Love thy neighbor:
CEO extraversion and corporate acquisitions

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Abstract

We investigate the relationship between CEO extraversion and the geographical dispersion of acquisitions within the U.S. The dispersion decision is important and has implications for employment, investments, and valuation. We show that extraverted CEOs prefer local deals and that the stock market favors local acquisitions made by extraverted CEOs. Our results support the notion that the extended and information-rich, local networks of extraverted CEOs as well as the agentic qualities of these CEOs facilitate the acquisition of local target firms. Our results are important in illuminating the channels through which extraverted CEOs make acquisitions and create value.

Keywords: Behavioral corporate finance; CEO extraversion; Mergers & Acquisitions; Geographical dispersion

JEL classification: G34, G40

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1. Introduction

A significant extent of the heterogeneity in investment, financial, and organizational practices of firms can be explained by the presence of manager fixed effects (Bertrand and Schoar, 2003). The upper echelon perspective states that strategic choices and performance levels are partially predicted by managerial background characteristics (Hambrick and Mason, 1984). In this line of reasoning, Roll (1986) argues that corporate takeovers reflect individual decisions. Empirical studies show that CEO personality traits and biases affect the corporate acquisition decision (Chatterjee and Hambrick, 2007; Malmendier and Tate, 2008; Malhotra et al., 2018; Ham et al., 2018; Green et al., 2019).

We exploit the fact that CEO personality traits seem to affect the corporate acquisition decision to investigate the relationship between CEO extraversion and the geographical dispersion of acquisitions. We restrict ourselves to national acquisitions (i.e., acquisitions where both the acquirer and the target are headquartered in the U.S.) to avoid confusion from cultural differences between countries. Our aim is to illuminate the channels through which CEO extraversion is linked to geographical dispersion and value creation.

The Big Five personality traits (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism) categorize human personality and this categorization is the most well-established framework for doing so (Gray and Bjorklund, 2018). Judge et al. (2002) conduct a meta-analysis and find extraversion to be the most consistent correlate of leadership. Extraversion is an interpersonal personality trait and is associated with sociability and expressiveness (Judge et al., 2002). Extraverts are more likely to engage in social behavior and are more likely to enjoy social attention than introverts (Ashton et al., 2002). Extraverts are skilled at handling problems requiring social interaction (Tett and Burnett, 2003). The sociability of extraverted CEOs allows them to mobilize others and to develop extensive social interactions both within their firms and outside their firms (Nadkarni and Herrmann, 2010).

We have two competing hypotheses. First, the sociability of extraverted CEOs pulls in the direction of non-local acquisitions (i.e., widely dispersed within the U.S.) because the sociability facilitates new social encounters. Furthermore, to the extent that acquisitions far away from the firm's headquarter is deemed riskier than acquisitions closer to the firm's headquarter, one may expect CEO extraversion to be positively associated with non-local acquisitions because CEO extraversion is generally associated with more risk taking (e.g., Harrison et al., 2020; Lartey et al., 2020; Malhotra et al., 2018; Oehler et al., 2018).[1] Second, the networks of the extraverted CEOs pull in the direction of local acquisitions because the networks of the extraverted CEOs are likely to be denser locally. It is an empirical question which hypothesis is supported.

The decision on the geographical dispersion of a firm is important for several reasons. Landier et al. (2009) document three distinct findings in relation to the association between corporate decision-making and the distance between divisions and headquarters in the U.S. First, geographically dispersed firms are less employee friendly. Second, divisions that are closer to headquarters are less likely to face layoffs. Third, divisions further from headquarters are divested before closer divisions. Landier et al. (2009) suggest that both informational constraints of geographically dispersed firms and the prevalence of social interactions are relevant determinants of the link between geographic dispersion and corporate decision-making. Furthermore, Garcia and Norli (2012) show that local firms' stock returns exceed those of geographically dispersed firms. Finally, Gao et al. (2008) show that firms with subsidiaries located in different regions of the United States experience a valuation discount. Thus, the geographical dispersion decision seems to have ramifications for employment, investments, and valuation.

We investigate national acquisitions of S&P 1500 firms in the period from 2007 to 2020. We find that CEO extraversion is negatively associated with the geographical dispersion of acquisitions

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[1] We thank an anonymous referee for highlighting this aspect.

within the U.S. Our results are in line with the notion that extraverted CEOs exploit their (local) networks to make local acquisitions rather than use their sociability to make acquisitions further away from the headquarters of the firm. In support of this reasoning, Haunschild and Beckman (1998) find that board memberships are an important source of interorganizational information. Both Malhotra et al. (2018) and Green et al. (2019) show a positive association between CEO extraversion and outside directorships. On top of these more formal networks, many social networks such as golf club memberships etc. are deemed to be of local nature while being potentially important information channels.

As an add-on to our investigation of the geographical dispersion of acquisitions, we show that the stock market is less negative (in the magnitude of 0.2-0.8% points higher abnormal acquisition announcement return) toward local acquisitions when these acquisitions are undertaken by more extraverted CEOs as opposed to less extraverted CEOs. We find that the most likely avenue through which extraverted CEOs create more value from local acquisitions than less extraverted CEOs is the agentic qualities of CEO extraversion.

Our research contributes to the existing literature in several ways. First, it adds to the existing literature on the impact of CEO personality traits on corporate decisions in general and on CEO extraversion and corporate acquisitions in particular (Chatterjee and Hambrick, 2007; Malhotra et al., 2018; Ham et al., 2018; Green et al., 2019; Aabo et al., 2021). Malhotra et al. (2018) is the study that is closest to our study. Thus, Malhotra et al. (2018) investigate the acquisitive nature of extraverted CEOs and find that these CEOs 1) are more likely to engage in acquisitions, 2) are more likely to conduct larger acquisitions, and 3) are more likely than other CEOs to succeed in M&As. However, Malhotra et al. (2018) do not address the question of domestic geographical dispersion which relates to our second and third contribution. Second, and most importantly, it adds to the existing literature by showing that CEO extraversion is negatively related to the dispersion of corporate acquisitions within

4

the U.S. Thus, our findings indicate that the local networks of the extraverted CEO act as more important facilitators in the acquisition decision than the general sociability of the extraverted CEO. We are not aware of previous literature addressing this important question. Thirdly, we show that the extraverted CEO adds value by being superior to a less extraverted CEO when making local acquisitions and we show that this value creation is likely to be facilitated by the agentic qualities of CEO extraversion. This is again a novel finding.

We present our data and methodology in the next section. The third section presents the results, and the last section concludes.

2. Data and methodology

We draw all non-financial S&P 1500 firms per mid-2019 from the ExecuComp database. We require data on corporate acquisitions and CEO personality traits and biases, as well as additional CEO and firm characteristics (Compustat, Datastream, ExecuComp, and Zephyr). To avoid financially distressed firms, we restrict our sample to firms with at least 100 million USD in market value of assets and a non-negative equity book value. We require the acquisitions to have a minimum deal value of 1 million USD, the acquired equity stake must be above 50%, and the initial equity stake of the acquiring firm must be 0% (Chari and Kiyoung, 2009; Chikhouni et al., 2017). Our final sample comprises 327 acquiring firms, 416 CEOs, and 993 acquisitions in the 14-year sample period from 2007 to 2020.

Our geographical variable is a dummy variable, *State*, which takes the value of 1, if the target and the acquirer are headquartered in the same state, otherwise 0. As a robustness test, we apply a dummy variable, *Region*, based on the 9 regions proposed by CASC (www.usgs.gov/media/images/casc-network-map-v1).

We follow the approach of Harrison et al. (2019 and 2020) to quantify the Big Five personality traits, including CEO extraversion. We use the CEO's speech in the Q&A session of quarterly earnings

conference calls, and we require a minimum of at least 3 quarterly earnings conference calls and at least 1,000 spoken words for each CEO (Malhotra et al., 2018; Green et al., 2019; Harrison et al., 2019). Furthermore, we use the same speech to quantify CEO narcissism by calculating the CEO's relative usage of first-person singular pronouns (Chatterjee and Hambrick, 2007; Aktas et al., 2016). Finally, we follow the approach of Malmendier and Tate (2005) and Campbell et al. (2011) to quantify CEO overconfidence. The Big Five personality traits are calculated on a continuous scale from 1 to 7, narcissism on a continuous scale from 0 to 1, and overconfidence is a binary variable.

Our dependent variable is *State*. Our main independent variable is CEO *extraversion*. We include various control variables. On the CEO level, we include the remaining four Big Five personality traits (*openness to experience, conscientiousness, agreeableness*, and *neuroticism*), *narcissism, overconfidence, tenure, age, gender* (male=1), and *duality*. On the firm level, we include firm size (*log MVA*), *leverage* (total liabilities divided by total assets), *ROA* (EBITDA divided by lagged total assets), *log Tobin's Q* (MVA divided by total assets), *log Current ratio* (current assets divided by current liabilities), *log RD* (R&D expenses divided by sales), and *log Tangibility* (PPE divided by total assets). On the deal level, we include *Cash financed* (cash = 1) and *Focus* (first two digits of SIC code are the same for acquirer and target = 1). Finally, we include *year fixed effects* and *firm fixed effects*. Standard errors are clustered at the firm level (Petersen, 2009).

We calculate the cumulative abnormal return (*CAR*) based on the S&P 1500 index and an event window of -1 day and +1 day [-1;+1] around the acquisition announcement. For robustness purposes, we calculate an event window of [-5;+5].

Table 1 reports descriptive statistics for our main variables. CEO extraversion has a mean of 5.1, in line with previous literature (Green et al., 2019; Harrison et al., 2019; Malhotra et al., 2018). *State* shows that 21.5% of acquisitions are done in the same state. Finally, *CAR* shows that 98% of observations have an announcement effect on the acquirer's stock price of somewhere between -3.5%

and +3.0% with an average of 0.0%.

*** Please insert Table 1 here ***

Table 2 reports correlation coefficients between our main variables. Table 2 shows a modest, positive correlation coefficient between CEO extraversion and local acquisitions (*State)* of 0.09. Furthermore, Table 2 shows that CEO extraversion is highly correlated with the remaining Big Five personality traits, in line with Harrison et al. (2019).

*** Please insert Table 2 here ***

3. Empirical results

Table 3 reports the results of multivariate regression analysis. Models 1-3 are logit models where the dependent variable is *State*. Model 2 shows a positive and significant association between CEO extraversion and local acquisitions. Model 3 controls for other CEO personality traits and biases. CEO extraversion continues to show a positive and significant association between CEO extraversion and local acquisitions.

*** Please insert Table 3 here ***

Model 4 is a logit model where the dependent variable is *Region* that divides the 993 acquisitions into 364 acquisitions **(**36.7%) where the acquirer and the target are headquartered in the same region and 629 acquisitions (63.3%) where this is not the case. CEO extraversion continues to be positively and significantly associated with "local" acquisitions, also when we use this broader

definition of a local acquisition. Model 3 indicates that other CEO personality traits (conscientiousness and narcissism) are also significantly associated with the decision to acquire local firms, but this indication is not robust to the alternative definition of a local acquisition in Model 4. The results are robust to the winsorization of firm control variables and qualitatively similar if we exclude small acquisitions (i.e., deal value less than 1% of acquirer's total assets).

Effects that are statistically significant but economically insignificant have limited practical implications (Cuervo-Cazurra et al., 2013). Model 5 is a replication of Model 3 except that Model 5 reports the marginal effects of the changes in explanatory variables, which are calculated holding all variables at their sample means. We find that an increase of one unit in extraversion is associated with an increase in the probability of a local acquisition of 23.7% points. This translates into an increase in the probability of a local acquisition of 17.1% points when going from the 25% quantile to the 75% quantile of CEO extraversion (Table 1). A similar calculation (not tabulated) based on *Region* in Model 4 shows an increase of 7.4% points. Compared to the average likelihood of a local acquisition of 21.5% points (Table 1), such associations are economically very significant.

Models 6 and 7 show the association between CEO extraversion when doing local acquisitions (the interaction term between *extraversion* and *State*) and the cumulative abnormal return (CAR) around the acquisition announcement date. Model 6 shows that a one unit increase in CEO extraversion is associated with a 0.3% points higher CAR in the case of local acquisitions. This is increased to a 1.1% points higher CAR if we expand the event window from (-1;+1) to (-5;+5) in Model 7. This translates into an increase in CAR of 0.2-0.8% points when going from the 25% quantile to the 75% quantile of CEO extraversion (Table 1).[2] The CAR results are robust to 1) the non-winsorization of

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[2] Table 3, Models 6-7, report a negative coefficient for "State" and a positive coefficient for "Extraversion*State". "State" is a binary variable, which takes the value of 1, if the target and the acquirer are headquartered in the same state, otherwise 0. "Extraversion" is a continuous variable restricted between 1 and 7 with a median of 5.185. The coefficient for "State" in Table 3, Model 6 (7) is -0.18 (-0.058). The coefficient for "Extraversion*State" in Table 3, Model 6 (7) is 0.003 (0.011). Thus, for a median-extraverted CEO, the local acquisition is in total associated with -24 basis points in the case of the short window in Model 6 (-0.018 + 5.185*0.003) and -10 basis points in the case of the long window in Model 7 (-0.058 +

the CAR variable, 2) the winsorization of firm control variables, and 3) the exclusion of small acquisitions. CEO extraversion by itself does not seem to be significantly associated with the stock market reaction to the acquisition announcement. Malhotra et al. (2018) and Green et al. (2019) find that CEO extraversion is associated with stronger abnormal returns following acquisition announcements. Our findings suggest that such a general, positive association may be driven – at least partly – by local acquisitions.

Two main and non-mutually exclusive avenues exist through which extraverted CEOs create more value from local acquisitions than less extraverted CEOs: 1) information asymmetry and 2) agency. Information asymmetry relates to the before-mentioned arguments on the benefits of the extraverted CEO's extended local networks in terms of information. Just as an extraverted CEO is more likely to know of and be offered potential takeover targets in the local area through local networks (Models 2-4 in Table 3), these local networks may be valuable in terms of obtaining good "bargains" (Models 6-7 in Table 3). In a meta-analysis, Fang et al. (2015) find that extraverted people are more likely to hold brokerage positions in instrumental networks. Such positions may facilitate the receipt of valuable information about potential takeover targets which may lead to better deals for the acquiring firms. This argument rests on information asymmetry between the local extraverted CEOs and 1) less extraverted, local CEOs and 2) non-local CEOs. Such information asymmetry is more likely to be present for 1) private targets versus public targets, 2) small targets versus large targets, and 3) R&D targets versus non-R&D targets (Uysal et al., 2008).

5.185*0.011). In contrast, Uysal et al. (2008) find a difference in favor of local acquisitions of 180 basis points. The study of Uysal et al. (2008) covers an earlier period (1990-2003) and defines "Local" differently. However, we see no apparent reason why Uysal et al. (2008) find a significant announcement premium for local acquisitions, while we find a neglectable announcement discount for local acquisitions. One argument that favors the possibility of an announcement discount for local acquisitions is that that such acquisitions may be associated with a psychological illusion of control and/or managerial private benefits which result in overpayment (Renneborg and Vansteenkiste, 2019). We thank an anonymous referee for initiating this discussion.

The second avenue through which extraverted CEOs may create more value from local acquisitions than less extraverted CEOs is agency. Extraversion is associated with interpersonal engagement, which consists of affiliation and agency. The former is related to enjoying/valuing close interpersonal bonds, being warm and affectionate, while the latter is related to being socially dominant, enjoying leadership roles, being assertive, being exhibitionistic, and having a sense of potency in accomplishing goals (Depue and Collins, 1999). Extraverted CEOs exhibit inspirational leadership, and they are likely to generate confidence and enthusiasm among followers (Bono and Judge, 2004). Thus, extraverted CEOs influence their followers and motivate them to transcend their self-interests (Do and Minbashian, 2014). The agency aspect of extraversion is important for extracting commitment and efforts from both the acquiring firm's and the acquired firm's stakeholders and it is especially important in a local setting where the physical presence of the extraverted CEO is more obvious. Malhotra et al. (2018) argues that larger acquisitions require more social engagement and more persuasion and enthusiasm to rally the troops. Based on this argument, we would expect CEO extraversion to be especially important for the acquisition of large target firms as opposed to small target firms in the local area.

Table 4 investigates the likely avenues through which extraverted CEOs create more value from local acquisitions than less extraverted CEOs. Panel A shows that the value creation from the combination of CEO extraversion and a local acquisition is only significant for listed target firms. Panel B divides target firms into small target firms (below median) and large target firms (above median). Panel B shows that the value creation from the combination of CEO extraversion and a local acquisition is only significant for large target firms. Panel C divides target firms into small target firms (lowest 3 quartiles) and large target firms (highest quartiles) in line with the division by Uysal et al. (2008). Panel C shows that the value creation from the combination of CEO extraversion and a local acquisition is primarily significant for large target firms. Finally, Panel D divides target firms into

target firms that indicate R&D expenses and target firms that do not indicate R&D expenses. Panel D does not show a clear pattern. Table 4 does not support the information asymmetry avenue but does to some extent support the agency avenue both directly (following the above argument of Malhotra et al., 2018, on target size) and indirectly (by not lending support to the information asymmetry avenue). Thus, we find that the most likely avenue through which extraverted CEOs create more value from local acquisitions than less extraverted CEOs is the agentic qualities of CEO extraversion.

*** Please insert Table 4 here ***

We include firm fixed effects in our regression analysis (Petersen, 2009). Thus, we exploit within-firm variation which reduces a potential omitted variable bias. Our results are plausible (Harvey, 2017). Thus, it seems likely that an extraverted CEO exploits her/his local network in relation to the acquisition decision. We have not "proved" causality – e.g., by instrumental variables that have severe limitations (Jiang, 2017; Kahn and Whited, 2018) – and we cannot rule out variable firm effects. In fact, it is highly likely that a reverse causality exists. However, even in the case where a board decides to hire an extraverted CEO with an extended local network because the board adopts a new strategy that includes local expansion through local acquisitions, it may not be the extraversion of the CEO that is the trigger for the new focus on local acquisitions, but the extended local network of the extraverted CEO is still an important instrument for the implementation of the new strategy decided by the board.

4. Conclusion

We investigate national acquisitions of S&P 1500 non-financial firms in the period from 2007 to 2020. We find that CEO extraversion is negatively associated with the geographical dispersion of acquisitions within the U.S. Furthermore, we find that the stock market is less negative toward local

11

acquisitions when these acquisitions are undertaken by extraverted CEOs. Our results support the notions 1) that the extraverted CEOs' local and information-rich networks facilitate local acquisitions and 2) that the agentic qualities of extraverted CEOs work as value enhancing mechanisms when conducting local acquisitions.

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Table 1: Descriptive statistics

This table reports descriptive statistics for the main variables.

	Obs.	Mean	Std. dev.	1 Perc	25 Perc	Median	75 Perc	99 Perc
Extraversion	993	5.125	0.678	3.357	4.795	5.185	5.518	6.604
State	993	0.215	0.411	0.000	0.000	0.000	0.000	1.000
CAR [-1;+1]	993	0.000	0.010	-0.035	-0.005	0.000	0.006	0.030
Openness to experience	993	4.799	0.567	3.549	4.365	4.853	5.245	5.808
Conscientiousness	993	5.074	0.503	3.651	4.747	5.044	5.419	6.271
Agreeableness	993	4.461	0.713	2.632	3.993	4.573	4.927	5.940
Neuroticism	993	3.061	0.498	1.621	2.833	3.064	3.343	4.173
Narcissism	993	0.242	0.080	0.088	0.190	0.237	0.284	0.483
Overconfidence	993	0.470	0.499	0.000	0.000	0.000	1.000	1.000
Tenure	993	7.866	6.926	0.550	3.039	6.050	10.142	34.492
Age	993	55.383	6.507	41.000	51.000	55.000	60.000	71.000
Gender	993	0.979	0.144	0.000	1.000	1.000	1.000	1.000
Duality	993	0.516	0.500	0.000	0.000	1.000	1.000	1.000
Log MVA	993	9.200	1.936	5.702	7.707	8.956	10.584	13.575
Leverage	993	0.509	0.187	0.088	0.404	0.520	0.632	0.937
ROA	993	0.165	0.080	-0.034	0.116	0.156	0.205	0.429
Log Tobin's Q	993	0.698	0.417	-0.115	0.397	0.657	0.961	1.764
Log Current ratio	993	0.874	0.582	-0.438	0.478	0.845	1.235	2.389
Log RD	993	-3.042	1.332	-6.935	-3.817	-2.853	-2.014	-0.788
Log Tangibility	993	-2.312	0.772	-4.568	-2.743	-2.297	-1.796	-0.799
Cash financed	993	0.579	0.494	0.000	0.000	1.000	1.000	1.000
Focus	993	0.501	0.500	0.000	0.000	1.000	1.000	1.000

Table 2: Correlation matrix

This table reports correlation coefficients for the main variables.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Extraversion	1.000																				
2	State	0.082	1.000																			
3	CAR [-1;+1]	0.059	-0.030	1.000																		
4	Openness to experience	0.543	0.141	0.039	1.000																	
5	Conscientiousness	0.395	-0.057	-0.026	0.694	1.000																
6	Agreeableness	0.432	0.185	0.032	0.823	0.565	1.000															
7	Neuroticism	-0.410	-0.091	-0.047	-0.755	-0.589	-0.772	1.000														
8	Narcissism	-0.086	0.028	0.013	-0.075	-0.095	-0.156	0.079	1.000													
9	Overconfidence	-0.165	-0.021	0.027	-0.019	-0.017	0.005	0.017	0.035	1.000												
10	Tenure	-0.203	-0.016	-0.015	-0.050	-0.209	-0.038	0.038	0.047	0.353	1.000											
11	Age	-0.253	-0.093	-0.040	-0.254	-0.144	-0.203	0.119	0.151	0.145	0.403	1.000										
12	Gender	0.005	-0.008	0.021	0.050	-0.061	0.029	-0.041	0.012	0.026	0.066	-0.024	1.000									
13	Duality	0.015	-0.092	-0.062	-0.090	0.047	-0.123	-0.011	0.075	0.170	0.293	0.245	0.040	1.000								
14	Log MVA	0.324	0.116	0.032	0.259	0.115	0.239	-0.312	0.107	-0.096	0.007	0.138	-0.040	0.232	1.000							
15	Leverage	0.115	-0.099	-0.006	-0.023	0.071	-0.100	-0.023	0.054	-0.054	-0.132	0.092	-0.058	0.132	0.360	1.000						
16	ROA	-0.083	-0.002	0.083	0.003	0.020	0.038	-0.079	0.048	0.053	0.003	0.128	0.007	-0.039	0.167	-0.033	1.000					
17	Log Tobin's Q	0.125	0.018	0.135	0.323	0.151	0.353	-0.348	-0.069	0.159	0.114	-0.047	0.007	0.018	0.253	-0.062	0.420	1.000				
18	Log Current ratio	-0.227	0.049	0.043	-0.108	-0.085	-0.024	0.080	0.011	0.089	0.091	0.031	0.013	-0.118	-0.345	-0.481	0.101	-0.034	1.000			
19	Log RD	0.178	0.221	0.010	0.407	0.084	0.561	-0.450	0.003	-0.040	0.094	-0.120	0.102	-0.131	0.049	-0.266	-0.058	0.297	0.196	1.000		
20	Log Tangibility	-0.012	-0.112	0.001	-0.251	-0.068	-0.284	0.204	-0.060	-0.198	-0.073	0.060	-0.106	0.107	0.100	0.167	0.132	-0.040	-0.127	-0.299	1.000	
21	Cash financed	-0.007	-0.031	-0.069	0.024	0.023	0.006	-0.012	-0.022	0.031	-0.013	0.005	0.016	0.006	-0.040	-0.019	-0.002	-0.009	-0.007	0.065	-0.079	1.000
22	Focus	0.004	-0.028	-0.041	0.137	0.094	0.082	-0.059	-0.031	0.017	-0.019	-0.065	-0.007	-0.090	-0.111	-0.037	0.042	0.056	-0.022	0.028	-0.009	-0.020

Table 3: Regression results

This table reports fixed effects logit (Models 1-5) and OLS (Models 6-7) estimations on the association between CEO extraversion and local acquisitions. Standard errors are shown below the coefficients. Standard errors are clustered at the firm level. Statistical significance is indicated by * at a 10% level, ** at a 5% level, and *** at a 1% level.

	(1) State	(2) State	(3) State	(4) Region	(5) State – marginal eff.	(6) CAR [-1;+1]	(7) CAR [-5;+5]
Extraversion		1.131**	1.729**	1.209***	.237**	.001	.001
		(.501)	(.766)	(.452)	(.766)	(.001)	(.004)
Extraversion*State						.003**	.011***
						(.001)	(.004)
State						-.018**	-.058***
						(.007)	(.02)
Openness to experience			1.138	-.339	.156	.007	.017
			(1.692)	(1.205)	(1.692)	(.004)	(.011)
Conscientiousness			-3.668**	-1.392	-.503**	-.003	-.014
			(1.436)	(.952)	(1.436)	(.004)	(.01)
Agreeableness			-1.584	.17	-.217	.003	.002
			(1.324)	(.738)	(1.324)	(.003)	(.007)
Neuroticism			-.239	-.267	-.033	0	-.007
			(1.216)	(.789)	(1.216)	(.003)	(.008)
Narcissism			-10.82**	-1.8	-1.484**	.007	.023
			(4.929)	(2.633)	(4.929)	(.009)	(.025)
Overconfidence			.878*	.243	.120*	0	0
			(.522)	(.323)	(.522)	(.001)	(.003)
Tenure	-.028	-.03	-.191***	-.065*	-.0262***	0	0
	(.038)	(.04)	(.069)	(.035)	(.069)	(0)	(0)
Age	.035	.063	.179**	.062	.025**	0	0
	(.049)	(.054)	(.078)	(.039)	(.078)	(0)	(0)
Gender	.212	.45	.208	.179	.029	-.004	.01
	(.897)	(.93)	(1.206)	(.916)	(1.206)	(.004)	(.01)
Duality	.399	.323	.886	-.232	.122	-.001	0
	(.557)	(.569)	(.681)	(.404)	(.681)	(.001)	(.004)
Log MVA	.424	.273	.494	.212	.068	.001	.002
	(.419)	(.439)	(.474)	(.337)	(.474)	(.001)	(.003)
Leverage	.694	.776	.78	.114	.107	.005	.012
	(1.321)	(1.332)	(1.43)	(1.051)	(1.43)	(.004)	(.011)
ROA	-.908	-.457	-.359	.805	-.049	-.001	-.031
	(2.579)	(2.668)	(2.826)	(1.993)	(2.826)	(.008)	(.022)
Log Tobin's Q	-.717	-.437	-1.036	-.258	-.142	.003*	.021***
	(.544)	(.563)	(.654)	(.454)	(.654)	(.002)	(.005)
Log Current ratio	.459	.626	.791*	.33	.108*	.003**	.012***
	(.392)	(.407)	(.458)	(.305)	(.458)	(.001)	(.003)
Log R&D	-.056	-.207	-.28	-.172	-.038	.001	0
	(.402)	(.413)	(.442)	(.355)	(.442)	(.001)	(.003)
Log Tangibility	-.329	-.329	-.223	-.008	-.031	0	.002
	(.39)	(.398)	(.406)	(.332)	(.406)	(.001)	(.004)
Cash financed	-.095	-.137	-.123	-.014	-.017	-.001*	-.002
	(.253)	(.253)	(.265)	(.195)	(.265)	(.001)	(.002)
Focus	.06	.094	.261	.111	.036	0	0
	(.299)	(.306)	(.32)	(.228)	(.32)	(.001)	(.002)
Constant						-.033	-.057
						(.027)	(.073)
Observations	993	993	993	993	993	993	993
R-squared	.074	.097	.145	.054		.088	.1
Year fixed effects	✓	✓	✓	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓	✓	✓	✓

Table 4: Subsample analysis

This table reports fixed effects OLS estimations with CAR[-1;+1] and CAR[-5;+5] as the dependent variables. The models are constructed using year- and firm-fixed effects and include the same control variables as in Table 3 (but not reported). Standard errors are shown below the coefficients. Standard errors are clustered at the firm level. Statistical significance is indicated by * at a 10% level, ** at a 5% level, and *** at a 1% level. Panel A divides into subsamples according to private or listed target firms. Panel B divides into subsamples according to deal value (below or above the median). Panel C divides into subsamples according to deal value (below or above the 75% quartile). Panel D divides into subsamples according to the target firm's R&D expenses the year prior to the announcement (no R&D expenses or R&D expenses).

Panel A	Private targets		Public targets	
	CAR [-1;+1]	CAR [-5;+5]	CAR [-1;+1]	CAR [-5;+5]
Extraversion	.001	.0	.003	.005
	(.002)	(.005)	(.003)	(.009)
Extraversion*State	.001	.01	.005**	.01*
	(.002)	(.006)	(.002)	(.006)
State	-.006	-.052	-.028**	-.057*
	(.012)	(.033)	(.012)	(.03)
Observations	736	736	257	257
R-squared	.108	.118	.447	.388
Controls	✓	✓	✓	✓
Year fixed effects	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓

Panel B	Small targets (below median)		Large targets (above median)	
	CAR [-1;+1]	CAR [-5;+5]	CAR [-1;+1]	CAR [-5;+5]
Extraversion	.003	.006	.002	.009*
	(.003)	(.009)	(.002)	(.005)
Extraversion*State	-.005	-.005	.006***	.013***
	(.004)	(.01)	(.002)	(.004)
State	.023	.021	-.033***	-.071***
	(.019)	(.053)	(.008)	(.022)
Observations	499	499	494	494
R-squared	.122	.13	.219	.232
Controls	✓	✓	✓	✓
Year fixed effects	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓

Panel C	Small targets (lowest 3 quartiles)		Large targets (highest quartile)	
	CAR [-1;+1]	CAR [-5;+5]	CAR [-1;+1]	CAR [-5;+5]
Extraversion	.001	-.004	.006*	.015*
	(.002)	(.005)	(.003)	(.008)
Extraversion*State	-.001	.011*	.006**	.013**
	(.002)	(.006)	(.002)	(.006)
State	.002	-.059*	-.033***	-.072**
	(.012)	(.034)	(.012)	(.033)
Observations	745	745	248	248
R-squared	.088	.114	.314	.294
Controls	✓	✓	✓	✓
Year fixed effects	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓

Panel D	R&D targets		Non-R&D targets	
	CAR [-1;+1]	CAR [-5;+5]	CAR [-1;+1]	CAR [-5;+5]
Extraversion	.005	.007	0	-.001
	(.004)	(.01)	(.002)	(.005)
Extraversion*State	.004**	.008	.001	.012*

	(.002)	(.006)	(.002)	(.006)
State	-.024**	-.045	-.007	-.063**
	(.011)	(.032)	(.012)	(.032)
Observations	203	203	790	790
R-squared	.546	.407	.09	.104
Controls	✓	✓	✓	✓
Year fixed effects	✓	✓	✓	✓
Firm fixed effects	✓	✓	✓	✓