Agency or stewardship? The impact of leadership structure on the debt financing of lodging firms (leadership structure on debt financing)

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Structured Abstract:

Purpose: This study empirically investigates agency and stewardship theories in the U.S. lodging market by examining the influence of fiscal and non-fiscal leadership structures on the debt financing decisions of lodging firms.

Design/methodology/approach: Secondary financial data were collected for U.S.-based lodging firms. Subsequently, bivariate correlation, pooled OLS (Ordinary Least Square), and endogeneity analyses were performed on the data.

Findings: The findings support the significant influence of some corporate governance attributes on the capital structure of U.S. lodging firms and show the limited applicability of agency and stewardship theories.

Practical implications: Theoretical and managerial implications are suggested in terms of balancing leadership structure attributes from the agency and stewardship theories, the capital structure of lodging firms, and future research.

Originality/value: Despite its importance considering the intensive capital and relatively high liabilities needed for success in the lodging industry, the influence of leadership structure on capital structure has not been examined either empirically or theoretically. Leadership structure attributes, both fiscal and non-fiscal, are included in the study to gain a richer understanding of their influence. The outcomes of the analysis suggest managerial implications for leadership structure as well as theoretical generalizability for agency and stewardship theories within the lodging industry.

Research paper

Keywords: agency, stewardship, leadership structure, capital structure, lodging industry

Introduction

Aligning interests in principal–agent relationships have been regarded as a critical issue significantly affecting firms' financial performances as well as their financial leverage. To align these interests, diverse leadership structure attributes, such as insider incentives (*e.g.,* stock options for the chief executive officer [CEO], officers, and directors), CEO governance (*i.e.,* CEO duality: CEO as well as the chair of the board of directors; tenure; age), outside board of directors, and the blockholders' presence have been suggested (Chakraborty, 2010; Fosberg, 2004; Guillet et al., 2013; Oak and Iyengar, 2009; Wintoki et al., 2012). Many of the hospitality firms with CEO duality, for example, choose to provide common stock options to insiders, while others with non-duality do not. The combination of CEO duality and stock options, along with other leadership structure attributes, can be critical issues influencing the capital structure within the hospitality industry.

Two conflicting theories based on agency and stewardship approach leadership structure differently (Schillemans, 2013). Agency theory assumes that corporate leaders tend to be self-interested and individualistic, which often conflicts with shareholders' interests and results in entrenchment. To prevent the "conflict," a proper means of monitoring, delegation, and correction has been suggested (Davis et al., 1997; Schillemans, 2013). On the other hand, stewardship theory contends that corporate leaders are pro-organizational and collectivistic, and

thus they intend to serve the shareholders' interests. Leadership structure attributes such as CEO duality without insider incentives, tenure, and age have been suggested to show significant influence on financial performance (Donaldson and Davis, 1991; Schillemans, 2013). In the hospitality contexts, several studies have suggested that CEO compensation, diversification, and principal–agent interest alignment in terms of agency (Hodari et al., 2017; Kim and Gu, 2005) and CEO duality influence a company's reputation and financial performance (Guillet et al., 2013; Musteen et al., 2010). Although the lodging sector has its own unique capital structure (*i.e.,* relatively high total and long-term liability), no study has attempted to explain the influence of leadership structure on the debt financing of lodging firms using the two theories. The previous studies were carried out in a restaurant business context, adopted only one of the theories, or only attempted to explain the influence of some of the leadership attributes on financial performance, not capital structure.

The leadership structure of the lodging industry can have a significant influence on its capital structure. When compared to other industries, the hospitality industry, which includes lodging, shows unique leadership and capital structures in terms of dual ownership and management (Guillet and Mattila, 2010; Hodari et al., 2017) and higher capital intensity (De Franco and Lattin, 2006), leading to a relatively higher level of long-term liabilities and greater sensitivity to overall national economic activity (Dalbor and Upneja, 2004; Kim and Ayoun, 2005; Reich, 2004). In 2016, for example, the U.S. lodging industry showed a significantly higher long-term liability-to-equity ratio (0.89) than economy-leading industries such as IT (Information Technology) (0.46) and healthcare (0.59), leading to higher financial risk (Industry Summary, 2016). Higher long-term liability equates to a higher-risk business (Brealey et al.,

2008). Given the relatively high financial risk in the lodging industry, leadership structure may play a critical role in deciding a company's level of financial leverage.

We examine the possible critical role that leadership structure plays in the capital structure of lodging firms. Capital structure is defined as the structure of a company's long-term sources of funds, basically the mixture of debt and equity (Brealey et al., 2008; Chatfield and Dalbor, 2005). Specifically, there is a need to examine the influence of leadership structure on capital structure (total and long-term debt) based on the unique characteristics of capital intensity. The two theories developed in non-hospitality contexts can have limitations when attempting to explain the influence of leadership structure attributes on capital structure in the lodging industry. In addition to the failure to examine the applicability of the theories, there are several fiscal and non-fiscal leadership structure attributes affecting capital structure that have never been examined in the context of the lodging industry.

The current study examines the influence of leadership structure attributes on the capital structure of the lodging industry. Specifically, the value of the common stock owned by the CEO, officers, and directors, as well as the number of blockholders (fiscal attribute) and the influence of CEO governance (non-fiscal attribute) on capital structure, were analyzed based on the theoretical generalizability of agency and stewardship within U.S. lodging firms.

Fosberg (2004) and Friend and Lang (1988) first theorized about fiscal leadership structure attributes and capital structure. They suggested that the value of the common stock shares owned by the CEO, other officers, and directors is inversely related to the debt/equity ratio, while the blockholder presence is positively related to the debt/equity ratio. Meanwhile, the influence of non-fiscal leadership structure attributes on capital structure in general business have been empirically supported by several previous studies (Pacheco and Tavares, 2015; Saad,

2010; Sheikh and Wang, 2012). Nevertheless, these studies did not simultaneously consider fiscal and non-fiscal leadership structure attributes, or they only applied agency theory to explain the aforementioned influence. In the hospitality industry, Guillet et al. (2013) found that CEO duality had a positive influence on the financial performance of full-service restaurants. However, the study did not include insider incentives as part of the analysis, nor did it cover the lodging industry.

The remainder of this article reviews the literature on agency and stewardship theories and its relevance to leadership structure. It then provides hypotheses, outlines the study's methodology, details the data collection, and proposes a research model pertinent to examining the fiscal and non-fiscal variables affecting capital structure.

Literature Review

Agency Theory vs. Stewardship Theory

Agency theory assumes human nature is individualistic and self-interested (Eisenhardt, 1989; Jensen and Meckling, 1976). When it comes to interest alignment, basic human nature can make "agents" inclined to deviate from the interests of principals. The deviation can cause conflicts, or so-called "agency problems," between the agent-principal when (1) divergent interests exist, and (2) the agent has more insider information than the principal (Bosse and Phillips, 2016; Jensen and Meckling, 1976). Thus, agents have a tendency to behave opportunistically through: a) shirking (*e.g.,* trying to do less work when the reward is less than expected and/or the agent can get away with less effort); b) the overconsumption of perks (*i.e.,* privileges granted on top of one's salary such as a spacious office, reserved parking space, private dining, and limousine and driver); and c) investing in negative net present value business projects, leading to personal benefits. To prevent agency problems, extrinsic motivation (*e.g.,*

rewards and monitoring systems) have been suggested (Eisenhardt, 1989; Jensen and Meckling, 1976). To provide the extrinsic motivation by principals, institutional power and external (hierarchical) management are assumed to maintain the hierarchy of agents and principals (Davis et al., 1997; Dicke, 2002; Van Slyke, 2006). Based on these motivations and management styles, financial rewards and promotions are emphasized to align the interests between principals and agents.

In contrast, stewardship theory sees human nature as collectivistic and pro-organizational (Davis et al, 1997; Schillemans, 2013), thus making "stewards" align their interests with those of the principals. Donaldson and Davis (1991), Davis et al. (1997) and Pfeffer and Salanick (1978) suggested that leaders with more discretion are better able to make more efficient strategic decisions that are beneficial for organizations and stakeholders. In other words, CEOs, officers, and directors with stewardship mindsets, as compared to "agents," are inclined to work in the best interests of shareholders. The basic assumption of the nature and alignment of interests is required to provide intrinsic motivation (*e.g.,* for the purposes of self-development, realization, or belonging, or simply to deliver their best performance). To provide the intrinsic motivation by principals, a self-regulating management style is assumed to maintain the hierarchy between stewards and principals (Schillemans, 2013). Based on these motivations and management styles, different sets of incentives such as realization, acknowledgment, praise, and reputation are recommended to intrinsically motivate stewards (Van Slyke, 2006). Table 1 summarizes each theory by comparing the theoretical attributes.

(Table 1 about here)

The distinctive differences between the two theories lead to different approaches to fiscal and non-fiscal leadership structure attributes affecting capital structure. For fiscal leadership structure attributes (*e.g.,* stock options for agents), agency theory posits that agents' opportunistic behaviors are due to a large proportion of insiders' personal wealth being invested in firm-specific common stock and human capital (Amihud and Lev, 1981; Friend and Hasbrouck, 1988). That is, if the company goes bankrupt, the insiders lose a large proportion of their personal wealth. Thus, in agency theory, risk-averse leaders (or managers) will by nature minimize the risk of bankruptcy by maintaining less than optimal debt financing (Friend and Hasbrouck, 1988). On the other hand, leaders with a stewardship mindset would choose an optimal capital structure that contributes to the best interests of shareholders.

For non-fiscal leadership structure attributes (*e.g.*, outside directors), agency theory argues that boards of directors and outside directors are an efficient means of balancing a leadership structure to prevent CEOs from making decisions based on their personal interests (Jensen and Meckling, 1976). In other words, CEO duality would negatively affect the maximizing of shareholders' interests. Stewardship theory, by contrast, implies that CEO duality and longer tenures are positively associated with optimal capital structures (Davis et al., 1997 Schillemans, 2013).

Empirical Support

The differences between fiscal and non-fiscal leadership structure attributes, as based on the theoretical differences between agency and stewardship, have received much academic attention in a general business context, producing diverse empirical studies. For fiscal attributes, insider incentives (*e.g.,* common stock and compensation) and blockholder presence have been found to be related to capital structure. Personal wealth invested in firm-specific common stock

by leaders (*e.g.,* CEOs, officers, and directors) was found to be inversely related to the debt ratio in the capital structure (Friend and Lang, 1988; Sheikh and Wang, 2012). The number of blockholders who own more than 5% of the firm's common stock was found to be positively related to the debt ratio (Fosberg, 2004; Granado-Peiró and López-Gracia, 2016).

In terms of non-fiscal attributes, empirical studies have been conducted that examine CEO duality, CEO tenure, board size, and outside directors. The influence of CEO duality has been found to be inconclusive in fields outside of hospitality. Abor (2007) and Vakilifard et al. (2011) found a positive relationship between CEO duality and debt ratio, while Saad (2010) found a negative relationship. CEO tenure is another attribute affecting capital structure. Abor (2007) found that CEO tenure is negatively related to a firm's financial leverage. At the same time, board size was found to be inversely related to financial leverage (Li et al., 2016; Vakilifard et al., 2011).

Outside directors were also found to be a non-fiscal leadership structure attribute associated with capital structure (Sheikh and Wang, 2012). Vakilifard et al. (2011) suggested that leaders seek lower leverage when they face stronger corporate governance. Sheikh and Wang (2012) found that the proportion of outside directors on the board is positively related to the debt ratio. Almost all of the studies mentioned above only examined the influence of fiscal or non-fiscal attributes on debt, leverage, or capital structure in fields beyond hospitality.

Recently, Sheikh and Wang (2012) examined the effects of corporate governance on capital structure in Pakistan in terms of fiscal and non-fiscal attributes. However, their study did not examine and critique the differences between agency and stewardship theory, nor was it conducted in the field of hospitality. Their findings were inconclusive regarding CEO duality and capital structure.

Several studies in the hospitality industry support the potentially exceptional influence of leadership structure attributes on capital structure. Compared to other industries, hospitality firms are unique in terms of their separation of real estate ownership from management (Guillet and Mattila, 2010) and heavy debt financing, especially long-term debt (Chatfield and Dalbor, 2005), high ratio of short-term decisions (*e.g.,* food inventory decisions and average daily lodging rates), and sensitivity to economic changes. Based on the special characteristics of the hospitality industry, empirical studies have suggested there is a positive relationship between CEO duality and financial performance in full-service restaurant businesses (Guillet et al., 2013), better financial performance of hospitality firms with CEO duality versus non-hospitality firms (Oak and Iyengar, 2009), and a negative impact in terms of separating real estate titles from management (Brickley et al., 1997; Guillet and Mattila, 2010). However, none of the hospitality studies considered the impact of both fiscal and non-fiscal leadership structure attributes on capital structure within the lodging industry.

Furthermore, the lodging industry is different from other sectors of the hospitality industry in its use of more debt to fund growth (Upneja and Dalbor, 2001), higher long-term debt (Dalbor and Upneja, 2004), international diversification and its positive influence on optimal financial leverage (Jang and Tang, 2009), and the influence on corporate governance of the plethora of choices to be made between independent ownership and affiliation, chain, integration, and franchise (Dahlstrom et al., 2009). Thus, the leadership structure attributes affecting the capital structure of the lodging industry may be different from other hospitality sectors. Consequently, this study explores the unique perspective of the impact of leadership structure on capital structure and the generalizability of the agency and stewardship theories in the U.S. lodging industry.

Hypotheses

This study proposes hypotheses regarding the influence of fiscal and non-fiscal leadership structure attributes on the capital structure of U.S. lodging firms in terms of agency theory and stewardship theory. The fiscal attributes adopted from previous empirical studies (Fosberg, 2004; Friend and Hasbrouck, 1988) are insider-owned (*e.g.,* CEOs, other officers, and directors), common stock, and blockholder presence. From the agency theory perspective, the executive compensation scheme is one of the mechanisms critical to minimizing agency cost and ensuring the alignment of agent/principal interests. Based upon the previous theoretical and empirical research summarized in the previous section, agency theory implies that the common stock value of insiders (*e.g.*, CEOs, other officers, and directors) who invested their personal wealth in the firm would have a significant negative influence, while a blockholder presence would have a positive influence on a firm's financial leverage.

From the stewardship perspective, insiders should be committed to the interests of shareholders, without any fiscal attributes (Davis et al., 1997). In other words, insiders should be able to achieve an optimal capital structure to maximize the shareholders' interests, regardless of incentives and blockholders. Thus, in line with the findings and logic of fiscal leadership structure attributes between the two theories, this study proposes the following:

(Agency)

AH_1: Fiscal leadership structure attributes (*e.g.,* insider incentives and blockholders) have a significant influence on the capital structure of U.S. lodging firms.

More specifically,

AH_{1a}: Insider incentives (*e.g.,* CEOs', officers', and directors' common stock incentives) have a significant negative influence on the level of liabilities in the capital structure of U.S. lodging firms.

AH_{1b}: The number of blockholders has a significant positive influence on the level of liabilities in the capital structure of U.S. lodging firms.

(Stewardship)

SH_1: Fiscal leadership structure attributes (*e.g.,* insider incentives and blockholders) have no significant influence on the capital structure of U.S. lodging firms.

The non-fiscal attributes adopted for this study based on previous empirical research are board size, number of outside directors, CEO duality, and CEO tenure. From an agency theory perspective, boards of directors, as well as outside directors, are critical to monitoring the alignment of insiders' interests with shareholders' interests (Davis et al., 1997; Sheikh and Wang, 2012). Boards of directors function to provide checks and balances on corporate governance in order to minimize agency problems (*e.g.,* shirking and information asymmetry and the use of capital for personal enrichment and not for financial performance). Thus, these non-fiscal leadership structure attributes could cause a company's capital structure to deviate from the optimal level in order to increase financial stability. In other words, the attributes would be negatively associated with financial leverage.

From the perspective of stewardship theory, insiders are expected to be committed to the interests of shareholders, even without monitoring from the board of directors or outsiders (Davis et al., 1997). In reality, because of the lodging industry's unique capital structure (Dahlstrom et al., 2009; Dalbor and Upneja, 2004), the direction of influence on the capital structure would be difficult to predict. Moreover, no study has been conducted that combines fiscal and non-fiscal

leadership structure attributes. According to stewardship theory, as a CEO's tenure lengthens, he or she would keep financial leverage less than optimal for financial stability (*i.e.,* negative influence on financial leverage). It also theorizes that the more authority a CEO has (*i.e.,* duality), the more he or she would be negatively associated with financial leverage (Davis et al., 1997; Donaldson and Davis, 1991). Thus, in this study based on agency theory and stewardship theory, the following hypotheses are posited regarding the directionality of the attributes on capital structure:

(Agency)

AH_2: Among the non-fiscal leadership structure attributes, board size and the number of outside directors have significant negative influences on the financial leverage of U.S. lodging firms.

(Stewardship)

SH_2: Among non-fiscal leadership structure attributes, CEO duality and tenure have significant negative influences on the financial leverage of U.S. lodging firms.

SH_3: The significant negative relationship between CEO tenure and financial leverage is stronger among those who hold dual positions (*i.e.,* CEO and chair of the board).

Methodology and Analysis

Data and Variables

This study collected data from publicly traded U.S. lodging companies. Different sources such as Compustat, ExecuComp and the SEC (Securities and Exchange Commission) were used to cross-check the accuracy of the data in terms of the company name, year, and

ticker. Data screening was performed to find any outliers and missing values. Observations with missing values were eliminated. The final sample included 268 firm observations between 2000 and 2014.

The current study uses two measures of capital structure as dependent variables: total liability ratio (total liabilities to total assets) and long-term liability ratio (long-term liabilities to total assets). These two ratios describe a company's capital structure. Eight independent variables are adopted in this study: fiscal variables (common stock value in USD held by the CEO, other officers, directors, and the number of blockholders) and non-fiscal variables (CEO duality, tenure years of CEO, board size and outside directors). Control variables include profitability (net profit after taxes to total assets) and size (total assets).

Model and Analysis

This study uses the following model equations to test hypotheses with and without interactions between tenure and CEO duality. The model equations below were examined using bivariate correlation, pooled OLS (*i.e.,* based on analyzing the results of the Hausman and Breusch-Pagan Lagrange multiplier tests) and endogeneity analyses with 2SLS.

$$TL_i = \beta_0 + \beta_1\, CEOcom_{it} + \beta 2\, Offcom_{it} + \beta 3\, Dircom_{it} + \beta 4\, Block_{it} + \beta 5\, Dual_{it} + \beta 6\, Tenure_{it} + \beta 7\, Bsize_{it} + \beta 8\, OutD_{it} + \beta 9\, Profit_{it} + \beta 10\, Size_{it} + (\beta 11\, Dual_{it} \times Tenure_{it}) + \varepsilon_{it}$$

$$LL_i = \beta_0 + \beta_1\, CEOcom_{it} + \beta 2\, Offcom_{it} + \beta 3\, Dircom_{it} + \beta 4\, Block_{it} + \beta 5\, Dual_{it} + \beta 6\, Tenure_{it} + \beta 7\, Bsize_{it} + \beta 8\, OutD_{it} + \beta 9\, Profit_{it} + \beta 10\, Size_{it} + (\beta 11\, Dual_{it} \times Tenure_{it}) + \varepsilon_{it}$$

The representation of each variable is as follows in Table 2.

(Table 2 about here)

Descriptive Statistics

The current study first performs a descriptive analysis of the sample of lodging companies in the United States (Table 3). The sampled lodging firms have a total liability ratio (TL) mean of .356 and a long-term liability ratio (LL) mean of .280. The means of CEO-, other officer-, and board of director-owned common stock values are 17.56 (USD million), 6.32 (USD million), and 26.37 (USD million), respectively. The average number of blockholders is 1.22. The CEOs' average number of tenured years is 8.44. The mean value of board size is 12.44, with an average of 8.18 outside members. The mean of profit is 1.09% of total assets.

(Table 3 about here)

Correlation

Next, the study performs a Pearson's correlation analysis (Table 4). Among the fiscal leadership structure attributes, board of director-owned common stock (henceforth Dircom) (r = .177, p < .01) and number of blockholders (henceforth Block) (r = -.187, p < .01) are significantly correlated with total liability (henceforth TL). Block also significantly correlates with long-term liability (henceforth LL) (r = -.204, p < .01). On the other hand, CEO-owned common stock (henceforth CEOcom) and other officer-owned common stock (henceforth Offcom) are not significantly correlated with either TL or LL. These findings provide preliminary support for AH_{1a} and SH_1, and reject AH_{1b}.

For non-fiscal leadership structure attributes, the number of directors (henceforth BSize) (TL: r = .337, LL: r = .319, p < .01) and outside directors (TL: r = .382, LL: r=.370, p < .01) (henceforth OutD) are positively correlated with TL and LL, providing preliminary support for AH_2. CEO duality (henceforth Dual) is positively correlated with TL (r = .208, p < .01) and LL

(r = .198, p < .01). The number of years a CEO is tenured (henceforth Tenure) is negatively correlated with TL (r = -.211, p < .01) and LL (r = -.236, p < .01). The Dual and Tenure with TL and LL findings provide preliminary support for SH_2. The interaction effect of Tenure and CEO duality (Tenure × Dual) is significant for both TL (r = -.153, p < .01) and LL (r = -.179, p < .01). However, the correlation is not greater than the separate correlation of each variable, thus rejecting SH_3.

The relatively high correlation between Tenure and (Dual × Tenure) (r = .681, p < .01) was expected because the interaction term is highly related to the two variables. None of the correlations among the independent variables show any potential multicollinearity (Tabachnick and Fidell, 2007). High correlation between the two dependent variables (TL and LL) was expected because lodging firms' higher long-term liability will generally cause both ratios to be high since long-term liability is either part of, or is the entire numerator for, both ratios (Kim and Ayoun, 2005).

(Table 4 about here)

Main and Moderation Effect Analyses

First, the Hausman test was performed and accepted the null hypothesis that unique errors are correlated with the regressors (x^2 = 20.78, p > .05). The Breusch-Pagan Lagrange multiplier test was next performed and failed to reject the null hypothesis of zero variance across the lodging firms (heteroscedasticity) (x^2 = 19.97, p > .05). Thus, pooled OLS analyses were performed to examine the main and moderation effects with (Models 1 & 3) and without (Models 2 & 4) interaction.

Data screening was conducted to check the assumptions. No normality violation was found. After deleting the outliers, a total of 268 firms remained in the final sample. Variance inflation factor (VIF) analysis ranges from 1.347 to 4.516 and shows no signs of multicollinearity (Table 5; Hair et al., 2006). Pair-wise linearity is satisfied by using within-group scatter plots. All four models showed significance (Model 1: F [11, 256] = 26.08, $p < .001$, $R^2 = .53$; Model 2: F [12, 255] = 23.34, $p < .001$, $R^2 = .54$; Model 3: F [11, 256] = 25.65, $p < .001$, $R^2 = .52$; Model 4: F [12, 255] = 22.95, $p < .001$, $R^2 = .53$).

Among the fiscal leadership structure attributes, Dircom shows a significant positive influence on TL (Model 1: $\beta_3 = .218$, $p < .001$; Model 2: $\beta_3 = .212$, $p < .001$) and LL (Model 3: $\beta_3 = .226$, $p < .001$; Model 4: $\beta_3 = .219$, $p < .001$) with and without moderation. Block shows a significant negative influence on TL (Model 1: $\beta_4 = -.136$, $p < .05$; Model 2: $\beta_4 = -.128$, $p < .05$) and LL (Model 3: $\beta_3 = -.141$, $p < .05$; Model 4: $\beta_3 = -131$, $p < .05$) with and without moderation. Hence, the significant positive influence of fiscal leadership structure attributes on TL and LL accept AH_1 and rejects sub-hypotheses AH_{1a} and AH_{1b} because of the opposite directionality of Dircom. The significance influence also rejects SH_1.

Among the non-fiscal leadership structure attributes, OutD shows significant positive effects on TL (Model 1: $\beta_8 = .233$, $p < .05$; Model 2: $\beta_8 = .243$, $p < .05$) and LL (Model 3: $\beta_8 = .237$, $p < .01$; Model 4: $\beta_8 = .249$, $p < .05$) with and without moderation, rejecting AH_2. Dual shows significant positive effects on TL (Model 1: $\beta_5 = .252$, $p < .001$; Model 2: $\beta_5 = .298$, $p < .001$) and LL (Model 3: $\beta_5 = .280$, $p < .001$; Model 4: $\beta_5 = .333$, $p < .001$) with and without moderation. Tenure shows significant negative effects on TL (Model 1: $\beta_6 = -.156$, $p < .05$) and LL (Model 3: $\beta_6 = -.126$, $p < .05$) without moderation, thereby supporting SH_2. Moderation of

Dual and Tenure shows a significant negative influence on TL (Model 2: $\beta_6 = -.334$, $p < .01$) and LL (Model 4: $\beta_6 = -.375$, $p < .001$), supporting SH_3.

Endogeneity Analysis

Since this study adopted the same indicator variables for the two different measures of capital structure, 2SLS analysis was performed to examine the predictor variables' potentially endogenous relationships (Campbell and Minguez-Vera, 2008; Perrini et al., 2008). The Durbin-Wu-Hausman (DHW) test was employed to test the endogeneity of the fiscal and non-fiscal leadership structure attributes. After regressing all other fiscal and non-fiscal leadership structure attributes with CEOcom, for example, the residual of CEOcom was saved and added as another predictor variable. The DHW test showed that when TL is a dependent variable, the saved variables show consistent significant influence as found in pooled OLS analysis (Table 6, Model 1- TL as a dependent variable without an interaction term). Also, 2SLS analyses showed a consistent regressor influence on the capital structure variables as in main and moderation effect analyses. Models 2 (TL as a dependent variable with an interaction term), 3 (LL as a dependent variable without interaction) and 4 (LL as a dependent variable with interaction) are presented in the appendix. They show a consistent regressor influence. In sum, the 2SLS analysis supports the pooled OLS results.

(Table 5 about here)

(Table 6 about here)

The statistical analyses support/ reject the hypotheses as follows (Table 7).

(Table 7 about here)

Conclusion

The statistical analyses show the following results. First, agency theory predicts that fiscal leadership structure attributes will have a significant influence on capital structure (*i.e.,* insider incentive will have a negative influence and blockholders will have a positive influence), while stewardship theory does not. Despite agency theory's implications, the empirical results show that the stock ownership of the CEO and officers does not have a significant influence on financial leverage within the lodging industry. For non-fiscal leadership structure attributes, agency theory hypothesizes that board size and the number of outside directors has a significant negative influence on capital structure. The analysis finds that the number of outside board members has a significant positive influence on financial leverage. Stewardship theory implies a significant negative influence of CEO duality and tenure on financial leverage, while agency theory does not. Whereas tenure shows a significant negative influence (as the theory predicts), CEO duality shows a positive influence on financial leverage. Thus, when a CEO holds dual positions (*i.e.*, the CEO and chair of the board of directors), the CEO tends to increase debt financing. On the other hand, when a CEO has had a longer tenure, the CEO is inclined to decrease debt financing.

Theoretical Implications

Based on the conclusions, theoretical implications can be provided as follows. First, the insignificance of CEO and officer stock ownership on capital structure might be attributed to some limitations of agency theory. Previous studies in non-hospitality contexts suggest outcomes contrary to agency theory implications or a readjustment of the basic assumptions (Bosse and

Phillips, 2016; Sander and Hambrick, 2007). These findings can be attributed to service-oriented industry characteristics tending toward stewardship (*i.e.,* infusing self-esteem into leadership rather than personal gain or reputation). The limitation similarly applies to CEO duality, as our results are contrary to stewardship theory implications. On the other hand, through the leadership structure attributes showing a significant influence in the lodging industry, it was reaffirmed that U.S. lodging firms are more oriented toward using long-term debt. Higher long-term debt financing means higher financial risks and likely higher returns on equity. Another interesting finding is that, contrary to what previous studies suggested, the number of blockholders has a significant negative influence on financial leverage. This finding appears to indicate that blockholders are well aware of the high levels of long-term liability in lodging and are more interested in moderate risk and long-term gain than in more financial risk and higher return. Next, the analysis finds the number of outside board members has a significant positive influence on financial leverage. Thus, the more outside board members, the greater the tendency to use debt financing, including long-term liabilities. This outcome might be attributed to board members being fully aware of the higher ratio of long-term liability and the critical role of debt financing decisions in the lodging business. Third, the positive influence of CEO duality might be attributed to the influence of chasing "self-interest," considering the interaction effect between tenure and CEO duality. The analysis suggests that the longer the CEO's tenure while holding dual positions, the more the CEO might be interested in managing financial risk. In sum, agency and stewardship theories show certain limitations in regard to application in lodging.

The results of the analyses show that both theories have limitations as well as significant capital structure explanatory power within the lodging industry. There are limitations, such as the insignificant influence of CEO and officer stock ownership and board size as well as the

significant influence of CEO duality, director stock ownership, and the number of outside board members. On top of the theoretical limitations explained previously, from a lodging industry perspective, the different outcomes might be attributed to the unique capital structure of the lodging industry.

Additionally, the directionality of the significant impacts is different from what the theories imply. The number of blockholders shows a positive significant influence as opposed to what agency theory contends. This outcome might be attributed to the blockholders understanding of the capital intensity of the lodging industry. Both stewardship and agency theory contend that CEO duality and the number of outside board members have a negative influence on capital structure. However, in this study, they both showed significant positive influences. These opposite directional influences can be attributed to the unique capital structure of lodging firms, including their high long-term liability and capital intensity (*i.e.,* increasing liability as a necessary choice, not for personal gain).

Further, the results support the argument regarding the significant negative influence of CEO duality and tenure interaction on financial leverage in the lodging business. This finding indicates that CEOs with duality and longer tenure could lower the liability ratio, leading to lower financial risk. Also, a prolonged leadership structure (non-fiscal) does not necessarily mean that fiscal leadership structure attributes are unnecessary, as stewardship theory contends. Although the ownership of common stock by the CEO and other officers was not found to be significant in this study, agency theory and other relevant empirical studies in different industries show that stock options are an essential part of aligning the interests of shareholders and agents.

Managerial Implications

The outcomes of the analysis yield several managerial implications. First, since directors' common stock ownership has been found to be positively associated and the number of blockholders negatively associated with financial leverage, managers of a lodging firm can use these relationships when making decisions regarding debt financing (*i.e.,* higher financial leverage → more stock options for directors and discouraging blockholder investors; lower financial leverage → less stock option for directors and enticing more blockholders).

Second, when the board of directors of a lodging firm decides to hire or specify the job function of a CEO, a candidate's previous record and the necessity of CEO duality should be considered along with the firm's capital structure strategy. For example, if a company needs to aggressively expand its business by increasing its debt financing, a non-dual CEO with a short tenure record would be a good fit. Moreover, although CEO and officer common stock ownership was found to have an insignificant impact on capital structure, aligning the interests of CEOs and officers with those of the principals provides many other benefits. In sum, non-fiscal leadership structure attributes, such as duality and tenure, should be promoted, in addition to providing ample fiscal rewards that align the interests of agents and principals. In addition, it is critical to recruit CEOs and other leaders not only on the basis of their performance and reputations but also according to their personalities and characteristics.

Limitations and Future Research

Limitations of this study include a limited data set, single country limitation, and different management affiliations. First, the complete data set includes the financial data as well as the stock options of CEOs, officers, and directors and the duality and tenure of CEOs. Since only those companies providing complete information could be included in the study, survival bias is possible. Second, because the data were only collected from U.S.-based lodging firms, the

findings may not apply to other countries. For example, some cultures with lower power distances (*i.e.*, stronger self-regulation than institutional management) or higher collectivism may show stronger stewardship tendencies than others, which could lead to different results. Finally, different types of management affiliations, as found in the lodging industry (*e.g.*, separation of a company into parent, owner, management, and chains), could be a way to manage financial risks. These different types of affiliations between parents and other affiliates could significantly influence both capital structure and financial risks.

These limitations suggest potential avenues for future research. First, a more complete set of data would provide a better understanding of the influence of leadership structure attributes on capital structure. Second, it would be interesting to investigate whether there is a cultural component that influences the relationship between leadership attributes and capital structure. Finally, combining financial risks with the influences of different managerial affiliations on capital structure would be an interesting topic to pursue in a future study.

Appendix A

2SLS Endogeneity Analysis

	Model 2 [c] *β* *(t-value)*								
EV[b] / Variable[a]	CEOcom	Offcom	Dircom	Block	Dual	Tenure	Bsize	OutD	Dual×Tenure
CEOcom	.018	.041	.017	.030	.109	.028	.025	.026	.027
	(.408)	(.709)	(.284)	(.551)	(1.894)	(.460)	(.424)	(.429)	(.458)
Offcom	.066	.045	.120	.073	.063	.062	.044	.063	.085
	(1.174)	(1.025)	(2.162)	(1.245)	(-1.149)	(1.088)	(.765)	(1.084)	(1.465)
Dircom	.211***	.229***	.156***	.173**	.239***	.211***	.178**	.287***	.202**
	(3.591)	(4.085)	(3.603)	(3.038)	(4.082)	(3.600)	(3.222)	(5.509)	(3.449)
Block	-.117*	-.134*	-.171*	-.094*	-.155*	-.142*	-.134*	-.147*	-.214***
	(-1.983)	(-2.078)	(-2.285)	(-1.982)	(-2.438)	(-2.236)	(-1.943)	(-2.331)	(-3.644)
Dual	.305***	.273***	.318***	.310***	.220***	.156**	.314***	.285***	.242***
	(5.190)	(4.789)	(5.219)	(5.149)	(4.886)	(2.872)	(5.248)	(4.713)	(4.131)
Tenure	-.024	-.028	-.016	-.008	-.144	-.015	-.004	-.024	-.123
	(-.268)	(-.319)	(-.183)	(-.082)	(-1.562)	(-.228)	(-.044)	(-.270)	(-1.916)
Bsize	.150	.134	.036	.141	.070	.144	.071	.022	.058
	(1.619)	(1.469)	(.410)	(1.529)	(1.093)	(1.499)	(1.615)	(.380)	(.911)
OutD	.243*	.245*	.406***	.268**	.202*	.243*	.361***	.113*	.199*
	(2.548)	(2.569)	(4.806)	(2.870)	(2.141)	(2.535)	(6.154)	(2.544)	(2.174)
Profit	.219**	.215**	.228***	.236***	.196*	.214**	.226***	.238***	.219**
	(3.525)	(3.356)	(3.580)	(3.728)	(3.070)	(3.352)	(3.555)	(3.758)	(3.432)
Size	-.610***	-.614***	-.608***	-.606***	-.674***	-.612***	-.602***	-.626***	-.632***
	(-10.367)	(-10.393)	(-10.298)	(-10.287)	(-11.706)	(-10.352)	(-10.263)	(-10.655)	(-10.745)
Dual×Tenure	-.334**	-.334**	-.334**	-.334**	-.334**	-.334**	-.334**	-.334**	-.142**
	(-3.293)	(-3.293)	(-3.294)	(-3.293)	(-3.293)	(-3.293)	(-3.293)	(-3.293)	(-3.293)
F-value	22.953	23.434	25.566	25.212	21.919	21.313	24.130	19.051	18.298
Adjusted R^2	.505	.470	.515	.520	.502	.473	.532	.440	.424
R^2	.721***	.697***	.728***	.731***	.719***	.699***	.739***	.676***	.664***

***p <.001, ** p <.01, *p <.05, [a] TL= total liability ratio, CEOcom = log of CEO owned common stock value (USD),Offcom= log of other officer owned common stock value(USD), Dircom= log of board of director owed common stock value(USD), Block= number of blockholder, Dual= dummy variable assigning '1'= CEO holding chair of board of directors otherwise '0', Tenure= number of years of CEO tenured, BSize= number of board of directors, OutD= number of outside board of directors, Profit= ratio of net profit after taxes to total asset, Size= log of total asset, [b]endogenous variable, [c]Model 2- interaction effect of duality and tenure on total liability ratio

	Model 3 [c] *β* *(t-value)*							
EV[b] / Variable[a]	CEOcom	Offcom	Dircom	Block	Dual	Tenure	Bsize	OutD
CEOcom	.012	.050	.010	.081	.094	.018	.018	.018
	(.280)	(.845)	(.162)	(1.447)	(1.590)	(.297)	(.299)	(.294)
Offcom	.123	.081	.127	.057	.008	.089	.100	.122
	(2.151)	(1.761)	(1.610)	(.672)	(.146)	(1.508)	(1.710)	(1.916)
Dircom	.208**	.224***	.154**	.139*	.233***	.213***	.170**	.259***
	(3.449)	(4.221)	(3.457)	(2.425)	(3.886)	(3.531)	(2.999)	(4.935)
Block	-.221***	-.241***	-.164**	-.168***	-.253***	-.280***	-.223**	-.241***
	(-4.030)	(-4.000)	(-2.856)	(-3.771)	(-4.199)	(-4.750)	(-3.695)	(-4.025)
Dual	.275***	.220***	.289***	.291***	.199***	.173**	.289***	.261***
	(4.746)	(4.014)	(4.820)	(4.846)	(4.481)	(3.159)	(4.854)	(4.350)
Tenure	-.158*	-.138*	-.156*	-.138*	-.119*	-.172***	-.142*	-.229***
	(-2.060)	(-2.591)	(-2.043)	(-2.591)	(-2.186)	(-3.857)	(-2.236)	(-3.814)
Bsize	.175	.144	.063	.160	.017	.155	.083	.077
	(1.863)	(1.547)	(.712)	(1.700)	(.221)	(1.626)	(1.860)	(1.724)
OutD	.179*	.240*	.325***	.210*	.245**	.238*	.303***	.302***
	(2.257)	(2.897)	(3.922)	(2.224)	(2.636)	(2.565)	(5.110)	(5.517)
Profit	.208**	.207**	.219**	.246***	.189**	.189**	.219**	.221**
	(3.260)	(3.155)	(3.341)	(3.792)	(2.875)	(2.884)	(3.357)	(3.391)
Size	-.606***	-.611***	-.604***	-.596***	-.663***	-6.609***	-.595***	-.617***
	(-10.061)	(-10.112)	(-9.987)	(-9.871)	(-11.213)	(-10.074)	(-9.906)	(-10.241)
F-value	24.566	23.566	25.566	26.566	24.576	25.587	24.233	24.434
Adjusted R^2	.493	.487	.515	.492	.490	.490	.489	.489
R^2	.713***	.709***	.728***	.712***	.711***	.714***	.710***	.710***

***p <.001, ** p <.01, *p <.05, [a] LL= long term liability ratio, CEOcom = log of CEO owned common stock value (USD),Offcom= log of other officer owned common stock value(USD), Dircom= log of board of director owed common stock value(USD), Block= number of blockholder, Dual= dummy variable assigning '1'= CEO holding chair of board of directors otherwise '0', Tenure= number of year(s) of CEO tenured, BSize= number of board of directors, OutD= number of outside board of directors, Profit= Ratio of net profit after taxes to total asset, Size= log of total asset, [b]endogenous variable [c]Model 3- main effect the leadership structure attributes on long-term liability ratio

	Model 4 [c]								
	β								
	(t-value)								
EV[b] / Variable[a]	CEOcom	Offcom	Dircom	Block	Dual	Tenure	Bsize	OutD	Dual×Tenure
CEOcom	.010	.039	.006	.042	.108	.017	.015	.015	.017
	(.232)	(.673)	(.104)	(.764)	(1.875)	(.288)	(.244)	(.253)	(.287)
Offcom	.094	.068	.057	.104	.046	.093	.078	.094	.119
	(1.670)	(1.550)	(1.022)	(1.75)	(0.839)	(1.627)	(1.356)	(1.612)	(2.046)
Dircom	.218***	.246***	.161***	.179**	.250***	.218***	.192*	.296***	.208***
	(3.707)	(4.361)	(3.713)	(3.137)	(4.245)	(3.710)	(3.460)	(5.667)	(3.540)
Block	-.125*	-.140*	-.125*	-.096*	-.161*	-.126*	-.128*	-.151*	-.228***
	(-2.102)	(-2.170)	(-2.165)	(-2.023)	(-2.529)	(-1.798)	(-1.979)	(-2.380)	(-3.863)
Dual	.337***	.295***	.353***	.345***	.246***	.343***	.346***	.320***	.270***
	(5.710)	(5.149)	(5.779)	(5.709)	(5.434)	(4.853)	(5.753)	(5.261)	(4.590)
Tenure	-.024	-.034	-.018	-.007	-.161	-.017	-.009	-.026	-.123
	(-.272)	(-.384)	(-.202)	(-.069)	(-1.732)	(-.248)	(-.101)	(-.291)	(-1.916)
Bsize	.120	.096	.002	.111	.139	.144	.057	.071	.175
	(1.290)	(1.046)	(.024)	(1.198)	(1.789)	(1.178)	(1.287)	(.997)	(1.906)
OutD	.250*	.253**	.419***	.276**	.024*	.250*	.344***	.117*	.171*
	(2.607)	(2.641)	(4.934)	(2.938)	(2.155)	(2.596)	(5.843)	(2.605)	(1.801)
Profit	.200**	.199**	.213**	.221**	.178**	.198**	.207**	.222**	.204**
	(3.204)	(3.101)	(3.317)	(3.464)	(2.771)	(3.084)	(3.342)	(3.494)	(3.174)
Size	-.584***	-.588***	-.582***	-.579***	-.655***	-.586***	-.577***	-.600***	-.607***
	(-9.889)	(-9.919)	(-9.806)	(-9.793)	(-11.322)	(-9.862)	(-9.804)	(-10.168)	(-10.291)
Dual×Tenure	-.375***	-.375***	-.375***	-.375***	-.375***	-.375***	-.375***	-.375***	-.160***
	(-3.680)	(-3.680)	(-3.680)	(-3.680)	(-3.680)	(-3.680)	(-3.680)	(-3.680)	(-.3.680)
F-value	22.953	23.434	25.566	25.212	21.919	21.313	24.130	19.051	18.298
Adjusted R^2	.505	.470	.515	.520	.502	.472	.532	.440	.423
R^2	.721***	.697***	.728***	.731***	.719***	.699***	.739***	.676***	.664***

****p* <.001, ** *p* <.01, **p* <.05, [a] LL= long term liability ratio, CEOcom = log of CEO owned common stock value (USD),Offcom= log of other officer owned common stock value(USD), Dircom= log of board of director owed common stock value(USD), Block= number of blockholder, Dual= dummy variable assigning '1'= CEO holding chair of board of directors otherwise '0', Tenure= number of year(s) of CEO tenured, BSize= number of board of directors, OutD= number of outside board of directors, Profit= Ratio of net profit after taxes to total asset, Size= log of total asset, [b]endogenous variable, [c]Model 4 tests interaction effect of duality and tenure on long-term liability ratio

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Table 1

Agency Theory vs. Stewardship Theory

	Agency theory	Stewardship theory
Human nature	Individualistic and self-interested	Collectivistic and pro-organizational
Interest alignment	Interests divergent	Interests congruent
Motivation	Extrinsic	Intrinsic
Incentives	Promotion/financial rewards	Realization, acknowledgment, praise, and reputation
Hierarchy	Institutional	Personal
Management style	External	Bounded self-regulating/discretion

†Adopted and modified from Schillemans (2013)

Table 2

Definition of Variables

	Variable	Definition
Dependent variables	TL	Total liability ratio
	LL	Long-term liability ratio
Fiscal attributes	CEOcom	Log of CEO-owned common stock[a]
	Offcom	Log of other officer-owned common stock[a]
	Dircom	Log of board of directors-owned common stock[a]
	Block	Number of blockholders
Non-fiscal attributes	Dual	Dummy variable assigning '1' = CEO holding chair of board of directors at the same time, otherwise '0.'
	Tenure	Number of tenured years of CEO
	Bsize	Number of directors
	OutD	Number of outside directors
Control variable	Profit	Ratio of net profit after taxes to total assets
	Size	Log of total assets

[a] Log of stock value in USD, adjusted for inflation

Table 3

Descriptive Statistics of Variables[a]

Variable	*Mean*	*Min*	*Max*	*S.D.*	*N*
TL	.356	.02	1.05	.333	268
LL	.280	.02	1.02	.314	268
CEOcom	17.56	1.2	25.8	4.38	268
Offcom	6.32	1.56	17.74	3.27	268
Dircom	26.37	64.76	18.92	5.06	268
Block	1.22	1	7	1.59	268
Tenure	8.44	1	40	5.54	268
Bsize	12.44	5	24	4.59	268
OutD	8.18	1	17	2.91	268
Profit	.0109	- .0628	.0171	.091	268
Size	1,608	29.21	2,776	195	268

	Frequency	
	1	0
Dual	165	103

[a] TL= total liability ratio, LL= long term liability ratio, CEOcom = CEO owned common stock (USD million), Offcom= other officer owned common stock (USD million), Dircom= board of director owed common stock (USD million), Block= number of blockholders, Dual= dummy variable assigning '1'= CEO holding chair of board of directors and the same time otherwise '0', Tenure= number of year(s) of CEO tenure, BSize= number of directors, OutD= number of outside directors, Profit= Ratio of net profit after taxes to total assets, Size= total assets (USD million)

Table 4

Correlations among Variables[a]

	Variable	1	2	3	4	5	6	7	8	9	10	11	12
Capital structure	1.TL	1											
	2.LL	.796**	1										
Fiscal leadership structure attribute	3.CEOcom	-.037	-.050	1									
	4.Offcom	-.060	-.029	.231*	1								
	5.Dircom	.177**	.186	.263*	.407**	1							
	6.Block	-.187**	-.204**	.506*	.120	.292**	1						
Non-fiscal leadership structure attribute	7.Dual	.208**	.198**	.302	-.348**	-.033	.214**	1					
	8.Tenure	-.211**	-.236**	.472**	.082	.272**	.585**	.389**	1				
	9.BSize	.337**	.319**	-.024	-.235**	.009	-.277**	.053	-.226**	1			
	10.OutD	.382**	.370**	.040	-.031	.318**	-.208**	-.031	-.091	.619**	1		
Control variable	11.Profit	.116	.103	.238**	.055	.183	-.139*	-.072	-.014	.489*	.522**	1	
	12.Size	-.308**	-.294**	.098	.123*	.110	-.189	-.237**	-.101	.359**	.342**	.489**	1
	13.Dual×Tenure	-.153*	-.179**	.477**	.003	.235**	.591**	.526**	.681**	-.189*	-.080	-.034	-.237**

*p <.05, **p < .01, [a] TL= total liability ratio, LL= long-term liability ratio, CEOcom = log of CEO owned common stock value (USD),Offcom= log of other officer owned common stock value(USD), Dircom= log of board of director owed common stock value(USD), Block= number of blockholder, Dual= dummy variable assigning '1'= CEO holding chair of board of directors and the same time otherwise '0', Tenure= number of year(s) of CEO tenured, BSize= number of board of directors, OutD= number of outside board of directors, Profit= Ratio of net profit after taxes to total asset, Size= log of total assets

Table 5

Main & Moderation Effect on Capital Structure[a]

	Model 1			Model 2		Model 3			Model 4		
	Variable	*β*	*t-Value*	*β*	*t-Value*	*β*	*t-Value*	*VIF*[b]	*β*	*t-Value*	*VIF*[c]
Fiscal leadership structure attribute	CEOcom	.033	.558	.024	.408	.023	.389	1.898	.014	.232	1.913
	Offcom	.064	1.119	.060	1.025	.095	1.663	1.751	.091	1.550	1.811
	Dircom	.218	3.759***	.212	3.603***	.226	3.871***	1.842	.219	3.713***	1.844
	Block	-.136	-2.195*	-.128	-1.982*	-.141	-2.276*	2.077	-.131	-2.023*	2.218
Non-fiscal leadership structure attribute	Dual	.252	4.496***	.298	4.886***	.280	4.974***	1.710	.333	5.434***	1.995
	Tenure	-.156	-2.043*	-.021	-.228	-.126	-2.323*	1.942	-.022	-.248	3.345
	Bsize	.144	1.565	.150	1.615	.115	1.242	3.598	.120	1.287	3.599
	OutD	.233	2.503*	.243	2.544*	.237	2.544**	3.690	.249	2.605**	3.864
Control variable	Profit	.219	3.458**	.213	3.327**	.204	3.195**	2.184	.196	3.057**	2.190
	Size	-.614	-10.496***	-.612	-10.262***	-.588	-10.007***	1.856	-.586	-9.982***	3.599
Interaction	Dual×Tenure			-.334	-3.293**				-.375	-3.680***	4.516
	Adjusted R^2 = .513 R = .727***			Adjusted R^2 = .523 R = .733***		Adjusted R^2 = .510 R = .724***			Adjusted R^2 = .520 R = .731***		

***p <.001, ** p <.01, *p <.05, [a] CEOcom = log of CEO owned common stock (USD),Offcom= log of other officer owned common stock (USD), Dircom= log of board of director owed common stock (USD), Block= number of blockholders, Dual= dummy variable assigning '1'= CEO holding chair of board of directors at the same time otherwise '0', Tenure= number of year(s) of CEO tenure, BSize= number of directors, OutD= number of outside directors, Profit= ratio of net profit after taxes to total assets, Size= log of total assets , [b]Model 1 and 3 VIF, [c]Model 2 and 4 VIF, †Model summary- Model 1 (without interaction) &2 (with interaction)- the leadership structure attributes on total liability ratio, Model 3(without interaction) & 4(with interaction) - the leadership structure attributes on long-term liability ratio.

Table 6

2SLS Endogeneity Analysis (Model 1)

	Model 1[c] *β* *(t-value)*							
EV[b] / Variable[a]	CEOcom	Offcom	Dircom	Block	Dual	Tenure	Bsize	OutD
CEOcom	.020	.051	.020	.065	.096	.004	.029	.028
	(.449)	(.865)	(.333)	(1.169)	(1.642)	(.067)	(.470)	(.464)
Offcom	.092	.063	.112	.106	.015	.058	.063	.087
	(1.617)	(1.438)	(1.933)	(1.818)	(-.274)	(.996)	(1.095)	(1.478)
Dircom	.201**	.227***	.149**	.137*	.225***	.206**	.158**	.254***
	(3.371)	(3.975)	(3.384)	(2.412)	(3.774)	(3.451)	(2.833)	(4.876)
Block	-.203***	-.233***	-.153**	-.158***	-.236***	-.260***	-.209**	-.228***
	(-3.735)	(-3.745)	(-2.674)	(-3.576)	(-3.963)	(-4.459)	(-3.487)	(-3.833)
Dual	.250***	.206***	.261***	.262***	.179***	.156**	.263***	.233***
	(4.351)	(3.801)	(4.385)	(4.400)	(4.054)	(2.872)	(4.467)	(3.833)
Tenure	-.156*	-.171*	-.210**	-.142*	-.196*	-.152**	-.125*	-.203*
	(-2.043)	(-2.285)	(-3.525)	(-2.236)	(-2.595)	(-3.460)	(-2.165)	(-3.416)
Bsize	.069	.084	.090	.180	.032	.058	.057	.070
	(.964)	(.248)	(1.029)	(1.876)	(.542)	(.911)	(.985)	(1.093)
OutD	.188*	.185*	.323***	.210*	.234**	.258**	.324***	.328***
	(1.870)	(1.866)	(3.930)	(2.242)	(2.425)	(2.679)	(5.521)	(5.649)
Profit	.226***	.222**	.234***	.259***	.206**	.207**	.237***	.236***
	(3.578)	(3.409)	(3.606)	(4.031)	(3.165)	(3.176)	(3.662)	(3.669)
Size	-.629***	-.634***	-.628***	-.621***	-.682***	-6.33***	-.618***	-.641***
	(-10.545)	(-10.592)	(-10.485)	(-10.378)	(-11.631)	(-10.568)	(-10.376)	(-10.743)
F-value	24.566	23.566	25.566	26.566	24.576	25.587	24.233	24.233
Adjusted R^2	.493	.487	.515	.492	.490	.495	.489	.489
R^2	.713***	.709***	.728***	.712***	.711***	.714***	.710***	.710***

***p <.001, ** p <.01, *p <.05, [a] TL= total liability ratio, CEOcom = log of CEO owned common stock (USD),Offcom= log of other officer owned common stock (USD), Dircom= log of board of director owed common stock (USD), Block= number of blockholders, Dual= dummy variable assigning '1'= CEO holding chair of board of directors at the same time otherwise '0', Tenure= number of year(s) of CEO tenure, BSize= number of directors, OutD= number of outside directors, Profit= Ratio of net profit after taxes to total assets, Size= log of total assets, [b]endogenous variable, [c]Model 1- main effect of the leadership structure attributes on total liability ratio

Table 7

Analyses Results

Category	Theory	Hypothesis	Support/ reject
Fiscal leadership structure attributes	Agency	AH_1: Fiscal leadership structure attributes (*e.g.,* insider incentives and blockholders) have a significant influence on the capital structure of U.S. lodging firms.	Support (†Dircom+)
		AH_{1a}: Insider incentives (e.g., CEO, officer, and director common stock incentives) have a significant negative influence on the level of liabilities in the capital structure of U.S. lodging firms.	Reject
		AH_{1b}: The number of blockholders has a significant positive influence on the level of liabilities in the capital structure of U.S. lodging firms.	Reject (†Block-)
	Stewardship	SH_1: The fiscal leadership structure attributes (insider incentives and blockholders) have no significant influence on the capital structure of the U.S. lodging firms.	Reject
Non-fiscal leadership structure attributes	Agency	AH_2: Among non-fiscal leadership structure attributes, board size and the number of outside directors have significant negative influences on the financial leverage of the U.S. lodging firms.	Reject
	Stewardship	SH_2: Among non-fiscal leadership structure attributes, CEO duality and tenure have significant negative influences on the financial leverage of the U.S. lodging firms.	Support (†Dual+/ Tenure-)
	Moderation	SH_3: The significant negative relationship between CEO tenure and financial leverage is stronger among those who hold dual positions.	Support

† '+' indicates positive influence on the capital structure, '-' indicates negative influence on the capital structure