THE INFLUENCE OF ATTRACTION AND COMPANY VALUES ON AGGRESSIVE CORPORATE TAX DECISION-MAKING

Jill M. Zuber
North Dakota State University

Debra L. Sanders
Washington State University

Key Words: tax aggressiveness, corporate taxpayer, decision-making, company values, attraction, value congruence

JEL Classification(s): M14, D23, D81, H25, K34, C91

Abstract

Little research has been published examining what influences tax decision-making within the corporate environment. What influences corporate tax decisions is an important issue because corporations account for 15.3 percent of the total gross tax collections and $67 billion of the tax gap. Additionally, based on anecdotal and survey evidence, pressure is being applied to tax personnel to be tax aggressive by senior management not associated with the tax department. This exploratory study identifies two factors that impact tax aggressiveness: 1) company values and 2) the individual's attraction to those values. Eighty-eight experienced MBA students are given an instrument describing a hypothetical situation involving tax depreciation and are asked whether they would recommend the asset be classified as a fixture or

structural component to a colleague. The company's values are described as either aggressive or nonaggressive. The results indicate that the interaction between the individual's level of attraction to the organization and the company values is significant. In particular, individuals with higher attraction to aggressive company values make the most aggressive tax recommendations while those with higher attraction to nonaggressive company values make the least aggressive tax recommendations.

INTRODUCTION

Tax aggressiveness is defined as engaging in transactions or applying methods that maximize after-tax returns beyond what the Internal Revenue Service (IRS) will accept without question upon audit.[1] In addition, tax aggressive stances are more likely not to be sustained upon audit because they involve risky choices with uncertain outcomes (Hite and McGill, 1992; Hanlon & Heitzman, 2010; Rego & Wilson, 2012). As little is known about the factors influencing tax aggressiveness, Shevlin (2007) encourages researchers to identify aggressive taxpayers and variables which can explain aggressive tax behavior.

Individuals making tax decisions on behalf of the corporation can be influenced by senior management not associated with the tax department, through policies, procedures, and company values. Aggressive tax strategies may maximize the corporation's after-tax cash flows and also result in benefits for senior management if these strategies are consistent with the company values. Conversely, aggressive tax stances may have negative repercussions for senior management and corporations if the IRS rejects the aggressive tax strategy or when managers make decisions that are not aligned with the company's values. Corporations account for 15.3 percent of the total gross tax

collections and $67 billion of the tax gap (IRS 2012b). Identifying factors that influence aggressive corporate tax decisions could shed light on why the annual underreporting tax gap is increasing. Based on the IRS' (2012a) Tax Gap Overview, the corporate tax gap figures using 2006 tax year figures ($67 billion) are 123 percent greater than the last tax gap reported, which used tax year figures from 2001 ($30 billion).

This exploratory study investigates the influence of two factors on corporate aggressive tax decision-making: 1) company values and 2) the individual's attraction to the organization's values. The instrument uses a realistic, but easy to understand, hypothetical situation with large tax consequences to examine the effects of these two factors on aggressive tax decisions. Eighty-eight experienced MBA students are used as surrogates for managers not associated with the tax department (hereafter management) and are asked to make recommendations to another nontax department manager regarding the asset classification for tax depreciation purposes. The classification of the asset in the instrument and the resulting amount of depreciation is an example of where tax aggressiveness can occur because there exists some ambiguity as to how to classify the asset. In addition, the instrument states that taking an aggressive stance increases the likelihood of an IRS audit.

The results of this study indicate that individuals with higher attraction to aggressive company values make tax recommendations that are riskier than individuals with lower attraction to aggressive company values or individuals assigned to nonaggressive company values. Thus, an individual characteristic as well as an organizational factor influence tax aggressiveness.

Since there has been scant research on corporate tax decision-making, the results provide a meaningful extension of prior research by identifying characteristics not previously examined that are associated with tax aggressiveness. Further, the study examines the behavior of individuals making decisions for others, i.e., decisions for a corporation. The findings suggest that

without alignment between the individual's values and the company values, the tax strategies chosen may not attain the corporation's goals.

The remainder of the paper is arranged as follows. The next section provides background information regarding tax behavior and reviews the theoretical literature leading to the development of the hypotheses. This is followed by a description of the experimental design and a discussion of the analysis and results. The final section summarizes the research findings, including limitations and provides suggestions for future research.

BACKGROUND, LITERATURE REVIEW, AND HYPOTHESIS DEVELOPMENT

The Corporate Taxpayer

Corporations do not make decisions; rather, individuals make decisions on behalf of and in the economic interest of corporations. Dyreng, Hanlon, and Maydew (2010) find that high level executives, such as CEOs and CFOs, can influence a corporation's tax strategies and the economic effects of their influence can be significant. This is true even when they are not tax experts and are unlikely to fully comprehend the intricacies of the tax aggressive strategies. However, executives do understand the competitiveness of their industry (Dyreng et al., 2010). Executives influence tax matters by setting the "tone at the top" (Dyreng et al., 2010), which can include applying pressure on the tax department to be aggressive (Cummings, 2005; Johnston, 2000). Fifty-nine percent of tax executives at Fortune 500 companies believe senior management expects them to adopt tax stances that are most favorable to the company and then rigorously defend these positions (Arlinghaus, 1998). For example, David Bullington, Wal-Mart's Vice President for Tax Policy, stated in a deposition that he began feeling pressure to lower the company's effective tax rate when Thomas Schoewe was hired as Chief Financial Officer (CFO) (Drucker, 2007). According to David Bullington, Thomas

Schoewe had knowledge of "some very sophisticated and aggressive tax planning," (as cited in Drucker, 2007, p. A1).

The described pressure from senior management on the tax department may be explained by how corporate tax departments are classified and how the departments' performance is evaluated. Corporate tax departments are typically classified as either cost centers or profit centers. Cost centers are concerned with compliance issues and keeping compliance costs to a minimum (McGill & Outslay, 2004; Robinson, Sikes, and Weaver, 2010). However, a profit center focuses more attention on tax planning and its contribution to the company's bottom line (McGill and Outslay, 2004; Robinson et al., 2010). A U.S. Treasury study found that tax departments labeled as profit centers felt "…pressure to increase shareholder value and remain competitive…" (U.S. Department of the Treasury, 1999, p. 14). Based on a 1999 survey of more than 200 CFOs working for Fortune 1000 companies, 56 percent of tax departments are considered profit centers rather than cost centers (Robinson et al., 2010). Data from the 2004-2005 Corporate Tax Department Survey administered by The Tax Executives Institute (2005) indicates tax department performance is evaluated on cash savings (56 percent of respondents), the effective tax rate (54 percent), and the total amount of cash taxes (48 percent). These findings indicate that reducing taxes paid is as important as lowering the company's effective tax rate and supports the use of a timing difference, the classification of an asset for tax depreciation purposes, in this study.

Tax Aggressiveness

As Judge Learned Hand states in *Commissioner v. Newman,* "…there is nothing sinister in so arranging one's affairs as to keep taxes as low as possible….for nobody owes any public duty to pay more than the law demands" [159 F.2d 848 (CA-2, 1947)]. Companies have a fiduciary duty to shareholders to not pay more taxes than are legally owed since doing so eliminates

resources that could be used to increase the value of the company. Taxpayers use tax avoidance, tax aggressiveness, and tax evasion to save tax dollars and/or lower their effective tax rates. On one end of the spectrum, there are legitimate tax avoidance strategies that are prescribed and endorsed by Congress and the IRS (e.g., accelerated depreciation).

On the other end are strategies so egregious that they are considered tax evasion (e.g., not reporting cash income with the intent to defraud the government). Between prescribed tax avoidance and evasion is the gray area within the tax law where tax aggressiveness occurs. This gray area exists because the tax law is not precise enough to address all possible transactions utilized currently or that may be crafted in the future by taxpayers.

It is possible for corporate employees to meet their public duty by engaging in tax strategies that maximize the cash flows of the corporation while still conforming to both the letter and the spirit of the tax law. If senior management is too aggressive, the company will have a higher likelihood of being audited by the IRS, depending on the size of the company. If the tax aggressive strategy is discovered during an audit, the strategy will be scrutinized and potentially rejected by the IRS, costing the company more in taxes, interest on taxes owed, and possibly penalties.

Company Values

Values are seen as providing "common direction" and guidance for employees' "day-to-day behavior" (Deal & Kennedy, 1982, p. 21). Values made public represent what the company is trying to achieve (Schein, 1985) and are most useful when employees know the company's values and why the values are important for success (Deal & Kennedy, 1982). Schein (1985) views values as a surface-level phenomenon that does not capture the true nature of organizational culture. He further defines culture as the basic assumptions and beliefs shared by employees, often without their conscious awareness. Unlike Schein, Deal and

Kennedy (1982) view values as the core or most prominent characteristic of organizational culture.

The current study investigates the relationship between company values and tax decisions. Company values may create an environment that influences risk taking in tax decisions, which may also result in greater IRS scrutiny. Engaging in aggressive pro-taxpayer positions is considered risk-seeking behavior (Hite & McGill, 1992; Schisler, 1995; Murphy, 2004; Hanlon & Heitzman, 2010; Rego & Wilson, 2012). Williams and Narendran (1989) find that managers who believe their organizations take risks are more willing to make risky decisions because the company rewards risk taking. Decision makers will most likely engage in aggressive tax decision-making when working for a company with aggressive values. Similarly, companies with nonaggressive values are apt to inspire less aggressive tax decisions. Therefore, the first hypothesis is as follows:

H_1. Individuals exposed to aggressive company values will make more aggressive tax decisions than individuals exposed to nonaggressive company values.

Attraction and Value Congruence

Attraction is the first step in the Attraction-Selection-Attrition cycle developed by Schneider (1987). In this first step, individuals identify potential organizations that may be good work environments. One reason individuals are attracted to particular organizations is that they perceive their values, personality, and interests are similar to the organization's characteristics (Schneider, 1987; O'Reilly, Chatman, & Caldwell, 1991; Schneider, Goldstein, & Smith, 1995; Judge & Cable, 1997). Gardner, Reithel, Foley, Cogliser, and Walumbwa (2009) demonstrate that individual attraction varies depending on the perceived congruence with the organization's core values.

Consistency between personal values and the values of the organization is referred to as value congruence (Amos &

Weathington, 2008; Elango, Paul, Kundu & Pauldel, 2010). The individual's decision-making is most influenced by the organization's values when the individual perceives a greater degree of value congruence (Liedtka, 1989). Thus, individuals are attracted to an organization because they perceive their values are in congruence with the company's values.

If individuals feel they have an affinity towards companies' values, it is likely that they will make decisions that are consistent with those values. Thus, individuals attracted to companies with aggressive values are likely to make more aggressive tax decisions than individuals with less attraction. Similarly, individuals attracted to nonaggressive companies are likely to be less aggressive in their tax decisions than those having less attraction. When there is a conflict in values, the individual will be less likely to make decisions consistent with the preferences of the company. This leads to the following set of interaction hypotheses.

H_{2a}. Individuals with higher attraction to aggressive company values will be more aggressive in their tax decisions than individuals with lower attraction to the same values.

H_{2b}. Individuals with higher attraction to nonaggressive company values will be less aggressive in tax decisions than individuals with lower attraction to the same values.

H_{2c}. Individuals with higher attraction to aggressive company values will be more aggressive in tax decisions than individuals with higher attraction to nonaggressive company values.

EXPERIMENTAL DESIGN

The participants, task, design, and independent and dependent variables for the study are discussed next.

Participants

The instrument was distributed to MBA students at a public university with a request that they complete it and return the instrument to their instructor to insure the participants remained anonymous to the researchers.[2] Of the 110 distributed, 88 usable instruments were returned for a response rate of 81 percent.

MBA students are used as surrogates for management to investigate what tax decisions managers not associated with the tax department would make within a realistic, but easy to understand scenario. MBA students have commonly been used as surrogates for business decision makers because their maturity and work experience are similar to actual managers (Beekun, Hamdy, Westerman, & HassabElnaby, 2008; Elango et al., 2010). Also, research demonstrates that MBA students do not significantly differ from managers in their business decisions (Remus, 1986; Beekun et al., 2008).

For example, recent studies using MBA students have investigated intentions to report wrongdoing by outside consultants, major corruption, questionable acts, and fraud (Ayers & Kaplan, 2005; Chiu, 2003; Kaplan & Schultz, 2007; Elango et al., 2010; Kaplan, Pope, & Samuels, 2010). Lipe and Salterio (2000) have MBA students act as senior executives as do Bonner, Clor-Proell, Koonce and Wang (2011). Bonner et al. (2011) chose MBA student as their participants because they have a reasonable level of business experience without being more knowledgeable than is necessary for the experimental task.

Based on the caution of Libby, Bloomfield and Nelson (2002), professional subjects were not used because professionals are not necessary to reach the research goal. Accordingly, MBA students have the capacity to participate in the study and respond to the experimental task.

Table 1 is a summary of demographic information. As indicated in the table, over 83.9 percent of the participants work over 30 hours per week with 35.2 percent having experience in structuring business transactions. Out of these participants, 58.1

percent indicate that tax strategies or tax minimization were part of this experience. Approximately 86.4 percent have personally prepared an individual tax return with the highest percentage completing between five and ten tax returns (31.8 percent). At least 49.4 percent of the participants have worked in their current occupation six or more years. The sample is predominately male (71.6 percent)[3] with a mode age range of 31 to 35 years. This study uses MBA students because of their extensive work experience[4], their level of education, their ability to assume the role presented in the instrument, and the fact that they have dealt with both tax and financial decisions.

TABLE 1: Demographic Profile of Respondents (n=88)

Characteristic	Observations	
	Number	Percentage
Number of MBA classes completed		
Zero to 2	34	38.6%
3 to 5	32	36.4%
6 or more	22	25.0%
What is your undergraduate degree in?		
Business	41	46.5%
Engineering	18	20.5%
Math and Science	10	11.4%
Other	19	21.6%
Have you participated in structuring a business transaction?		
Yes	31	35.2%
No	57	64.8%
Were tax strategies or the minimization of taxes mentioned?		
Yes	18	58.1%
No	13	41.9%
How many individual tax returns have you personally prepared?		
None	12	13.6%
Between 1 and 4 returns	26	29.6%
5 or more returns	50	56.8%
What is your occupation?		
Banking and Analyst Positions	10	11.4%
Insurance and Real Estate	5	5.7%
Managers in all fields	28	31.8%

Sales Professionals	8	9.1%
Project Controls positions	4	4.5%
Accounting and Finance	6	6.8%
Engineers, not management	9	10.2%
Other	18	20.5%
How many hours on average do you work per week?		
15 hours or less	6	6.8%
Between 16 and 30 hours	8	9.1%
More than 30 hours	73	83.9%
How many years have you worked in your current occupation?		
5 years or less	44	50.0%
Between 6 and 15 years	34	38.6%
More than 15 years	10	11.4%
Gender		
Male	63	71.6%
Female	25	28.4%
Age		
25 or younger	10	11.4%
26 to 30	31	35.2%
31 to 35	17	19.3%
Over 35	30	34.1%

Task

Participants received an instrument describing Starstruck Metals, a profitable hypothetical company that recently refurbished a manufacturing and distribution facility. The experimental task states that the participant is a manager who has been asked by a colleague, another manager, for a recommendation on how to properly classify an asset (office dividers) for tax depreciation purposes (see Appendix A for the instrument).

Participants are asked to provide an initial recommendation of the asset's classification based on a description of the asset purchased and relevant criteria from a Tax Court case. Next, the randomly assigned company values (aggressive or nonaggressive) manipulation is provided to participants and they are again asked to provide a recommendation concerning the appropriate asset classification. Since attraction is an individual characteristic, it is not manipulated but rather measured after the participants make their second recommendation to their colleagues.

Specifically, the participants indicate on a seven-point Likert scale whether they would recommend to their colleague that the office dividers (a new product on the market within the last three months) for the refurbished facility be classified as fixtures, to be depreciated over 7 years for tax purposes, or structural components of the building, which will be depreciated over 39 years. The scenario includes company background information, a list of assets already classified, as well as the cost and physical description of the office dividers.

The appropriate classification of this new product is currently not known and consequently, making a recommendation requires judgment by the participants. Five criteria stated in *Whiteco Industries* [65 TC 664 (1975)] are provided because MBA students may not be aware of criteria used to classify assets as either fixtures or structural components for tax purposes. However, the experimental task requires only a general understanding of depreciation. The *Whiteco Industries* criteria are the same that a tax professional would likely use or suggest for making this decision as these criteria are considered the standard for distinguishing structural components.

Following the initial asset classification recommendation, the participants are provided with additional background information on the company. Depending on the manipulation received, the company values are described as either aggressive or nonaggressive. The aggressive company encourages and rewards employees that make risky decisions to take advantage of opportunities even if the benefits might be short lived. The nonaggressive company prefers employees make low risk decisions and take advantage of opportunities only after the potential results have been thoroughly calculated and weighed. In addition, the first year tax depreciation deductions for classifying the office dividers as fixtures ($571,600) or structural components ($98,440) are provided and the potential first year tax savings for fixture classification over a structural component classification is explicitly stated ($160,874).[5]

Recommending a fixture classification for the dividers is the more aggressive choice because of how the asset is described and the tax benefits that will result from this classification. Consistent with this view, the scenario indicates that a fixture classification will increase the likelihood of an IRS review.

Participants are told that the classification of the office dividers for financial reporting purposes will occur after the tax classification is made. This is an important statement since researchers have found that companies seek conformity between tax and financial methods in order to increase their ability to defend aggressive positions (Cloyd, Pratt, & Stock, 1996; Mills & Sansing, 2000; Mills, 1998; Shackelford & Shevlin, 2001).

After reviewing the company values manipulation, the participants are again asked to make a recommendation regarding the asset classification for the dividers using a seven-point scale. After the participants make their second recommendation to their colleague, they are asked to use a seven-point scale to indicate the level of their attraction to the description of the company values presented in the scenario. Participants are also asked to indicate, on a seven point scale, how important the possibility of the IRS reclassifying the dividers is to the recommendation they have given. The final portion of the instrument collects demographic data.

The participants are asked to make recommendations to a colleague rather than choices for themselves. Psychology research demonstrates that individuals make decisions differently for themselves than they do when making decisions for or providing advice to others (Kray, 2000). They weigh risk considerations differently in these situations (Hsee & Weber, 1997). In addition, Jonas, Schulz-Hardt and Frey (2005) find that individuals making recommendations evaluate information in a more balanced manner. Advisors use more information to bolster and justify the objectivity of their recommendations whereas non-advisors seek information to support their choices. Also, advisors experience less regret and self-blame, as well as have stronger preferences for their

recommendations than individuals that make choices for themselves (Kray 2000). Based on these findings, recommendations rather than choices were selected as the dependent variable and covariate.

Design

The experiment is a between subjects two by two design. The design crosses the type of company values (aggressive or nonaggressive) with the level of attraction (higher or lower). The ANCOVA model is:

POST_RECOMMEND = PRE_RECOMMEND (covariate) + VALUES (manipulated) + ATTRACTION (measured) + (VALUES * ATTRACTION) + LIKELIHOOD (covariate).

Independent Variables

Company Values. The VALUES variable in the model is manipulated by using two different descriptions of company values. These descriptions of values were written using O'Reilly et al. (1991) value statements. O'Reilly et al. (1991) create an organizational culture profile (OCP) based on factor analysis of 54 value statements. They identify five factors that "replicated almost exactly" (O'Reilly et al., 1991, p. 504) between the values individuals are seeking in organizations and the values which exist in organizations.

The authors labeled these factors as innovation, outcome orientation, aggressiveness, detail orientation, and team orientation (O'Reilly et al., 1991). For example, the innovation factor includes being quick to take advantage of opportunities, risk taking, and not being rule oriented. Given the focus of this study, only the factors of innovation, outcome orientation, and aggressiveness are used to develop the descriptions of the aggressive and nonaggressive company values manipulations (VALUES). These descriptions of company values are general and not specifically related to tax strategies.

> Participants in the aggressive company values treatment group read the following statement:
>
> Starstruck is in an intensely competitive market. Thus, in order to be successful in the short run, Starstruck's organizational culture encourages employees to make aggressive decisions and quickly take advantage of opportunities even when benefits might be short lived. Starstruck rewards employees who generate company income and are unconstrained by conventional methods or rules.
>
> Participants in the nonaggressive company values treatment group read the following statement:
>
> Starstruck is in a competitive market. In order to be successful in the long run, Starstruck's organizational culture encourages employees to make conservative decisions and take advantage of opportunities only after the potential results have been thoroughly calculated and weighed. Starstruck rewards employees who generate company income within the bounds of conventional methods or rules.

Attraction. The participants in this experiment were requested to imagine that they are managers of the corporation provided in the case and thus they may feel some degree of commitment to the organization. However, due to the hypothetical nature of the case, attraction rather than commitment to the corporation is more likely the feeling experienced. Since both attraction and commitment lead to the same hypothesized behavior due to value congruence, attraction is examined in this study.

Using a seven-point scale, attraction was measured by how committed the participant could feel to a company culture similar to the one described in the study. This statement captures the

participant's attraction to and perceived value congruence with the organization rather than their commitment to it. An individual's commitment level develops as the individual works for the organization, views the organizational goals and values as valid, and wants to maintain membership in the organization (Virtanen, 2000; Meyer, Becker, & Van Dick, 2006). The statement posed to the participants includes the term company culture, which at its core encompasses company values (Deal & Kennedy, 1982).

Dependent Variables

The participants provide a recommendation to their manager colleague as to how the office dividers should be classified (PRE_RECOMMEND) using a seven-point Likert scale, with one indicating the dividers are fixtures and seven that they are structural components. This recommendation provides the base rate for the participant and likely acts as an anchor (Tversky & Kahneman, 1974) from which the participant adjusts their second asset classification recommendation (POST_RECOMMEND) after receiving the company values manipulation, additional information about depreciation deductions, and information regarding the increased likelihood of an IRS review if the asset is classified as a fixture.

Both PRE_RECOMMEND and POST_RECOMMEND are reverse-coded so that recommendations with scores above four denote tax aggressiveness. An analysis of covariance (ANCOVA) is used to isolate the effect of the company values manipulation on the asset classification recommendation. According to Nunnally and Bernstein (1994), ANCOVA is appropriate for pretest/posttest designs because it correctly adjusts for the correlation between the two variables (PRE_RECOMMEND and POST_RECOMMEND).

ANALYSIS AND RESULTS

Manipulation Check

As a manipulation check for the company values treatment, participants are asked whether the company in the scenario has a

non-aggressive culture. Instruments of participants who did not answer the manipulation check correctly were eliminated from the sample. The mean response for the remaining aggressive values treatment group, on a seven-point scale, is 1.89 (disagree) and for the nonaggressive values treatment group is 5.37 (agree). This difference is statistically significant ($p < 0.001$). Thus, the company values manipulation is successful.

Initial Analysis

Descriptive statistics and a correlation matrix for variables used in the study are provided in Table 2, Panels A and B. The statistics indicate that before the company values manipulation, participants recommend that the office dividers be classified slightly more towards fixtures than structural components (mean = 4.51).[6] In addition, the correlation matrix (Table 2, Panel B) shows that PRE_RECOMMEND and POST_ RECOMMEND are correlated; this provides additional evidence that PRE_ RECOMMEND is a covariate of POST_ RECOMMEND.

The likelihood that the asset may be reclassified by the IRS (LIKELIHOOD) is also correlated with POST_RECOMMEND and is included in the model as another covariate. The negative correlation indicates that as the importance of the IRS likelihood to reclassify the asset increased for the participants, the classification of the divider by the subjects was more towards the structural component classification. Additionally, Table 2 indicates that ATTRACTION is correlated with VALUES as well as PRE_ RECOMMEND and POST_ RECOMMEND. An interaction effect may be indicated by ATTRACTION being correlated with VALUES.

TABLE 2, Panel A, Descriptive Statistics (n=88)

Variable	Mean	Median	S.D.	Min	Max	Skew-ness	Kur-tosis
PRE_RECOMMEND	4.51	5.00	1.688	1	7	-0.222	-1.108
POST_ RECOMMEND	4.45	5.00	1.813	1	7	-0.387	-1.159
VALUES	1.49	1.00	0.503	1	2	0.046	-2.045
ATTRACTION	3.97	4.00	1.527	1	7	-0.199	-1.011
LIKELIHOOD	4.19	4.50	1.660	1	7	-0.238	-0.951

Variable Definitions:

PRE_ RECOMMEND	= Asset classification recommendation based on five criteria from the Tax Court. Recommendations closer to 7 (1) denote a fixture (structural component) classification.
POST_ RECOMMEND	= Asset classification recommendation after company values manipulation received.
VALUES	= Participants were randomly assigned to either (1) aggressive or (2) nonaggressive company values treatment groups.
ATTRACTION	= Response to whether the subject could feel committed to a company that has an organization culture like the one described in the scenario. Choices closer to 7 (1) denote strong agreement (strong disagreement).
LIKELIHOOD	=Response to whether the likelihood that the IRS may reclassify the asset was important to the participant's recommendation.

TABLE 2, Panel B, Pearson Correlation Matrix, Independent and Dependent Variables

Variable	PRE_ RE-COMMEND	POST_ RE-COMMEND	VALUES	ATTRAC-TION	LIKE-LIHOOD
PRE_RECOMMEND	1				
POST_RECOMMEND	0.599**	1			
VALUES	0.095	-0.045	1		
ATTRACTION	0.292**	0.226*	0.471**	1	
LIKELIHOOD	-0.15	-0.255*	0.106	0.066	1

** Indicates $p<0.01$.
* Indicates $p<0.05$.

ANCOVA Analysis

Hypothesis 1 states that aggressive company values invite more aggressive tax decisions than nonaggressive company values. As seen in Table 3, the ANCOVA model shows that company VALUES influences POST_RECOMMEND in the direction hypothesized but not to a statistically significant level (p = 0.12, one-tail). Thus, Hypothesis 1 is not statistically supported. In isolation, the company values do not appear to be the sole influence in this tax decision-making setting.

[7]TABLE 3, Analysis of Covariance
Dependent Variable: Recommendation after receiving the company values manipulation (POST_RECOMMEND)

Panel A: ANCOVA Statistics

Source of variation	Type III Sum of Squares	d.f.	Mean Square	F	p-value
Corrected Model	120.913	5	24.183	12.025	0.000
Intercept	31.853	1	31.853	15.839	0.000
VALUES	2.831	1	2.831	1.408	0.120^
ATTRACTION	1.441	1	1.441	0.717	0.400
PRE_RECOMMEND	77.070	1	77.070	38.324	**0.000**
LIKELIHOOD	5.863	1	5.863	2.915	**0.092**
VALUES*ATTRACTION	8.045	1	8.045	3.910	**0.026^**
Error	164.905	82	2.011		
Total	2032.000	88			
Corrected Total	285.818	87			
Adjusted R^2 = 0.388					

Variable Definitions:

POST_RECOMMEND	= Dependent variable: asset classification recommendation after company values manipulation received.
VALUES	= Participants were randomly assigned to either (1) aggressive or (2) nonaggressive company values treatment groups.
ATTRACTION	= Response to whether the subject could feel committed to a company that has an organization culture like the one described in the scenario. This variable was split into two equal groups based on the median response of 4.
PRE_RECOMMEND	= Covariate: asset classification recommendation based on five criteria from the Tax Court. Recommendations closer to 7 (1) denote a fixture (structural component) classification.
LIKELIHOOD	=Response to whether the likelihood that the IRS may reclassify the asset was important to the participant's recommendation.

^ one-tail significance level

TABLE 3, Panel B: Estimated Marginal Means for Interaction Effects
VALUES * ATTRACTION

VALUES	ATTRACTION	MEAN[a]	STD. ERROR	Number of Subjects
Aggressive	Lower	4.30	0.256	30
	Higher	5.19	0.360	15
Nonaggressive	Lower	4.52	0.366	14
	Higher	4.20	0.257	29

[a] The covariates appearing in the model are valuated at the following values: PRE_RECOMMENDATION = 4.51 and LIKELIHOOD = 4.19.

TABLE 3, Panel C: Tests of H2a, b, and c
Planned Contrasts

H2a: Aggressive Values, Higher Attraction > Aggressive Values, Lower Attraction	**p=0.02**
H2b: Nonaggressive Values, Higher Attraction < Nonaggressive Values, Lower Attraction	p=0.24
H2c: Aggressive Values, Higher Attraction > Nonaggressive Values, Higher Attraction	**p=0.01**
Aggressive Values, Higher Attraction > Nonaggressive Values, Lower Attraction	**p=0.10**

However, the interaction effect of company VALUES and ATTRACTION, tested in Hypothesis 2, is statistically significant (p = 0.026, one-tail) and therefore requires further examination of Hypotheses 2a, b, and c. According to Table 3, Panel B, higher attraction to aggressive company values encourages significantly more aggressiveness in tax decision-making (mean = 5.19) than

lower attraction to the same company values (mean = 4.30). The difference in these means is statistically significant (p = 0.02) as shown in Table 3, Panel C. Higher attraction to nonaggressive company values produces less aggressive tax decisions (means = 4.20) than lower attraction to the same company values (mean = 4.52). While the means are in the direction predicted, they are not significantly different (p = 0.24). Therefore, the findings support Hypothesis 2a regarding aggressive company values and attraction but not Hypothesis 2b regarding nonaggressive company values and attraction. The lack of results for Hypothesis 2b may indicate there is a missing variable.

Hypothesis 2c evaluates whether participants with higher attraction to aggressive company values will be more aggressive than participants with higher attraction to nonaggressive company values. The results support Hypothesis 2c as those with higher attraction to aggressive company values recommend a fixture classification (mean = 5.19) while those with higher attraction to nonaggressive company values are more towards a structural component than a fixture when making their recommendations (mean = 4.20). The difference in these means is also statistically significant (p = 0.01). Thus, individuals highly attracted to the aggressive company make the most aggressive recommendations.

It is interesting to note the asymmetrical results between the four groups. Participants with company value congruence are more likely to base their recommendations on the company's desires (higher attraction to nonaggressive company values, mean = 4.20; higher attraction to aggressive company values, mean = 5.19). However, participants without company value congruence are less likely to base their recommendations on the company's desires (lower attraction to nonaggressive company values, mean = 4.52; lower attraction to aggressive company values, mean = 4.30). The difference between higher attraction, aggressive company values (mean 5.19) and lower attraction, nonaggressive company values (mean 4.52) was not hypothesized. However, it is statistically different at the 0.10 level. This evidence further supports that

participants with higher attraction to aggressive company values make the most tax aggressive recommendations.

CONCLUSIONS AND FUTURE RESEARCH

Aggressive tax decision-making within the corporate environment is currently an uncharted area in published behavioral research. Tax aggressiveness is defined as engaging in transactions or applying methods that maximize after-tax returns beyond what the Internal Revenue Service will accept without question upon audit. This exploratory study examines two factors that may influence the aggressiveness of corporate tax decisions: corporate values and the attraction an individual feels toward the organization.

Attraction is a prerequisite to value congruence and commitment to an organization. The results find an interaction effect between company values and an individual's attraction to the organization when recommending the classification of an asset (a new product on the market within the last three months) for tax depreciation purposes to a colleague. Participants with higher attraction to the company values make recommendations more aligned with those values than participants with lower attraction.

The most aggressive tax stances are recommended by those with higher attraction to aggressive company values and the least aggressive recommendations are made by those with higher attraction to nonaggressive company values. Since the instrument did not describe the company values in tax terms, these findings may also generalize to non-tax decisions.

These results should be of interest to researchers as well as the U.S. government given that little research has examined corporate tax aggressiveness. This study is exploratory in nature and examines two factors, corporate values and attraction. This provides a foundation for future research to identify other variables important to aggressive corporate tax decision-making. The findings suggest that individuals attracted to aggressive company values are more influenced by the corporate values when making

decisions than those with lower attraction and those assigned to nonaggressive company values. In addition, government tax agencies should consider the companies' values when selecting corporations for audit. Future research may discover computer programs, such as DICTION (Cho, Roberts, & Patten, 2010), are useful in identifying tax aggressive companies by looking at value statements on company websites and within their Form 10-K filings with the U.S. Securities and Exchange Commission.

As with all behavioral research, only participants' intentions to act are gathered, which may be different from how they would act if put in a similar situation in real time. Selecting additional independent variables, both organizational and individual, are natural extensions of this study.

REFERENCES

Amos, E. & Weathington, B. (2008). An analysis of the relation between employee-organization value congruence and employee attitudes. *The Journal of Psychology*, 142(6): 615-631.

Arlinghaus, B. P. (1998). Goal Setting and Performance Measures. *Tax Executive*, 50: 434-442.

Ayers, S., & Kaplan, S. E. (2005). Wrongdoing by consultants: An examination of employees' reporting intentions. *Journal of Business Ethics*, 57(2): 121–137.

Beekun, R. I., Hamdy, R., Westerman, J. W., & HassabElnaby, H. R. (2008). An Exploration of Ethical Decision-making Processes in the United States and Egypt. *Journal of Business Ethics*, 82: 587-605.

Bonner, S., Clor-Proell, S., Koonce, L., & Wang, T. (December 16, 2011). Disaggregating Gains and Losses: The Effects of Sign and Magnitude on Managers' Reporting Behavior (Working paper).

Chiu, R. K. (2003). Ethical judgment and whistleblowing intention: Examining the moderating role of locus of control. *Journal of Business Ethics*, 43: 65–74.

Cho, C. H., Roberts, R. W., & Patten, D. M. (2010). The language of US corporate environmental disclosure. *Accounting, Organizations and Society*, 35: 431-443.

Cloyd, C. B., Pratt, J., & Stock, T. (1996). The Use of Financial Accounting Choice to Support Aggressive Tax Positions: Public and Private Firms. *Journal of Accounting Research*, 34: 23-43.

Commissioner v. Newman, 159 F.2d 848 (CA-2, 1947).

Cummings, J. L., Jr. (2005). Chief Tax Officer Reporting Structures. *The Tax Adviser*, 36: 620-625.

Deal, T. E., & Kennedy, A. A. (1982). *Corporate Cultures: The Rites and Rituals of Corporate Life*. Reading, MA: Addison-Wesley.

Drucker, J. (2007, October 23). Inside Wal-Mart's Bid to Slash State Taxes; Ernst & Young Devises Complex Strategies; California Pushes Back. *Wall Street Journal*, Eastern ed., p. A1.

Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2010). The Effects of Executives on Corporate Tax Avoidance. *The Accounting Review*, 85(4): 1163-1189.

Elango, B., Paul, K., Kundu, S. K., & Pauldel, S. K. (2010). Organizational ethics, individual ethics, and ethical intentions in international decision-making. *Journal of Business Ethics*, 97: 543-561.

Fisher, A. (2009, September 18). *Why more Women don't get MBAs*. Retrieved from http://money.cnn.com/2009/09/17/ news/economy/women_mba_business_school.fortune/index.htm

Gardner, W. L., Reithel, B. J., Foley, R. T., Cogliser, C. C., & Walumbwa, F. O. (2009). Attraction to Organizational Culture Profiles. *Management Communication Quarterly*, 22(3): 437-472.

Hanlon, M., and Heitzman, S. (2010), "A Review of Tax Research." *Journal of Accounting and Economics* 50: 127–78.

Hite, P. A., & McGill, G. A. (1992). An Examination of Taxpayer Preference for Aggressive Tax Advice. *National Tax Journal,* 45(4): 389-404.

Hsee, C. K., & Weber, E. U. (1997). A Fundamental Prediction Error: Self-Others Discrepancies in Risk Preference. *Journal of Experimental Psychology; General,* 126(1): 45-53.

IRS. (2012a, January 6). *Overview Tax Gap for Tax Year 2006.* Retrieved from http://www.irs.gov/pub/newsroom/ overview_tax_gap_2006.pdf

IRS. (2012b, August 3). *Table 6. Gross collections, by Type of tax, fiscal years 1960-2011.* Retrieved from http://www.irs.gov/uac/SOI-Tax-Stats---Gross-Collections-by-Type-of-Tax---IRS-Data-Book-Table-6

Johnston, D. C. (2000, February 20). KPMG Corporations' Taxes are Falling Even as Individuals' Burden Rises. The New York Times, late ed., p. A1.

Jonas, E., Schulz-Hardt, S. & Frey, D. (2005). Giving Advice or Making Decisions in Someone Else's Place: The Influence of Impression, Defense, and Accuracy Motivation on the Search for New Information. *Personality and Social Psychology Bulletin,* 31: 977-990.

Judge, T. A., & Cable, D. M. (1997). Applicant Personality, Organizational Culture, and Organization Attraction. *Personnel Psychology,* 50: 359-394.

Kaplan, S. E., Pope, K. R., & Samuels, J. A. (2010). The Effect of Social Confrontation on Individuals' Intentions to Internally Report Fraud. *Behavioral Research in Accounting,* 22(2): 51-67.

_____, & Schultz, J. J. (2007). Intentions to report questionable acts: An examination of the influence of anonymous reporting channel, internal audit quality, and setting. *Journal of Business Ethics,* 71(2): 109–124.

Kray, L. (2000). Contingent weighting in self-other decision making. *Organizational Behavior and Human Decision Processes,* 83(1): 82-106.

Libby, R., R. Bloomfield, & M.W. Nelson (2002). Experimental research in financial accounting. *Accounting, Organizations and Society,* 27: 775-810.

Liedtka, J. M. (1989). Value Congruence: The Interplay of Individual and Organizational Value Systems. *Journal of Business Ethics,* 8(10): 805–815.

Lipe, M. G., & Salterio, S. E. (2000). The Balanced Scorecard: Judgmental Effects of Common and Unique Performance Measures. *The Accounting Review,* 75(3): 283-298.

Lisowsky, P. (2010). Seeking Shelter: Empirically Modelling Tax Shelters Using Financial Statement Information. *The Accounting Review,* 85(5): 1693-1720.

McGill, G. A. and E. Outslay. (2004). Lost in Translation: Detecting Tax Shelter Activity in Financial Statements. *National Tax Journal,* 57(3): 739-756.

Meyer, J. P., Becker, T. E., & Van Dick, R. (2006). Social Identities and Commitments at Work: Toward an Integrative Model. *Journal of Organizational Behavior,* 27: 665-683.

Mills, L. F. (1998). Book-Tax Differences and Internal Revenue Service Adjustments. *Journal of Accounting Research,* 36: 343-356.

_____, & Sansing, R. C. (2000). Strategic Tax and Financial Reporting Decisions: Theory and Evidence. *Contemporary Accounting Research,* 17: 86-106.

Murphy, K. (2004). Aggressive Tax Planning: Differentiating Those Playing the Game from Those Who Don't. *Journal of Economic Psychology,* 25: 307-329.

Nunnally, J., & Bernstein, I. (1994). *Psychometric Theory (3rd ed.).* New York, NY: McGraw-Hill.

O'Reilly, C. A., III, Chatman, J., & Caldwell, D. F. (1991). People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *Academy of Management Journal,* 34: 487-516.

Rego, S. O., & Wilson, R. (2012). Equity Risk Incentives and Corporate Tax Aggressiveness. *Journal of Accounting Research*, 50(1): 1-35.

Remus, W. (1986). Graduate students as surrogates for managers in experiments on business decision making. *Journal of Business Research*, 14(1): 19-25.

Robinson, J. R., Sikes, S. A., & Weaver, C. D. (2010). Performance Measurement of Corporate Tax Departments. *The Accounting Review*, 85(3): 1035-1064.

Schein, E. H. (1985). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.

Schisler, D. L. (1995). Equity, Aggressiveness, Consensus: A Comparison of Taxpayers and Tax Preparers. *Accounting Horizons*, 9(4): 76-87.

Schneider, B. (1987). The People Make the Place. *Personnel Psychology*, 40: 437-453.

_____., Goldstein, H. W., & Smith, D. B. (1995). The ASA Framework: An Update. *Personnel Psychology*, 48: 747-773.

Shackelford, D. A., & Shevlin, T. (2001). Empirical Tax Research in Accounting. *Journal of Accounting and Economics*, 31: 321-387.

Shevlin, T. (2007). The Future of Tax Research: From an Accounting Professor's Perspective. *The Journal of the American Taxation Association*, 29: 87-93.

Stuart, A. (2006, June 1). *What Women Want*. Retrieved from http://www.cfo.com/article.cfm/6970016?f=search

_____. (2010, July 13). *Women CFOs Holding Steady*. Retrieved from http://www.cfo.com/ article.cfm /14510069?f=search

The Tax Executives Institute, Inc. (2005). *2004-2005 Corporate Tax Department Survey*. Washington, DC: Author.

Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, 185 (September), 1124 -1131.

U.S. Department of the Treasury. (1999). *The Problem of Corporate Tax Shelters: Discussion, Analysis, and Legislative*

Proposals. Washington, DC: U.S. Government Printing Office.

Virtanen, T. (2000). Commitment and the Study of Organizational Climate and Culture. In N. M. Ashkanasy, C. P. M. Wilderom, and M. F. Peterson (Eds.) *Handbook of Organizational Culture and Climate* (339-354). Thousand Oaks, CA: Sage Publications.

Whiteco Industries, Inc. v. Commissioner of Internal Revenue, 65 TC 664 (1975).

Williams, S., & Narendran, S. (1999). Determinants of Managerial Risk: Exploring Personality and Cultural Influences. *The Journal of Social Psychology,* 139(1), 102-125.

NOTES

[1.] This definition is similar to ones used by Hite and McGill (1992), Schisler (1995), and Murphy (2004). Lisowsky (2010) uses a different approach to define tax aggressiveness. He states the most important aspect of tax aggressive behavior is to reduce the amount of taxes owed and of less importance is pre- or non-tax factors.

[2.] Some participants volunteered to complete the instrument during class time instead of leaving early or received extra credit while others were offered a chance to win a $25 gift certificate. No significant difference was found in the responses of the students from the various MBA classes.

[3.] Fisher (2009) reports that women account for approximately 30 percent of business school students (those with MBAs). Thus, the sample in this study is consistent with national averages for women in MBA programs. In a CFO.com article, Stuart (2010) indicates that the percentage of women CFOs in the Fortune 500 and Midcap 1500 firms is about 8.8% in 2010 and 2009. In another CFO.com article by Stuart (2006), a greater percentage of women (about 20%) are in positions such as controllers,

treasurers, and tax directors, which are considered a level lower than CFO. Likewise, Dyreng, Hanlon, and Maydew (2010) find that 5% of the top executives (i.e. CEO, CFO) included in their study were female.

4. Business experience is a prerequisite for acceptance into the MBA program at the public university where the experiment was conducted.

5. The $160,874 is computed as follows: $571,600 (fixtures depreciation) – $98,440 (structural depreciation) * 34% (corporate tax rate).

6. There is no statistical difference in PRE_RECOMMEND means between the aggressive (4.36) and nonaggressive (4.67) company values treatment groups. Participants did not receive the company values manipulation until after their PRE_ RECOMMEND decision was made.