REVISITING THE LOCUS OF EXPERIENCE: A STUDY ON CORPORATE DEVELOPMENT EXECUTIVES, ORGANIZATIONAL LEARNING AND M&A PERFORMANCE

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Job Market Paper

Draft: Oct 25th, 2019

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ABSTRACT

Understanding how firms learn to make better strategic decisions and achieve superior performance is a question of significant concern to managers and scholars, especially in the context of mergers and acquisitions (M&A). While a long history of research has been conducted on the role of organizational-level learning in shaping M&A outcomes, limited attention has been paid to the individuals who are specifically dedicated to this process. In this study, I introduce and argue that **Corporate Development Executives (CDEs)**, the *M&A-specific human capital* leading inorganic growth inside companies, are particularly critical for M&A learning and performance. Through a comprehensive, hand-collected dataset on the heads of corporate development in S&P 500 information technology companies, I shed light on who CDEs are, what they do, and whether and how they impact M&A outcomes. Specifically, I find evidence that an inverted U-shaped relationship exists between CDEs' prior M&A experience and subsequent M&A performance. Context variability moderates this relationship, while firm-level and CEO-level M&A experience serve as important boundary conditions for the effectiveness of CDEs. Overall, this study contributes to the corporate strategy literature by unveiling novel insights regarding the locus of experience and learning in M&A.

Acknowledgement: *I would like to thank the members of my dissertation committee Emilie Feldman, Harbir Singh, Dan Levinthal and Minyuan Zhao for their feedback and guidance in the development of this paper. I also received valuable comments from Pierre Azoulay, Matthew Bidwell, Peter Cappelli, Seth Carnahan, Guoli Chen, JP Eggers, Connie Helfat, Exequiel Hernandez, Samina Karim, Aseem Kaul, Mario Schijven, Margarethe Wiersema, the participants at the 2019 Strategic Management Society Annual Meeting, 2019 Academy of Management Annual Conference, 2019 CCC Doctoral Conference, 2019 Columbia/NYU East Coast Doctoral Conference, the Wharton Management Department Seminar Series and PhD Seminars, and the Mack Innovation Doctoral Association Seminar. I would like to thank the Strategy Research Foundation, the Jacobs Levy Equity Management Center and the Mack Institute for Innovation Management at Wharton for their generous financial support. An earlier version of this paper was recognized as the winner of the 2019 SMS Best Conference PhD Paper Prize, Best Paper in Corporate Strategy Interest Group, and Best Conference Paper Prize Honorable Mention.*

INTRODUCTION

In today's rapidly changing global competitive landscape, mergers and acquisitions (M&A) have become ever more important sources of growth, value creation and long-term competitive advantage (Capron and Mitchell, 2013; Haspeslagh and Jemison, 1991). In 2018, US$3.9 trillion was spent on M&A globally (Statista.com, 2018), almost double the amount spent on worldwide R&D activities (Riemschneider, 2018). A long history of research has been conducted on the factors that drive the performance of M&A, including the role of learning from past experience (Barkema and Schijven, 2008; Haleblian and Finkelstein, 1999). Drawing on the evolutionary theory of the firm, scholars have generally focused on learning at the organizational level, where routines, deliberate learning and codification processes have been shown to be important antecedents to M&A capabilities and superior M&A performance (Trichterborn *et al.*, 2016; Zollo and Singh, 2004; Zollo and Winter, 2002).

However, the knowledge-based view of the firm and recent works on the microfoundations of dynamic capabilities suggest that individuals also play critical roles in organizational learning (Grant, 1996; Meyer-Doyle, Lee, and Helfat, 2019). Individuals are highly involved in the codification and application of knowledge regarding specific tasks, and they bring a wealth of tacit knowledge from their heterogeneous backgrounds (Argote, 2012; Argote and Ingram, 2000). As strategic decisions like M&A are largely determined by a handful of individual decision makers inside companies, it is thus imperative to examine who these individuals are and how they shape M&A outcomes.

In this paper, I introduce and argue that *Corporate Development Executives (CDEs)*, the *M&A-specific human capital* inside organizations, are particularly important for M&A learning and performance. With their growing prevalence in the last three decades (EY, 2015), these individuals are now often competed for in labor markets and even fought over in courts (Wall Street Journal, 28

May 2009; Reuters, 18 April 2018). Unlike other actors such as CEOs or boards, CDEs are specifically responsible for orchestrating and overseeing the entire M&A process inside companies (Haspeslagh and Jemison, 1991; Laamanen and Keil, 2008; Trichterborn *et al.*, 2016). They are engaged in every step and every detail of the M&A decision process, and play a unique organizational role as the nexus linking all relevant internal and external parties throughout the process. Shedding light on these individuals may bring new theoretical insights into how, whose, and what type of M&A experience impact M&A performance, and partly answer the question of where M&A capabilities come from.

To unpack the role of CDEs in shaping firms' M&A learning and performance outcomes, I make three sets of arguments. First, I propose that the locus of experience and learning in M&A is not necessarily at the organizational level, but instead resides with the actors specifically dedicated to the focal task, namely, the CDEs. Second, the complex and context-dependent nature of M&A poses both learning benefits and misapplication challenges, suggesting a net inverted-U relationship between CDEs' prior experience and subsequent M&A performance. Third, greater variation in prior CDE experience contexts may mitigate these misapplication challenges, resulting in a net increasing relationship between their prior M&A experience and subsequent M&A performance.

Using a proprietary, hand-collected dataset on heads of corporate development built from LinkedIn and other web resources, I empirically test these arguments through an event study of all announced M&As by S&P 500 information technology companies from 1995-2015. I find an inverted U-shaped relationship between CDEs' prior M&A experience and subsequent M&A performance, where a more varied prior experience (based on CDEs' prior organizational and deal contexts) moderates this relationship. In addition, I find that CEO-level and firm-level M&A experience serve as important boundary conditions for the effectiveness of CDEs. I also test and find evidence against several alternative explanations including selection based on firm-related

factors, impression management, survivorship bias, productivity declines, reputation spillovers, other functional backgrounds of CDEs, financial advisors' experience and prior partnerships between target and acquiring firms.

This study contributes to the corporate strategy literature by unveiling novel insights into the relationship between M&A experience, learning and performance. By introducing CDEs as a critical group of actors in the M&A process and showing that their prior M&A experience matters for M&A performance in important ways, this study also builds on the emerging stream of research on dedicated corporate functions and the microfoundations of M&A capabilities. The findings of this study also have managerial implications on how firms should source talent for their M&A functions, especially given firms' growing reliance on inorganic opportunities for growth and transformation.

THEORETICAL BACKGROUND AND HYPOTHESES

M&A is an important strategic action whereby firms can change their corporate scope, reconfigure their resource bases, and sustain their competitive advantage (Capron and Mitchell, 2013; Haspeslagh and Jemison, 1991; Karim and Mitchell, 2000; Zollo, 1998). Understanding how firms can achieve superior M&A performance has continued to be an active area of research and debate among corporate strategy scholars (Haleblian *et al.*, 2009; King, Bauer, and Schriber, 2018), especially as M&A has become an even more critical source of growth (Financial Times, 2018).

Prior Literature on M&A Experience and Learning

Many scholars have argued that prior M&A experience is an important antecedent of learning how to make better M&A decisions and achieving superior M&A performance (Barkema and Schijven, 2008; Bauer and Matzler, 2014; Haleblian *et al.*, 2009; King *et al.*, 2018), where much of the existing works on M&A experience has examined learning at the organizational level.

Studies examining the theoretical mechanisms through which organizational learning occurs have argued that learning from direct experience primarily occurs through two ways: routines and

deliberate learning processes (Nelson and Winter, 1982; Zollo and Singh, 2004; Zollo and Winter, 2002). Routines are conceptualized as a semi-autonomous and iterative type of learning that is history-dependent and target-oriented, where firms draw inferences from past experiences, and retrieve the inferred learning for future similar engagements (Hoang and Rothaermel, 2005; Levitt and March, 1988; Zollo, 1998). Deliberate learning processes have been argued to be high-order capabilities that require intentional cognitive attempts to reflect on past accumulated experience of a task (Zollo, 1998; Zollo and Winter, 2002), and may occur when firms have a dedicated function that focuses on articulation, codification, sharing and internalization of knowledge learned from past experiences (Trichterborn *et al.*, 2016; Zollo and Singh, 2004). Based on these mechanisms, scholars have argued that organizational-level M&A experience should lead to subsequent improvements in performance.

However, the empirical studies examining the M&A experience-learning-performance relationship have found mixed results. For example, upon examining the direct relationship between organizational M&A experience and subsequent performance, Fowler and Schmidt (1989) and Barkema, Bell, and Pennings (1996) find a *positive* relationship while Haleblian and Finkelstein (1999) and Zollo and Reuer (2010) document a *U-shaped* relationship; Hayward (2002) finds an *inverted U-shaped* relationship, while Uhlenbruck, Hitt, and Semadeni (2006) find a *negative* relationship, and Zollo and Singh (2004) find *no significance*. Building on these results, other works have also highlighted the potential contingencies for the experience-learning-performance relationship, such as the applicability of past deal experience to future deals and the re-usability of routines (Barkema, Bell, and Pennings, 1996; Hayward, 2002), the relatedness and similarities to what the firms have learned from prior M&A transactions (Haleblian and Finkelstein, 1999; Nadolska and Barkema, 2007), the differential effects of learning from successful or non-successful experiences (Kim, Kim, and Miner, 2009), and the existence of a dedicated M&A function (Trichterborn *et al.*, 2016).

Individual vs. Firm-Level M&A Experience and Learning

While foundational to our understanding of how learning from prior experience may impact strategic decisions such as M&A, these works implicitly make two assumptions. First, the learning process can be studied and measured at the organizational level, where prior experience with a task may be codified, aggregated and attributed to the collective property of the organization. Second, the reenactment of routines and the reapplication of knowledge from deliberate learning processes are largely firm-level properties, regardless of the heterogeneous backgrounds of the individuals involved in the task and their mobility over time.[1]

These assumptions may be valuable simplifications for understanding many activities of the firm, such as making toys in factories or building liberty ships (Argote, Beckman, and Epple, 1997), but they do not always hold for all activities of the firm, especially in strategic decisions like M&A that are largely determined by a few key actors inside the firm. In such contexts, reexamining the roles of *the specific individuals dedicated to M&A and their prior experience* is essential to our theoretical understanding of the relationship between organizational learning and performance, especially since individuals bring a wealth of tacit knowledge from their heterogeneous prior experiences, and are highly involved in both knowledge codification and their reapplications (Argote, 2012).

A few recent studies have begun to examine the prior M&A experience of the most senior individual actors of the organization, including the board of directors, CEOs, and the top management teams (Gamache *et al.*, 2015; Jensen and Zajac, 2004; McDonald, Westphal, and Graebner, 2008; Meyer-Doyle *et al.*, 2019; Nadolska and Barkema, 2014). However, additional works examining other key strategic activities of the firm have also demonstrated the importance of

[1] In their theory-building sections, prior works often loosely refer to all individuals involved in the experience accumulation process as "managers" or "top managers," without specifying who these individuals are and their differential roles in relation to the task. Instead, they assume that regardless of which individuals are "experiencing" the task (and whether these individuals leave the organization), any actors' accumulation of task experience can be aggregated to the firm level, as any knowledge gained from these experiences would be fully reflected in firm-level memory, routines, codified manuals and processes (Haleblian and Finkelstein, 1999; Trichterborn *et al.*, 2016).

looking beyond the C-level to the most relevant individual actor-level (Arora, Fosfuri, and Gambardella, 2001; Fu, Tang, and Chen, 2018; Gruber, Harhoff, and Hoisl, 2013; Levinthal and Fichman, 1988; Seabright, Levinthal, and Fichman, 1992). Focusing on the most relevant actor is especially important for M&A, because it is a highly complex activity that requires not only specialized knowledge regarding every task, but also extensive intra- and inter-organizational relationships to ensure smooth coordination and access to privileged information. All of these properties are individual-specific, and are not easily transferrable to other actors in the organization. In other words, a closer examination of the *M&A-specific human capital* is critical for unpacking the theoretical mechanisms driving organizational learning in M&A.

Corporate Development Executives as the Locus of Experience in M&A

Corporate Development Executives (CDEs)[2] serve as the *M&A-specific human capital* within organizations, and have become increasingly prevalent over the last three decades (EY, 2015)[3]. While their exact responsibilities may vary across organizations, the existence of the function in which they reside and their key responsibilities were first documented in Haspeslagh and Jemison (1991). Though the exact nomenclature many vary across firms, for the purpose of theorizing, throughout this manuscript I refer to CDE as the highest-ranking individual who leads the function in a given organization[4].

CDEs provide an opportunity to reexamine where learning in M&A occurs. These executives are the dealmakers inside firms, specifically charged with the task of leading inorganic

[2] Their nomenclature may vary across organizations, where they have been called Head of M&A, Head of Corporate Development, Corporate Business Development Executives, Chief Development Officer, etc. Throughout this paper, by CDE, I refer to the individual whose main responsibility is to lead a firm's inorganic growth and all M&A efforts.
[3] This paper is not focused on what factors drive companies to have CDEs in the first place (an important open question for future study), but rather, *given that they have a dedicated person leading M&A*, does that CDE matter and how. In my empirical setting of the S&P 500 IT sector, all companies have CDEs.
[4] In this study, I do not explicitly theorize on the teams reporting to the CDE and the role of their reporting structure, but they could also be important for learning. I try to control for their impacts on CDEs' effectiveness in the empirical analyses, and I am also collecting additional data on the composition of corporate development teams and structures for future studies.

growth strategies (Haspeslagh and Jemison, 1991; Laamanen and Keil, 2008; Trichterborn *et al.*, 2016). They play a critical role in orchestrating and overseeing every task and every detail in the M&A lifecycle, from target screening and selection, to deal execution, to post-merger integration, where the decisions made in each step directly impact the ultimate performance of each deal.

While they have been largely ignored by existing M&A literature, CDEs have been recognized in the business press as highly valuable resources of firms. For example, the media has attributed Apple's uptick in M&A volume and performance since 2009 to its Head of M&A, Adrian Perica, who joined from Goldman Sachs in 2009, bringing expertise and discipline to Apple's M&A process (Bloomberg, 29 May 2014; Newsweek, 4 April 2019). Competitors often battle over these executives, such as these headlines: "*Facebook Said to Hire Google Executive for M&A" (New York Times*, 15 March 2011*)* or "*GSK poaches Roche dealmaker*" (*Reuters*, 18 April 2018). CDEs are even fought over in courts, such as the case of IBM's lawsuit against Dell over the poaching of its M&A chief (*Wall Street Journal*, 28 May 2009).

CDEs are very different from other groups of actors involved in the M&A process. Unlike the business unit leaders who are mostly focused on their own products/divisions/geographies, CDEs take a broader view to develop a good understanding of the strengths and weaknesses of each business unit of the firm and how they together create value for the firm. When evaluating potential transactions, they holistically assess the overall financial and strategic impact to other business units and the firm, something business unit leaders may not be able to do.

Similarly, CDEs differ from other C-suite executives such as CEOs and board members, who set firms' overall strategies but necessarily take a 10,000-foot view of the organization. While M&A decisions require the CEO's (and board members') support and approval and may involve support from other relevant actors (e.g. legal, IR, accounting, other TMTs, etc.), CDEs are "in the trenches" with day-to-day responsibilities across all M&A workstreams.

In addition, CDEs play a unique organizational role as the *nexus* linking all relevant internal and external parties during the M&A process. Internally, CDEs collect and implement inorganic growth objectives across the C-suite and business unit level, serving as the centralized repository whereby potential M&A ideas are evaluated and executed. They also act as internal learning centers of M&A know-how, in charge of developing manuals, codifying past lessons learned, and updating relevant M&A knowledge bases (Trichterborn *et al.*, 2016). Externally, CDEs serve as the firm's primary "postbox contact," liaising with all external parties relevant to the M&A process. They monitor and screen all external opportunities, and they also make decisions on when and where to source external advice (from investment bankers, consultants, lawyers, accountants, etc.).

Given CDEs' importance and unique role in the M&A process, we should reexamine the relationship between M&A experience, learning and performance at the CDE level.

Corporate Development Executives and M&A Performance

Drawing on existing works on the learning curve hypothesis, managerial expertise and cognition, I argue that CDEs' prior M&A experience is a double-edged sword for subsequent M&A performance.

M&A scholars have conceptualized M&A as a highly complex, dynamic and multifaceted process with often ambiguous performance feedback (Barkema and Schijven, 2008). A typical transaction usually goes through stages of target screening and selection, deal execution, deal announcement, deal completion, post-merger integration, and post-deal learning (Haspeslagh and Jemison, 1991; King *et al.*, 2018), where the decisions made at each step jointly impact subsequent task performance and overall deal performance.

To deal with the complexity of M&A, CDEs are likely to develop and rely on mental representations and frameworks, which are cognitive tools that may improve the tractability of their decision-making but necessarily make implicit simplifications regarding the task environment

(Csaszar and Levinthal, 2016; Eggers and Kaplan, 2013; Gavetti, 2012; Gavetti, Levinthal, and Rivkin, 2005; Levinthal, 2011). These cognitive tools can be both beneficial and limiting to subsequent M&A performance.

Potential Learning Benefits of CDEs' M&A Experience

On the one hand, these mental representations help CDEs to quickly gain efficiency and know-how on the various tasks in the M&A process. Studies on expertise and the learning curve perspective have found that repeated task experience helps managers to accrue relevant knowledge, skills and abilities (KSAs), and improve overall competencies at conducting the task, which in turn may lead to better task performance (Argote and Epple, 1990; Quińones, Ford, and Teachout, 1995). As such, CDEs with prior M&A experience are likely to have accumulated KSAs for the various tasks in the M&A process, e.g., sourcing better targets, conducting higher-quality due diligence, developing more accurate valuation estimates, adopting more comprehensive integration planning, etc., all of which lead to improvements in the performance of future transactions.

However, performance improvements from these learning benefits are likely to be nonlinear, where *ceteris paribus*, improvements in performance are likely to be greater at lower levels of experience than at higher levels (Darr, Argote, and Epple, 1995; Epple, Argote, and Murphy, 1996). For example, when CDEs have very little or no prior M&A experience, they do not possess any knowledge on how a typical M&A process should be conducted (e.g., how to source potential targets, when to contact advisors, who to call and when, what documents to file, etc.), and thus may not be able to accurately evaluate the transaction's value nor efficiently organize firms' resources, leading to suboptimal M&A outcomes. After a certain amount of transaction experience, CDEs begin to develop mental representations and frameworks regarding the M&A process, and they may start applying them to future transactions and updating them along the way, thus increasing M&A performance. As transaction experience accumulates, what can be learned from each new

transaction becomes limited, and performance improvements may slow down, especially at higher levels of CDE M&A experience (e.g., the learning benefits and performance improvements gained from the 2nd deal to the 12th deal are likely to be more than from the 100th deal to the 110th deal).

Potential Misapplication Challenges of CDEs' M&A Experience

On the other hand, prior works have also highlighted the perils of mental rigidities and cognitive entrenchment (Dane, 2010; Leonard-Barton, 1992; Levinthal and March, 1993; Tripsas and Gavetti, 2000), which may result in misapplications of existing mental representations and frameworks to new transactions, especially at high levels of CDE M&A experience.

Like all individual decision makers, CDEs are boundedly rational (Simon, 1991), and their abilities to learn from experience are subject to the fact that *experience is an imperfect teacher* that is often causally ambiguous, noisy and path-dependent, and has flexible interpretations, where any lessons learned are "likely to be incomplete, superstitious, self-confirming, or mythic" (March, 2010: 114). That is, learning how to conduct M&A transactions is not as simple as improving input/output ratios of learning curve studies, as every new M&A transaction is different from prior M&A in some way, especially since the target company is always different (Barkema and Schijven, 2008; Zollo, 2009). As one senior corporate development executive put it in an interview, "Every deal is a snowflake. They are similar but never exactly the same."[5][6]

Given the "similar but different" nature of each M&A and context-dependent nature of their cognitive frameworks, CDEs should actively adapt and update their existing mental representations through future encounters with the task. However, as CDEs develop and become increasingly reliant on mental representations and structures to deal with the complexities of M&A, these mental processes become increasingly automatic (Ericsson, 2006; Helfat and Peteraf, 2015). As their M&A

[5] Interview with the Head of M&A and Integration at a large internet company on April 14th, 2017.
[6] This challenge of learning from similar but different repeated events of a given task has been referred to as the problem of generalization (Choi and Levinthal, 2019).

experience increases, CDEs are likely to become cognitively entrenched in these mental representations, over-relying on the "I have seen it before" mindset (Csaszar and Levinthal, 2016; Dane, 2010; Levitt and March, 1988), engaging in lower levels of active monitoring, learning, and vigilance-type behaviors (Johnson, 2012; Luciano *et al.*, 2018), and becoming complacent about their own abilities to accurately assess new transactions[7]. At high levels of CDE M&A experience, these cognitive inertial forces are likely to result in misapplication of existing M&A know-how to new contexts, resulting in subsequent negative performance.

Net First-Order Effect of Learning from CDEs' M&A Experience

The combination of the above learning benefits and misapplication challenges suggests a net nonlinear relationship between CDEs' prior M&A experience and subsequent M&A performance, specifically an inverted-U-shaped relationship. At low to moderate levels of prior experience, there is a positive association between CDEs' prior M&A experience and performance, due to the relative combinations of high learning benefits of experience and low misapplication challenges from cognitive entrenchments. However, at higher levels of CDEs' M&A experience, the potential performance improvements from learning benefits of experience are outweighed by the misapplication challenges of experience, as the likelihood of misapplication and cognitive entrenchment increases with experience while the learning benefits are decreasing. Thus, I hypothesize that:

- **Hypothesis 1 (H1). There is an inverted U-shaped relationship between a CDE's prior M&A experience and subsequent M&A performance, *ceteris paribus*.**

[7] I classify performance decreases resulting from overconfidence, hubris and complacency behaviors as part of cognitive entrenchment and misapplication challenges, as under these conditions, the individuals also continue to rely on old mental frameworks, believing that their decisions are always right and rejecting any alternative considerations.

Variation in CDEs' Prior Experience Contexts on M&A Performance

Having established the arguments for a baseline inverted-U relationship between CDEs' prior M&A experience and subsequent M&A experience, it is important to also consider mechanisms that alleviate or enhance the challenges of misapplication by examining where CDEs' prior M&A experience comes from.

Prior works on learning rates and knowledge generation have highlighted the role of variation. Using an experimental study, Schilling et al. (2003) finds that some degree of task variation improves learning rates. Varying the content or the context of the task may enhance the learning process by allowing the individual actors to develop more abstract principles and a deeper cognitive understanding of the focal task (Graydon and Griffin, 1996; Paas, Van Merriënboer, and Adam, 1994; Schmidt, 1975). They may update their mental schema of the focal task by relating it to a general class of tasks, which in turn promotes rapid acquisition of related skills and knowledge sets that are similar but slightly different (in content or context) to those of the focal task.

Other works have also highlighted the potential benefits of variability in prior experience. Gavetti *et al.* (2005) finds that greater breadth of experience improves individual managers' mental representations and increases subsequent performance. Perkins (2014) shows that variations in learning contexts affect learning curves of multinational companies, where greater breadth of prior institutional experience prolongs subsequent survival of foreign investments. Furr (2019) examines the antecedents to product adaptation, and argues that start-up TMTs' pre-entry experience breadth increases the likelihood of product adaptations, as TMTs with greater breath of experience may have greater absorptive capacity, increased ability to engage in knowledge recombination and develop integrative knowledge, and have higher access to complementary knowledge.

Applying this logic to CDEs, I propose that more variation in CDEs' prior experience contexts may help to overcome the challenges of misapplication, leading to superior M&A

performance. If CDEs learn to conduct M&A only in a few contexts – such as doing M&A only in a few firms or conducting similar deal types – they are likely to develop refined mental representations and know-how on M&A that are very specific to these contexts. Misapplications are more likely to occur as CDEs overfit these existing mental representations to subsequent transactions, without realizing that not all M&A knowledge can be applied across all transactions and contexts.

In contrast, if CDEs learn to conduct M&A in a variety of contexts – such as across multiple organizations or transaction types that are very different from each other – they would be able to update their mental representations with a more complex mapping of M&A. As they see more different iterations of how M&A may be done (in both deal content and deal context), they are more cognizant of the context-dependent nature, transferability and limitations of their prior M&A experience. They are also less likely to be entrenched in existing cognitive frameworks, more able to recognize the specific nuances across deals, and become more vigilant in selecting and matching the right context-relevant knowledge to the subsequent transactions. This in turn decreases the likelihood of misapplications, resulting in net improvements in performance.

Indeed, when asked during an interview who he would hire, a CDE who has done 40 M&A transactions in five different companies or a CDE who has done 100 deals in a single firm, a C-suite executive said, "*it depends, but I'd be inclined towards the former, as that guy probably has sat in more types of boats, navigated more currents, and seen more of the ocean.*"[8] This metaphor captures the core intuition behind this argument, as the former CDE probably has learned more, seen a lot more varied contexts under which M&A are done, and is better able to recognize what M&A knowledge can be applied to what types of organizations and deals and what circumstances. Thus, I hypothesize that:

- **Hypothesis 2 (H2). There is an increasing relationship between a CDE's experience and M&A performance if the CDE has a more varied experience.**

[8] Interview with a C-suite executive of a medium-sized technology company on March 13th, 2019.

METHODS

Sample and Data Construction

This paper analyzes the effect of CDEs' prior M&A experience on M&A performance and the role of context variability on this relationship. In order to test the above hypotheses, I need a dataset containing different levels of M&A experience, at the CDE-level, at the CEO-level, and at the firm-level. As no available data on CDEs exists, I manually construct such a dataset.

I begin the sample construction process with a list of all publicly traded information technology companies that have appeared at least once in the Standard & Poor's 500 index from 1995 to 2015[9]. I choose the information technology sector for several reasons. First, the information technology sector is one of the most acquisitive sectors in the S&P 500, representing ~20% of the total market capitalization of the index. Almost every company in this sector is active in M&A and has dedicated executives for M&A (which I manually verify). These characteristics of the industry are advantageous from an empirical design perspective, as they allow me to avoid potential problematic selection issues. Second, focusing on one sector allows me to observe a lot of M&A experience without the idiosyncrasies across industries. Third, the information technology/high-tech sector is also the setting of many prior strategy works on M&A, facilitating potential comparisons of results (Ahuja and Katila, 2001; Kapoor and Lim, 2007; King, Slotegraaf, and Kesner, 2008; Puranam, Singh, and Chaudhuri, 2009; Puranam, Singh, and Zollo, 2006).

Corporate Development Executives Dataset

As my theory focuses on the CDEs in charge of M&A within their respective firms, I focus on identifying and collecting data on the *highest-ranking individual* in charge of M&A, who usually has

[9] This includes software and services, technology hardware and equipment and semiconductor companies based on their industry codes using the Global Industry Classification Scheme (GICS), which classifies companies by their principal business activity. Scholars have also documented that that GICS is the best performing Industry Classification Scheme for peer identification when compared to SICS and NAICS classification codes (Bhojraj, Lee, and Oler, 2003).

the title Head of the Corporate Development or Head of M&A in the firms in my sample[10]. For each firm in the sample, I identify and hand-collect comprehensive data (demographics, education, employment history) on both the current and past CDEs through a comprehensive, iterative manual search process using a combination of LinkedIn, BoardEx, Directory of Corporate Affiliations (DCA), Amadeus, Crunchbase, Bloomberg, Factiva, company filings, press releases, and web search results. Appendix A provides additional details on the data construction process, and Appendix B provides some descriptive information on the composition of the CDEs in the sample.

CEO Dataset

I construct a similar dataset for CEOs' backgrounds and prior M&A experience, beginning with the BoardEx dataset, which contains information on CEOs' prior employment, education and demographics details, and is often used by studies on CEOs and boards (Custódio and Metzger, 2013; Falato, Li, and Milbourn, 2015). BoardEx typically only includes information on prior jobs when the individuals were in a senior position, not their complete employment history since college graduation/first year of work. As M&A experience is of critical importance to my analyses, I manually collect the complete education and employment history of all CEOs.

Final Dataset

As I am interested in analyzing how prior M&A experience shapes subsequent M&A outcomes, I merge the CDEs' and CEOs' datasets to a panel of all announced M&A transactions by the focal information technology firms from 1995-2015, as well as detailed firm-level information collected from Compustat, CRSP, BoardEx, Professor Jay Ritter's online database of initial public offerings, and M&A performance data available from WRDS Event Study. I drop deals when M&A

[10] Note that the nomenclature on CDE varies across firms, where some may have the title Head of Corporate Development, others may have titles such as Head of Worldwide M&A, Head of Acquisitions, Corporate Development Senior Vice President, etc. Every effort has been made to ensure that the person identified is the most senior person in the firm in charge of M&A activities.

market-based performance data is not available, or when key control variables (total assets, current ratio, and deal ownership status) are missing. My final sample consists of 3,638 deals announced by 112 information technology firms, 221 CEOs and 243 CDEs from 1995 to 2015[11].

Variables

Dependent Variable: Cumulative Abnormal Stock Returns

Following prior M&A experience studies (Capron and Pistre, 2002; Haleblian and Finkelstein, 1999; Hayward, 2002; Kim, Finkelstein, and Haleblian, 2015), I use the event study approach to test my hypotheses. M&A performance is measured as cumulative abnormal returns (CARs) of firms' stocks at the time of deal announcement. CARs enable an immediate and direct assessment of firms' strategic decisions on their valuations (MacKinlay, 1997), and has been extensively used by scholars to evaluate the performance of M&A (Zollo and Meier, 2008), alliances (Kale, Dyer, and Singh, 2002), and other strategic decisions of the firm.

Using CARs to measure M&A performance following announcements makes two assumptions. First, a general assumption of market efficiency, where investors are able to accurately assess the potential future value creation opportunities and challenges of the transaction based on all available information disclosed at the time of the announcement. Second, the specific change in a firm's stock price is primarily driven by the announcement at a given time, and not due to any other factors. I ensure that this assumption is met by testing all analyses excluding announcements that may be confounded by other simultaneous actions by the firm (e.g., dividend changes, stock splits, earnings announcements, stock repurchase programs, major executive appointments) (McWilliams

[11] Of the 154 information technology firms that were ever in the S&P 500 from 1995-2015, 26 companies were acquired in the late 1990s/early 2000s during the dot-com bubble, making the identification of pre-acquisition internal firm employee details extremely difficult. Of these remaining 128 companies, 117 engaged in M&A during the sample period, 3 were then dropped due to missing dependent variables, and 2 were dropped due to missing current ratio information, resulting in a total of 112 companies in the final analyses. I test and do not find any differences in market capitalization between companies that were dropped due to missing CDE information (26 companies) or key variables information (16 companies) from the final sample of 112 companies.

and Siegel, 1997; Ryngaert, 1988), and by performing supplementary placebo analyses using an event window prior to the focal announcement (Eklund and Kapoor, 2019). For the main analyses, I calculate CAR using a three-day window at deal announcement (-1, +1). For robustness checks, I also test five-day (-2, +2) and seven-day (-3, +3) windows, all of which are in line with those used in prior studies (Haleblian and Finkelstein, 1999; McWilliams and Siegel, 1997; Zollo and Meier, 2008).

Independent Variables: Acquisition Experience at CDE-Level, CEO-Level, Firm-Level[12]

CDEs' prior M&A experience is defined as the total number of announced deals that CDEs have done in prior jobs in corporate development functions or when they are specifically mentioned in prior job descriptions on LinkedIn, before becoming CDE at the focal firm[13]. I assume that CDEs were involved in all deals done by prior employers when they were part of the dedicated corporate development / M&A functions within these firms. Total deal count best capture the aggregate M&A know-how gained by CDEs and the consequences of accumulating these experiences. Using total count is also consistent with prior M&A experience literature (Haleblian and Finkelstein, 1999; Hayward, 2002; Kim *et al.*, 2015; Vermeulen and Barkema, 2001; Zollo and Singh, 2004). For ease of display, this measure is scaled by 1/100.

Variability of CDEs' prior experience is operationalized in two ways. First, I measure it as the number of organizations CDEs have worked prior to starting the current role. There are many ways where CDEs can experience variability in their prior M&A experience contexts, the most salient one being the organizational environment itself. Firms are different in fundamental ways (Nelson, 1991),

[12] In an ideal study, it would be great to combine both the individual-level learning and organizational-level processes. However, the data requirements (e.g. detailed codification processes for how each company selects and integrates transactions, M&A routines, etc.) are beyond the scope of this study, as it would require a completely different research design and sample selection process, but it can be an important follow-on work.

[13] I believe this measure of CDE M&A Experience is a better, more conservative measure of the stock of experience that he/she is bringing into the role, compared to the potential alternative measure as a rolling count of announced deals *up until focal deal year* (i.e. including the new deals done in current job as CDE). While my results are robust to this alternative measure, I do not use it in my analyses as it conflates firm-level and CDE-level experiences.

where they may have different M&A processes, such as reporting structures, investment focuses, analytical tools, approval process, and relationships with external venture capitalists and advisors.

Second, I measure variability by examining the variations in deal structures (i.e. stakes purchased) among CDEs' portfolio of prior deals, one of the most important decisions in a transaction. I classify all prior deals done by the CDEs into four types based on the acquirer's post transaction ownership percentage in the target company: (i) acquisition of less than 5% (above which companies must disclose in filings); (ii) minority investment (5%-50%); (iii) majority investment (>50% and less than 100%); (iv) full takeover (100% ownership). I then calculate a Herfindahl concentration index $\sum_{i=1}^{n} S_i^2$ for each CDE, where n is the total number of deal types he or she has done, and S_i is percentage of the number of deals done for each type to the total number of deals that he or she has done prior to starting the focal role as CDE.

While I do not theorize about the role of CEOs' prior M&A experience and firms' prior M&A experience, they have been the focus of almost all prior works studying the relationship between M&A experience and performance, so I include them in all my analyses.

CEOs' prior M&A experience is defined as the total number of announced deals before he/she joins the focal firm, where their prior M&A experience could have been gained during prior corporate development roles, CEO roles, or when specifically mentioned in job descriptions. For robustness checks, I also use alternative measures of CEO experience in terms of log transformations, count and binary indicators of recent deals, total count before joining the focal firm, or before starting the CEO role. For ease of display, this measure is scaled by 1/100.

Firms' prior M&A experience is measured as the log of firms' total number of announced deals prior to the focal deal year. Log transformation is the right measure of the variable, as a plot of its distribution suggests a log-normal distribution that's highly skewed. Log transaction of experience has also been used in prior acquisition experience studies (Barkema *et al.*, 1996; Barkema and

Schijven, 2008). For robustness checks, I also construct alternative measures of firm M&A experience as total count, and log transformation, count and binary indicators of recent deals.

Control Variables

To rule out confounding effects from other variables impacting CARs and potentially biasing the relationship between CDEs' M&A Experience and performance, I control for CDE-level, firm-level and deal-level characteristics that might impact CARs of announced M&A (Haleblian and Finkelstein, 1999; Hayward, 2002; Nadolska and Barkema, 2014; Rabier, 2017).

At the CDE-level, I control for alternative aspects of CDEs' M&A experience that may also impact performance, namely, their *tenure in the current job as CDE* and their *tenure in the focal firm.* This also allows me to control for potential productivity declines associated with increasing age and tenure (Levin and Stephan, 1991; Skirbekk, 2008).

At the firm-level, I control for firms' market value using *Tobin's Q* (Gompers, Ishii, and Metrick, 2003), *firm size* using the log of total assets (Hayward, 2002; Zollo, 2009), firms' *prior performance* using return on assets (Capron and Shen, 2007; Hayward, 2002), firms' financial liquidity and leverage using *current ratio* (Haleblian and Finkelstein, 1999; Hayward and Hambrick, 1997), firms' diversification level using number of business segments (Nadolska and Barkema, 2014; Nary, 2017), and *firms' age* (Fowler and Schmidt, 1989). All firm-level controls are lagged by one year.

At the CEO-level, I control for *CEO tenure* to account for CEO-specific impacts on the selection of CDEs, and whether the firm has a *new CEO* in the prior year, as new CEOs may be more likely to undertake acquisitions or pursue new strategies (Walters, Kroll, and Wright, 2007).

At the deal-level, I control for *deal relatedness* (by SIC2 codes), whether the deal is a *majority takeover*, is *above $1Bn in deal size*, *cross-border*, a *tender offer*, an *auction*, a *hostile takeover*, whether *the target is public*, and whether the *target and acquirer have financial advisors.*

Empirical Strategy

In an ideal world, I would be able to randomly assign identical firms with CDEs with different prior M&A experience levels in a large randomized field experiment. As this would not be possible, the core empirical challenge would be to reduce the potentially biasing effects of nonrandom selection on the CDE Experience-firm pair, where stock market reactions to the deal are driven by systematic differences in firms' selections of different CDE experience types.

I address this concern in four ways. First, since CARs are cumulative abnormal returns to a firm's stock price, it already accounts for any firm-specific characteristics that may be driving its decision to hire a particular CDE (which occurs before the announcements of subsequent M&A transactions), as the firm's stock price already reflects all the information known to the stock market. Second, the year and industry fixed effects help to control for unobserved heterogeneity across time that may impact the firm's selection of different types of CDE, such as the macroeconomic environment for M&A or the overall industry changes, etc. Third, I conduct a series of robustness checks controlling for potential firm-level and CDE-level characteristics that may bias the selection of CDEs with different M&A experience levels, including firm fixed effects (for a summary see Table 9 and Appendix C)[14]. I also find that no firms in my sample have only highly experienced or only inexperienced CDEs, and the backgrounds and prior M&A experience of CDEs are highly diverse. Lastly, I plan to run a simulation study explicitly modeling the firm-level selection effects on the relationship between CDE Experience and M&A performance (preliminary results in Appendix D), and I am collecting additional data on CDE mobility events across companies that could allow more identified results and more robust findings on individual CDE-fixed effects.

[14] I do not use firm fixed effects in my main analyses, since the calculations of CAR already account for firm-level characteristics known to the market. Moreover, firm fixed effects would eliminate firms with only one deal in my sample, and restrict my results to be based on within firm variations rather than across firm variations. However, for robustness checks I retest all the models including firm fixed effects, and find that all of my results hold.

All my analyses are run using ordinary least squares (OLS) with industry and year fixed effects and robust standard errors clustered at the acquirer level. The summary statistics and correlations are shown in Table 1.

——— Insert Table 1 ———

RESULTS

Hypothesis 1 predicts that there is an inverted-U relationship between CDEs' prior acquisition experience and focal M&A performance. Models (1) to (7) in Table 2 show the results of regressions testing this hypothesis. Model 2 replicates existing studies on firm experience and M&A performance where, without considering CDEs' experience, firms' prior M&A experience is negative but statistically insignificant, consistent with the results found in prior studies (King *et al.*, 2004; Zollo and Singh, 2004). Model 3 tests the potential counterargument that CEOs' prior M&A experience is the driver of M&A performance. The coefficient of CEO experience is positive but again statistically insignificant. Model 4 combines both firm experience and CEO experience, but both coefficients remain statistically insignificant. Model 5 tests the linear effect of CDEs' prior M&A experience on performance, where the estimate is statistically insignificant. Model 6 tests both the linear and the quadratic effects of CDEs' prior M&A experience, where the positive and statistically significant linear term and negative and statistically significant square term support the predicted inverted-U relationship in H1. Model 7 combines all three types of prior acquisition experience – CDE experience, firm experience and CEO experience. Only the linear and quadratic terms of CDE experience are statistically significant (and larger in magnitude compared to Model 6), while the main effects of firm and CEO experience remain statistically insignificant. This suggests that at low levels of CDE experience, the learning benefits of experience dominate the misapplication challenges, and every additional M&A experience is positively associated with focal deal performance. However, at very high levels of CDE experience, the potential benefits of learning

diminish and are overshadowed by the potential harmful effects arising from misapplication challenges and cognitive entrenchment, where every incremental deal experience is negatively associated with performance at an increasing rate. Figure 1 illustrates this predicted relationship.

In terms of economic significance, the positive linear estimate of 0.0106 suggests that for the CDEs with a low amount of prior M&A experience, a modest increase of 10 deals in CDE experience would be associated with a 0.1% increase in CAR of subsequent deals. Given the average industry market cap of $41.5Bn, this translates to a $38.5MM gain in shareholder value. A one standard deviation increase in CDE experience would be associated with a 0.4% increase in CAR, or a $122.4MM gain in shareholder value. As the average firm conducts 3-4 deals a year, this would translate to nearly half a billion dollars gain each year, an economically meaningful effect.

——— Insert Figure 1 & Table 2 ———

To test the existence of the inverted-U relationship in my sample, I run the three tests proposed in Lind and Mehlum (2010) and Haans *et al.* (2016, SMJ). I find that the results in Model 7 pass all three tests: (1) the quadratic term is statistically significant and negative; (2) the slope at minimum of CDE experience is positive and significant (*beta* = 0.01; *p* = 0.005), the slope at the maximum of CDE experience is negative and significant (*beta* = -0.01; *p* = -0.037); and (3) the turning point of the inverted-U is at 90 deals, which is well within the data range of CDE experience of 0 to 202 deals. The 'utest' command results a p-value of 0.036 (a Stata user command written by Lind and Mehlum to test all three criteria directly), further evidence supporting the hypothesized inverted-U relationship between CDE prior acquisition experience and M&A performance.

Table 3 tests the robustness of the inverted-U relationship using different measures of firm and CEO M&A experience that have been used in prior M&A studies – i.e., total count (Haleblian and Finkelstein, 1999; Hayward, 2002; Kim *et al.*, 2015; Laamanen and Keil, 2008; Vermeulen and Barkema, 2001; Zollo and Singh, 2004), log of total count (Barkema *et al.*, 1996), total count squared

(Haleblian and Finkelstein, 1999), only recent deals in the last three years (Haunschild, 1993; Hou, Priem, and Goranova, 2017), last four years (Bruton, Oviatt, and White, 1994; Fowler and Schmidt, 1989; Trichterborn *et al.*, 2016), last five years (Capron and Shen, 2007; Haleblian and Finkelstein, 1999), binary indicators of having done a transaction in the last three years (Kroll *et al.*, 1997, 1997; Wright *et al.*, 2002), last four years (Kroll *et al.*, 1997) and last five years (Kroll *et al.*, 1997). The baseline inverted-U association holds regardless of which alternative measures of firm M&A experience and CEO M&A experience are used in the regression models.

——— Insert Tables 3 ———

Tables 4 and 5 test Hypothesis 2 on the moderating effect of a high varied experience on the relationship between CDEs' prior M&A experience and M&A performance. In Table 4, I measure variability by the number of prior organizational contexts that CDEs have been exposed to. As ~ 90% of my sample has worked in fewer than five organizations, I test this hypothesis using three indicators in Models (1) to (3): CDEs having worked in at least two firms, at least three firms and at least four firms. In all three models, the baseline inverted-U only takes place if the CDE has worked in fewer organizational contexts. Model (1) and Figure 2 show the results when CDEs have worked in at least two organizations. The interaction with CDE experience squared is positive and statistically significant (p=0.016), while the linear coefficient of the CDE experience interaction term is negative and borderline significant (p = 0.097). As the marginal plot in Figure 2 shows, the positive curvilinear relationship persists throughout the estimation window, and its confidence interval is above zero, supporting H2. Model (2) and Figure 3 show a similar set of results when CDEs have worked in at least three organizations. Model (3) shows the results when CDEs have worked in at least four firms, where the estimates are in line with (1) and (2) but are less precise given the low number of observations that fall under the 'at least four firms' category.

——— Insert Figure 2, Figure 3 & Table 4 ———

Table 5 tests Hypothesis 2 by measuring variability based on CDEs' prior experience with different deal types. I calculate a Herfindahl index of CDE's portfolio of prior deal structure types (from minority investments to full acquisitions), where a lower Herfindahl index indicates more variability in CDEs' prior M&A experience. In Models (1) to (7), I test a range of binary indicators for low Herfindahl / less varied experience, with the indicator ranges from Herfindahl less than 0.38 to less than 0.50. H1 holds in all models, suggesting that when CDEs have a more concentrated portfolio of deal types, the inverted-U relationship with subsequent M&A performance takes place. The direct effect of the interaction indicator and the linear interaction term in Models (1), (5), (6) and (7)) are not statistically significant, while the quadratic interaction term is large in magnitude and statistically significant for all models where the Herfindahl is less than 0.40 to 0.50. Wald tests of the quadratic terms and the quadratic interaction terms are significant ($p = 0.01$), suggesting that the positive quadratic interaction term dominates, supporting H2. In other words, through exposure to more varied deals with different structures and their associated considerations, CDEs are more able to recognize differences across deal types and the context dependent nature of existing knowledge and frameworks. Figure 4 illustrates the predicted effects of CDEs' prior M&A experience on M&A performance in contexts of high variability in prior deal types.

——— Insert Figure 4 & Table 5 ———

Supplementary Analyses and Alternative Explanations

The non-random nature of the CDE-firm pair leads to several potential concerns around the identification of the effects of CDEs' prior M&A experience on subsequent M&A performance. Although I cannot directly identify a causal estimate of my hypothesized relationships, I conduct a series of robustness checks to explore the boundary conditions of my findings and test potential alternative explanations. In the below, I will briefly discuss the findings of high CEO M&A experience and low firm M&A experience as boundary conditions for the effectiveness of CDEs, as

well as the results from tests on non-random selection of CDEs, impression management as a way to manipulate CARs, and other omitted variables concerns. Table 9 and Appendix C summarize the list of all empirical concerns tested in this paper.

1. Other Actors in the Organization and Their Interactions with CDEs

While the above sets of arguments and results highlight the importance of CDEs' prior M&A experience and their within-person experience variability for subsequent M&A performance, CDEs are also individual decision makers working within different organizations, where an important way through which they influence M&A performance is their role as the *executive coordinator* among different actors in the organizations, from the C-suite decision makers such as the CEO to the supporting function staff. The effects of CDEs' prior M&A experience on performance are likely to vary depending on the prior M&A experience of these other actors in the M&A process.

CEO M&A Experience. A large body of work has documented the importance of CEOs in shaping M&A outcomes (Cannella and Hambrick, 1993; Haleblian *et al.*, 2009; Haspeslagh and Jemison, 1991; Haunschild, 1994; Hayward and Hambrick, 1997; Meyer-Doyle *et al.*, 2019). Specifically, we might expect that CEOs who are *highly experienced in M&A* may influence M&A outcomes, as CEOs are often hired for their expertise gained from prior employment, including M&A-related knowledge (Bragaw and Misangyi, 2017; Hayward and Hambrick, 1997). CEOs with significant M&A experience may be more likely to engage with CDEs on key deal decisions, and take a centralized approach to M&A decision-making (Csaszar, 2012; Csaszar and Eggers, 2013).

Table 3 tests different measures of CEO M&A experience, where there does not appear to be a direct relationship between CEO M&A experience and M&A performance. In Table 6, I test the *interaction* between *High CEO M&A Experience* and CDEs' prior M&A experience, and find that their interactions do matter. H1 holds in all models, and the statistically significant positive quadratic interaction term dominates when CEO M&A experience is greater than 28 through 42 deals. These

results provide evidence that an interactive, complementary effect exists between CDEs' and CEOs' M&A experience, where high CEO M&A experience may help to limit the misapplication challenges associated with CDEs' prior experience. These results also support my theoretical argument on the variability of experience – variability not only occurs at the intra-personal CDE-level, but also at the inter-personal level through CDEs' interactions with other experienced actors in the focal firm.

——— Insert Table 6 ———

Firm M&A Experience. In addition to CEOs' M&A experience, existing literatures have also highlighted the role of firm-level M&A experience. We might expect that some amount of firm-level infrastructures or M&A routines may also change CDEs' ability to effectively execute and coordinate M&A, as CDEs often rely on other top management executives, business unit leaders, support function staff, etc., for certain internal workstreams during the M&A process (e.g. reviewing definitive agreements, assembling acquisition financing, drafting press releases, etc.), and these actors' prior experience with M&A may also change the effectiveness of CDEs.

Table 7 tests this alternative explanation using different levels of firm-level M&A experience. H1 continues to hold across a range of binary indicators for low firm experience, providing evidence that the inverted-U relationship between CDEs' prior M&A experience and M&A performance takes place when firms have a certain amount of M&A experience. However, when the firm has very limited prior M&A experience, the inverted-U relationship flips to become a U-shaped relationship[15], suggesting that in these contexts, it is perhaps better to hire a highly experienced CDE who can set up the internal processes, manuals, playbooks and M&A infrastructure for the firm.

——— Insert Table 7 ———

2. Non-Random Selection of CDEs

[15] Interestingly, the U-shaped finding under low firm-level experience is similar to the U-shaped relationship found in Haleblian and Finkelstein (1999). The average firm acquisition experience is their sample is 2.2 deals with a standard deviation of 3.2 deals, exactly the scenario of low firm experience that I test here.

Another explanation for the observed empirical findings could be that certain types of firms are better able to select CDEs with the right experience levels, which in turn result in superior deal performance. While I cannot conduct random assignments to fully overcome this selection concern, in addition to using CARs as my dependent variable, I also try to control for time-invariant firm-level, CEO-level and CDE-level characteristics that may drive the selection process. Table 8 shows the results of the models in Table 2 including firm fixed effects. The inverted-U relationship still holds in Models 7 and 8 and the magnitudes of the coefficients are comparable to those in Table 2, suggesting that even for within firm analyses, changes in CDEs' prior M&A experience levels (i.e. changes in CDEs) do meaningful change the performance of subsequent deals.

——— Insert Table 8 ———

These results are evidence against the potential selection concern that certain firms may be better at choosing CDEs. That is, given the robustness of the inverted-U result, the potential unobserved firm heterogeneity that could be driving the selection of CDEs must *not* be able to be explained by firm-invariant characteristics, firm and CEO prior M&A experience, changes in firm strategy due to prior operational results, the arrival of a new CEO, or the tenure effects of the CEO, which are the most plausible explanations for why certain firms may choose to hire a certain type of experienced CDEs. Table 9 summarizes tests of other potential factors that may drive the unobserved CDE selection process across firms[16].

3. Impression Management

Existing works on the sociological explanation of markets have suggested that managers often take steps to actively impression-manage investors' reactions to firm announcements (Bansal and Clelland, 2004; Graffin, Carpenter, and Boivie, 2011; Merkl-Davies and Brennan, 2007). One

[16] As a next step, I am also planning to run a simulation study to explicitly model the firm-level selection effects on the relationship between CDEs and M&A performance.

alternative mechanism that could be that CDEs with higher levels of M&A experience are better at *framing M&A*, which in turn lead to better investor reactions. I address this concern in three ways.

First, if impression management is indeed the mechanism through which CDEs affect M&A performance, then there should be differences in the language used by firms with highly experienced CDEs versus those with limited prior M&A experience. As shown in Table 1 of Appendix C, using the Linguistic Inquiry and Word Count (LIWC) lexicon (Pennebaker *et al.*, 2015), I do not find any systematic differences in the language used in the press releases between CDEs of different experience levels, indicating that perhaps the level of active impression management may not vary depending on CDEs' prior M&A experience levels[17].

Second, I conduct analyses using M&A outcomes that are not driven by stock-market reactions or the influences of analysts. If impression management is the sole mechanism driving the relationship between CDEs' M&A experience and performance, the longer-term accounting-based performance post transaction would be self-correcting. I test alternative outcomes not influenced by stock market reactions, where I find that CDEs' prior M&A experience is negatively associated with days to deal completion and acquisition impairment likelihood, and positively associated with the likelihood of deal completion and ROA two years after the acquisition, the amount of time firms usually need for integration (Zollo and Meier, 2008). These results provide suggestive evidence that CDEs are learning to execute better M&A transactions from their past experience, and not solely adding value because of their impression-management skills[18].

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[17] Since LIWC is a linguistic tool that mainly focuses on textual style rather than content, I also tried to conduct LDA topic modeling analysis, which is based on a "bag-of-word" approach to natural language processing (Blei, Ng, and Jordan, 2003). After extensive testing, unfortunately I do not find coherent and consistent topics emerging from the 11,004-text corpus. The resulting topics often include keywords for deal characteristics and target and acquirer industries, but no systematic differences across the words associated for each topic. Perhaps further analyses can be conducted using a different sample with a larger corpus of documents.

[18] While helpful as suggestive evidence, these alternative measures are problematic in many ways: (i) in my sample, 99% of deals are completed after announcement, limiting the power of completion likelihood as a potential DV; (ii) days to completion is usually more of a process-level measure – it reflects execution skills (i.e. ability to file the relevant regulatory requirement documents and obtain shareholder approvals), where the scope of misapplications is limited; (iii)

Lastly, to better understand the mechanisms through which CDEs' prior M&A experience may impact M&A performance, I also conduct extensive field interviews with senior corporate development executives at firms in my sample as well as with professional services providers who interact with many different CDEs across all industry settings. As one investment banker mentioned in an interview, "*Experience really matters. You can really tell the difference between the heads of corp dev who have countless deals under their belt versus those don't. The experienced ones always have the standard checklist of diligence questions and valuation models at hand, and more importantly, they always know what key questions to ask, and which key business assumptions are the real value drivers should they proceed with the transaction …*"

4. Other Potential Omitted Variables and Sample Selection Biases

In Table 9 and Appendix C, I also test for other potential omitted variables and sample selection concerns that may bias my estimates, including results driven by survivorship bias (Quińones, Ford, and Teachout, 1995; Sturman, 2003), lifecycle productivity declines (Levin and Stephan, 1991; Skirbekk, 2008), extremely acquisitive firms or time periods, firm reputation and firm celebrity status (Haleblian, Pfarrer, and Kiley, 2017; Pfarrer, Pollock, and Rindova, 2010), prior average M&A performance, CDEs' prior functional backgrounds (e.g. investment banking, legal, consulting, private equity, start-up, engineering, operations, corporate finance, etc.), prior interactions between target and acquiring firm, and prior experience of the financial advisors.

——— Insert Table 9 ———

the likelihood of impairment is helpful, but more as an indicator of *extremely poor* performance (Rabier, 2017), it is also subject to potential internal reclassifications; (iv) while accounting-based ROA is helpful as an overall indicator of M&A investment returns, it cannot be attributed to a specific deal, and would be hard to disambiguate given that the average firm in this sector does 3-4 deals each year.

DISCUSSION

Summary of Results

This paper has investigated how the focal task-specific actor shapes firms' abilities to make superior strategic decisions in the context of mergers and acquisitions. Revisiting the M&A experience-learning-performance relationship, this study has four key findings.

First, I introduce Corporate Development Executives, a previously unexamined group of important decision makers in the M&A process. I find evidence that CDEs, through their role and prior M&A experience, meaningfully shape M&A outcomes.

Second, I propose and find support for the double-edged nature of CDEs' prior M&A experience. As CDEs improve their deal performance through learning and accumulation of experience, they are also subject to the perils of misapplication. These challenges of misapplication are enhanced at high levels of prior M&A experience, resulting in a net inverted-U relationship between CDEs' prior M&A experience and subsequent M&A performance.

Third, I find that context variability helps CDEs to overcome the challenges of misapplication. Specifically, I find that there is a net increasing relationship between CDES' prior M&A experience and performance when CDEs have worked in more than two firms, or have exposure to many different types of deal structures. In contrast, the inverted-U relationship takes place when there is less variability in CDEs' prior M&A experience contexts.

Fourth, while I do not find any direct relationships between CEOs' and firms' M&A experience with M&A performance, I find that they serve as important boundary conditions. High CEO M&A experience mitigates the negative performance consequences at high ends of CDE experience, complementing and enhancing CDEs' effectiveness, while prior firm M&A experience acts as a necessary but insufficient condition for CDEs' ability to effectively drive M&A processes

within the organizational context. In other words, the effectiveness of CDEs may vary depending on the organizational contexts and their interactions with other relevant actors in the M&A process.

Taking all these results together, a revised model of experience as a multi-dimensional construct emerges. Learning in M&A not only occurs at the organizational level, but also resides with and is critically shaped by the individuals specifically dedicated to the task. These findings also highlight the importance of context variability of experience for effective learning, where a large amount of M&A experience gained across a wide variety of organizational and deal contexts may culminate in the development of M&A capabilities and superior M&A performance.

Theoretical Contributions

By introducing CDEs as an important group of actors in M&A, this study makes several important theoretical contributions. First, I open the "black-box" of organizational learning by examining and theorizing the importance of experience and learning at the M&A-specific human capital level. Through a close examination of the CDEs – who they are, what they do, and why they matter – I show how individual-level learning may drive organizational outcomes in contexts where a handful of individuals shape important strategic decisions of firms. A more nuanced interpretation on existing works on CEO and firm M&A experience also emerges, suggesting new theoretical insights on the interactions between individual- and organizational-level learning. The effectiveness of M&A-specific human capital critically depends on the context in which they accumulate their prior experience, and the organizational context in which they operate.

Second, as the first work to examine M&A experience across CDE level, CEO level, firm level, and their interactions, I help to unpack the inconsistent findings in existing studies on the M&A experience-learning-performance relationship, answering the call for a greater understanding of antecedents of M&A performance (Haleblian et al., 2009; King et al., 2004). By introducing a revised model of experience as a multi-dimensional construct, I show that the mixed findings of

positive, negative, U-shaped and inverted-U-shaped relationship between M&A experience and performance in existing literature can be explained by looking at different levels of CDEs' experience curve. *Ceteris paribus*, the positive relationship exists at low to moderate amount of CDE experience, the negative relationship exists at very high levels of CDE experience (when their experience is less varied), while the U-shaped relationship exists only when firms have very limited prior M&A experience. The finding of the U-shaped relationship in contexts of low firm experience also helps to explain why authors haven't been able to replicate the U-shaped relationship proposed in Haleblian and Finkelstein (1999), one of the foundational works on acquisition experience and the subject of much debate in M&A literature (Bauer and Matzler, 2014; King *et al.*, 2018).

Third, I introduce a new theoretical mechanism on how misapplication challenges and learning rigidities may be reduced. Building on the cognition literature (Csaszar and Levinthal, 2016), I show that variation in individuals' prior experience allow the development of more complex and adaptable mental representations and frameworks, especially for important strategic decisions that vary in their implications and generalizability across contexts. This also suggests a new mechanism through which firms can source critical capabilities – namely, by hiring new employees and taking advantage of these task-specific human capital's prior experiences accumulated across different contexts, while letting other firms bear the cost of their experience accumulation.

Fourth, by introducing CDEs as a critical group of actors in the M&A process and highlighting their role as the nexus of the M&A, I build on the emerging stream of research on dedicated corporate functions, introduce a new empirical context that can serve as fertile ground for future M&A research (Kale *et al.*, 2002; Kale and Singh, 2007; Trichterborn *et al.*, 2016; Zollo and Singh, 2004), and highlight the importance of looking beyond the C-suite to build competitive advantages. While the existence of corporate development functions in firms has been argued as a necessary condition for the development of M&A capabilities (Trichterborn *et al.*, 2016), as far as I

know, this is the first empirical study shedding light on who the executives in these functions are and how they impact the M&A process. With the growth of dedicated corporate development functions across all industries and firms, it has become ever more important to look inside these functions and understand who CDEs are and how they matter for M&A outcomes.

Finally, my findings also build on the literature on strategic human capital and the portability of stars by Groysberg and co-authors (Groysberg and Lee, 2009; Groysberg, Lee, and Nanda, 2008; Groysberg, Nanda, and Nohria, 2004). I show that the benefits of hiring stars (in this case, M&A-specific human capital) must be understood in terms of the types of experience they bring in, and their interactions with existing firm-level M&A infrastructure and other key decision makers inside the different organizational contexts. These are important managerial implications on how firms should source M&A talent and build M&A capabilities, especially given the growing reliance on inorganic opportunities for organizational growth and transformation.

Limitations and Future Research

This study has several limitations, each of which raises important avenues for further research on this phenomenon.

First, this study does not fully address the empirical challenge of non-random selection of the CDE-firm pairs. Given the nature of CARs and the inclusion of year, industry, and firm fixed effects, I believe that my OLS results are strongly indicative of the underlying relationships. Future works could potentially address this issue with larger samples across multiple industries and years, since CDEs are highly prized resources that tend to move across firms. If a sufficiently large number of CDE mobility events can be observed, a matching approach can be used to create matched pairs at the firm level and the CDE level, allowing us to better parse out the effect of CDE M&A experience from individual- and firm-level unobservable characteristics.

Second, I cannot rule out alternative explanations driving the observed inverted-U relationship between CDEs' prior M&A experience and deal performance. I find evidence indicating the existence of both learning benefits and misapplication challenges, and evidence against the various potential alternative explanations that may bias my estimates. Future works could conduct a simulation to specifically model the unobserved selection process, or collect within-firm data to examine the joint effects of both organizational-level M&A codification processes and individual-level CDE experience, or take an inductive qualitative approach to further unpack the role of CDEs in the M&A lifecycle.

Third, the findings from this study may not be generalizable to all industries and firms. My sample consists of large, public, S&P 500 information technology companies. While they all have CDEs, not all industries are as acquisitive as the high-tech sector, and the existence, prevalence and reporting structures of CDEs may vary across industries. For example, while most firms in my sample seem to have an identifiable individual in charge of M&A, pharmaceutical companies tend to organize by drug therapeutic classes, where M&A efforts are often run within each division rather than at the overall organizational level. Future works could examine the external validities of findings in this study by comparing CDEs across industries, as well as how the structural differences across industries and firms may change how they shape M&A across organizational contexts. These additional data on CDEs across industries could also allow us to model the factors predicting their existence, adding potential boundary conditions to the findings in this study.

CONCLUSION

This paper examines how individual-level learning shapes organizational-level outcomes by examining how Corporate Development Executives shape M&A performance. Through a multi-level perspective, I reconceptualize the locus of experience and learning in M&A as not at the organizational level but instead residing with the actors most engaged with the focal task, and their

interactions within the organizational context. Individual-level learning may lead to superior organizational performance, if it comes from repeated experiences accumulated across a variety of organizational and deal contexts. Integrating works across corporate strategy, organizational learning and dynamic capabilities, this study contributes to our understanding of the drivers of superior M&A performance, and offers important implications for managers involved in shaping inorganic growth strategies across organizations.

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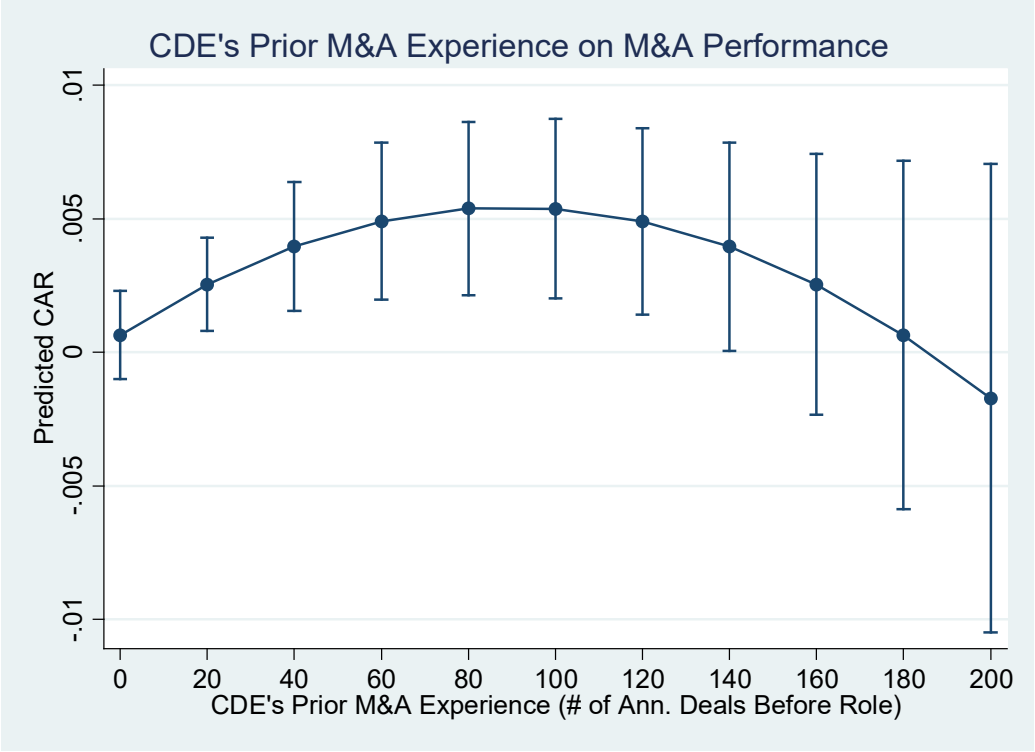


Figure 1

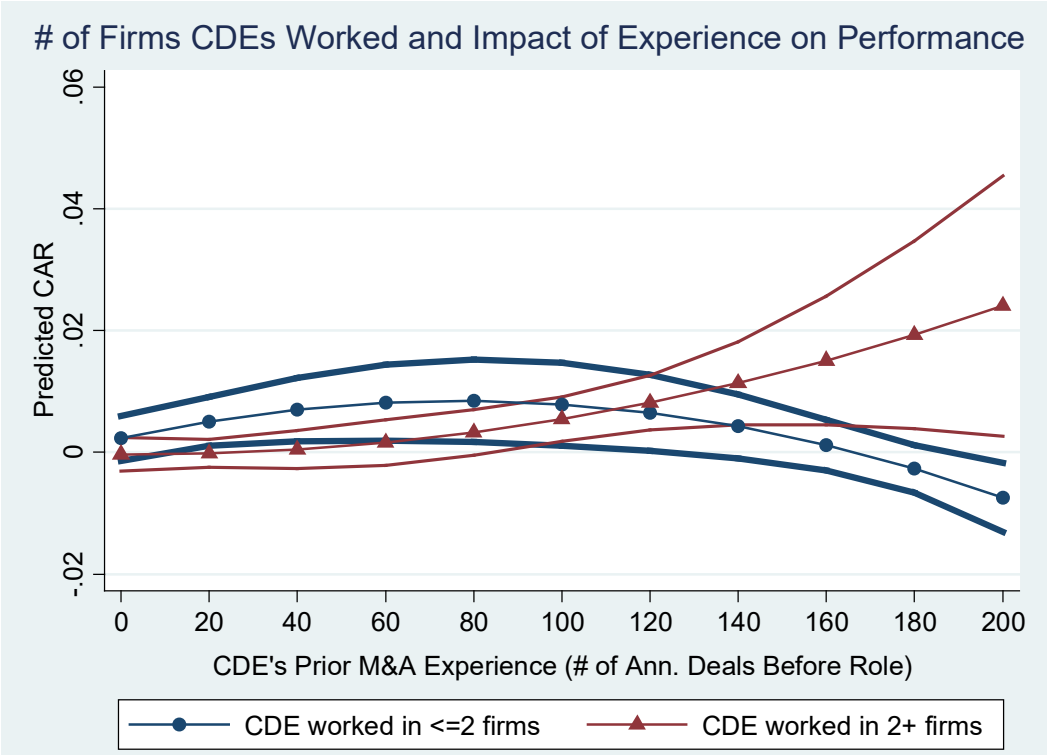


Figure 2

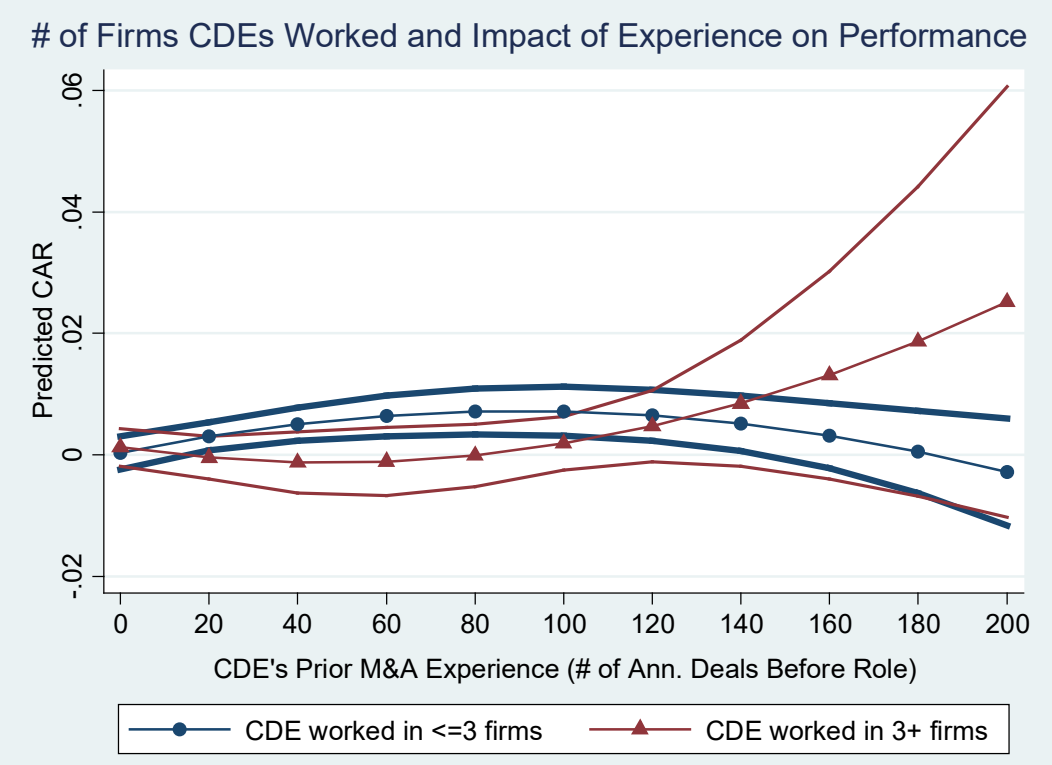


Figure 3

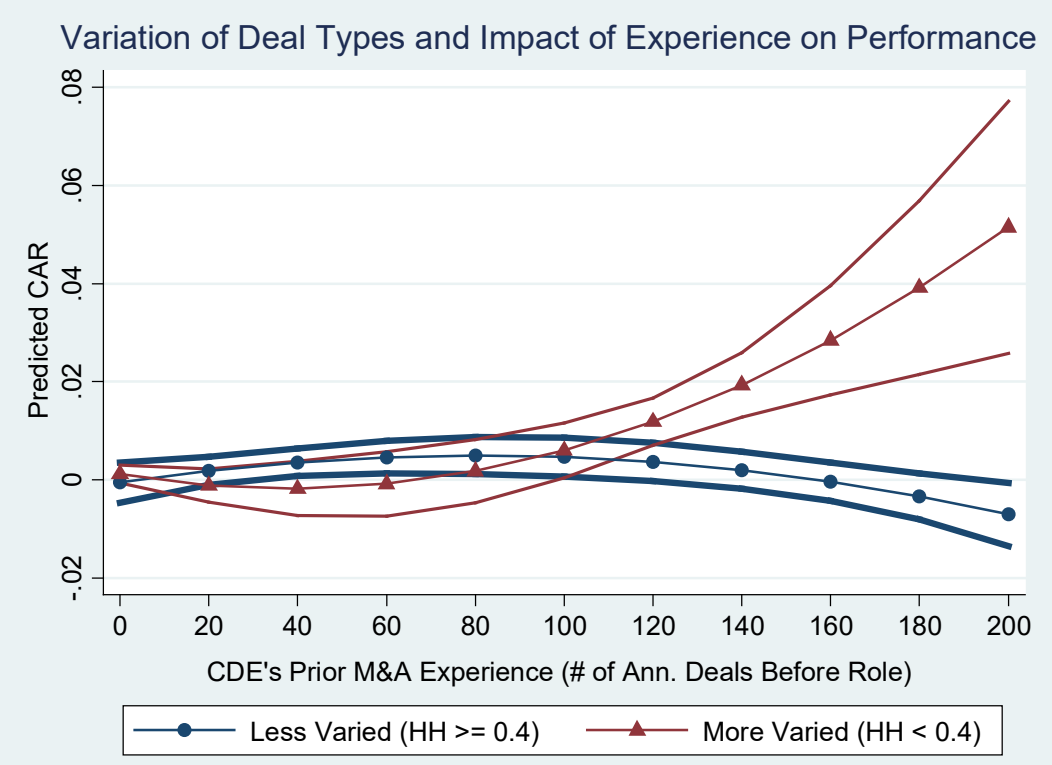


Figure 4

Table 1. Summary Statistics and Correlations

	Mean	S.D.	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
(1) DV = CAR (-1, +1)	0.00	0.04	(0.37)	0.31	1.00																											
(2) CDE M&A Experience	0.19	0.38	0.00	2.02	(0.01)	1.00																										
(3) CDE M&A Experience Squared	0.18	0.53	0.00	4.08	(0.01)	0.92	1.00																									
(4) Firm M&A Experience	3.54	1.17	0.00	5.74	(0.06)	0.40	0.25	1.00																								
(5) CEO M&A Experience	0.03	0.10	0.00	1.29	0.01	(0.03)	(0.05)	0.01	1.00																							
(6) CDE Worked in 2+ Firms	0.64	0.48	0.00	1.00	0.02	0.01	(0.01)	(0.17)	0.08	1.00																						
(7) CDE Deal Experience HH < 0.40	0.60	0.49	0.00	1.00	0.01	(0.43)	(0.26)	(0.21)	0.01	0.01	1.00																					
(8) CDE Tenure in Current Job	3.58	4.33	0.00	26.00	(0.02)	(0.14)	(0.11)	0.12	(0.14)	(0.20)	0.14	1.00																				
(9) CDE Tenure in Firm	7.89	7.25	0.00	32.00	(0.02)	0.14	0.04	0.32	(0.17)	(0.51)	(0.17)	0.50	1.00																			
(10) CDE Tenure in Corp Dev Function	3.50	5.06	0.00	27.00	(0.02)	0.60	0.46	0.20	(0.04)	0.02	(0.64)	(0.14)	0.21	1.00																		
(11) Acquiror Tobin's Q	3.79	5.02	0.59	78.57	(0.02)	(0.05)	(0.05)	(0.09)	(0.08)	0.01	0.09	(0.05)	(0.13)	(0.14)	1.00																	
(12) Acquiror Size	9.35	1.48	4.59	12.35	(0.06)	0.44	0.33	0.71	0.00	(0.25)	(0.27)	0.03	0.32	0.25	(0.15)	1.00																
(13) Acquiror Prior Performance	0.08	0.18	(4.58)	0.48	0.03	0.09	0.07	0.11	0.01	(0.04)	(0.04)	0.07	0.08	0.02	0.11	0.13	1.00															
(14) Acquiror Current Ratio	2.62	2.19	0.67	36.19	0.00	0.01	0.02	(0.10)	0.07	0.17	0.14	(0.04)	(0.15)	(0.09)	0.19	(0.05)	0.05	1.00														
(15) Acquiror Business Segments	7.51	3.83	1.00	20.00	(0.03)	0.06	0.04	0.33	0.02	(0.15)	(0.04)	0.21	0.27	0.06	(0.25)	0.35	(0.02)	(0.26)	1.00													
(16) Deal Relatedness	0.53	0.50	0.00	1.00	0.02	(0.05)	(0.05)	(0.09)	0.08	0.33	0.11	(0.06)	(0.20)	(0.07)	0.04	(0.22)	0.03	0.15	(0.13)	1.00												
(17) Target Has Financial Advisor	0.35	0.48	0.00	1.00	0.01	(0.03)	0.01	(0.05)	0.01	(0.05)	0.02	0.03	0.01	(0.02)	(0.02)	(0.02)	(0.01)	(0.05)	0.05	0.03	1.00											
(18) Acquiror Has Financial Advisor	0.16	0.37	0.00	1.00	(0.04)	(0.04)	(0.01)	(0.11)	0.00	(0.04)	(0.02)	(0.01)	0.01	0.00	(0.02)	(0.09)	(0.03)	(0.01)	0.02	0.04	0.36	1.00										
(19) Post-Deal Has Majority Ownership	0.94	0.24	0.00	1.00	0.05	0.06	0.05	0.00	0.04	0.16	(0.09)	(0.09)	(0.03)	0.08	(0.13)	(0.03)	(0.05)	0.03	0.00	0.10	0.08	0.05	1.00									
(20) Deal $1Bn+	0.04	0.21	0.00	1.00	(0.04)	0.03	0.03	(0.01)	0.02	(0.03)	(0.02)	(0.01)	0.00	0.00	0.03	0.05	0.02	0.03	0.03	0.01	0.25	0.39	0.03	1.00								
(21) Target Public	0.13	0.33	0.00	1.00	(0.06)	(0.06)	(0.04)	(0.03)	0.02	(0.09)	0.04	0.03	0.00	(0.03)	0.04	0.00	0.01	(0.02)	0.04	0.02	0.31	0.45	(0.26)	0.36	1.00							
(22) Auction	0.00	0.06	0.00	1.00	(0.02)	(0.01)	(0.01)	0.01	0.00	0.04	0.01	(0.03)	(0.04)	(0.02)	0.00	(0.01)	0.00	0.00	0.01	0.02	0.07	0.10	0.01	0.04	0.12	1.00						
(23) Hostile Attitude	0.00	0.02	0.00	1.00	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	0.01	0.01	(0.01)	(0.02)	(0.01)	0.01	0.00	0.01	0.00	0.02	0.02	0.02	0.04	0.00	0.08	0.04	0.00	1.00					
(24) Tender	0.03	0.17	0.00	1.00	(0.02)	(0.02)	(0.01)	0.00	0.02	0.00	0.01	0.01	(0.01)	0.00	(0.02)	0.00	0.00	(0.01)	0.05	0.04	0.19	0.30	0.02	0.12	0.44	0.17	0.10	1.00				
(25) Crossborder	0.33	0.47	0.00	1.00	0.01	(0.05)	(0.05)	0.00	(0.02)	(0.07)	0.02	0.03	0.11	(0.02)	(0.02)	0.04	0.03	(0.06)	0.09	(0.02)	(0.13)	0.01	(0.19)	(0.07)	0.03	0.01	(0.01)	0.05	1.00			
(26) Firm Age	35.40	29.62	1.00	164.00	(0.03)	0.10	0.00	0.34	0.00	(0.42)	(0.20)	0.10	0.50	0.30	(0.23)	0.34	0.02	(0.26)	0.42	(0.30)	0.01	0.05	(0.01)	0.00	0.03	(0.01)	(0.01)	0.01	0.08	1.00		
(27) Firm Has New CEO	0.11	0.31	0.00	1.00	0.00	(0.07)	(0.06)	0.04	0.04	(0.02)	0.07	0.04	0.02	(0.03)	(0.04)	0.03	(0.02)	(0.04)	(0.01)	0.01	(0.01)	(0.01)	(0.03)	(0.02)	0.01	0.03	(0.01)	0.01	0.03	0.00	1.00	
(28) CEO Tenure	6.89	6.95	0.00	39.00	0.01	0.16	0.22	(0.03)	(0.18)	0.14	(0.11)	(0.03)	(0.05)	0.05	0.01	0.06	0.09	0.01	0.05	0.06	0.06	(0.01)	0.03	0.06	0.04	0.02	0.05	0.01	(0.10)	(0.13)	(0.29)	1.00

Table 2. Baseline Results

DV = CAR [-1, +1]	(1) Controls Only	(2) Controls + Firm	(3) Controls + CEO	(4) Controls + Firm + CEO	(5) Controls + CDE	(6) Controls + CDE	(7) Baseline
CDE M&A Experience					**0.00196**	**0.00926****	**0.01065****
					(0.333)	**(0.026)**	**(0.011)**
CDE M&A Experience Squared						**-0.00519***	**-0.00592****
						(0.054)	**(0.033)**
Firm M&A Experience		-0.00101		-0.00100			-0.00121
		(0.309)		(0.313)			(0.234)
CEO M&A Experience			0.00459	0.00447			0.00384
			(0.508)	(0.516)			(0.596)
CDE Tenure in Current Job					-0.00028	-0.00023	-0.00018
					(0.199)	(0.284)	(0.412)
CDE Tenure in Firm					0.00007	0.00002	0.00003
					(0.615)	(0.881)	(0.815)
Acquiror Tobin's Q	-0.00012	-0.00011	-0.00011	-0.00010	-0.00012	-0.00013	-0.00011
	(0.570)	(0.605)	(0.603)	(0.635)	(0.552)	(0.520)	(0.587)
Acquiror Size	-0.00173**	-0.00119	-0.00172**	-0.00119	-0.00201**	-0.00214**	-0.00156*
	(0.019)	(0.170)	(0.020)	(0.172)	(0.010)	(0.008)	(0.086)
Acquiror Prior Performance	0.01144	0.01166	0.01137	0.01160	0.01189	0.01183	0.01191
	(0.191)	(0.176)	(0.194)	(0.179)	(0.166)	(0.167)	(0.160)
Acquiror Current Ratio	-0.00007	-0.00008	-0.00008	-0.00009	-0.00009	-0.00012	-0.00016
	(0.885)	(0.856)	(0.863)	(0.835)	(0.845)	(0.789)	(0.726)
Acquiror Business Segments	-0.00009	-0.00007	-0.00010	-0.00007	-0.00003	-0.00002	-0.00001
	(0.741)	(0.810)	(0.722)	(0.790)	(0.918)	(0.931)	(0.973)
Deal Relatedness	-0.00129	-0.00116	-0.00133	-0.00121	-0.00134	-0.00145	-0.00136
	(0.530)	(0.566)	(0.517)	(0.553)	(0.504)	(0.472)	(0.500)
Target Has Financial Advisor	0.00364**	0.00359**	0.00363**	0.00358**	0.00372**	0.00389**	0.00383**
	(0.025)	(0.027)	(0.025)	(0.027)	(0.021)	(0.020)	(0.022)
Acquiror Has Financial Advisor	-0.00349	-0.00359	-0.00343	-0.00354	-0.00367	-0.00356	-0.00363
	(0.319)	(0.303)	(0.324)	(0.307)	(0.291)	(0.307)	(0.293)
Post-Deal Has Majority Ownership	0.00702**	0.00700**	0.00697**	0.00695**	0.00692**	0.00687**	0.00682**
	(0.024)	(0.025)	(0.025)	(0.025)	(0.026)	(0.027)	(0.028)
Deal $1Bn+	-0.00418	-0.00431	-0.00421	-0.00434	-0.00421	-0.00426	-0.00444
	(0.474)	(0.462)	(0.470)	(0.458)	(0.470)	(0.464)	(0.447)
Target Public	-0.00531	-0.00535	-0.00538	-0.00542	-0.00520	-0.00529	-0.00538
	(0.194)	(0.191)	(0.187)	(0.185)	(0.201)	(0.192)	(0.185)
Auction	-0.01227	-0.01193	-0.01218	-0.01185	-0.01243	-0.01259	-0.01195
	(0.360)	(0.373)	(0.363)	(0.376)	(0.351)	(0.341)	(0.366)
Hostile Attitude	-0.04254***	-0.04304***	-0.04256***	-0.04306***	-0.04305***	-0.04342***	-0.04360***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Tender	0.00135	0.00149	0.00134	0.00147	0.00144	0.00154	0.00168
	(0.817)	(0.798)	(0.819)	(0.800)	(0.805)	(0.791)	(0.771)
Crossborder	0.00203	0.00194	0.00206	0.00197	0.00206	0.00213	0.00204
	(0.177)	(0.201)	(0.171)	(0.195)	(0.168)	(0.152)	(0.171)
Firm Age	-0.00003	-0.00002	-0.00003	-0.00002	-0.00004	-0.00004	-0.00004
	(0.247)	(0.334)	(0.253)	(0.339)	(0.211)	(0.175)	(0.214)
Firm Has New CEO	0.00175	0.00173	0.00178	0.00175	0.00190	0.00217	0.00219
	(0.517)	(0.527)	(0.512)	(0.522)	(0.486)	(0.429)	(0.428)
CEO Tenure	0.00008	0.00006	0.00009	0.00008	0.00007	0.00010	0.00010
	(0.419)	(0.512)	(0.371)	(0.453)	(0.498)	(0.301)	(0.347)
Constant	0.02394**	0.02080*	0.02402**	0.02090*	0.02841**	0.03019**	0.02649**
	(0.026)	(0.074)	(0.026)	(0.072)	(0.013)	(0.010)	(0.033)
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0276**	**0.0279**	**0.0277**	**0.0280**	**0.0284**	**0.0289**	**0.0294**
N	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**

*p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01*

Table 3. Baseline Results - Robustness Check with Different Firm/CEO Experience Measures

DV = CAR [-1, +1]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	Panel A				Panel B				Panel C				Panel D				Panel E			
	Log(All Prior Deals)				Firm = All Prior Deals				Firm Experience = Last 5 Years				Firm Experience = Last 4 Years				Firm Experience = Last 3 Years			
CDE M&A Experience	0.01065**	0.01094**	0.01135**	0.01138**	0.00907**	0.01066**	0.00962**	0.01085**	0.00886**	0.00939**	0.01001**	0.00967**	0.00905**	0.00969**	0.00899**	0.00936**	0.00906**	0.00965**	0.00927**	0.00965**
	(0.011)	(0.010)	(0.015)	(0.019)	(0.025)	(0.027)	(0.030)	(0.030)	(0.028)	(0.033)	(0.016)	(0.032)	(0.025)	(0.028)	(0.032)	(0.038)	(0.029)	(0.034)	(0.027)	(0.032)
CDE M&A Experience Squared	-0.00592**	-0.00610**	-0.00654**	-0.00655**	-0.00510*	-0.00602**	-0.00554*	-0.00624**	-0.00494*	-0.00539*	-0.00551**	-0.00557*	-0.00506*	-0.00559*	-0.00506*	-0.00543*	-0.00506*	-0.00556*	-0.00518*	-0.00556*
	(0.033)	(0.026)	(0.026)	(0.026)	(0.059)	(0.049)	(0.052)	(0.047)	(0.070)	(0.062)	(0.040)	(0.051)	(0.063)	(0.052)	(0.068)	(0.059)	(0.067)	(0.057)	(0.058)	(0.051)
Firm M&A Experience (Log of Total # Deals)	-0.00121	-0.00117	-0.00134	-0.00134																
	(0.234)	(0.251)	(0.203)	(0.217)																
Firm M&A Experience (Total # Deals / 1000)					0.00347	-0.02101	0.00019	-0.02378												
					(0.850)	(0.622)	(0.992)	(0.601)												
Firm M&A Experience Squared						0.09238		0.08998												
						(0.430)		(0.472)												
Firm M&A Experience (# Deals in Last n Years / 100)									0.00179	0.00088			0.00101	-0.00023			0.00132	-0.00009		
									(0.709)	(0.865)			(0.862)	(0.971)			(0.854)	(0.990)		
Firm M&A Experience (= 1 if Has M&A in Last n Years)											-0.00099	-0.00092			0.00441	0.00436			-0.00026	-0.00029
											(0.835)	(0.845)			(0.426)	(0.433)			(0.961)	(0.955)
CEO M&A Experience (# Deals Before Firm / 100)	0.00384	-0.00597			0.00358	-0.00590			0.00360		0.00480		0.00362		0.00369		0.00364		0.00356	
	(0.596)	(0.644)			(0.624)	(0.651)			(0.621)		(0.495)		(0.618)		(0.613)		(0.615)		(0.623)	
CEO M&A Experience (# Deals Before Firm / 100) Squared		0.01806				0.01844														
		(0.443)				(0.431)														
CEO M&A Experience (# Deals Before Job / 100)			0.00370	0.00334			0.00252	0.00232		0.00224		0.00254		0.00260		0.00251		0.00256		0.00253
			(0.355)	(0.755)			(0.533)	(0.836)		(0.592)		(0.510)		(0.535)		(0.516)		(0.536)		(0.510)
CEO M&A Experience (# Deals Before Job / 100) Squared				0.00047				0.00021												
				(0.971)				(0.988)												
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year and Industry (SIC2) Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Robust Standard Errors Clustered by Acquirer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R2	0.0294	0.0296	0.0295	0.0295	0.0290	0.0293	0.0290	0.0291	0.0290	0.0290	0.0287	0.0290	0.0290	0.0290	0.0293	0.0293	0.0290	0.0290	0.0290	0.0290
N	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638

*p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01*

Table 4. Variation in Prior Organizational Contexts (H2)

DV = CAR [-1, +1]

	(1)	(2)	(3)
	Variety of Organizational Contexts in CDEs' Prior Experience		
	At Least 2 Firms	At least 3 Firms	At least 4 Firms
CDE M&A Experience	**0.01607****	**0.01527****	**0.01284****
	(0.036)	**(0.004)**	**(0.005)**
CDE M&A Experience Squared	**-0.01046****	**-0.00842****	**-0.00697****
	(0.013)	**(0.005)**	**(0.012)**
Indicator = 1 if CDE Worked in > N Firms	-0.00262	0.00091	0.00292
	(0.354)	(0.706)	(0.300)
Indicator * CDE Experience	**-0.01670***	**-0.02596****	**-0.03426***
	(0.097)	**(0.035)**	**(0.093)**
Indicator * CDE Experience Squared	**0.01688****	**0.01976***	**0.02593**
	(0.016)	**(0.056)**	**(0.124)**
Firm M&A Experience	-0.00137	-0.00120	-0.00114
	(0.162)	(0.223)	(0.256)
CEO M&A Experience	0.00478	0.00301	0.00367
	(0.499)	(0.693)	(0.627)
Controls	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**
R2	**0.0306**	**0.0301**	**0.0301**
N	**3638**	**3638**	**3638**

*p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01*

Table 5. Variation in Prior Deal Contexts: Relative Concentration of Experience with Different Deal Types (H2)

DV = CAR [-1, +1]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	HH < 0.38	HH < 0.40	HH < 0.42	HH < 0.44	HH < 0.46	HH < 0.48	HH < 0.50
CDE M&A Experience	**0.01225****	**0.01361****	**0.01361****	**0.01361****	**0.01193***	**0.01223***	**0.01223***
	(0.049)	**(0.027)**	**(0.027)**	**(0.027)**	**(0.050)**	**(0.066)**	**(0.066)**
CDE M&A Experience Squared	**-0.00766****	**-0.00844****	**-0.00844****	**-0.00844****	**-0.00756****	**-0.00778****	**-0.00778****
	(0.018)	**(0.009)**	**(0.009)**	**(0.009)**	**(0.016)**	**(0.021)**	**(0.021)**
Indicator = 1 if Deal Type Herfindahl < N	0.00160	0.00168	0.00168	0.00168	0.00163	0.00132	0.00132
	(0.485)	(0.464)	(0.464)	(0.464)	(0.482)	(0.609)	(0.609)
Indicator * CDE Experience	-0.01248	-0.02908**	-0.02908**	-0.02908**	-0.01120	-0.01488	-0.01488
	(0.602)	(0.026)	(0.026)	(0.026)	(0.287)	(0.165)	(0.165)
Indicator * CDE Experience Squared	0.01569	**0.02876****	**0.02876****	**0.02876****	**0.01502****	**0.01821****	**0.01821****
	(0.398)	**(0.002)**	**(0.002)**	**(0.002)**	**(0.046)**	**(0.018)**	**(0.018)**
Firm M&A Experience	-0.00129	-0.00138	-0.00138	-0.00138	-0.00127	-0.00133	-0.00133
	(0.216)	(0.173)	(0.173)	(0.173)	(0.217)	(0.201)	(0.201)
CEO M&A Experience	0.00468	0.00484	0.00484	0.00484	0.00486	0.00507	0.00507
	(0.510)	(0.497)	(0.497)	(0.497)	(0.495)	(0.476)	(0.476)
Controls	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0305**	**0.0307**	**0.0307**	**0.0307**	**0.0306**	**0.0306**	**0.0306**
N	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**

*p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01*

Table 6. Boundary Condition: High CEO M&A Experience
DV = CAR [-1, +1]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	>= 95th Perc.	*>= 96th Perc.*		*>= 97th Perc.*				*>= 98th Perc.*		*>= 99th Perc.*
	+26 Deals	+28 Deals	+30 Deals	+32 Deals	+34 Deals	+36 Deals	+38 Deals	+40 Deals	+42 Deals	+44 Deals
CDE M&A Experience	**0.00945****	**0.00940****	**0.00940****	**0.00940****	**0.00936****	**0.00936****	**0.00936****	**0.00937****	**0.00938****	**0.00939****
	(0.023)	**(0.021)**	**(0.021)**	**(0.021)**	**(0.022)**	**(0.022)**	**(0.022)**	**(0.021)**	**(0.021)**	**(0.021)**
CDE M&A Experience Squared	**-0.00511***	**-0.00509***	**-0.00509***	**-0.00509***	**-0.00507***	**-0.00507***	**-0.00507***	**-0.00507***	**-0.00507***	**-0.00508***
	(0.054)	**(0.050)**	**(0.050)**	**(0.050)**	**(0.052)**	**(0.052)**	**(0.052)**	**(0.052)**	**(0.051)**	**(0.051)**
Indicator =1 if CEO Experience >= X Deal	0.00077	0.00036	0.00036	0.00036	-0.00043	-0.00043	-0.00043	-0.00044	-0.00018	-0.00021
	(0.804)	(0.912)	(0.912)	(0.912)	(0.925)	(0.925)	(0.925)	(0.924)	(0.973)	(0.969)
Indicator * CDE Experience	-0.02826	-0.02543	-0.02543	-0.02543	-0.01522	-0.01522	-0.01522	0.00154	-0.00189	0.05015
	(0.553)	(0.641)	(0.641)	(0.641)	(0.825)	(0.825)	(0.825)	(0.985)	(0.984)	(0.815)
Indicator * CDE Experience Squared	**0.04809**	**0.25797****	**0.25797****	**0.25797****	**0.24464****	**0.24464****	**0.24464****	**0.22004***	**0.22455***	**0.14810**
	(0.472)	**(0.002)**	**(0.002)**	**(0.002)**	**(0.014)**	**(0.014)**	**(0.014)**	**(0.057)**	**(0.080)**	**(0.625)**
Firm M&A Experience	-0.00131	-0.00128	-0.00128	-0.00128	-0.00129	-0.00129	-0.00129	-0.00128	-0.00128	-0.00128
	(0.209)	(0.210)	(0.210)	(0.210)	(0.217)	(0.217)	(0.217)	(0.215)	(0.207)	(0.206)
Controls	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acqui	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0293**	**0.0308**	**0.0308**	**0.0308**	**0.0308**	**0.0308**	**0.0308**	**0.0308**	**0.0308**	**0.0308**
N	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**

p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01

Table 7. Boundary Condition: Low Firm M&A Experience
DV = CAR [-1, +1]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	< 5th Perc.	*< 10th Perc.*	*< 15th Perc.*	*< 20th Perc.*	*< 25th Perc.*	*< 30th Perc.*	*< 35th Perc.*	*< 40th Perc.*
	< 1 Deal (4th perc)	< 3 Deals (10th perc)	< 4 Deals (15th perc)	< 6 Deals (23rd perc)	< 7 Deals (25th perc)	< 9 Deals (31st perc)	< 10 Deals (35th perc)	< 12 Deals (40th perc)
CDE M&A Experience	**0.00840****	**0.00831****	**0.00911****	**0.00961****	**0.00945****	**0.00964****	**0.00995****	**0.00911****
	(0.035)	**(0.035)**	**(0.020)**	**(0.018)**	**(0.024)**	**(0.019)**	**(0.018)**	**(0.028)**
CDE M&A Experience Squared	**-0.00461***	**-0.00458***	**-0.00486****	**-0.00518****	**-0.00508****	**-0.00520****	**-0.00538****	**-0.00423***
	(0.069)	**(0.065)**	**(0.046)**	**(0.036)**	**(0.045)**	**(0.033)**	**(0.030)**	**(0.099)**
Indicator = 1 if Firm Experience < X Deals	0.00248	0.00581	0.00601*	0.00322	0.00367	0.00455*	0.00456*	0.00240
	(0.614)	(0.131)	(0.065)	(0.249)	(0.189)	(0.055)	(0.057)	(0.275)
Indicator * CDE Experience	**-0.82702****	**-0.35405****	**-0.10899**	**-0.08365****	**-0.06584****	**-0.07223****	**-0.07052****	**-0.01123**
	(0.019)	**(0.004)**	**(0.121)**	**(0.019)**	**(0.039)**	**(0.018)**	**(0.007)**	**(0.417)**
Indicator * CDE Experience Squared	**6.41450****	**0.73918*****	**0.16356***	**0.12675****	**0.09651****	**0.11368****	**0.11036****	**0.00319**
	(0.031)	**(0.000)**	**(0.097)**	**(0.047)**	**(0.028)**	**(0.011)**	**(0.010)**	**(0.633)**
CEO M&A Experience	0.00202	-0.00177	0.00273	0.00288	0.00343	0.00463	0.00455	0.00243
	(0.775)	(0.763)	(0.695)	(0.684)	(0.635)	(0.529)	(0.540)	(0.743)
Turning Point of the U	*29*	*24*	*31*	*30*	*31*	*29*	*29*	*n/a*
Controls	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0302**	**0.0328**	**0.0305**	**0.0300**	**0.0300**	**0.0308**	**0.0309**	**0.0293**
N	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**

p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01

Table 8. Baseline Results with Firm Fixed Effects

DV = CAR [-1, +1]

	(1) Controls Only	(2) Controls + Firm	(3) Controls + CEO	(4) Controls + Firm + CEO	(5) Controls + CDE	(6) Controls + CDE	(7) Baseline
CDE M&A Experience					**0.00305**	**0.01017****	**0.01044***
					(0.101)	**(0.044)**	**(0.051)**
CDE M&A Experience Squared						**-0.00567***	**-0.00572***
						(0.092)	**(0.098)**
Firm M&A Experience		-0.00467		-0.00473			-0.00501
		(0.153)		(0.150)			(0.129)
CEO M&A Experience			0.00344	0.00459			0.00351
			(0.788)	(0.713)			(0.777)
CDE Tenure in Current Job					0.00019	0.00025	0.00027
					(0.623)	(0.501)	(0.480)
CDE Tenure in Firm					-0.00003	-0.00007	-0.00004
					(0.900)	(0.761)	(0.844)
Acquiror Tobin's Q	-0.00058**	-0.00062**	-0.00057**	-0.00060**	-0.00058**	-0.00058**	-0.00061**
	(0.004)	(0.002)	(0.008)	(0.004)	(0.006)	(0.005)	(0.004)
Acquiror Size	-0.00776**	-0.00689**	-0.00778**	-0.00690**	-0.00790**	-0.00801**	-0.00711**
	(0.009)	(0.021)	(0.009)	(0.022)	(0.009)	(0.008)	(0.019)
Acquiror Prior Performance	0.00765	0.00785	0.00760	0.00779	0.00784	0.00783	0.00802
	(0.394)	(0.375)	(0.399)	(0.381)	(0.379)	(0.381)	(0.362)
Acquiror Current Ratio	-0.00046	-0.00062	-0.00050	-0.00067	-0.00045	-0.00042	-0.00062
	(0.393)	(0.280)	(0.384)	(0.268)	(0.417)	(0.437)	(0.300)
Acquiror Business Segments	0.00027	0.00024	0.00026	0.00023	0.00020	0.00020	0.00015
	(0.618)	(0.661)	(0.630)	(0.676)	(0.716)	(0.710)	(0.785)
Deal Relatedness	-0.00037	-0.00038	-0.00038	-0.00040	-0.00038	-0.00042	-0.00045
	(0.877)	(0.871)	(0.872)	(0.865)	(0.872)	(0.861)	(0.852)
Target Has Financial Advisor	0.00448**	0.00438**	0.00448**	0.00437**	0.00454**	0.00462**	0.00451**
	(0.007)	(0.008)	(0.007)	(0.009)	(0.006)	(0.006)	(0.008)
Acquiror Has Financial Advisor	-0.00311	-0.00325	-0.00309	-0.00322	-0.00318	-0.00314	-0.00328
	(0.344)	(0.323)	(0.345)	(0.324)	(0.333)	(0.339)	(0.316)
Post-Deal Has Majority Ownership	0.00698**	0.00718**	0.00694**	0.00714**	0.00690**	0.00688*	0.00707**
	(0.046)	(0.039)	(0.047)	(0.040)	(0.050)	(0.050)	(0.043)
Deal $1Bn+	-0.00565	-0.00578	-0.00568	-0.00582	-0.00573	-0.00583	-0.00602
	(0.343)	(0.329)	(0.341)	(0.326)	(0.336)	(0.329)	(0.311)
Target Public	-0.00425	-0.00424	-0.00430	-0.00431	-0.00414	-0.00420	-0.00421
	(0.297)	(0.297)	(0.294)	(0.292)	(0.311)	(0.303)	(0.302)
Auction	-0.00889	-0.00928	-0.00882	-0.00920	-0.00836	-0.00827	-0.00850
	(0.540)	(0.531)	(0.543)	(0.534)	(0.565)	(0.568)	(0.565)
Hostile Attitude	-0.04405***	-0.04491***	-0.04402***	-0.04488***	-0.04367***	-0.04347***	-0.04414***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Tender	-0.00124	-0.00103	-0.00122	-0.00100	-0.00133	-0.00123	-0.00099
	(0.836)	(0.862)	(0.839)	(0.867)	(0.825)	(0.839)	(0.868)
Crossborder	0.00294**	0.00293**	0.00294**	0.00293**	0.00296**	0.00301**	0.00300**
	(0.047)	(0.045)	(0.047)	(0.045)	(0.043)	(0.039)	(0.037)
Firm Age	-0.00530***	-0.00431***	-0.00530***	-0.00430***	-0.00535***	-0.00535***	-0.00431***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Firm Has New CEO	0.00177	0.00171	0.00177	0.00171	0.00206	0.00195	0.00190
	(0.539)	(0.559)	(0.540)	(0.559)	(0.483)	(0.506)	(0.526)
CEO Tenure	0.00016	0.00016	0.00017	0.00017	0.00017	0.00017	0.00019
	(0.415)	(0.397)	(0.410)	(0.385)	(0.405)	(0.389)	(0.365)
Constant	0.58095***	0.47811***	0.58126***	0.47718***	0.58641***	0.58738***	0.47850***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Firm Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0934**	**0.0944**	**0.0935**	**0.0944**	**0.0938**	**0.0941**	**0.0952**
N	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**

*p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01*

Table 9. Summary of Alternative Explanations and Robustness Checks

Empirical Concern *The main results may be sensitive to or driven by …*	**Robustness Test** *To mitigate this concern, I …*	**Results** *See Table(s)*
(i) Selection Effects		
unobservable heterogeneity in the CDE-firm matching		
…they are better at choosing CDEs	Control for firm fixed effects	*Table 8*
…they anticipate new strategic directions	Control for new CEO, CEO tenure, lagged operating performance in all	*Tables 2 to 8*
…they anticipate uptick in M&A activities	Control for average M&A intensity prior to the focal year	*Tables 3*
…they want to revamp M&A platform because of prior poor M&A performance	Control for prior negative CARs, average CARs among last n deals, prior M&A impairment	*Appendix C Table 4*
…they want to create a dedicated M&A function	Control for whether focal CDE is the first CDE, prior CDE history, year of first CDE in firm	*Appendix C Table 4*
(ii) Impression Management		
…active impression management of stock markets' reactions to M&A announcements (i.e. the stock market reactions are not driven by assessments of the NPV of the transaction, but shaped by how CDEs are framing and portraying the transaction in press releases)	(1) Use natural language processing techniques (LIWC, LDA topic modeling) to compare differences between high vs low experienced CDEs; (2) Test for alternative M&A outcomes that are not driven by stock-market reactions or the influence of analysts; (3) Conduct extensive field interviews with professional services providers (i.e. investment bankers, legal, consultants) who interact with many different CDEs to understand differences in behaviors between high vs low experienced CDEs	*Appendix C Table 1*
(iii) Sample Selection Bias		
results may be driven by …		
…productivity declines over time	Control for CDEs' tenure and tenure squared in the current job and current	*Table 3*
…sample selection due to survivorship bias (i.e. attrition of really good/bad CDEs over time, so those left in sample may have high experience only because they have been around the longest)	Control for CDEs' tenure and tenure squared in the corporate development function	*Appendix C Table 3*
…extremely acquisitive or large companies	Exclude the largest and most acquisitive firms one at a time (Apple, Cisco, Google, IBM, Intel, Microsoft)	*Appendix C Table 5*
…dot-com bubble era active deal activities	Exclude deals from 1995-2000	*Appendix C Table 5*
(iv) Omitted Variable Bias		
…M&A experience of other actors in the firm	(1) Sequentially add CEO M&A Experience and Firm M&A Experience; (2) Test alternative measures of CEO and Firm M&A Experience; (3) Interact Indicators for High/Low CEO and Firm M&A Experience	*Table 2* *Table 3* *Tables 6, 7*
…reputation spillovers of celebrity firms	Control for firm reputation based on Haleblian et al. (2017)	*Appendix C Table 2*
…availability of targets	Control for lagged target industry-level deal activity by SIC 3 and SIC 4	*Appendix C Table 6*
…prior interactions between target and acquirer	Control for prior partnership between target and acquirer	*Appendix C Table 6*
…prior M&A experience of the financial advisor	Control for target and acquirer's financial advisors' recent experience in the target sector by SIC3 and SIC4	*Appendix C Table 6*
(v) Other Characteristics of the CDE		
…functional background in professional services firms	Control for whether the CDE worked in investment banking, legal, consulting, hedgefund or private equity	*Appendix C Table 7*
…relevant technical background from prior engineering / technology-related jobs or education training	Control for whether the CDE was an ex engineer, or have a science-based education	*Appendix C Table 7*
…whether they have an MBA	Control for whether the CDE has a MBA	*Appendix C Table 7*
…whether they attended an elite institution	Control for whether the CDE had attended an elite institution (US News top 50 schools)	*Appendix C Table 7*
…whether they are from abroad	Control for whether the CDE came from abroad	*Appendix C Table 7*
…innate ability / other unobservable characteristics that	Control for CDE fixed effects using CDE M&A experience as a rolling count of announced deals prior to focal year (limited statistical power)	*Appendix C Table 8*

Appendix

A. Coding Procedures Used to Identify Corporate Development Executives in Sample

First, I created a pool of potential CDE candidates based on publicly available LinkedIn profiles with the help of Research Assistants (RAs), who conducted independent Boolean title searches on LinkedIn, using keywords *"M&A," "Acquisition," "Integration," "Merger," "Divestiture," "Strategy," "Corporate Development," "Business Development," "Transaction," "Transformation," "Head," "Vice President," "Senior Vice President," "Executive Vice President,"* and short-forms of each of these terms. LinkedIn has become the standard networking tool used by business professionals, and CDEs often utilize LinkedIn as part of their job (for deal sourcing as well as interactions with outside advisors). As such, they have incentives to keep their information as accurate and up to date as possible, including their current title and detailed descriptions of their roles and responsibilities. This initial identification process by RAs resulted in 2,906 potential candidates. Note that LinkedIn searches can only be performed on titles held by current employees of a company, not their historical titles.

Next, I create additional pools of potential CDE candidates from existing executive information provided by Amadeus, BoardEx and DCA. Observations are added to this pool if their titles contain any of the following: *M&A, merger, acquisition, corp dev, dev, corp strat, strategy, integration, divestiture, spin-off, acq, strat*. This text filtering process resulted in a total of 21,090 records from Amadeus, 24,382 records from BoardEx, and 333,803 records from DCA.

After the different pools of potential candidates are built, I conduct a thorough manual Google search of each individual from the different pools, as well as a general search on Google for a company's current and past CDE (using a combination of the abovementioned keyword searches). A person is identified as the "Corporate Development Executive" for a particular firm if the following criteria are met (in order of importance):

(1) there are company press releases or news articles which clearly refer to them as the person in charge of corporate development or M&A or inorganic activities of the firm; and/or
(2) they are reported as the most senior person (typically Vice President or Senior Vice President) for corporate development or corporate business development or M&A on company websites, annual reports or transaction prospectuses; and/or
(3) their titles and descriptions on LinkedIn clearly identify them as the person responsible for company-wide corporate development activities; and/or (4) their titles and descriptions on Amadeus/BoardEx/DCA clearly identify them as the person responsible for company-wide corporate development activities, and there are other web results indicative of their seniority/responsibilities in the company.

For each identified CDE, I collect his or her prior education and employment history based on the relevant LinkedIn profiles (where 80% of identified CDEs have public LinkedIn profiles with detailed prior experience history), Bloomberg, company websites and press releases. For the missing items (education degrees, graduation years, missing gaps in career history, demographics characteristics), I manually triangulate the data based on Pitchbook, Crunchbase, high school / college yearbooks and reunion pages, disclosed biographies on various websites, and any available information resulting from extensive web searches.

B. Demographics, Prior Education and Career Backgrounds of S&P 500 IT CDEs

	%
Female	*8%*
Born in 1940s (current age: 69-78)	*5%*
Born in 1950s (current age: 59-68)	*21%*
Born in 1960s (current age: 49-58)	*50%*
Born in 1970s (current age: 39-48)	*22%*
From Abroad	*16%*
Has Education in Foreign Country	*18%*
Has Natural Science Education	*27%*
Has Social Science Education	*48%*
Has Humanities Education	*17%*
Has MBA	*56%*
Has JD	*12%*
Has Masters	*71%*
Has PhD	*8%*
Had Corp Dev Jobs Before CDE	*45%*
Had IBD Jobs Before CDE	*21%*
Had Legal Jobs Before CDE	*9%*
Had Consulting Jobs Before CDE	*25%*
Had PE/Investing Jobs Before CDE	*16%*
Had Engineer Jobs Before CDE	*17%*
Had Management/Operations Jobs Before CDE	*40%*
Had Marketing Jobs Before CDE	*38%*
Had Corporate Finance Jobs Before CDE	*26%*
Had Entrep. Jobs Before CDE	*11%*
Had IR Jobs Before CDE	*1%*
Had HR Jobs Before CDE	*1%*
Had Government Jobs Before CDE	*5%*

C. Supplementary Analyses on Alternative Explanations and Empirical Concerns

1. Impression Management

If impression management is indeed the mechanism through which CDEs affect M&A performance through prior experience, then we would expect to see differences between the language used in press releases by firms with highly experienced CDEs versus those with CDEs who have limited prior M&A experience. To test this, I first collect all press releases and relevant news articles for all deals in my sample, which resulted in a corpus of 11,004 documents. Next, I apply the Linguistic Inquiry and Word Count (LIWC) lexicon (Pennebaker *et al.*, 2015) and compare textual differences between high vs low experienced CDEs (I use 90 deals as the cutoff since it is the estimated turning point of the inverted-U). The below table shows the regression results of CDE experience against various textual outcomes, including degree of positive and negative affect language (Piezunka and Dahlander, 2019), analytical thinking (Pennebaker *et al.*, 2014), authority (Kacewicz *et al.*, 2014), negation, and language complexity (Piezunka and Dahlander, 2019; Tausczik and Pennebaker, 2010). After controlling for deal-specific and firm-specific characteristics, I don't find any systematic differences between highly experienced vs inexperienced CDEs.

Table 1. Testing Alternative Explanation: Impression Management (LIWC Analyses)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
DV:	**Positve Affect Lanugage**		**Negative Affect Lanugage**		**Analytical Thinking**		**Authority**		**Negation**		**Language Complexity (# of Words > 6 Letters)**	
High CDE M&A Experience:	**0.16645**		**-0.02836**		**0.26974**		**-0.17162**		**-0.03010**		**-0.24020**	
(=1 if CDE M&A Experience > 90 Deals)	**(0.315)**		**(0.582)**		**(0.324)**		**(0.709)**		**(0.350)**		**(0.796)**	
CDE M&A Experience		**0.14069**		**-0.01597**		**-0.02865**		**0.46215**		**-0.01575**		**-0.23691**
		(0.373)		**(0.669)**		**(0.903)**		**(0.297)**		**(0.569)**		**(0.671)**
Deal Relatedness	-0.00812	-0.00874	0.04088	0.04086	-0.10524	-0.10202	-0.00334	-0.01272	-0.01541	-0.01546	-0.66909**	-0.66763**
	(0.921)	(0.915)	(0.119)	(0.119)	(0.509)	(0.521)	(0.995)	(0.980)	(0.448)	(0.447)	(0.013)	(0.013)
Target Has Financial Advisor	0.04634	0.04812	0.00835	0.00824	0.24946*	0.24615*	-0.17456	-0.16174	-0.04428**	-0.04437**	0.30723	0.30385
	(0.473)	(0.453)	(0.742)	(0.746)	(0.078)	(0.081)	(0.600)	(0.625)	(0.009)	(0.009)	(0.254)	(0.257)
Acquiror Has Financial Advisor	0.02184	0.01989	0.00641	0.00654	0.45404**	0.45718**	-0.14688	-0.15979	-0.06247**	-0.06236**	-0.69941**	-0.69576**
	(0.813)	(0.828)	(0.850)	(0.847)	(0.002)	(0.001)	(0.762)	(0.742)	(0.002)	(0.002)	(0.012)	(0.013)
Post-Deal Has Majority Ownership	-0.08671	-0.08673	-0.01077	-0.01098	-1.09245***	-1.08566***	-0.79012	-0.80625	0.00878	0.00853	1.17701**	1.17795**
	(0.529)	(0.531)	(0.826)	(0.823)	(0.000)	(0.000)	(0.384)	(0.373)	(0.843)	(0.846)	(0.022)	(0.022)
Deal $1Bn+	0.00737	0.00884	0.07994**	0.07962*	0.60378**	0.60866**	-1.18546**	-1.19291**	0.00216	0.00180	-0.68352	-0.68530
	(0.956)	(0.947)	(0.049)	(0.050)	(0.036)	(0.036)	(0.048)	(0.048)	(0.934)	(0.946)	(0.185)	(0.187)
Target Public	0.95837***	0.95669***	-0.07255**	-0.07203**	0.62178***	0.61149***	1.34653**	1.36616**	-0.10067***	-0.10008***	-2.67251***	-2.67107***
	(0.000)	(0.000)	(0.017)	(0.017)	(0.000)	(0.000)	(0.008)	(0.007)	(0.000)	(0.000)	(0.000)	(0.000)
Auction	-0.38837	-0.37705	-0.02646	-0.02759	0.38727	0.37998	-0.99936	-0.95038	0.00396	0.00288	0.17735	0.15763
	(0.401)	(0.413)	(0.837)	(0.831)	(0.430)	(0.441)	(0.548)	(0.565)	(0.950)	(0.963)	(0.925)	(0.933)
Hostile Attitude	-0.98301**	-0.97836**	1.03315***	1.03213***	-2.21605***	-2.20098***	12.06186***	12.03926***	0.72145***	0.72033***	-8.13959***	-8.14532***
	(0.002)	(0.002)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Tender	0.34416	0.34607	-0.05311	-0.05363	0.31675	0.32588	2.55962**	2.54338**	0.02145	0.02087	-0.35532	-0.35728
	(0.140)	(0.138)	(0.206)	(0.201)	(0.228)	(0.216)	(0.010)	(0.011)	(0.530)	(0.540)	(0.673)	(0.672)
Crossborder	-0.21340**	-0.21172**	-0.04542**	-0.04553**	0.39505**	0.39236**	0.35994	0.37102	-0.03552*	-0.03562*	-0.63546**	-0.63860**
	(0.008)	(0.008)	(0.029)	(0.029)	(0.014)	(0.014)	(0.415)	(0.397)	(0.066)	(0.065)	(0.023)	(0.022)
Firm Age	-0.12215***	-0.12267***	0.01525***	0.01526***	0.03882	0.04047*	-0.44609***	-0.45148***	0.00411*	0.00411*	-0.17695***	-0.17587***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.105)	(0.094)	(0.000)	(0.000)	(0.054)	(0.058)	(0.000)	(0.000)
Year, Industry (SIC2), Firm Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acqui	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.1819**	**0.1820**	**0.1131**	**0.1130**	**0.2936**	**0.2934**	**0.1780**	**0.1781**	**0.1287**	**0.1286**	**0.4298**	**0.4299**
N	**3398**	**3398**	**3398**	**3398**	**3398**	**3398**	**3398**	**3398**	**3398**	**3398**	**3398**	**3398**

p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01

In addition, I conduct analyses using M&A outcomes that are not driven by stock-market reactions or the influences of analysts. I find that CDEs' prior M&A experience is negatively associated with days to deal completion and acquisition impairment likelihood, and positively associated with the likelihood of deal completion and ROA two years after the deal. While helpful as suggestive evidence, these alternative measures are problematic in many ways: (i) in my sample, 99% of deals are completed after announcement, limiting the power of completion likelihood as a potential DV; (ii) days to completion is usually more process-level orientated, where the scope for

misapplications is limited; (iii) the likelihood of impairment is helpful, but more as an indicator of extremely poor performance (Rabier, 2017), and subject to internal reclassifications; (iv) accounting-based ROA is useful as an overall indicator of M&A investment returns, but it cannot be attributed to a specific deal, which is problematic given that the average firm in this sector does 3-4 deals each year. For these reasons, I do not rely on these alternative outcomes in my analyses.

2. Reputation Spillovers

Some recent research has found that firm reputation and firm celebrity status impact stock market reactions when releasing unexpected announcements (Haleblian, Pfarrer, and Kiley, 2017; Pfarrer, Pollock, and Rindova, 2010). To test this mechanism, I control for firms' reputation as per Haleblian et al. (2017) and firm fixed effects, and find that the inverted-U relationship still holds.

Table 2. Testing Alternative Explanation: Reputation Spillovers

DV = CAR [-1, +1]

	(1) Firm	(2) CEO	(3) Firm + CEO	(4) CDE	(5) Firm + CEO + CDE	(6) Firm + CEO + CDE + Firm FEs	(7) High Reputation Interactions
CDE M&A Experience				**0.00935****	**0.01084****	**0.01057***	**0.00948***
				(0.025)	**(0.010)**	**(0.057)**	**(0.070)**
CDE M&A Experience Squared				**-0.00531****	**-0.00610****	**-0.00570***	**-0.00482***
				(0.048)	**(0.026)**	**(0.097)**	**(0.072)**
Firm M&A Experience	-0.00107		-0.00107		-0.00127	-0.00505	-0.00128
	(0.278)		(0.277)		(0.213)	(0.127)	(0.210)
CEO M&A Experience		0.00568	0.00571		0.00493	0.00374	0.00484
		(0.407)	(0.404)		(0.489)	(0.762)	(0.492)
High Reputation Firm	0.00175	0.00187	0.00214	0.00158	0.00211	0.00082	0.00173
	(0.543)	(0.527)	(0.476)	(0.595)	(0.502)	(0.851)	(0.632)
High Reputation * CDE M&A Experience [1]							0.00971
							(0.441)
High Reputation * CDE M&A Experience Squared [1]							-0.00876
							(0.357)
Controls	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Firm Fixed Effects	**No**	**No**	**No**	**No**	**No**	**Yes**	**No**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0281**	**0.0279**	**0.0282**	**0.0290**	**0.0296**	**0.0952**	**0.0298**
N	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**

p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01

[1] *High Reputation is calculated as a binary indicator rather than depreciated per Haleblian et al. (2017)*

3. Survivorship Bias

Existing works on individual job performance have also documented an inverted-U relationship between length in a job and job performance, where survivorship bias has been argued to be an alternative explanation for this empirical observation (Quińones, Ford, and Teachout, 1995; Sturman, 2003). Specifically, individuals that are very good at their jobs would be promoted, while the bottom performers would be fired, so those left in sample may have a high amount of experience only because they have been around the longest. To rule out this alternative explanation of survivorship bias, in addition to controlling for tenure in the job and in firm (included in all my analyses), I also test for CDEs' tenure in the corp dev function, replicating all models of Table 3. The estimates on 'CDE Tenure in Corporate Development Function' are negative and statistically significant, suggesting that survivorship bias is indeed a plausible concern. After controlling for this, the hypothesized inverted-U relationship between CDEs' M&A experience and performance actually becomes more statistically significant and larger, suggesting that CDEs are in fact gaining M&A-specific knowledge with each additional deal, not just from time spent in the function.

Table 3. Testing Alternative Explanation: Survivorship Bias

DV = CAR [-1, +1]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	Panel F				Panel G				Panel H				Panel I				Panel J			
	Firm = Log(All Prior Deals)				Firm = All Prior Deals				Firm Experience = Last 5 Years				Firm Experience = Last 4 Years				Firm Experience = Last 3 Years			
CDE M&A Experience	0.01632***	0.01676***	0.01665***	0.01669**	0.01480**	0.01615**	0.01527**	0.01619**	0.01400**	0.01436**	0.01424**	0.01424**	0.01430**	0.01472**	0.01387**	0.01399**	0.01419**	0.01455**	0.01410**	0.01422**
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.004)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)
CDE M&A Experience Squared	-0.00795**	-0.00819**	-0.00835**	-0.00836**	-0.00714**	-0.00792**	-0.00753**	-0.00805**	-0.00682**	-0.00715**	-0.00708**	-0.00708**	-0.00697**	-0.00736**	-0.00676**	-0.00696**	-0.00692**	-0.00726**	-0.00687**	-0.00707**
	(0.004)	(0.003)	(0.004)	(0.004)	(0.008)	(0.009)	(0.008)	(0.011)	(0.012)	(0.013)	(0.009)	(0.009)	(0.009)	(0.009)	(0.010)	(0.011)	(0.011)	(0.011)	(0.009)	(0.009)
CDE Tenure in Current Job	-0.00020	-0.00021	-0.00019	-0.00019	-0.00025	-0.00023	-0.00024	-0.00021	-0.00026	-0.00025	-0.00025	-0.00025	-0.00025	-0.00024	-0.00026	-0.00026	-0.00025	-0.00024	-0.00025	-0.00025
	(0.343)	(0.320)	(0.386)	(0.383)	(0.248)	(0.294)	(0.273)	(0.332)	(0.242)	(0.254)	(0.250)	(0.250)	(0.244)	(0.260)	(0.231)	(0.236)	(0.241)	(0.255)	(0.248)	(0.254)
CDE Tenure in Firm	0.00005	0.00004	0.00003	0.00003	0.00006	0.00004	0.00004	0.00003	0.00004	0.00003	0.00003	0.00003	0.00004	0.00003	0.00005	0.00003	0.00004	0.00003	0.00004	0.00003
	(0.706)	(0.746)	(0.829)	(0.838)	(0.689)	(0.798)	(0.753)	(0.844)	(0.759)	(0.834)	(0.836)	(0.836)	(0.749)	(0.835)	(0.720)	(0.802)	(0.752)	(0.834)	(0.754)	(0.837)
CDE Tenure in Corporate Development Function	-0.00037*	-0.00038*	-0.00036*	-0.00036*	-0.00035*	-0.00036*	-0.00035*	-0.00035*	-0.00033	-0.00033	-0.00032	-0.00032	-0.00033*	-0.00033*	-0.00033*	-0.00033*	-0.00033*	-0.00033*	-0.00033*	-0.00032
	(0.059)	(0.056)	(0.073)	(0.073)	(0.083)	(0.085)	(0.087)	(0.097)	(0.101)	(0.106)	(0.101)	(0.101)	(0.091)	(0.098)	(0.085)	(0.098)	(0.091)	(0.099)	(0.088)	(0.101)
Firm M&A Experience (Log of Total # Deals)	-0.00144	-0.00140	-0.00153	-0.00152																
	(0.158)	(0.169)	(0.144)	(0.154)																
Firm M&A Experience (Total # Deals / 1000)					-0.00682	-0.02557	-0.00972	-0.02739												
					(0.724)	(0.555)	(0.629)	(0.549)												
Firm M&A Experience Squared						0.07074		0.06675												
						(0.553)		(0.607)												
Firm M&A Experience (# Deals in Last n Years / 100)									0.00024	-0.00043			-0.00071	-0.00165			-0.00051	-0.00153		
									(0.960)	(0.935)			(0.904)	(0.792)			(0.944)	(0.840)		
Firm M&A Experience (= 1 if Has M&A in Last n Years)											-0.00082	-0.00090			0.00454	0.00450			-0.00018	-0.00023
											(0.861)	(0.848)			(0.417)	(0.422)			(0.972)	(0.964)
CEO M&A Experience (# Deals Before Firm / 100)	0.00363	-0.00697			0.00334	-0.00716			0.00336		0.00332		0.00332		0.00346		0.00333		0.00334	
	(0.603)	(0.586)			(0.632)	(0.580)			(0.632)		(0.636)		(0.634)		(0.622)		(0.634)		(0.633)	
CEO M&A Experience (# Deals Before Firm / 100) Squared		0.01953				0.02010														
		(0.400)				(0.385)														
CEO M&A Experience (# Deals Before Job / 100)			0.00277	0.00238			0.00226	0.00120		0.00169		0.00156		0.00199		0.00151		0.00185		0.00155
			(0.487)	(0.822)			(0.571)	(0.914)		(0.678)		(0.686)		(0.626)		(0.696)		(0.648)		(0.687)
CEO M&A Experience (# Deals Before Job / 100) Squared				0.00053				0.00140												
				(0.967)				(0.920)												
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year and Industry (SIC2) Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Robust Standard Errors Clustered by Acquirer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R2	0.0303	0.0305	0.0303	0.0303	0.0297	0.0301	0.0297	0.0298	0.0297	0.0297	0.0297	0.0297	0.0297	0.0297	0.0300	0.0300	0.0297	0.0297	0.0297	0.0297
N	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638	3638

*p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01*

4. Selection of CDEs Based Firms' Prior M&A Activity

Another plausible explanation for why certain firms choose certain CDEs is that firms want to change their M&A strategy, either as a result of recent operations, the initiatives of new CEOs, or to change their M&A processes due to bad performance outcomes in prior deals, or to set up a dedicated M&A function (if they didn't have one previously). I test for all of these alternative potential CDE-firm selection explanations in Table 4 below. The predicted inverted-U shaped relationship holds in all models.

Table 4. Testing Prior Firm M&A Activity as Potential Selection Mechanisms
DV = CAR [-1, +1]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Firms' Prior M&A Experience (before current CDE, before current year)						Firm Had M&A Impairment		Change in Corp Dev Func		
CDE M&A Experience	**0.00925****	**0.01045****	**0.00894****	**0.00901****	**0.00914****	**0.00888****	**0.01081****	**0.01096****	**0.01077****	**0.01268****	**0.01064****
	(0.027)	**(0.012)**	**(0.031)**	**(0.030)**	**(0.027)**	**(0.034)**	**(0.010)**	**(0.009)**	**(0.012)**	**(0.004)**	**(0.012)**
CDE M&A Experience Squared	**-0.00534***	**-0.00584****	**-0.00496***	**-0.00505***	**-0.00507***	**-0.00490***	**-0.00604****	**-0.00622****	**-0.00596****	**-0.00692****	**-0.00592****
	(0.053)	**(0.036)**	**(0.067)**	**(0.064)**	**(0.061)**	**(0.074)**	**(0.028)**	**(0.024)**	**(0.031)**	**(0.011)**	**(0.033)**
Firm M&A Experience: # of Neg. CARs Year Before CDE Joined	-0.00025 (0.227)										
Firm M&A Experience: # of Neg. CARs 2Yr Before CDE Joined		-0.00026 (0.106)									
Firm M&A Experience: Avg CAR Before Deal (Last 10 Deals)			0.07122 (0.268)								
Firm M&A Experience: Avg CAR Before Deal (Last 50 Deals)				0.06866 (0.640)							
Firm M&A Experience: Avg Recent Performance (Last 3 Year)					0.04375 (0.476)						
Firm M&A Experience: Avg Recent Performance (Last 5 Year)						0.04961 (0.470)					
Firm Has Prior M&A Impairment (Last 1 Year)							-0.00155 (0.653)				
Firm Has Prior M&A Impairment (Year before CDE Joined)								-0.00329 (0.239)			
Number of CDEs the Firm Had Before Current CDE									0.00033 (0.664)		
Current CDE is First CDE of the Firm										-0.00374 (0.194)	
First Year Corp Dev Function was Founded											0.00001 (0.947)
Firm M&A Experience							-0.00111 (0.291)	-0.00105 (0.312)	-0.00136 (0.181)	-0.00172* (0.097)	-0.00119 (0.222)
CEO M&A Experience	0.00335 (0.647)	0.00344 (0.638)	0.00365 (0.616)	0.00360 (0.621)	0.00385 (0.599)	0.00392 (0.595)	0.00408 (0.574)	0.00395 (0.579)	0.00362 (0.626)	0.00435 (0.542)	0.00386 (0.594)
Controls	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0292**	**0.0295**	**0.0295**	**0.0290**	**0.0293**	**0.0293**	**0.0295**	**0.0297**	**0.0295**	**0.0302**	**0.0294**
N	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**

p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01

5. Results Driven by Outliers

Another potential concern is that the results are driven by extremely acquisitive companies or transactions occurring during turbulent macroeconomic changes. To test for this empirical concern, I exclude the most frequent and largest acquirers one by one in the sample (Apple, Cisco, Google, IBM, Intel, Microsoft), as well as all deals occurring during the dot-com bubble (pre-2000).

Table 5. Testing for Potential Bias with Subsample Analyses
DV = CAR [-1, +1]

	(1)	(2)			(3)	(4)	(5)
	Sub-Sample Analyses: Exclude Deals from …						
	Apple	Cisco	Google	IBM	Intel	Microsoft	Dot-Com Bubble (1995-2000)
CDE M&A Experience	**0.01072****	**0.01085****	**0.01338****	**0.00973****	**0.01051****	**0.01150****	**0.01073****
	(0.011)	**(0.012)**	**(0.004)**	**(0.043)**	**(0.014)**	**(0.006)**	**(0.020)**
CDE M&A Experience Squared	**-0.00601****	**-0.00567****	**-0.00700****	**-0.00533***	**-0.00584****	**-0.00723****	**-0.00541****
	(0.030)	**(0.033)**	**(0.019)**	**(0.080)**	**(0.036)**	**(0.003)**	**(0.035)**
Firm M&A Experience	-0.00120	-0.00176	-0.00123	-0.00123	-0.00112	-0.00132	-0.00064
	(0.253)	(0.119)	(0.239)	(0.236)	(0.275)	(0.195)	(0.520)
CEO M&A Experience	0.00382	0.00465	0.00290	0.00538	0.00269	0.00539	0.00686
	(0.598)	(0.509)	(0.684)	(0.464)	(0.705)	(0.455)	(0.314)
Controls	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0296**	**0.0312**	**0.0304**	**0.0299**	**0.0315**	**0.0306**	**0.0268**
N	**3605**	**3437**	**3443**	**3433**	**3487**	**3458**	**2906**

*p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01*

6. Other Omitted Variable Concerns

Another potential concern is that the results are driven by certain omitted variables arising from target-related factors, including the availability of targets (which may bid up the price paid for a given transaction, influence new inorganic growth strategies, etc.), prior interactions between targets and acquirers (alliances, non-equity partnerships), and prior experience of the financial advisors with the target industry (where acquirer's advisor may be driving the deal execution process instead of the CDE, or that the target's advisor may know about the target select criteria of the CDE, etc.).

Table 6. Testing for Omitted Variables Bias Arising from Target-Related Factors
DV = CAR [-1, +1]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Target Industry M&A Activity Last Year:				Acq. Fin. Advisors' Experience in Target Sector		Target Fin. Advisors' Experience in Target Sector		Prior Alliance btw Target and Acquirer
	SIC 4	SIC 4	SIC 3	SIC 3	SIC 4	SIC 3	SIC 4	SIC 3	
CDE M&A Experience	**0.01069****	**0.01065****	**0.01038****	**0.01034****	**0.01058****	**0.00953****	**0.01066****	**0.01005****	**0.01041****
	(0.012)	**(0.011)**	**(0.013)**	**(0.012)**	**(0.012)**	**(0.024)**	**(0.011)**	**(0.015)**	**(0.013)**
CDE M&A Experience Squared	**-0.00591****	**-0.00592****	**-0.00568****	**-0.00572****	**-0.00583****	**-0.00489***	**-0.00595****	**-0.00561****	**-0.00577****
	(0.034)	**(0.033)**	**(0.035)**	**(0.034)**	**(0.035)**	**(0.077)**	**(0.032)**	**(0.037)**	**(0.038)**
Firm M&A Experience	-0.00111	-0.00115	-0.00100	-0.00105	-0.00120	-0.00102	-0.00120	-0.00102	-0.00121
	(0.277)	(0.260)	(0.320)	(0.294)	(0.242)	(0.317)	(0.238)	(0.301)	(0.233)
CEO M&A Experience	0.00361	0.00380	0.00349	0.00358	0.00399	0.00428	0.00385	0.00371	0.00384
	(0.620)	(0.598)	(0.626)	(0.616)	(0.581)	(0.548)	(0.594)	(0.600)	(0.589)
Target Sector (SIC 4) Deal Activity (# Deals)	-0.00000								
	(0.369)								
Target Sector (SIC 4) Deal Activity ($MM)		-0.00000							
		(0.418)							
Target Sector (SIC 3) Deal Activity (# Deals)			-0.00000						
			(0.186)						
Target Sector (SIC 3) Deal Activity ($MM)				-0.00000					
				(0.140)					
Acquirer's FA Prior Exp in Target Sector (SIC 4)					-0.00033				
					(0.552)				
Acquirer's FA Prior Exp in Target Sector (SIC 3)						-0.00058*			
						(0.084)			
Target's FA Prior Exp in Target Sector (SIC 4)							-0.00014		
							(0.575)		
Target's FA Prior Exp in Target Sector (SIC 3)								-0.00033*	
								(0.062)	
Prior Alliances/Partnerships Between Target & Acquirer									0.00551
									(0.549)
Controls	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0297**	**0.0297**	**0.0303**	**0.0304**	**0.0296**	**0.0336**	**0.0295**	**0.0323**	**0.0297**
N	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**

*p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01*

7. CDEs' Other Characteristics

While this paper focuses on prior M&A experience of CDEs, it is possible that CDEs' prior functional backgrounds and education also play a role in shaping different M&A outcomes. In Table 7, I test the relationship between CDEs' functional backgrounds (investment banking, law, consulting, investing), familiarity with technology, prior education in the sciences, MBA education and foreign origin with M&A performance. I find that their coefficients are not statistically significant while the inverted-U relationship holds in all models. In the future, I can further test this with other dimensions of the deal, such as the types of targets selected (which are likely to be shaped by CDEs' social capital and access to the start-up/VC community), whether the company engages financial advisors (where we might expect that CDEs with investment banking relationship may not necessarily need external advisors while those without may work with external banks as partners throughout the various M&A processes), and deal completion challenges (where we might expect that CDEs who have a lot of experience closing deals, or have failed to close deals, or have prior familiarity with the regulatory approval processes may bring these types of knowledge with them).

Table 7. Testing CDEs' Other Characteristics
DV = CAR [-1, +1]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CDE M&A Experience	**0.01120****	**0.01057****	**0.01044****	**0.01121****	**0.01208****	**0.01052****	**0.01092****	**0.01042****	**0.01178****
	(0.009)	**(0.012)**	**(0.013)**	**(0.008)**	**(0.011)**	**(0.014)**	**(0.012)**	**(0.013)**	**(0.004)**
CDE M&A Experience Squared	**-0.00656****	**-0.00588****	**-0.00588****	**-0.00608****	**-0.00651****	**-0.00587****	**-0.00593****	**-0.00583****	**-0.00624****
	(0.021)	**(0.035)**	**(0.034)**	**(0.028)**	**(0.026)**	**(0.035)**	**(0.033)**	**(0.036)**	**(0.018)**
Firm M&A Experience	-0.00120	-0.00123	-0.00125	-0.00119	-0.00139	-0.00120	-0.00119	-0.00117	-0.00148
	(0.237)	(0.256)	(0.225)	(0.243)	(0.181)	(0.231)	(0.236)	(0.250)	(0.165)
CEO M&A Experience	0.00182	0.00386	0.00457	0.00370	0.00473	0.00369	0.00480	0.00394	0.00325
	(0.802)	(0.594)	(0.530)	(0.604)	(0.505)	(0.608)	(0.494)	(0.589)	(0.652)
CDE Had Investment Banking Experience	-0.00322								
	(0.109)								
CDE Had Legal Experience		0.00026							
		(0.914)							
CDE Had Consulting Experience			-0.00090						
			(0.687)						
CDE Had Investing / PE Experience				0.00197					
				(0.567)					
CDE Had Engineering Tech Experience					0.00241				
					(0.443)				
CDE Had Science Education						-0.00027			
						(0.892)			
CDE is from Abroad							0.00275		
							(0.312)		
CDE Had MBA								0.00075	
								(0.669)	
CDE Had Elite Education (Top 25 US Schools)									0.00330*
									(0.091)
Controls	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0301**	**0.0294**	**0.0295**	**0.0296**	**0.0298**	**0.0294**	**0.0298**	**0.0295**	**0.0305**
N	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**	**3638**

p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01

8. Selection Based on Non-Observable CDE Characteristics

Another plausible explanation that may bias the observed inverted-U relationship is that there may be certain individual-specific characteristics that drive both the CDEs' prior experience levels and their selection by firms (e.g. their innate ability or quality). While I do not have enough data in my sample on CDE mobility across firms to fully test this, I show illustrative results from firm- and individual- fixed effects models below. Note that in all other analyses, I measure CDEs' prior M&A experience as the total number of deals they have done *prior to starting their current role as*

CDE, which does not allow me to conduct individual CDE-fixed effects analyses. To address this, I create new measures of CDEs' and CEOs' M&A experience as the *rolling count of their total prior announced M&A deals until the focal year*. Using these alternative measures and different individual and firm fixed effects, Model (1) to Model (7) show that an increase in CDEs' prior M&A experience has important implications for M&A performance, as the estimate on the linear term is still positive and statistically significant (except in the CEO only FE models), controlling for individual CDE-level, CEO-level and firm-level characteristics. While the estimates on the quadratic term are not statistically significant, these are likely due to the low power of the data (only 8% of observations fall on the right side of the inverted-U curve). In the future, I plan to further test this with additional data on CDE mobility events for a large sample (on-going data collection in progress).

Table 8. Fixed Effects Estimation Results
DV = CAR [-1, +1]

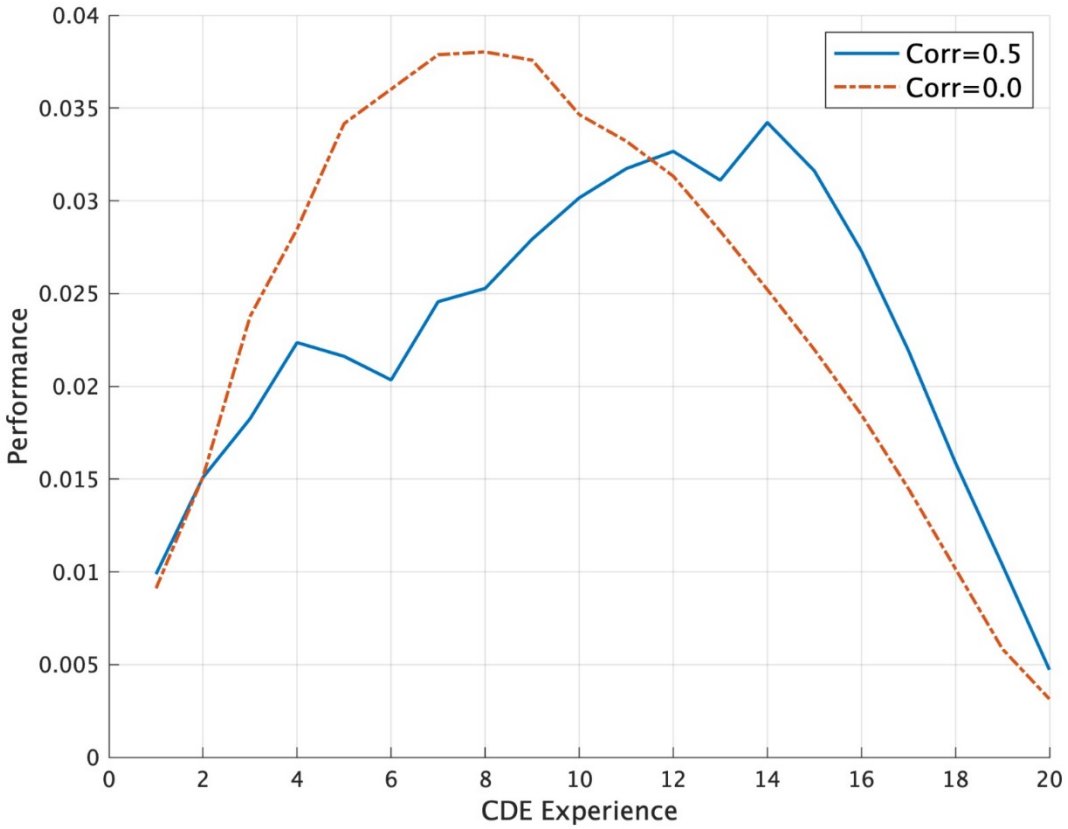
	(1)	(2)	(3)	(4)	(5)	(6)
	New Measure: CDE / CEO M&A Experience as Rolling Count Until Focal Year					
	Firm FEs	CEO FEs	Firm & CEO FEs	CDE FEs	Firm & CDE FEs	Firm, CEO & CDE FEs
CDE M&A Experience	**0.01252****	**0.01002**	**0.00843**	**0.03698****	**0.04345****	**0.15620****
	(0.042)	**(0.140)**	**(0.186)**	**(0.020)**	**(0.005)**	**(0.013)**
CDE M&A Experience Squared	-0.00436	-0.00344	-0.00308	0.00187	-0.00103	-0.00226
	(0.215)	(0.360)	(0.378)	(0.658)	(0.823)	(0.740)
CEO M&A Experience	-0.00097	-0.00894	-0.00373	**-0.02672****	**-0.03235****	**-0.13444****
	(0.778)	(0.251)	(0.617)	**(0.025)**	**(0.006)**	**(0.039)**
Firm M&A Experience	**-0.00591***	-0.00433	-0.00094	-0.00524	**-0.00751***	-0.00398
	(0.076)	(0.247)	(0.806)	(0.226)	**(0.092)**	(0.432)
Controls	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Year and Industry (SIC2) Fixed Effects	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Robust Standard Errors Clustered by Acquirer	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
R2	**0.0960**	**0.1505**	**0.1556**	**0.1409**	**0.1448**	**0.1858**
N	**3637**	**3613**	**3613**	**3624**	**3624**	**3610**

*p-values in parentheses: * p<0.10 ** p<0.05 *** p<0.01*

D. Simple Simulation Model of Unobserved Selection Bias in CDE-Firm Pair

Model Assumptions:

1) CDEs are randomly assigned a quality type (good or bad)
2) There is an inverted-U shaped relationship between CDE Experience and Performance, where higher experience has higher mean and lower variance
3) Firms will conduct a certain number of deals during each CDE appointment
4) Correlation parameter: positive correlation between CDE's quality and the number of deals firms will do (where the good types are preferred when firms are planning to do more M&A)



Results from simulation model suggest that the inverted-U relationship would still hold even if there are unobservable selection biases in firms' selection of CDEs – the inverted-U would shift to the right as it would take longer for the good-type CDEs to climb the learning curve.