations in fiscal year 2007 identified in the GAO 2008 report, *Large U.S. Corporations and Federal Contractors with Subsidiaries in Jurisdictions Listed as Tax Havens or*

Financial Privacy Jurisdictions (GAO-09-157**)** as the basis of our sample of 28 tax-haven firms of the 100 largest publicly traded federal contractors having subsidiaries in tax haven countries both from fiscal years 2001 to 2007. We also used the same lists to determine our 8 non-tax-haven firms with no subsidiaries in tax haven countries from fiscal years 2001 to 2007.

In the GAO reports on *"Information on Federal Contractors With Offshore Subsidiaries"* (2004) and *"Large U.S. Corporations and Federal Contractors with Subsidiaries in Jurisdictions Listed as Tax Havens or Financial Privacy Jurisdictions"* (2008), the GAO determined how many of the 100 largest publicly traded U.S. corporations and the 100 largest publicly traded U.S. federal contractors have subsidiaries in jurisdictions listed as tax havens or financial privacy jurisdictions. The three sources that the GAO used are (1) the Organization for Economic Co-operation and Development, (2) a National Bureau of Economic Research working paper, and (3) a U.S. District Court order granting leave for the Internal Revenue Service to serve a "John Doe" summons. GAO combined the three lists into one for the purposes of this report.

Fifty-nine of the 100 largest publicly traded federal contractors from fiscal year 2001 reported having a subsidiary in a tax haven country (GAO 2004). Eighty-three of the 100 largest publicly traded U.S. corporations in terms of 2007 revenue reported having subsidiaries in jurisdictions listed as tax havens or financial privacy jurisdictions. Sixty-three of the 100 largest publicly traded U.S. federal contractors in terms of fiscal year 2007 federal contract obligations reported having subsidiaries in such jurisdictions (GAO 2008).

Our initial sample consists of 30 tax-haven firms over the period between 2001 and 2007 based on the aforementioned lists of 100 largest publicly traded federal contractors having subsidiaries in tax haven countries. We used the same lists to determine our 10 non-tax-haven firms with no subsidiaries in tax haven countries over the period of 2001 to 2007. We also use the SEC's Electronic Data Gathering, Analysis, and Retrieval database (EDGAR) to verify firms' subsidiary status over the period of 2001 and 2007. To be included in the final sample, firms must have valid data in Compustat, and ExecuComp from 2001 to 2007. When data are missing from ExecuComp, we collect them from proxy statements if possible. Our final sample consists of 814 firm-year observations between 2001 and 2007 for 28 tax-haven firms and 226 firm-year observations for 8 non-tax-haven firms. The number of foreign subsidiaries, the number of foreign subsidiaries located in jurisdictions listed as tax havens or financial privacy jurisdictions, and the locations of those subsidiaries for the sample of 28 tax-haven firms are listed in Appendix 1.

Methodology

Executives with higher equity-based compensation are widely believed to be more likely to act in shareholders' interests. We examine executive compensation of firms with subsidiaries in tax haven countries by controlling for executive and firm characteristics. We estimate fixed-effects regression models. The fixed-effects approach is robust, and fixed-effects specification helps capture the effect of the unobservable variables, and therefore alleviates the endogeneity problem caused by the omitted variables that may lead to biased estimates in an ordinary least squares framework.

Variable Definition

We define and use the following variables throughout the paper.

- New options awarded: The aggregate value of stock options granted to the executive during the year as valued using S&P's Black Scholes methodology.
- Restricted shares awarded: The value of restricted stock granted during the year
- Cash pay: the sum of Salary and Bonus in the year.
- Total compensation comprised of the following: Salary, Bonus, Other Annual, Total Value of Restricted Stock Granted, Total Value of Stock Options Granted (using Black-Scholes), Long-Term Incentive Payouts, and All Other Total.
- Stockholding: Fraction of equity held by executive through direct stock ownership, excludes shares held contingently and those from which executive derives no economic benefit (e.g.,

charitable trusteeships)

- Return on Assets. Company's return on assets (ROA) is The Net Income Before Extraordinary Items and Discontinued Operations divided by Total Assets. This measure examines the profitability of a company in relation to assets are invested, which indicates how efficiently assets are utilized.
- Stock return: (1 Yr. Total Return to Shareholders, Dividends Reinvested): The 1 year total return to shareholders, including the monthly reinvestment of dividends.
- Sales growth was measured as the annual change in firm revenues (Mishina et al. 2004).

We also include characteristics of executive and firm as control variables, which include executive age, executive tenure, and firm size (measured as the natural log of the firm's total assets (Cannella and Shen, 2001, Zimmerman, 1983).

Summary Statistics for Executive and Firm Characteristics

We report summary statistics in Table 1. Panel A reports the statistics for executive characteristics and Panel B reports firm characteristics. Table 1 shows differences in most of the executive and firm characteristics between firms having subsidiaries in jurisdictions listed as tax havens or financial privacy jurisdictions (tax-haven firm hereafter) and firms having no subsidiary in such jurisdictions (non-tax-haven firm hereafter).

TABLE 1
SUMMARY STATISTICS FOR EXECUTIVE AND FIRM CHARACTERISTICS

		Tax Haven Firms	Non- Tax Haven Firm	Difference	t-test
Panel A: Executive Incentives and Characteristics					
Bonus ($000)	**Mean**	716.80	459.84	256.95***	4.38
	Median	467.69	260.59		
Salary ($000)	**Mean**	665.80	505.41	160.39***	6.89
	Median	555.00	450.00		
Option grants ($million)	**Mean**	1,752.07	937.34	814.73***	4.29
	Median	504.62	492.28		
Restricted stock grants ($000)	**Mean**	808.03	196.59	611.44***	4.86
	Median	0.00	0.00		
Total compensation ($000)	**Mean**	5,751.53	2,765.56	2,985.97***	8.58
	Median	3,174.27	1,735.81		
Percentage of Total Shares	**Mean**	0.02	0.01	0.01***	3.33
Owned	**Median**	0.00	0.00		
Age	**Mean**	56.53	56.03	0.50	0.60
	median	56.00	55.00		
Tenure	**Mean**	13.19	6.39	6.80***	5.05
	median	10.00	4.00		
Panel B: Firm Characteristics					
Sales Growth	**Mean**	14.18	11.09	3.08**	2.72
	median	12.09	8.93		
Firm Size	**Mean**	51,448.71	8,786.84	42,661.86***	13.18
	median	16,029.00	4,033.40		
ROA	**Mean**	5.82	4.75	1.07*	1.73
	median	6.52	5.10		
Stock Return during the year	**Mean**	24.82	13.99	10.82***	4.11
	median	19.37	11.95		

*** Significant at 1% level. ** Significant at 5% level. * Significant at 10% level.

Executive characteristics reported in Panel A shows that executives of tax-haven firms possess greater equity portfolio incentives - options and restricted stock grants, and total compensation than those in the non-tax-haven firms. Executives of tax-haven firms have higher mean equity ownership (2%) than do those of non-tax-haven firms (1%). Executives of tax-haven firms also have longer average tenure than do their nontax-haven counterparts. Executive age is similar for both types of firms. Panel B of Table 1 shows that Mean *Sales Growth, ROA,* and *Stock Return are* higher, *Firm size* is also larger for tax-haven firms than for non-tax-haven firms. These results are consistent with prior literature (Bodnar and Weintrop, 1997; Garrod and Rees, 1998; Zimmerman, 1983).

RESULTS

Regression of Executive Compensation on Executive and Firm Characteristics

Table 2 reports the results of regression analysis of executive compensation for tax-haven firms and non-tax-haven firms from 2001 to 2007. The sample consists of 814 firm-year observations between 2001 and 2007 for 28 tax-haven firms and 226 firm-year observations for 8 non-tax-haven firms. We use three models where the dependent variable is either the log of executive cash pay, equity pay, or total pay. The results of the regression with firm and fiscal year fixed effects suggest older executives and executives at larger firms receive higher cash pay, stock-based pay, and total pay for both tax-haven firms and non-tax-haven firms, and the result is economically significant across all three models.

The results of the regression with firm and fiscal year fixed effects for non-tax-haven firms appear in column 2, 4, and 6 of Table 2. The coefficients on the stockholding variable in column 2 and column 6 suggest higher stockholding executives at non-tax-haven firms receive more cash compensation and more total compensation than lower stockholding executives. The results of the regression of stock-based compensation shown in column 3 of Table 2 indicates that the negative coefficient on stockholding suggests higher stockholding executives do not receive as much stock-based pay as executives with lower stockholdings. The mixed result is consistent with previous literature. Matsunaga (1995) find no relation between executive stockholding and equity compensation and Mehran (1995) argue that incentives provided by stock option awards will decrease when CEOs hold large fractions of their own firms' equity, while Yermack (1995) did not find the result economically statistic significant.

The positive coefficient on the sales growth and ROA in column 3 indicates that executives of higher growth and ROA firms receive more stock-based pay, suggesting executives are rewarded with higher equity pay levels for tax-haven firms. There is also some evidence of negative associations between executive stock-based pay and stock return for tax-haven firm.

Logit Regression Model Control for Correlation and Fixed Effect

Previous literature does not find a conclusive relation between tax avoidance activities and shareholder value. We employ a logit model adjusting for correlated outcome data and controlling for firm and fiscal year to examine relation between executive equity portfolio incentives and the likelihood that firms having subsidiary in tax haven. The predicted probability, p, can be computed from the formula:

$$p = \frac{\exp(\beta' x)}{1+\exp(\beta' x)} \tag{1}$$

where x is equal to 1 if the firm has subsidiary in tax-haven, and 0 otherwise; and β is the coefficient of vector x variables that affect the probability of a tax-haven announcement. The explanatory variables are *Log(Cash), Log(Stock based pay), Log(Total Pay), Stockholding, Log(Age), Log(Tenure), Log(Firm Size), Sales growth, ROA*, and *Stock return.*

TABLE 2
REGRESSIONS OF EXECUTIVE COMPENSATION FOR TAX-HAVEN FIRMS AND NON-TAX-HAVEN FIRMS

Stockholding is the percentage of outstanding shares owned by the executive. *Executive tenure* is the number of years the executive served as executive. *ROA* is EBITDA/TA, where EBITDA is earnings before interest, taxes, depreciation, and amortization and TA is book value of total assets. *Stock Return* is one-year holding-period return over the fiscal year before the tax-haven. *Sales growth* is percentage change in sales from three years before to one year. Log(*Firm size*) is the log of Total Assets. The *t-test* are reported in parentheses. The symbol *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Log(cash pay)		**Log(equity pay)**		**Log(total pay)**	
	Tax Haven Firm	**Non-Tax Haven Firm**	**Tax Haven Firm**	**Non-Tax Haven Firm**	**Tax Haven Firm**	**Non-Tax Haven Firm**
	(1)	(2)	(3)	(4)	(5)	(6)
Stockholding	9.293	65.840*	-38.478*	8.512	-2.225	91.951**
	(0.85)	(1.78)	(-1.90)	(0.35)	(-0.18)	(2.28)
Log(Age)	1.102***	0.656**	1.645***	1.050***	1.193***	0.556*
	(7.22)	(2.49)	(6.82)	(5.26)	(7.04)	(1.94)
Log(Tenure)	0.113	0.097	-0.054	0.106	-0.210*	-0.039
	(1.02)	(0.67)	(-0.27)	(1.13)	(-1.72)	(-0.25)
Annual change of number of Subsidiary at Tax Haven	0.034		0.005		0.013	
	(0.61)		(0.06)		(0.21)	
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Sales growth	-0.001	0.012	0.017**	0.010	0.004	0.010
	(-0.14)	(1.16)	(2.44)	(1.57)	(0.91)	(0.87)
Log(Firm Size)	0.273***	0.488***	0.168*	0.363***	0.453***	0.676***
	(4.95)	(3.8)	(1.77)	(3.77)	(7.4)	(4.85)
ROA	0.016	-0.004	0.066**	0.001	0.011	-0.012
	(1.62)	(-0.29)	(2.65)	(0.08)	(0.98)	(-0.76)
Stock return	-0.001	0.005	-0.009**	-0.006*	-0.002	0.003
	(-0.28)	(1.01)	(-2.54)	(-1.81)	(-0.76)	(0.56)
N	814	226	814	226	814	226
F-test	1131.13***	630.86***	664.65***	1650***	1248.81***	670.44***
p-value	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

We report logit regression results in Table 3. The results in column 1 show that the odds of a firm with a subsidiary in tax havens equals exp(−0.001) = 0.99 times the odds for an firm granting executives lower cash-based compensation, but the result is not economic significantly. Larger firms and firms with higher stock return and longer length of executive tenure are more likely to have subsidiaries in tax haven, the results are economic significantly.

TABLE 3
LOGIT MODEL OF FIRMS WITH TAX-HAVEN SUBSIDIARIES FROM 2001 TO 2007

Logit results of a tax-haven subsidiary regressed on executive cash pay, equity portfolio incentives, and total pay are reported. *Tax Haven* is equal to 1 if the firm has a subsidiary at tax havens, and 0 otherwise. *Stockholding* is the percentage of outstanding shares owned by the executive. *Executive tenure* is the number of years the executive served as executive. *ROA* is EBITDA/TA, where EBITDA is earnings before interest, taxes, depreciation, and amortization and TA is book value of total assets. *Stock Return* is one-year holding-period return over the fiscal year before the tax-haven. *Sales growth* is percentage change in sales from three years before to one year. Log(*Firm size*) is the log of Total Assets. The *p*-values are reported in parentheses. The logit model is controlled for correlated data outcome and firm and fiscal year fixed effect. The symbol *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable: Tax-haven Dummy (Firms with Subsidiary at Tax haven)			
	(1)	**(2)**	**(3)**
Intercept	-6.155***	2.029	-6.155***
	(0.0006)	(0.8848)	(0.0006)
Log(Cash)	-0.001		
	(0.2055)		
Log(Stock based pay)		0.780*	
		(0.082)	
Log(Total Pay)			0.003
			(0.5538)
Stockholding	0.000	12.721*	0.023
	(0.9859)	(0.0589)	(0.2783)
Log(Age)	-0.001	-4.456	-0.002
	(0.5115)	(0.235)	(0.1033)
Log(Tenure)	0.001**	-0.329**	0.000**
	(0.0361)	(0.05)	(0.0444)
Log(Firm Size)	0.755***	1.018**	0.754***
	(0.0001)	(0.0107)	(.0001)
Sales growth	0.005	-0.008	0.005
	(0.716)	(0.784)	(0.716)
ROA	0.030	0.264**	0.030
	(0.2261)	(0.0158)	(0.2262)
Stock return	0.024***	0.048***	0.024***
	(0.005)	(0.0028)	(0.005)

The results in column 2 show that the coefficient for executive equity portfolio is positive and different from zero at the 10% significance level. After adjusting for correlated outcome data and controlling for firm and fiscal year, firms with higher stock-based pay for executives were exp(0.780)= 2.19 times more likely to have subsidiaries in tax havens when compared to those with lower stock-based pay. This finding was statistically significant. This evidence suggests firms granting executives with greater equity portfolio are more likely to establish subsidiary in tax-haven. The coefficient for stockholding is positive, which implies that firms with executives with greater stockholding tend to have subsidiaries in tax havens.

Column 3 in Table 3 shows the regression results of executive total pay in the model. The coefficient for *nature log of total pay* remains positive, but is not significant. In conclusion, regressions comparing tax-haven firms and non-tax-haven firms show that *executive equity-based compensation* are positively related to the likelihood of having tax-haven subsidiaries. This finding is consistent with our hypothesis. Regression results of *executive tenure* are mixed, negative when inclusion of stock-based pay, but positive with inclusion of cash pay and total pay. Our results also show larger firms, higher ROA, and higher stock

return firms are more likely to having subsidiary in tax haven. *Executive age* and *Sales growth* do not affect the likelihood of tax-havens.

CONCLUSION

This study examines the links between corporate tax avoidance and the incentives for managers by analyzing the compensation structure of corporations and federal contractors with subsidiaries in jurisdictions listed as tax havens or financial privacy jurisdictions. Our empirical results indicate that incentive compensation impacts firm's tax sheltering decisions. Executive equity-based compensation is positively related to the likelihood of having tax-haven subsidiaries. This finding is consistent with the executive compensation literature which suggests that "greater incentive compensation helps align the incentives of agents and principals and leads managers to be more aggressive about increasing firm value through tax avoidance" (Desai et al., 2006). Our results also show larger firms and firms with higher ROAs and higher stock returns are more likely to have a subsidiary in tax haven countries. We also find that *Executive age* and *Sales growth* do not affect the likelihood of tax-havens.

Our results indicate that how executives are paid is important to how executives make decisions about tax planning. Our findings are also important as corporations continue to report high profits but pay little to no US federal income tax. As such, US corporations would like the US to become more tax friendly and, therefore, continue to lobby for a tax holiday, similar to the one granted in 2004 so that they will be able to repatriate funds back with little or no tax liability.

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APPENDIX 1

The number of foreign subsidiaries, the number of foreign subsidiaries located in jurisdictions listed as tax havens or financial privacy jurisdictions, and the locations of those subsidiaries for the sample of 28 tax-haven firms

Company Name	**Number of foreign subsidiaries**		**Number and locations of subsidiaries in jurisdictions listed as tax havens or financial privacy jurisdictions**
Year	**2001**	**2007**	**2007**
Affiliated Computer Services, Inc.	24	55	7 Barbados (1) Hong Kong (2) Ireland (1) Luxembourg (1) Switzerland (2)
Cubic Corporation	6	8	1 U.S. Virgin Islands (1)
Dell, Inc.	76	158	29

			Bahrain (1) Barbados (1) Cayman Islands (4) Costa Rica (2) Hong Kong (1) Ireland (10) Lebanon (1) Luxembourg (1) Panama (1) Singapore (5) Switzerland (2)
Exxon Mobil Corporation	90	122	32 Bahamas (18) Bermuda (1) Cayman Islands (3) Hong Kong (3) Ireland (1) Luxembourg (2) Singapore (3) Switzerland (1)
Fluor Corporation	202	197	34 Barbados (2) Bermuda (7) British Virgin Islands (2) Cyprus (2) Guernsey (9) Ireland (5) Liechtenstein (2) Mauritius (3) Panama (1) St. Lucia (1)
Ford Motor Company	46	54	2 Bermuda (1) Cayman Islands (1)
General Dynamics Corporation	26	51	5 Cyprus (1) Singapore (1) Switzerland (3)
General Motors Corporation	200	113	11 Barbados (1) Bermuda (2) Cayman Islands (4) Ireland (1) Singapore (1) Switzerland (2)
Goodrich Corporation	62	72	17 Barbados (2) Gibraltar (3) Hong Kong (1) Luxembourg (5) Mauritius (1) Singapore (4) Virgin Islands (1)
Harris Corporation	32	71	13 Bermuda (1) Cayman Islands (1) Hong Kong (5) Mauritius (1) Singapore (4) U.S. Virgin Islands (1)
Honeywell International, Inc.	3	35	7 Bermuda (1) Luxembourg (3) Singapore (1) Switzerland (2)
International Business Machines Corporation	98	70	10 Bahamas (1) Barbados (1) Bermuda (1) Costa Rica (1) Hong Kong (1) Ireland (1) Latvia (1) Luxembourg (1) Singapore (1) Switzerland (1)
ITT Corporation	142	170	18 Barbados (1) Bermuda (1) Cayman Islands (1) Hong Kong (3) Ireland (3) Luxembourg (5) Singapore (2) Switzerland (1) Virgin Islands (1)
Jacobs Engineering Group, Inc.	48	58	11 Hong Kong (1) Ireland (2) Luxembourg (1) Singapore (5) U.S. Virgin Islands (1) Virgin Islands (1)
L-3 Communications Holdings, Inc.	45	90	15 Barbados (1) Bermuda (1) Cayman Islands (1) Costa Rica (1) Hong Kong (2) Ireland (1) Singapore (5) U.S. Virgin Islands (3)
Mantech International Corporation	15	7	1 Panama (1)
McDermott International, Inc.	10	5	5 Panama (5)
Olin Corporation	13	7	1 Bermuda (1)

Oracle Corporation	84	297	77 Barbados (3) Bermuda (1) British Virgin Islands (1) Cayman Islands (5) Costa Rica (1) Cyprus (1) Hong Kong (12) Ireland (22) Isle of Man (1) Jersey (1) Luxembourg (6) Mauritius (1) Netherlands Antilles (1) Singapore (16) Switzerland (5)
Oshkosh Truck Corporation	20	52	6 Barbados (2) Cayman Islands (2) Hong Kong (1) Mauritius (1)
Sprint Nextel Corporation	56	59	7 Bermuda (1) Hong Kong (2) Ireland (1) Singapore (1) Switzerland (2)
Textron, Inc.	19	98	5 Barbados (1) Singapore (2) Switzerland (2)
The Boeing Company	96	135	38 Bermuda (6) Cayman Islands (1) Gibraltar (2) Hong Kong (4) Ireland (4) Netherlands Antilles (2) Singapore (3) U.S. Virgin Islands (16)
The Procter & Gamble Company	306	581	83 Barbados (1) Belize (1) Bermuda (5) British Virgin Islands (2) Cayman Islands (2) Costa Rica (3) Hong Kong (10) Ireland (11) Latvia (1) Lebanon (2) Liechtenstein (1) Luxembourg (6) Panama (3) Singapore (11) Switzerland (24)
United Technologies Corporation	66	93	12 Cayman Islands (1) Hong Kong (2) Ireland (1) Luxembourg (4) Singapore (4)
URS Corporation	94	276	24 Bahrain (2) Bermuda (4) Hong Kong (2) Ireland (2) Jordan (4) Singapore (4) U.S. Virgin Islands (2) Virgin Islands (4)
Valero Energy Corporation	10	23	11 Aruba (5) Bermuda (1) British Virgin Islands (3) Cayman Islands (2)
Xerox Corporation	216	164	33 Barbados (4) Bermuda (8) Hong Kong (1) Ireland (12) Jersey (1) Luxembourg (2) Mauritius (1) Singapore (1) Switzerland (2) Turks and Caicos Islands (1)

Source: United States (U.S.) General Accounting Office (GAO)2004 & 2008 Report