Acquisition misfit? How the acquirer and target CEO personalities influence shareholder value

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ABSTRACT

This study examines personalities of the Chief Executive Officers (CEOs) involved in mergers and acquisitions (M&A) using a multimodal machine learning method, and it relates the five-factor model of personality to the acquisition premiums paid over the independently estimated value of the targeted firms. Based on data from 216 M&A transactions, the results indicate that the personality similarity between the acquirer and target CEOs contributes to the increased acquisition premiums. The findings also show that the relationship between CEO similarity and acquisition premiums is stronger in related industries. Furthermore, the results indicate that the acquirer CEO's personality trait of openness supports a higher acquisition premium. By considering how the acquirer and target CEO personalities influence acquisition outcomes for the shareholders, this study contributes to the emerging literature on CEO dyadic relationships in the upper echelons theory and provides new insights for strategic management practice.

Keywords: Mergers and Acquisitions, CEO, Big Five Personality, Acquisition Premium, Upper Echelons Theory, AI

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INTRODUCTION

Over the past two decades, a CEO personality's impact on the firm has emerged as prominent topics in strategic management (Chatterjee & Hambrick, 2007; Chin et al., 2013; Hiller & Hambrick, 2005). As CEOs hold central positions of power that dominate and disproportionately influence firm activities (Finkelstein et al., 1996), they are also the key individuals in setting and guiding their firms' strategic direction (Calori, et al., 1994; Gioia & Chittipeddi, 1991). Thus, the CEO's personality has a major influence on the strategic behavior (Peterson et al., 2003) and the success of the firm (Nadkarni & Herrmann, 2010). For example, Malhotra et al. (2018) report that extroverted CEOs can strongly influence the growth path of a firm by prioritizing acquisitions as a growth instrument. However, despite the strong influence of an acquiring firm CEO's personality on the strategy of the firm to expand and manage acquisitions, the personality of the targeted firm's CEO is also influential. The dyadic interaction of CEO personalities is especially critical for acquisitions in which both the target and the acquirer CEOs determine the agreed-upon outcome, such as the acquisition premium paid over the independently estimated assessment of the target firm's market value.

Drawing on the upper echelons theory (Hambrick & Mason, 1984; Hambrick et al., 2005) and prior research on the impact of CEO personality on acquisition outcomes (Hayward & Hambrick, 1997; Malhotra et al., 2018), this paper argues that the similarity between the acquirer and target CEO personalities is a variable influencing the outcome of acquisitions. While the literature holds that the acquisition premiums are affected by CEO narcissism (Chatterjee & Hambrick, 2011), hubris (Hayward & Hambrick, 1997), and CEO power (Fralich & Papadopoulos, 2018), little research has been focused on the impact of acquirer-target CEO personality similarity on the acquisition outcomes. However, especially for acquisitions, a further examination of dyadic interactions is important (Aktas et al. 2016; Pavicevic, et al., 2019), as acquisitions involve intense negotiations, giving both the acquirer and target CEOs positions of paramount influence. This paper therefore goes deeper into the acquirer and target CEO personalities and their similarities to shed more light on the role of dyadic interactions of CEOs related to acquisitions. Adding to the body of emerging research on the similarity of upper-echelon individuals and how their personality and interactions among peers alter their strategic behavior, this study argues that the acquirer-target CEO similarity—with its implication for corporate acquisitions—is a critical factor affecting shareholder value.

To analyze the acquirer-target personality relationship, the authors collected publicly available video data for 236 unique CEOs of S&P500-listed companies engaged in mergers and acquisitions (M&A) transactions from 2009 to 2020. To measure the Big Five personality traits (extraversion, agreeableness, openness, conscientiousness, and neuroticism) of CEOs, the authors applied a multimodal machine learning method, extracting spoken, facial, and gesture data from videos (Poria et al., 2017). The multimodal machine learning is an approach especially useful in personality predictions due to its increased reliability, as compared to other applicable methods, achieving accuracy rates ranging from 81.3% to 91.7% (Kindiroglu et al., 2017; Gucluturk et al., 2017). This study's findings suggest that the CEO personality similarity and the acquirer CEO's trait of openness positively relate to the increase in acquisition premiums and—given the enduring nature of personality—that the former influences the latter. Personality similarity might increase acquisition premiums perhaps due to biased decision-making based on interpersonal affinity, promoting favoritism and mutual conformity, as noted in prior studies (Lee et al., 2020; Byrne, 1971). The results also show that the relationship between CEO personality similarity and acquisition premiums is positively moderated when the acquisitions are in a related industry.

Therefore, this study aims to contribute to existing research in two primary ways. First, it complements prior research on CEO similarity by emphasizing the importance of dyadic CEO relationships affecting strategic behavior (Shi et al., 2019; Buchholtz et al., 2003). To the best of the authors' knowledge—except Aktas et al. (2016) investigating the effects of acquirer-target narcissism—no previous published research focused on the similarity of acquirer-target personalities to better understand acquisition outcomes. Furthermore, this study complements existing literature by explicitly examining the relationship between CEO personality similarity and acquisition premiums (Pavicevic & Keil, 2021; Hayward & Hambrick, 1997). This gives strategic management scholars key insights on how CEO personality affects shareholder value.

Second, this paper makes an important methodological contribution by introducing a novel machine learning technique to analyze CEO personality. The authors applied a multimodal machine learning method to extract data from verbal communication, facial expressions and gestures to predict the personality of CEOs. This novel approach complements similar but unimodal machine learning methods previously applied in strategic management studies (Choudbury et al., 2019; Harrison et al., 2020).

THEORY AND HYPOTHESES

CEO's Openness and Acquisition Premiums

The authors argue that the acquiring CEOs who score high in the personality trait of openness pay increased acquisition premiums. Openness reflects the degree to which an individual tends to be divergent thinking, risk-taking, and promoting unusual thoughts (McCrae, 1987). Individuals high in openness promote change (Goldberg, 1990; McCrae & Costa, 1997), actively seek new information, and are identified as more creative problem solvers (Tetlock, 1983), While openness in individuals has been related to strategic flexibility (Nadkarni & Herrmann, 2010), better decision making in unforeseeable situations (LePine et al., 2000), and the improved management in recognizing and seizing opportunities (Shane et al., 2010), highly open CEOs overestimate the positive outcomes of their decisions—which reduces the quality of accurate decision making (Bono & Judge, 2004). Furthermore, individuals high in openness focus more on future outcomes, while underestimating the perceived risk of present decisions (Lauriola & Levin, 2001). Studies also show that CEOs high in openness not only contribute to generally higher risk-taking but, specifically, seek new risks for personal excitement (Judge et al., 2002). These prior findings are germane to determining how the acquisition premiums are set based on the future prospects of a deal evaluating future expected returns against the risks to justify an acquisition premium (Malhotra et al., 2015). It is therefore theoretically plausible that a CEO's personality trait of openness might be associated with shifting the evaluation of investments to more optimistic and favorable future outcomes, adversely affecting the objective pricing process.

Hypothesis 1: Acquirer CEOs high in openness pay increased acquisition premiums.

CEO Personality Similarity, Acquisition Premiums, and Industry Relatedness

Drawing on the upper-echelons theory, the authors argue that acquirer-target CEO personality similarity affects the increase in acquisition premiums positively. Prior research identified that personality similarity positively affects interpersonal affinity towards each other (Montoya & Horton, 2004), leading to more conformity and amiability between similar individuals. Additionally, individuals' similarity leads to preferable interactions (Byrne,

1971), interpersonal attraction, and trust (Huang & Iun, 2006; McPherson et al., 2001; Ragins, 1997). Thus, similarity promotes a more favorable attitude and treatment (Lee et al., 2020). However, while a certain amount of similarity has positive effects on collaboration among top executives (O'Reilly et al., 1993; Wagner et al., 1984), similarity also promotes favoritism (Zajac & Westphal, 1996), which results in adverse outcomes for organizations. For example, CEO similarity results in the biased CEO succession and suboptimal resource allocation within an organization (Zhu et al., 2021; Hutzschenreuter & Kleindienst, 2015). Additionally, similarity impacts CEO compensation by reducing compensation restrictions, making them less confined and controlled by pay performance criteria (Young & Buchholtz, 2002), resulting in overall higher compensations for CEOs (Belliveau et al., 1996). Combined, based on the attraction-perspective, similarity promotes favoritism in dyadic relationships (Tajfel, 1982), resulting in more subjective decision-making and perhaps—in the case of acquisitions—offers of increased acquisition premiums. Thus,

Hypothesis 2: Acquirer-target CEO personality similarity is positively related to increased acquisition premiums.

Additionally, the authors argue that the relationship between CEO similarity and acquisition premiums is positively moderated by industry relatedness. Empirical evidence suggests that acquirers pay increased acquisition premiums when targets are related (Gondhalekar et al., 2004), improving the target's willingness to accept industry-related takeovers (Wong & O'Sullivan, 2001). Prior research additionally indicates that related acquisitions generate higher than expected returns as compared to unrelated acquisitions (Berger & Ofek, 1995, Rumelt, 1982). Also, Jemison and Sitkin (1986) showed that related acquisitions are perceived as less risky due to lower information asymmetries and higher levels of comparable business knowledge. Thus, acquirer CEOs are more reassured in capturing larger fractions of synergies and successfully integrating the industry-related target. This study therefore posits that the combination of reassurance to extract more value from the industry-related targets and favoritism due to CEO similarity further affects the acceptance and willingness to pay higher premiums.

Hypothesis 3: Industry relatedness moderates the relationship between CEO personality similarity and acquisition premium positively.

METHODS

Data and Data Collection

The study used 2009-2020 M&A data from the Securities Data Company (SDC) database and the CEO Big Five personality measurements from publicly available videos of acquirer and target CEOs. The sample was limited to acquisitions made by the acquirer firms in the S&P500 index and deals where the acquirer controlled more than 50% of the target after the transaction. Starting with 826 acquisitions, and following the guidelines discussed by Aktas et al. (2016), only the deals greater than \$1 million and with the publicly listed target firms were considered. Any observations with a missing target size or acquisition value were eliminated. After collecting information on the required control variables for the target and acquirer, 404 deals were included. Reconciling these acquisitions with the acquirer and target CEO Big Five personality measurements has narrowed the final sample to 216 observations with 236 unique CEOs. The firms' financial data from Compustat were also obtained to compute the control and dependent variables.

Independent and Dependent Variables

CEO Personality:

Personality was measured using a multimodal machine learning approach previously applied by Kindiroglu et al. (2017) and Gucluturk et al. (2017), which observed and analyzed verbal and non-verbal communication from the recorded videos of individuals. In recent years, research has increasingly utilized machine learning to measure personality traits, using unimodal approaches through text or facial detection (Harrison et al., 2020; Choudhury et al., 2019). These approaches achieved an accuracy rate of 57.99% in case of text or 64.84% in case of audio data (Majumder et al., 2017; Valente et al., 2012). However, unimodal approaches have often neglected more complex criteria (e.g., text combined with facial detection) that help to accurately measure personality (Poria et al., 2017). Utilizing the combination of time-series multiple data sources, multimodal approaches address these shortcomings and provide the improved accuracy rates ranging from 81.3% to 91.7% (Kindiroglu et al., 2017; Gucluturk et al., 2017).

Acquirer-Target Personality Similarity:

The similarity between the acquirer and target CEOs was determined by measuring the similarity of their Big Five personality traits. Like in Harrison and Klein (2007), this study first measured the Euclidian distance of all personality traits and calculated the inverse of the square root of the average sum of the squared difference in the five traits. The applied equation is shown below:

Personality Similarity_{i,t} =
$$\sqrt[2]{\frac{\sum_{j=1}^{5} (Acquirer_{j,i,t} - Target_{j,i,t})^{2}}{5}}$$

Acquisition Premium:

The construct of acquisition premium continues to be an important variable in determining the outcome of acquisitions (Choi et al., 2015; Laamanen, 2007; Malhotra et al., 2015). Some recent research criticized the cases of innovation-driven acquisitions for using acquisition premium as an indicator for shareholder value-destroying behavior or low-quality decision making (Laamanen, 2007). However, the present study follows Hayward's and Hambrick's (1997) enduring argument that acquisition premiums serve as a primary source to measure the destruction of shareholders' wealth in the short and long term. This study has a sample that covers all types of acquisitions irrespective of the motive, and it follows previous streams of literature measuring premium as the value paid by the acquirer deflated by the target's value four weeks prior to the acquisition (Aktas et al., 2016):

$$Acquisition \ Premium = \frac{Acquisition \ value \ Paid}{Target \ value \ 4weeks \ prior}$$

Regression Model

The authors employ the following regression to investigate the effect of acquirer or target personality on the acquisition premium for the period from 2009 to 2020:

 $Premium_{it} = \alpha_0 + \alpha_1 Personality_{it} + \sum \alpha_k Controls + \varepsilon_{it}$ Premium is the value paid, deflated by the target value four weeks prior to the acquisition. Personality is the acquirer and target CEO Big Five personality indicator measured as discussed above. This research also follows previous literature to include various firm-related controls below (Chung & Choi, 2017; Dimara et al., 2004; Moeller et al., 2004; Percy & Munasinghe, 2015).

Control Variables

The study included nine control variables that could affect the analysis, which are defined in Table 1 (Appendix). The table provides descriptions of these firm-level controls used in the study with their respective sources. All continuous variables are winsorized at 1%.

As the regression is affected by multiple factors, the authors have implemented several controls to improve the robustness of regressions. First, in consideration of past research discussing the potential impact of firm size, profitability, and market-to-book ratios as control variables affecting acquisition premiums (Moeller et al., 2004), no significant such impact was identified in the analysis here. The authors concluded that the uniqueness of the personality variable and the modest sample size—as compared to other studies—might account for these insignificant results. Second, when controlling for acquisition characteristics such as multiple bidder, cash acquisitions, and acquisition size, the authors find a positive and strong significant relationship between acquisition premium and cash payment as well as between acquisition premium and multiple bidder. However, there was a significantly strong negative relationship between target firm size and acquisition premium. A full set of results is presented next.

RESULTS

Table 2 (Appendix) contains summary statistics and correlation for all variables in the analysis. The results explain a substantial amount of variance in acquisition premium, with the acquirer CEO openness ($R^2 = 0.536$) and CEO similarity ($R^2 = 0.59$). To test the hypotheses, Ordinary Least Squares (OLS) regressions with the industry- and year-fixed effects were applied, while standard errors clustered by firms. There is empirical support for Hypothesis 1, confirming that acquirer CEOs' openness is positively associated with increased acquisition premiums ($\beta = 0.862$; t = 2.72). Table 3 (Appendix) shows OLS regression results for the relationship between CEO personality and acquisition premium. Given the finding of strong correlation and the enduring nature of adult personality traits—temporally preceding the acquisition events in this study—there seems to be support for the trait of openness in the acquirer CEO being a contributing factor in higher acquisition premiums.

For Hypothesis 2, indicating that acquirer-target CEO similarity results in increased acquisition premiums, empirical evidence was also found (β = 0.924; t = 2.26). Based on prior literature, this might suggest that CEO personality similarity increases favoritism and subjective decision-making when it comes to evaluating and negotiating acquisition premiums.

For Hypothesis 3, anticipating that industry relatedness moderates the relationship of CEO similarity and acquisition premium, the results again indicate empirical support. CEOs with similar personality and in the same industry classification have a positive relationship with acquisition premiums. Compared to the results testing Hypothesis 2 (β = 0.924; t = 2.26), the coefficient is stronger for the firms in the same industry (β = 1.829; t = 1.99). Table 3 (Appendix) shows the OLS regression results between acquirer-target CEO similarity and acquisition premium. In addition, Table 4 (Appendix) and Figure 1 (Appendix) show the moderating effect of industry relatedness on acquirer-target CEO similarity and acquisition premium.

DISCUSSION AND CONCLUSION

Although CEO similarity has been identified to benefit firms by promoting collaboration among CEOs (O'Reilly et al., 1993; Wagner et al., 1984) and building trust (Huang & Iun, 2006; McPherson et al., 2001), recent research suggests that CEO similarity might lead to adverse strategic outcomes (Zhu et al., 2021; Hutzschenreuter & Kleindienst, 2015). Most research identified favoritism as a problematic attribute of CEO similarity (Wiersema et al., 2018; Zajac & Westphal, 1996, Zhu et al., 2021), negatively impacting decision making (Becker et al., 2019; Li et al., 2017). Drawing on theories of attraction-perspective (Tajfel, 1982), this study's findings complement the extant research by identifying the tendency of acquirer CEOs to overpay when engaging with similar-personality target CEOs.

In addition, the findings support the upper-echelons theory by emphasizing the importance of dyadic CEO relationships as a decisive aspect in acquisition outcomes. While prior research stressed the importance of CEO personality similarity (Hutzschenreuter & Kleindienst, 2015) or dyadic interactions of personality traits in acquisitions (Aktas et al., 2016), few studies investigated the joint effects of dyadic CEO personalities in acquisitions. Thus, this study extends the associated research stream by examining the combined effects of acquirer-target CEO personalities' similarity and industry relatedness.

This study also yields practical implications for the corporate boards and M&A managers by fostering the discussion about the effects of acquirer and target CEO personality similarity on the acquisition strategy. Since CEOs have a significant influence in guiding acquisition strategy, being aware of the effects of current or subsequent CEOs' personalities might alter the approaches to a particular acquisition's management. The authors suggest that acquisitions with similar-personality target and acquirer CEOs should be monitored for potentially higher acquisition premiums, especially when the target is within a related industry. In such cases, the acquisition managers and the board members might need to be aware of a potentially increased risk of overpaying and introduce measures to improve negotiation or control CEO favoritism. In some instances, to maximize shareholder value, CEO similarity might be included as a rejection criterion when creating an acquisition shortlist.

Overall, the findings in this study provide strong evidence that CEO personality similarity is an important dyadic relational characteristic that affects acquisition premium as one of the parameters of post-acquisition shareholder value. The evidence indicates that the acquiring CEO's openness might increase the acquisition premium, as might the acquirer-target CEO similarity in personality. It also suggests that the interaction between CEO similarity and acquisition premium is positively moderated by industry relatedness. By discerning the effects of acquirer and target CEO similar personalities, this study augments existing research that focuses on the CEO-to-TMT or CEO-to-board similarity yet neglects the personality similarity between the acquirer and target CEOs.

APPENDIX

Table 1: Control Variables

Firm-level Controls	Description	Data Source
Profitability	Operating income before depreciation scaled by the book value of totals assets	Compustat
Research and Development	Ratio of Research and development cost to total asset	Compustat
Firm Cash	Cash and short-term investments scaled by the book value of total assets.	Compustat
Market to Book	Market value of Asset scaled by the book value of asset.	Compustat
Firm Size	Natural logarithm of the book value of total assets.	Compustat
Book Leverage	Long-term debt plus current debt, scaled by book value of asset.	Compustat
Cash Acquisition Indicator	This is an indicator variable equal to one if acquisition payment is made by more than 50% cash zero otherwise.	SDC
Multi Bidder Indicator	An indicator variable equal to one if there are more than one bidder for the deal and zero otherwise.	SDC
Target Size	The natural log of the total asset of the target prior to the acquisition.	SDC

Table 2: Summary Statistics

Variables		N	Mean	SD	Min	Median	Max
Acquiror Agreeableness		216	0.561	0.094	0.328	0.582	0.718
Acquiror Extraversion		216	0.573	0.100	0.339	0.575	0.742
Acquiror Openness		216	0.59 <mark>1</mark>	0.099	0.346	0.601	0.757
Acquiror Conscientiousness		216	0.512	0.128	0.256	0.513	0.758
Acquiror Neuroticism		216	0.425	0.103	0.237	0.413	0.714
Target Agreeableness		216	0.570	0.096	0.316	0.577	0.791
Target Extraversion		216	0.586	0.099	0.332	0.591	0.757
Target Openness		216	0.594	0.100	0.363	0.594	0.796
Target Conscientiousness		216	0.522	0.124	0.275	0.530	0.758
Target Neuroticism			0.414	0.096	0.221	0.401	0.661
Acquiror-Target Personality Similarity			0.099	0.082	0.000	0.093	0.331
Acquiror-Target Agreeableness Similarity			0.079	0.084	0.000	0.058	0.352
Acquiror-Target Extraversion Similarity		216	0.083	0.089	0.000	0.048	0.304
Acquiror-Target Openness Similarity		216	0.077	0.083	0.000	0.053	0.332
Acquiror-Target Conscientiousness Similarity		216	0.111	0.114	0.000	0.076	0.423
Acquiror-Target Neuroticism Similarity		216	0.086	0.089	0.000	0.058	0.349
Acquisition Premium		216	0.608	0.496	0.000	0.817	2.095
Firm Size		216	10.528	1.389	7.773	10.427	14.095
Firm Profitability		216	0.160	0.075	0.011	0.151	0.407
Research and Development		216	0.033	0.057	0.000	0.000	0.246
Capital Expenditure		216	0.042	0.042	0.000	0.026	0.178
Market to Book		216	2.135	1.115	0.955	1.797	6.132
Firm Cash		216	0.152	0.152	0.000	0.091	0.579
Book Leverage		216	0.387	0.274	0.000	0.332	1.372
Cash Acquisition			0.218	0.414	0.000	0.000	1.000
Multi Bidder			0.037	0.189	0.000	0.000	1.000
Target Firm Size		216	8.379	2.435	0.000	8.436	13.752

Table 3: Acquisition Premium, Acquirer and Target CEO Big Five Personality

DV: Premium	Acquirer CEO Regression						Target CEO Regression				
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 1	Model 2	Model 3	Model 4	Model 5	
Agreeableness	0.675					0.495					
	(1.53)					(1.65)					
Extraversion		0.057					0.140				
		(0.18)					(0.44)				
Openness			0.862***					0.223			
			(2.72)					(0.68)			
Conscientiousness				0.521*					0.409*		
				(1.77)					(1.69)		
Neuroticism					-0.413					-0.152	
					(-1.31)					(-0.44)	
Firm Size	-0.041	-0.037	-0.043	-0.041	-0.040	-0.029	-0.034	-0.035	-0.032	-0.034	
	(-1.47)	(-1.28)	(-1.59)	(-1.49)	(-1.45)	(-1.14)	(-1.33)	(-1.36)	(-1.26)	(-1.34)	
Firm Profitability	-1.042	-0.852	-0.949	-1.015	-0.905	-0.182	-0.140	-0.144	-0.163	-0.144	
•	(-1.59)	(-1.24)	(-1.49)	(-1.49)	(-1.35)	(-0.32)	(-0.24)	(-0.25)	(-0.29)	(-0.25)	
Research and				, í							
Development	-0.911	-0.702	-0.933	-0.777	-0.740	0.063	0.022	0.038	0.046	0.033	
Capital	(-1.13)	(-0.89)	(-1.21)	(-1.01)	(-0.97)	(0.07)	(0.02)	(0.04)	(0.05)	(0.03)	
Expenditure	-0.976	-0.821	-0.9 <mark>97</mark>	-0.956	-1.1 <mark>07</mark>	-1.640	-1.454	-1.503	-1.558	-1.450	
	(-0.93)	(-0.76)	(- <mark>0.97</mark>)	(-0.95)	(-1.04)	(-1.45)	(-1.27)	(-1.31)	(-1.43)	(-1.28)	
Market to Book	0.02	0.00	0.02	0.02	0.01	-0.01	-0.02	-0.02	-0.01	-0.02	
	(0.56)	(0.10)	(0.53)	(0.57)	(0.37)	(-0.37)	(-0.42)	(-0.43)	(-0.31)	(-0.44)	
Firm Cash	0.042	-0.011	0.051	0.002	0.014	0.085	0.082	0.083	0.056	0.087	
	(0.14)	(-0.04)	(0.16)	(0.01)	(0.05)	(0.29)	(0.27)	(0.28)	(0.19)	(0.29)	
Book Leverage	0.37***	0.33***	0.37***	0.33***	0.3 <mark>6***</mark>	0.22 <u>*</u>	0.22*	0.22*	0.24**	0.22*	
	(2.75)	(2.73)	(3.02)	(2.67)	(2.86)	(1.87)	(1.81)	(1.79)	(2.05)	(1.82)	
Cash Acquisition	0.27***	0.28***	0.26***	0.27***	0.27 <u>***</u>	0.24***	0.23***	0.23***	0.23***	0.23***	
	(3.94)	(4.08)	(3.83)	(4.17)	(4.06)	(3.44)	(3.28)	(3.22)	(3.27)	(3.26)	
Multi-Bidder	0.56 <u>***</u>	0.56 <u>***</u>	0.57***	0.57 <u>***</u>	0.57 <u>***</u>	0.57 <u>***</u>	0.56***	0.56***	0.59***	0.55 <u>***</u>	
	(3.53)	(3.39)	(3.37)	(3.64)	(3.46)	(4.13)	(4.17)	(4.26)	(4.45)	(3.97)	
Target Firm Size	0.07***	- 0.07***	-0.07***	0.07***	0.07***	0.07***	0.07***	0.07***	0.07***	0.07***	
C	(-4.13)	(-4.13)	(-4.21)	(-4.02)	(-4.08)	(-3.56)	(-3.61)	(-3.60)	(-3.49)	(-3.59)	
Cons	1.58***	1.89***	1.49***	1.64***	2.12***	0.41	0.61	0.57	0.37	0.75*	
	(3.15)	(3.97)	(3.09)	(3.57)	(4.44)	(1.06)	(1.58)	(1.47)	(0.89)	(1.81)	
Year Fixed Effect Industry Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
N	216	216	216	216	216	216	216	216	216	216	
R-sq	0.528	0.521	0.536	0.530	0.524	0.543	0.536	0.537	0.543	0.536	

Table 4: Acquisition Premium and Acquirer-Target Personality Similarity

DV: Premium DV: Premium	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Acquirer-Target Personality Similarity	0.924 <u>**</u> (2.26)					
Acquirer-Target Agreeableness Similarity		0.407 (1.02)				
Acquirer-Target Extraversion Similarity		()	0.602 (1.38)			
Acquirer-Target Openness Similarity			(/	0.516 (1.27)		
Acquirer-Target Conscientiousness Similarity					0.614 <u>*</u> (1.87)	
Acquirer-Target Neuroticism Similarity					(===,)	0.809 <u>**</u> (2.01)
Firm Size	0.003 (0.11)	0.000 (0.01)	0.002 (0.05)	-0.001 (-0.03)	0.002 (0.07)	0.000 (0.00)
Firm Profitability	-0.908	-1.065	-1.097	-0.943	-0.897	-0.999
Research and Development	(-1.06) -0.488	(-1.21) -0.648	(-1.26) -0.432	(-1.06) -0.702	(-1.07) -0.598	(-1.19) -0.348
Capital Expenditure	(-0.53) -0.660	(-0.70) -0.450	(-0.44) -0.536	(-0.76) -0.588	(-0.65) -0.722	(-0.37) -0.531
Market to Book	(-0.52) 0.052	(-0.36) 0.046	(-0.42) 0.048	(-0.48) 0.048	(-0.58) 0.053	(-0.41) 0.062
Firm Cash	(0.91) -0.144	(0.78) -0.168	(0.80)	(0.81) -0.177	(0.92) -0.122	(1.08) -0.194
Book Leverage	(-0.41) 0.281 <u>*</u>	(-0.47) 0.326 <u>**</u>	(-0.49) 0.298 <u>*</u>	(-0.50) 0.322 <u>**</u>	(-0.34) 0.260	(-0.56) 0.285 <u>*</u>
Cash Acquisition	(1.74) 0.278***	(2.09) 0.272 <u>***</u>	(1.87) 0.276***	(2.03) 0.271***	(1.55) 0.278 <u>***</u>	(1.77) 0.269***
Multi Bidder	(3.47) 0.570 <u>***</u>	(3.32) 0.587 <u>***</u>	(3.38) 0.567 <u>***</u>	(3.34) 0.571 <u>***</u>	(3.43) 0.579 <u>***</u>	(3.42) 0.596 <u>***</u>
Target Firm Size	(3.19) -0.070 <u>***</u>	(3.22) -0.071 <u>***</u>	(3.17) -0.072 <u>***</u>	(3.22) -0.071 <u>***</u>	(3.05) -0.072***	(3.38) -0.072 <u>***</u>
Cons	(-3.51) 1.278 <u>**</u>	(-3.46) 1.412 <u>**</u>	(-3.57) 1.347 <u>**</u>	(-3.45) 1.357 <u>**</u>	(-3.55) 1.365 <u>**</u>	(-3.60) 1.370 <u>***</u>
	(2.42)	(2.57)	(2.41)	(2.43)	(2.55)	(2.73)
Year Fixed Effects Industry Fixed Effects	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
N R-sq	216 0.590	216 0.579	216 0.583	216 0.581	216 0.588	216 0.588
t statistics in parentheses	0.570	0.517	\	0.501	0.500	0.500

t statistics in parentheses * p<0.1 ** p<0.05 *** p<0.01

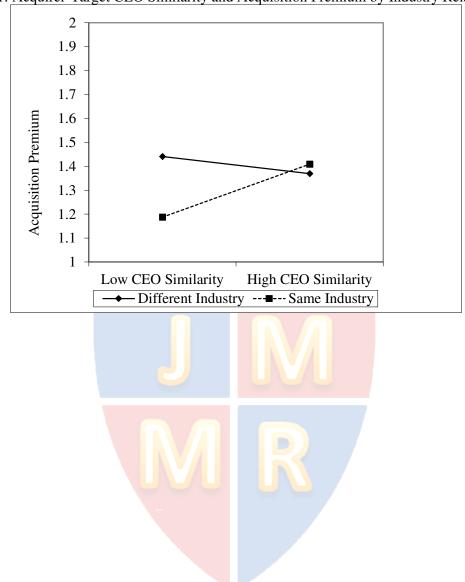


Figure 1: Acquirer-Target CEO Similarity and Acquisition Premium by Industry Relatedness

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