

Merger and Acquisition Targets: The Role of Moral Hazard and Acquiring Firm Executive Compensation

William A. Kline

Assistant Professor of Management

Pennsylvania State University—Harrisburg
wak14@psu.edu

Richard S. Brown

Assistant Professor of Management

Pennsylvania State University—Harrisburg
rsb24@psu.edu

Incentive structures have been a prevalent topic in the Management literature over the past decades as researchers have attempted to predict managerial discretion and outcomes as a function of compensation design. Most of this work has sat atop an agency platform (Jensen and Meckling, 1976; Fama and Jensen, 1983; Eisenhardt, 1989) with scholars arguing that incentive mechanisms induce agents to reach for goals that converge to, or at least approximate, those of the firm's shareholders. Considering that agents (i.e., managers) tend toward risk-aversion as a result of their wealth being tied to the health of the organization (Wiseman and Gomez-Mejia, 1998; Hill and Snell, 1989; Ashley and Yang, 2004), agency research predicts that fixed compensation will produce risk-averse managerial behavior while variable compensation will produce the opposite (Ji and Oh, 2014). Accordingly, research in this domain tends to examine how different types of incentives will most likely foster principal-agent goal alignment.

The root cause of this behavioral variance lies in the moral hazard issue (Holmstrom, 1979). Moral hazard is a problem related to an interparty information asymmetry whereby one party to a transaction has crucial private information (agent) that the other side (principal) needs in order to contract optimally (Brown, 2014). In the case of top management teams, managers possess private information on two dimensions. First, managers have more knowledge concerning the day-to-day operations of the firm. In a sense, managers are on the front line of commerce and have a more acute feel for the firm's actual financial position, future potential growth, company morale and the like. Secondly, managers have private information concerning their individual effort exertion (i.e., effort policy). Moral hazard exists when an agent's effort is not observable and, therefore, the agent needs external inducements in order to catalyze additional marginal effort with respect to some firm goal (Lazear, 2005).

While agency theory applied to mergers and acquisitions is not an entirely new line of research (Jensen, 1986; Shleifer and Vishny, 1991; Devine *et al.*, 2016), this paper will attempt to answer the following research question, which has not, to date, been adequately addressed. Does the form of executive pay lead to the acquisition of firms with a specific set of attributes? In other words, does salary lead to the acquisition of less risky firms (i.e., larger, established firms)? Does option-based pay lead to the acquisition of riskier firms (i.e., smaller, start-up type firms)? These research questions form the basis of this work.

The main theoretical contribution of this paper stems from extending agency logic to the study of pay and target firm attributes. A considerable body of work has already focused on the linkage between compensation packages and firm risk. For example, Chen *et al.* (2006) and Wright *et al.* (2007) studied the relationship between option-based pay and overall firm risk, while others have focused on how managers allocate resources to high-risk (i.e., R&D) versus low-risk (i.e., capital projects) alternatives (Coles *et al.*, 2006). This study contributes to this vein of research by examining compensation and target characteristics, specifically, target age and target size. Research supports the assertion that larger firms are less risky than smaller firms and that established firms are less risky than start-ups. Given these relationships, this paper adds to both the agency theory and mergers and acquisitions literature.

This paper is structured as follows. The following sections will address the theory and hypotheses involved, the data, methodology, and results. Finally, there will be sections dedicated to a discussion of results, limitations, and then a conclusion.

Literature Review

Agency Theory (Berle and Means, 1932; Jensen and Meckling, 1976) asserts that agents who bear the risk within some contractual relationship must be externally induced to exert the needed effort to complete some stated task. Furthermore, if the task that is delegated from the principal to the agent is not highly programmable, then the agent's risk lies in the fact that his or her effort may not be a significant determinant of the desired outcome (Eisenhardt, 1989). In the case of high-level managers, the goals of the corporation are typically noisy and, therefore, subject to causal ambiguity (Barney, 1991). In this case, giving managers a fixed salary may lead to high risk-aversion resulting from the fear of the manager losing his or her wealth, which is tied to the firm (Amihud and Lev, 1981; May, 1995). Since the shareholders (principals) cannot observe the true effort of the manager (agent), the moral hazard issue results in the need for a planned mechanism to induce extra effort.

Two standard approaches for this problem are proposed in the agency literature—monitoring and incentives. While monitoring may suffice when task programmability is low (Eisenhardt, 1989), the case of top managers seldom falls into this category. Incentives, therefore, are the mainstay in attempting to solve the issue of moral hazard. The logic is that incentives, especially variable incentives, align the preferences of shareholders and the manager. This alignment means that both parties should want to make financially optimal decisions for the firm; however, it is important to understand that, according to theory, the manager is still making self-interested decisions that may not coincide with that of shareholders.

Firms vary in the way they allocate compensation for corporate executives. Since salary alone is assumed to encourage agent risk aversion, firms often allocate

compensation to other forms of pay such as bonuses and option-based incentives. Bonuses tend to be structured, so the management team receives additional compensation when firm-based financial performance targets are reached, the most common performance targets being quarterly or annual return on assets (ROA) or return on equity (ROE). Theoretically, this should align principal-agent goals since both the management team and the shareholders mutually benefit (Carter *et al.*, 2009). Prior research indicates that bonuses are linked to earnings stability or persistence (Ashley and Yang, 2004). Compensation packages may also include option-based incentives, which for publicly-traded firms generally approximate thirty percent of total compensation (Balsam, 2007). Agency theorists contend that the asymmetric return profile of options provides the needed incentive to really align the return preferences between managers and shareholders (Anderson *et al.*, 2003). When given options contracts, executives can receive windfall payments if things go well, but avoid some downside risk if the firm underperforms, thus providing strong incentives for riskier strategic decisions.

While the underlying assumptions of agency theory are well documented in the literature, recent work has challenged whether or not option-based incentives create positive outcomes for shareholders. For example, recent research shows a link between option-based pay and firm variance (a common risk measure), but there is no consensus on the direction of such variance (Kline *et al.*, 2017). Supporting this notion, Sanders and Hambrick noted that options lead executives to “swing for the fences.” (2007: 1061) They found that CEO stock options increase goal alignment with shareholders, but that there was a propensity for large losses as opposed to large gains. As a result of these findings, scholars have argued that a contingency theory of incentive alignment may be warranted (Steinbach *et al.*, 2017).

Regarding international mergers and acquisitions (M&A), acquiring firms face choices as to the riskiness of target firms (Butler and Sauska, 2014). Since larger firms are more stable and likely more established, managers will be able to make more predictable assumptions about the activities and outcomes of these firms. Conversely, when target firms are small and young, there is a considerable amount of uncertainty about firm performance and survival (Daspit *et al.*, 2014). Therefore, Agency Theory predicts that without incentives (i.e., only salary and bonus pay), managers will remain risk-averse and will select firms that have less risky attributes (i.e., older, larger acquisition targets). However, if given option-based compensation, managers will be incentivized to target firms with riskier attributes (i.e., smaller, younger acquisition targets).

Hypothesis Development

Target firm size, risk, and compensation

As theory predicts, certain incentive structures lead to more or less risk-averse decisions by managers (Jensen and Meckling, 1976). In mergers and acquisitions, there are a number of variables that can be used to determine the riskiness of the transaction. One key variable is firm size. Firm size has been shown to be correlated with stability in the management literature since having economies of scale also induces processes and procedures that are meant to stabilize such scale. For example, as firms grow, they tend to become more hierarchical. This hierarchy leads to different layers of management codifying rules and procedures meant to keep its scale intact (Blau, 1968). The literature

assumes, and evidence supports, the notion that smaller firms are more flexible while larger firms are more rigid (Gong *et al.*, 2013). A derivative of this assumption is that the variance in outcomes at more flexible firms (i.e., smaller) is less known and more volatile. If this assumption holds, then the distribution of outcomes leads to less predictability and more risk.

In the management literature, size has been shown to have an inverse relationship with risk. In a study of large firms and SMEs in the United States, Arend (2014) finds that dynamic capabilities are used more optimally by larger firms due to larger firms having more absorptive capacity from their history of operations. Revilla and Fernandez (2013) likewise found that small firms are more able to change in technologically dynamic environments because they lack the inertial qualities more prevalent in larger firms. These newer works add credence to more established literature that associates larger firms with being more risk-averse. In a case study of Smith Corona Typewriters, Danneels (2010) puts forth evidence that the once market-leading firm failed as it became too large to stave off corporate rigidities. In another case study of Polaroid, Tripsas and Gavetti (2000) describe how the once iconic brand consistently made decisions based off of the perceived certainty of past successes, eventually leading it toward failure. These rigidity arguments (Leonard-Barton, 1992) exemplify a corporate culture, due at least partially to size, that stopped taking the risks the firms needed originally to be industry leaders.

During the M&A process, acquirers may look toward firm size in order to assess the riskiness of the transaction. While acquiring a large firm may yield more predictable returns, acquiring small firms may prove both riskier and more lucrative. The agency costs borne by the firm in this instance are those that revolve around how executives are compensated in the context of making important decisions (i.e., acquisition decisions). Empirical results point to the relationship between incentive structures and risk propensity. Sanders and Hambrick (2007) argue that stock options lead executives to make high-variance bets, a notion corroborated by others (Cohen *et al.*, 2000; Rajgopal and Shevlin, 2002). Coles *et al.* (2006) found evidence that executives compensated heavily with options allocated resources toward more risky parts of the firm (i.e., R&D). Tufano (1996) found evidence of a relationship between options pay and decreased hedging activities, thereby putting the firm in a riskier position in order to reap rewards from risky bets. Specifically relevant to this paper, Datta *et al.* (2001) documented a positive relationship between equity compensation and firm risk-taking through acquisitions. Therefore, if compensation is based primarily on options, theorists would expect managers to acquire firms that are riskier, in this case firms that are smaller. Conversely, if compensation is more fixed (non-variable), theory and evidence predict that acquiring firm managers would become more risk-averse, in this case acquiring firms that are larger. The following relationships are proposed:

- H1A - TMT salary will be positively associated with the size of the target firm.
- H1B - TMT bonus will be positively associated with the size of the target firm.
- H1C - TMT option-based compensation will be negatively associated with the size of the target firm.

Figure I and Figure II illustrate the hypotheses in this paper, as well as the linkage between managerial compensation, risk aversion, and acquisition target characteristics.

Figure I
Hypothesized Relationships

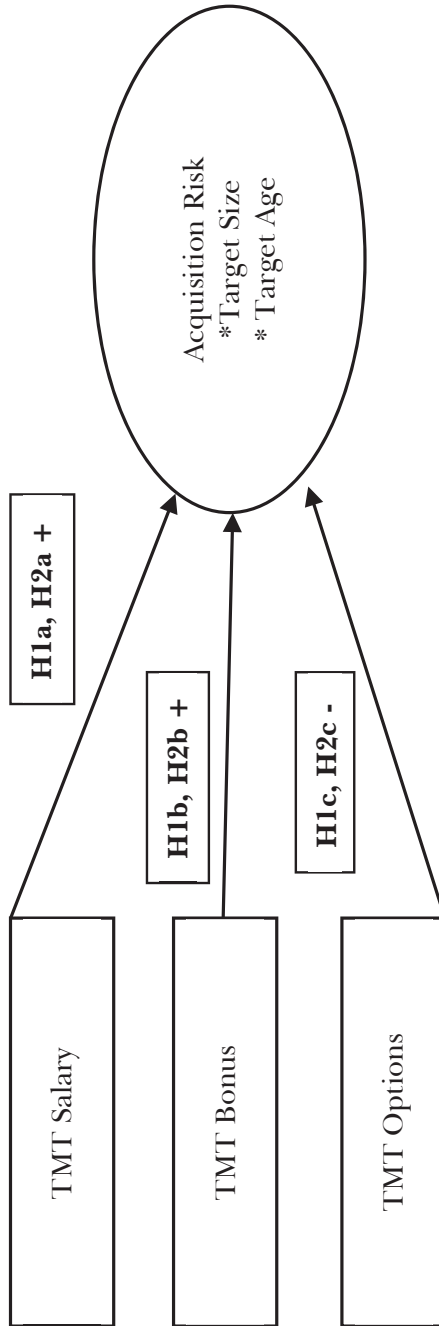
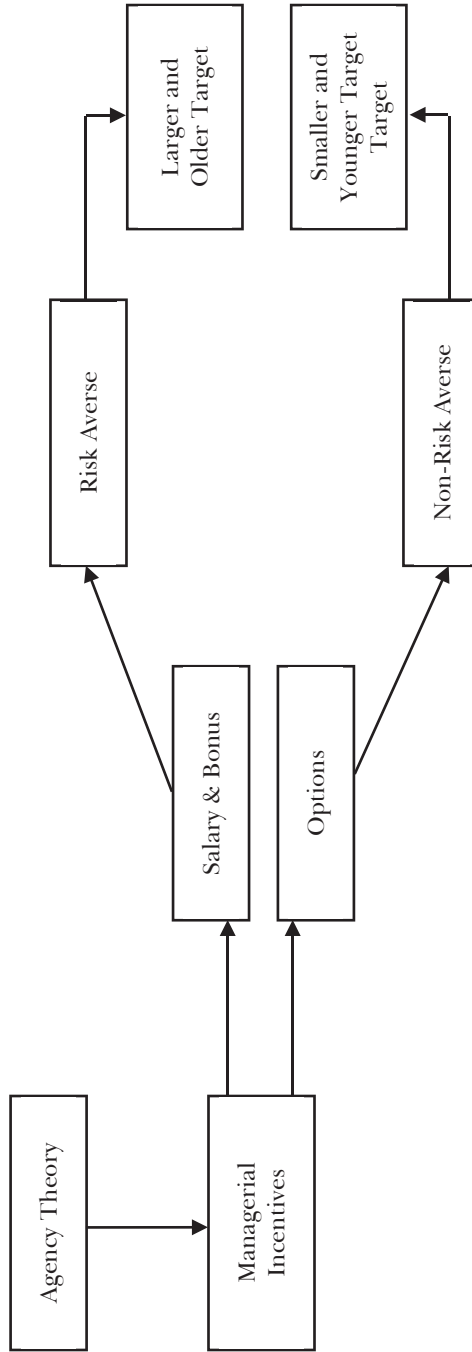


Figure II
Agency Theory and Acquisitions Theoretical and Empirical Link



Target firm age, risk, and compensation

Following the same logic set forth in the first set of hypotheses, the authors also propose that firm age is a proxy for risk. Managers seeking acquisition targets that are young are, in essence, taking a bet since there is limited information on the history of the firm. This “liability of newness” (Stinchcombe, 1965) makes the variance in outcomes of such an acquisition inherently risky and, as proposed before, it is expected that managers who are compensated with options are more apt to acquire younger, more risky firms. There is empirical evidence that firm age is associated with risk. Hamilton (2012) found that small firms grew at a less predictable path relative to large firms in a sample of New Zealand firms. In a sample of 676 businesses, Withers *et al.* (2011) found that smaller firms were less stable than their larger counterparts in leveraging their technological capabilities. Finally, Kotha *et al.* (2011) found evidence that technological output is greater in older firms, but the variance of output is greater in young firms. To parallel the arguments made with respect to firm size, as managers are compensated with a greater amount of options, they are incentivized to take riskier actions in order to see returns to their variable compensation. Acquisition targets that are younger give acquiring firm managers a varied set of potential outcomes and, therefore, it is proposed that they will be more prone to acquire smaller firms as compensation moves away from fixed sums and toward variable forms (i.e., options). Conversely, if managers are compensated with fixed items such as salaries and bonuses, the opposite should occur since these types of incentive structures induce risk-aversion. The following relationships are proposed:

- H2A - TMT salary will be positively associated with the age of the target firm.
- H2B - TMT bonus will be positively associated with the age of the target firm.
- H2C - TMT option-based compensation will be negatively associated with the age of the target firm.

Data and Methodology

In this study, transaction data were drawn from the Capital IQ (a division of Standard & Poor's) transactions database, which provides detailed reports on both mergers and financing activities. The initial sample of completed transactions was narrowed by eliminating observations where the variables in question were unavailable for the key focal acquirer or target. Firm-level financial data were retrieved from the Compustat Database and executive compensation measures were taken from the Execucomp Database. As such, the sample consists of, depending on the model, between 181 and 275 transactions over the seventeen-year period from 1994 through 2010. This data range reflects limitations in data availability, which was influenced by database access (budgetary constraints) and available transactions data in the Capital IQ transactions database in the data-gathering phase of this study.

Variable Definitions

Dependent Variable: Two dependent variables were tested in this study. To test the first set of hypotheses, target firm size was used. Target firm size was measured as the natural logarithm of the target firm's revenue in the year of acquisition. The logged version of this dependent variable was used due to the wide dispersion in the values of firm size in the sample. In order to test the second set of hypotheses, target firm age was

utilized. Target firm age was measured as the natural logarithm of the target firm's age in the year of acquisition. The logic behind using the logged measure is identical to that of target firm size.

Independent Variables: Since there are three components to each of the two tested hypotheses, there are three independent variables of interest: Salary, Bonus and Option Value. Consistent with prior literature, salary, bonus, and option value data were gathered from the Compustat Executive Compensation database. Salary and bonuses were measured in dollars in the year prior to the transaction, while the Black and Scholes (1973) option pricing model was utilized to estimate option values.

Control Variables: To control for industry-specific differences, two-digit SIC codes were included in the models (Burns and Kedia, 2008). Additionally, since data were pooled over a seventeen-year period, dummy variables were created for each year in order to control for Time Period (1994 was the reference year). The Gompers Governance Index was included since researchers have found that the relative quality of corporate governance has an impact on firm performance and earnings (Gompers *et al.*, 2003; Cornett *et al.*, 2008).

Established entry mode antecedents were controlled to examine the role that pay mix plays in acquisition decision-making. More specifically, the empirical models controlled for asset specificity (Williamson, 1985), which was measured as R&D as a percentage of sales (R&D/sales) in the year prior to each transaction. Consistent with prior research, specifically Chari and Chang (2009) and Chari *et al.* (2007), missing R&D data were replaced with zero values. Acquisition experience, which often serves as a proxy for internal uncertainty (Zhao *et al.*, 2004), was measured as the number of acquisitions over the three years prior to the date of the transaction. Finally, the models were controlled for external uncertainty, which consisted of measures for country risk and target market potential. Country risk premium estimates controlled for country risk and were estimated by calculating the yield differential between sovereign debt of each country of study versus the United States Treasury securities (Damodaran, 2003). Target market potential was estimated by calculating the three-year average GDP per capita during the three-year period prior to the transaction (Chari and Chang, 2009).

Methodologically, linear hierarchical regression in STATA was utilized with the following model and specification:

$$Y = \beta'X + \varphi'W + \varepsilon \quad (1)$$

Where Y is the natural log of the target firm's revenues, $\beta'X$ is a vector of regression coefficients and explanatory variables, $\varphi'W$ is a vector of regression coefficients and control variables and ε is the residual term which is assumed to be distributed normally with mean zero and variance 1 (i.e., $N(0,1)$).

Results

Table 1 reports the descriptive statistics and correlation coefficients in this study.

Table 1
Descriptive Statistics and Correlation Coefficients of Variables in the Study ^{A, B}

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1 Acquisition Target Size	4.13	1.96	1									
2 Acquisition Target Age	3.78	0.90	0.20**	1								
3 Compers Index	9.83	2.55	-0.05	0.05	1							
4 Acquisition Experience	0.39	1.16	0.04	0.02	0.15**	1						
5 GDP (3-year average)	2.05	1.04	-0.02	-0.01	0.07	0.07	1					
6 Asset Specificity	0.06	0.21	-0.17**	0.00	-0.12*	-0.02	-0.12**	1				
7 Common Stock Ownership	4.50	5.20	0.30**	0.03	-0.02	0.25**	0.14	0.06	1			
8 Salary	7.68	0.43	0.37**	0.07	0.05	0.20**	-0.01	-0.15**	0.58**	1		
9 Bonus	7.11	1.48	0.25**	-0.02	-0.02	0.17**	0.02	-0.08	0.27*	0.45**	1	
10 Option Value	8.03	1.44	0.24**	0.02	-0.07	0.18**	-0.03	-0.07	0.00	0.52**	0.38**	1

^A p<0.05 *, p<0.01 **

^B Common stock ownership, salary, bonuses, and option values are in millions of dollars. Target size represents the log of firm revenue and target age is the log of the years of operation. The Compers index was a count index based on 24 corporate governance variables. All other variables were percentages.

Table 2
The Relationship Between Forms of Pay and Acquisition Target Characteristics ^A

	Model 1	Model 2	Model 3	Model 4	Model 5
	Dependent Variable: Acquisition Target Size				
Compers Index	-0.142**	-0.009**	-0.100**	-0.144**	-0.142**
Acquisition Experience	0.064	-0.099	-0.042	-0.008	0.064
GDP (3-year average)	-0.139	0.021	0.025	0.047	-0.139
Asset Specificity	-3.698**	-2.440*	-3.560**	-4.050**	-3.698**
TMT Common Stock Ownership	0.075***	0.036	0.096	0.047	0.075***
SIC	Included	Included	Included	Included	Included
Year	Included	Included	Included	Included	Included
Salary (in \$)		1.8890***			1.2230**
Bonus (in \$)			0.238***		0.2300*
Option Value (in \$)				0.279**	0.1230
F-Value	1.610**	2.740***	2.220***	1.590**	2.290***
R-Square	0.306	0.367	0.354	0.317	0.402
Adjusted R-Square	0.113	0.233	0.195	0.118	0.227
Change in R-Square		0.061***	0.048***	0.011***	0.096***
	N = 275	N = 275	N = 238	N = 187	N = 181

^A p<0.10 *, p<0.05 **, p<0.01 ***

Table 3
The Relationship between Forms of Pay and Acquisition Target Characteristics ^A

	Model 1	Model 2	Model 3	Model 4	Model 5
	Dependent Variable: Acquisition Target Age				
Compers Index	0.023	0.023	0.027	0.027	0.028
Acquisition Experience	-0.067	-0.084	-0.023	-0.023	-0.025
GDP (3-year average)	-0.366	-0.338	-0.399	-0.399	-0.398
Asset Specificity	0.205	0.284	0.054	0.054	0.058
TMT Common Stock Ownership	-0.001	-0.011	-0.134	-0.134	-0.012
SIC	Included	Included	Included	Included	Included
Year	Included	Included	Included	Included	Included
Salary (in \$)		0.000			0.000
Bonus (in \$)			0.002		0.088
Option Value (in \$)				0.088	0.000
F-Value	0.860	0.870	0.310	0.980	0.580
R-Square	0.151	0.157	0.152	0.222	0.221
Adjusted R-Square	-0.025	-0.022	-0.028	-0.005	-0.019
Change in R-Square	NMF	0.006	0.001	0.071	0.070
	N = 275	N = 275	N = 275	N = 187	N = 187

^A p<0.10 *, p<0.05 **, p<0.01 ***

Table 2 reports the results from the hierarchical regression performed in STATA with the Dependent Variable as Target Size (measured by log revenues). Model 1 is the control-only model resulting in an R-squared value of 0.306. To capture the marginal differences resulting from the explanatory variables, Models 2, 3, and 4 include one explanatory variable separately in addition to the control variables from Model 1. Model 2 includes managerial salary as an independent variable. In Model 2, the coefficient on salary is 1.889 and is highly significant ($p=0.000$). As predicted in Hypothesis 1A, salary is positively associated with risk aversion. Since this was measured as a log-level estimation, the interpretation of Model 2 is $\% \Delta Y = (e^{B1}-1)$ or $\% \Delta Y = (e^{1.889}-1)$, which equals 5.61. Therefore, for every \$1,000 increase in salary, the size of the target firm acquired increases by 5.61%. Therefore, Hypothesis 1A is supported, as managers compensated with non-variable pay seek risk averse acquisitions.

Model 3 also includes a fixed compensation component—Bonus—which is also positive and significant lending support to Hypothesis 1B ($B=0.238$, $p=0.000$). In this case, for every \$1,000 in additional bonus, managers acquire firms that are 0.27% larger. Therefore, Hypothesis 1B has support. Model 4 includes a variable compensation component, namely option value. Hypothesis 1C predicts a negative coefficient, which would have the opposite logic as Hypotheses 1A and 1B. In the case of option values, theory would predict that as options increase, managers would tend toward riskier decision-making. In this analysis, this is interpreted as tending toward smaller firms. However, while the coefficient is significant, it has the opposite sign as that predicted ($B=0.279$, $p=0.033$). Possible explanations for this are offered in the Discussion section. Model 5 includes all explanatory variables simultaneously. The results from Model 5 add credence to the findings on Hypotheses 1A and 1B. However, the options value was insignificant in Model 5.

Other important findings include an increase in R-squared above that of the control-only model in Models 2, 3, and 4 with Model 2 (Salary) having the largest marginal effect. Model 5 includes all of the explanatory variables simultaneously. While this model has more predictive power, the inclusion of all variables leads the option value coefficient to be not significantly different than zero. Finally, regressions for Hypotheses 2A, 2B, and 2C were calculated in STATA. In this set of regressions, the dependent variable was the age of the target firm in lieu of the size of the target firm. All of the independent variables (Salary, Bonus, and Options) tested were not significant. Therefore, there is no empirical support for any of the hypotheses (2A, 2B, or 2C) that addressed firm age as the dependent variable.

Discussion

The objective of this paper was to examine the relationship between executive compensation and target firm characteristics (target size and age). Support was found for Hypothesis 1A and 1B, which tested the relationship between TMT salary and bonus and target firm size. These findings are consistent with the existing literature in the agency theory domain and support the assertions that fixed payments encourage managerial tendencies to favor lower risk acquisitions, specifically those involving larger firms. This provides support for empirical evidence related to empire building, risk management (Hill and Snell, 1989), and cash flow stabilization (Ashley and Yang, 2004), as well as those theorists and practitioners calling for more research devoted to top management team compensation. The general consensus among researchers is that

compensation committees should include incentive-based pay in order to foster more goal alignment with shareholder preferences, but additional research is needed to identify optimal pay allocation schemes across a wide range of industries.

In Hypothesis 1C, the option variable was statistically significant, but the sign was the opposite of what was predicted. It is possible that the option positions of the executives in this study are significantly “in the money,” which theory predicts would encourage risk aversion. This logic is drawn from prospect theory, which asserts that when executives accumulate wealth through options, they may experience loss aversion. Loss aversion is a behavioral bias that surfaces when a market participant views anything below a hypothetical gain position (i.e., gains in stock option value) as a loss (Tversky and Kahneman, 1991), and subsequently exhibits risk-averse behavior. In previous work, Brisley (2006) demonstrated that deep-in-the-money options lead to risk-averse behavior since executives seek to protect the wealth accumulation that is theoretically in their hands. This suggests that in future studies researchers should examine executive option values in relation to reference points. By combining prospect theory and agency theory, and taking a more nuanced approach in measuring and categorizing TMT option values, researchers may be able to support these findings.

These results also present the possibility that the acquisition decision reflects a different perspective than what was presented in the hypothesis development. For example, the authors built upon the literature showing larger firms carry less risk due to more stability in operations. However, from the perspective of a potential acquiring management team, a large established firm may be viewed as the riskier alternative since it will require a larger upfront resource commitment. In addition, large firms are more complex and less transparent than smaller firms, thus giving the selling TMT team an information advantage during the transaction process. This could potentially lead to a higher acquisition premium, and thus, it could be viewed as the riskier alternative. In short, there are a number of factors that potentially offset one another.

Limitations

Three limitations are noted in this paper. First, the sample of acquisitions was drawn from the Capital IQ acquisitions database, which potentially limits the empirical findings due to target firm size and survivorship bias. In general, this database covers larger, more capitalized firms and deals that are material enough to require disclosure under Securities and Exchange Commission (SEC) financial reporting requirements. Deals incorporating larger firms typically encounter a host of issues/costs that may not be as acute in smaller firm deals such as incompatibilities in acquirer-acquiree systems, organizational cultures, or human resource management practices. These differences influence the riskiness of potential deals and may differ significantly from deals with smaller target firms. The Capital IQ database also only captures formalized offer data from completed deals, which reflects information about targets that survived the evaluation process. This neglects data about the many firms in the deal universe that have been eliminated during acquirer due diligence efforts. As such, consistent with most academic studies, this study suffers from survivorship bias. Integrating managerial surveys or detailed case studies into this research stream would greatly contribute to the understanding of managerial logic in this space. This would help researchers quantify the deal factors that influenced the final deal decision, but it could also shed light on how managerial perceptions evolved during the deal process as well.

Second, the focus of this study was on only target risk factors such as age and size. However, there are many target characteristics that could potentially influence the acquisition decision. Numerous factors could offset the focal risk factors such as high potential growth, firm profitability, relatedness or synergies to/existing acquirer portfolios. Collectively, many of these factors are captured in the literature examining corporate strategy, specifically as it relates to the firm's level of industrial diversification. Industrial diversification captures the degree at which firm operations cross various business lines and industries (Davis *et al.*, 1994) and influences risk perception in the minds of key decision-makers. It is likely that executives view unrelated acquisitions as riskier than related ones. As such, more refined variables, which reflect the relatedness between acquirer-acquiree nodes would be a significant contribution to the field. In addition, integrating slack variables such as available, recoverable, and potential slack, which reflect the resources that are accessible to the firm (Cyert and March, 1963; Bougeois and Singh, 1983) could be fruitful. Again, similar to relatedness, the level of slack for the acquirer, as well as potential competitors, could influence an executive's perceived risk of an acquisition. For example, Uhlenbruck *et al.* (2017) find that a rival's slack influences the competitive response to an acquisition. This should also influence an acquirer's risk perception of a potential deal.

Third, there is a limitation in the measurement of stock options in that in-the-money or out-of-the-money positions were not calculated (i.e., measured reference points). This is a limitation as the direction and magnitude of option positions may influence risk preferences toward M&A. In a study of deep in-the-money options, Brisley (2006) found that options can lead to risk aversion in project selection. Devers *et al.* (2008) also found that options positions (in-the-money versus out-of-the-money) influenced TMT decisions. This evidence supports prospect theory, which asserts that the likelihood of future gains or losses influences risk aversion (Kahneman and Tversky, 1979; Tversky and Wakker, 1995). In short, if executives believe a future payment is highly probable they may become risk-averse. Again, future research in this area may be valuable as well.

Including target firm projections would allow researchers to examine many of these important deal factors noted above. Scholars could then further refine antecedents to M&A activity and success, while also integrating risk-adjusted measures in their analysis. Again, managerial surveys or detailed case studies could help to overcome these limitations as well.

Conclusion

For practicing managers, the findings suggest that the due diligence period of the M&A process is crucial in understanding the riskiness of potential target firms (Morrison *et al.*, 2008). Individuals that are employed in acquisition-related positions should take into account a multitude of factors in attempting to determine the riskiness of acquisitions. Key risk factors should potentially include the focal variables of target age and size, as well as other established factors that are firm-specific and/or industry-specific. Furthermore, board members and, specifically, those on the compensation committees should consider how pay allocation can shift managerial preferences with respect to risk, return, and project acceptance.

References

- Amihud, Y., and B. Lev. 1981. "Risk Reduction as a Managerial Motive for Conglomerate Mergers." *Bell Journal of Economics* 12(2): 605-617.
- Anderson, R., S. Mansi, and D. Reeb. 2003. "Founding Family Ownership and the Agency Cost of Debt." *Journal of Financial Economics* 68(2): 263-285.
- Arend, R. 2014. "Entrepreneurship and Dynamic Capabilities: How Firm Age and Size Affect the Capability Enhancement-SME Performance Relationship." *Small Business Economics* 42(1): 33-57.
- Ashley, A., and S. Yang. 2004. "Executive Compensation and Earnings Persistence." *Journal of Business Ethics* 50(4): 369-382.
- Balsam, S. 2007. *Executive Compensation: An Introduction to Theory and Practice*. New York: WorldatWork Press.
- Barney, J. 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 7(1): 99-120.
- Berle, A., and G. Means. 1932. *The Modern Corporation and Private Property*. New York: Harcourt, Brace and World.
- Black, F., and M. Scholes. 1973. "Pricing of Options and Corporate Liabilities." *Journal of Political Economy* 81(3): 637-654.
- Blau, P. 1968. "The Hierarchy of Authority in Organizations." *American Journal of Sociology* 73(3): 453-467.
- Bourgeois, L., and J. Singh. 1983. "Organizational Slack and Political Behavior within Top Management Groups." *Academy of Management Proceedings* 43-49.
- Brisley, N. 2006. "Executive Stock Options: Early Exercise Provisions and Risk-Taking Incentives." *Journal of Finance* 61(5): 2487-2509.
- Brown, R. 2014. "Double Moral Hazard and Franchising: A Dual Case Study Approach." *Journal of Organizational Culture Communications and Conflict* 18(2): 15-25.
- Burns, N., and S. Kedia. 2008. "Executive Option Exercises and Financial Misreporting." *Journal of Banking and Finance* 32(5): 845-857.
- Butler, F., and P. Sauska. 2014. "Mergers and Acquisitions: Termination Fees and Acquisition Deal Completion." *Journal of Managerial Issues* 26(1): 44-54.
- Carter, M., L. Lynch, and S. Zechman. 2009. "Changes in Bonus Contracts in the Post-Sarbanes-Oxley Era." *Review of Accounting Studies* 14(4): 480-506.
- Chari, M., and K. Chang. 2009. "Determinants of the Share of Equity Sought in Cross-Border Acquisitions." *Journal of International Business Studies* 40(8): 1277-1297.
- , S. Devaraj, and P. David. 2007. "International Diversification and Firm Performance: Role of Information Technology Investments." *Journal of World Business* 42(2): 184-197.
- Chen, C., T. Steiner, and A. Whyte. 2006. "Does Stock Option-Based Executive Compensation Induce Risk-Taking? An Analysis of the Banking Industry." *Journal of Banking & Finance* 30(3): 915-945.
- Cohen, R., B. Hall, and L. Viceira. 2000. "Do Executive Stock Options Encourage Risk-Taking?" Working Paper, Harvard University.
- Coles, J., N. Daniel, and L. Naveen. 2006. "Managerial Incentives and Risk-Taking." *Journal of Financial Economics* 79(2): 431-468.

- Cornett, M., A. Marcus, and H. Tehranian. 2008. "Corporate Governance and Pay-for-Performance: The Impact of Earnings Management." *Journal of Financial Economics* 87(2): 357-373.
- Cyert, R., and J. March. 1963. *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice Hall.
- Damodaran, A. 2003. "Country Risk and Company Exposure: Theory and Practice." *Journal of Applied Finance* 13(2): 63-76.
- Danneels, E. 2010. "Trying to Become a Different Type of Company: Dynamic Capability at Smith Corona." *Strategic Management Journal* 32(1): 1-31.
- Daspit, J., I. Ramachandran, and D. D'Souza. 2014. "TMT Shared Leadership and Firm Performance: Investigating the Mediating Role of Absorptive Capacity." *Journal of Managerial Issues* 26(3): 219-239.
- Datta, S., M. Iskandar-Datta, and K. Raman. 2001. "Executive Compensation and Corporate Acquisition Decisions." *Journal of Finance* 56(6): 2299-2336.
- Davis, G., K. Diekmann, and C. Tinsley. 1994. "The Decline and Fall of the Conglomerate Firm in the 1980s: The Deinstitutionalization of an Organizational Form." *American Sociological Review* 59(4): 547-570.
- Devers, C., G. McNamara, R. Wiseman, and M. Arrfelt. 2008. "Moving Closer to the Action: Examining Compensation Design Effects on Firm Risk." *Organization Science* 19(4): 548-566.
- Devine, R., B. Lamont, and R. Harris. 2016. "Managerial Control in Mergers of Equals: The Role of Political Skill." *Journal of Managerial Issues* 28(1-2): 50-66.
- Eisenhardt, K. 1989. "Agency Theory: An Assessment and Review." *Academy of Management Review* 14(1): 57-74.
- Fama, E., and M. Jensen. 1983. "Agency Problems and Residual Claims." *Journal of Law and Economics* 26(2):301-325.
- Gompers, P., J. Ishii, and A. Metrick. 2003. "Corporate Governance and Equity Prices." *Quarterly Journal of Economics* 118(1): 107-155.
- Gong, Y., J. Zhou, and S. Chang. 2013. "Core Knowledge Employee Creativity and Firm Performance: The Moderating Role of Riskiness Orientation, Firm Size and Realized Absorptive Capacity." *Personnel Psychology* 66(2): 443-482.
- Hamilton, R. 2012. "How Firms Grow and the Influence of Size and Age." *International Small Business Journal* 30(6): 611-621.
- Hill, C., and S. Snell. 1989. "Effects of Ownership Structure and Control on Corporate Productivity." *Academy of Management Journal* 32(1): 25-46.
- Holmstrom, B. 1979. "Moral Hazard and Observability." *The Bell Journal of Economics* 10(1): 74-91.
- Jensen, M. 1986. "Agency Cost of Free Cash Flow, Corporate Finance and Takeovers." *American Economic Review* 76(2): 323-329.
- , and W. Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics* 3(4): 305-360.
- Ji, Y., and W. Oh. 2014. "An Integrative Model of Diffusion and Adaptation of Executive Pay Dispersion." *Journal of Managerial Issues* 26(1): 70-85.
- Kahneman, D., and A. Tversky. 1979. "Prospect Theory: Analysis of Decision under Risk." *Econometrica* 47: 263-291.
- Kline, W., M. Kotabe, R. Hamilton, and S. Balsam. 2017. "Executive Compensation: An Examination of the Influence of TMT Compensation on Risk-Adjusted

- Performance.” *Journal of Strategy and Management* 10(2): 187-205.
- Kotha, R., Y. Zheng, and G. George. 2011. “Entry into New Niches: The Effects of Firm Age and the Expansion of Technological Capabilities on Innovative Output and Impact.” *Strategic Management Journal* 32(9): 1011-1024.
- Lazear, E. 2005. “Entrepreneurship.” *Journal of Labor Economics* 23(4): 649-80.
- Leonard-Barton, D. 1992. “Core Capabilities and Core Rigidities: A Paradox in Managing New Product Development.” *Strategic Management Journal* 13(SI): 111-125.
- May, D. O. 1995. “Do Managerial Motives Influence Firm Risk Reduction Strategies.” *Journal of Finance* 50(4): 1291-1308.
- Morrison, N., G. Kinley, and K. Ficery. 2008. “Merger Deal Breakers: When Operational Due Diligence Exposes Risk.” *Journal of Business Strategy* 29(3): 23-28.
- Rajgopal, S., and T. Shevlin. 2002. “Empirical Evidence on the Relation between Stock Option Compensation and Risk Taking.” *Journal of Accounting and Economics* 33(2): 145-171.
- Revilla, A., and Z. Fernandez. 2013. “Environmental Dynamism, Firm Size and the Economic Productivity of R&D.” *Industry and Innovation* 20(6): 503-522.
- Sanders, W., and D. Hambrick. 2007. “Swinging for the Fences: The Effects of CEO Stock Options on Company Risk Taking and Performance.” *Academy of Management Journal* 50(5): 1055-1078.
- Shleifer, A., and R. Vishny. 1991. “Takeovers in the 60s and the 80s: Evidence and Implications.” *Strategic Management Journal* 12(SI): 51-59.
- Steinbach, A., T. Holcomb, M. Holmes, C. Devers, and A. Cannella. 2017. “Top Management Team Incentive Heterogeneity, Strategic Investment Behavior, and Performance: A Contingency Theory of Incentive Alignment.” *Strategic Management Journal* 38(3): 1701-1720.
- Stinchcombe, A. 1965. “Social Structure and Organizations.” In J. G. March’s *Handbook of Organizations*. Chicago, IL: Rand McNally & Company.
- Tripsas, M., and G. Gavetti. 2000. “Capabilities, Cognition and Inertia: Evidence from Digital Imaging.” *Strategic Management Journal* 21(10): 1147-1161.
- Tufano, P. 1996. “Who Manages Risk? An Empirical Examination of Risk Management Practices in the Gold Mining Industry.” *Journal of Finance* 51(4): 1097-1137.
- Tversky, A., and D. Kahneman. 1991. “Loss Aversion in Riskless Choice: A Reference-Dependent Model.” *The Quarterly Journal of Economics* 106(4): 1039-1061.
- , and P. Wakker. 1995. “Risk Attitudes and Decision Weights.” *Econometrica* (63): 1255-1280.
- Uhlenbruck, K., M. Hughes-Morgan, M. Hitt, W. Ferrier, and R. Brymer. 2017. “Rivals Reactions to Mergers and Acquisitions.” *Strategic Organization* 15(1): 40-66.
- Williamson, O. E. 1985. *The Economic Institutions of Capitalism*. New York: Free Press.
- Wiseman, R. M., and L. R. Gomez-Mejia. 1998. “A Behavioral Agency Model of Managerial Risk Taking.” *Academy of Management Review* 23(1): 133-153.
- Withers, M., C. Drnevich, and L. Marino. 2011. “Doing More with Less: The Disordinal Implications of Firm Age for Leveraging Capabilities for Innovation Activity.” *Journal of Small Business Management* 49(4): 515-536.
- Wright, P., M. Kroll, J. A. Krug, and M. Pettus. 2007. “Influences of Top Management Team Incentives on Firm Risk Taking.” *Strategic Management Journal* 28(1): 81-89.

Zhao, H. X., Y. D. Luo, and T. Suh. 2004. "Transaction Cost Determinants and Ownership-Based Entry Mode Choice: A Meta-Analytical Review." *Journal of International Business Studies* 35(6): 524-544.

MAIN ARTICLES

- Merger and Acquisition Targets: The Role of Moral Hazard and Acquiring Firm Executive Compensation* 119
William A. Kline and Richard S. Brown

This paper utilizes an agency theory perspective to examine the relationship between executive compensation and the characteristics of target firms in acquisitions. The authors hypothesize that high salaries will encourage the purchase of less risky (larger, older, and more established firms) targets, while executive compensation in the form of option-based pay will encourage the acquisition of riskier (smaller, younger, and less established) targets. Using both the age and size of the target firms as a measure of acquiring-firm risk-taking, there is evidence that fixed components of compensation, such as salary and bonus, are related to risk-aversion. However, there is no evidence that options-based compensation in the acquiring firm leads to excessive risk-taking.

- Is Customer Satisfaction Really a Catch-All? The Discrepancy between Financial Performance and Survey Results* 137
Kevin W. James, Hui James, Barry J. Babin, and Janna M. Parker

The managerial literature traditionally views customer satisfaction as a key indicator of retailer success despite research suggesting its limits as a performance metric. The research reported here focuses specifically on the relationships between satisfaction, value, and loyalty, with financially-based outcomes such as earnings per share and return on assets. Retail managers are charged with increasing customer satisfaction as a key contributor to firm success. However, the extant literature reports a weak relation between customer satisfaction and a firm's organizational performance. This work attempts to determine if the drivers of loyalty and retail firm financial performance in a retail context are the same by examining the role of satisfaction and value in the process. The results provide evidence that value is a predictor of market-based success including ROA and EPS while satisfaction is a predictor of loyalty. In particular, the role of hedonic value and its impact on financial performance for retail management proves particularly interesting.

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