

Post-acquisition retention of target founder-CEOs: Looking beneath the surface

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ABSTRACT

This study investigates the retention of target CEOs in the aftermath of acquisitions by comparing target founder and professional CEOs. Considering insights from resource-based view, managerial rent perspective, studies on acquisition implementation, and the literature on founder-CEOs, we argue that target founder-CEOs are resourceful assets for acquirers for implementation purposes; ergo, they are more likely to be retained than target professional CEOs. Target founder-CEOs, owing to their unique firm-specific human capital, have greater acquisition implementation abilities than target professional CEOs. They also have greater monetary incentives to deploy their implementation abilities to the benefit of acquirers. Furthermore, we claim that these effects are stronger, thus contributing to a higher retention rate of target founder-CEOs than their professional peers when acquisitions are technology-driven, and target firms are young. Results from a sample of small high-tech firms acquired by large incumbent firms confirm our predictions.

Keywords: Target CEO retention, Founder-CEO, Acquisition implementation, Technology acquisitions,

1. INTRODUCTION

There is a consensus among scholars and practitioners that post-acquisition retention or replacement of target CEOs (i.e., the CEOs of acquired firms) is a crucial decision for acquirers (e.g., Haspeslagh and Jemison, 1991; Jemison and Sitkin, 1986; Pablo, 1994. See Krug et al., 2014 for a review).¹ Previous studies observe that, in many acquisitions, target CEOs leave the post-acquisition organization within two years following completion of the acquisition deal.² However, it is unclear whether acquirers should retain or dismiss target CEOs and why.

In certain situations, the retention of target CEOs has apparent drawbacks. For example, the market for corporate control perspective suggests that acquirers should replace entrenched and ineffective target CEOs to improve the performance of the acquired operations (Martin and MacConnell, 1991). A similar rationale applies to acquisitions driven by cost-saving objectives (Krug et al., 2014). However, taking inspiration from the resource-based view (RBV) (Barney, 1988; 1991), one can argue that acquirers would be better off retaining target CEOs in the aftermath of the acquisition if two conditions apply. First, when the human capital of these individuals makes them valuable, rare, inimitable, and non-substitutable (VRIN) assets for acquirers. Second, when the value generated by target CEOs for acquirers in the post-acquisition period is greater than the price of retaining them, as reflected in the salary packages offered to target CEOs or the increase in the acquisition premium.³ The few previous studies investigating the determinants of the post-acquisition retention (or replacement) of target CEOs (Bergh, 2001; Buchholtz et al., 2003; Wulf and Singh, 2011) provide empirical evidence supporting this contention. However, a characteristic of target CEOs that has been neglected by this literature (for an exception, see Barger et al., 2017) but crucially influences the value these individuals can generate for acquirers and therefore the likelihood of their post-acquisition retention, is the fact that the target CEO is one of the firm's founders.

We believe target founder-CEOs deserve deep academic scrutiny in the context of acquisition for several reasons. First, many listed firms and most privately held firms are founder-led⁴. Second, the firm-specific human capital of the founder-CEOs is unique and differentiates these CEOs from their professional peers. The practitioner press publicizes the charismatic leadership of founders, such as Steve Jobs of Apple, Bill Gates of Microsoft, Richard Branson of the Virgin Group, or Mark Zuckerberg of Facebook, in managing their companies. Aside from anecdotal evidence, it is also well documented in the entrepreneurship literature (e.g., Certo et al., 2001; Daily and Dalton, 1992; Fahlenbrach, 2009; Gao and Jain, 2011; He, 2008; Hendricks et al., 2019; Nelson, 2003; Willard et al., 1992) that founder-CEOs have different managerial abilities and management styles from those of professional CEOs. Such differences bear the question of under what conditions founder-CEOs remain an asset or become a liability for their firms (Boeker and Karichalil, 2002; Dobrev and Barnett, 2005; Jayaraman et al., 2000; Tzabbar and Margolis, 2017). A natural extension of this inquiry is investigating whether and when target founder-CEOs are assets to keep or liabilities to replace for acquirers. Third, previous studies have predicted the likelihood of either retention or replacement of founder-CEOs at various crucial milestones in the

life cycle of firms. Such milestones include completion of the development of a firm's first product (Wasserman, 2003), receipt of the first round of venture capital (Gerasymenko and Arthurs, 2014; Pollock et al., 2009), or listing through an IPO (Jain and Tabak, 2008). An acquisition is another fundamental milestone for firms and occurs more frequently than IPOs. Surprisingly, it is still unclear whether acquirers are more likely to retain target founder-CEOs than their professional peers, and if they are, why they decide to do so. This paper aims to fill this gap in the literature.

Building on the RBV of acquisitions (Barney, 1988), the managerial rent perspective (Castanias and Helfat, 1991; 2001), the literature on acquisition implementation, and insights from previous studies investigating the unique characteristics of founder-CEOs, we argue that target founder-CEOs are more likely to be retained in the aftermath of the acquisition than professional CEOs. Effective implementation is a fundamental requisite to realize the "combination potential" (Larsson and Finkelstein, 1999) of acquisitions and obtain the uniquely valuable synergies that make acquisitions a source of competitive advantage (Barney, 1988). Target founder-CEOs are VRIN assets for acquirers because of the role they can play during acquisition implementation. Indeed, target founder-CEOs have unique firm-specific human capital, equipping them with superior acquisition implementation abilities than their professional peers. Furthermore, as target founder-CEOs generally have a greater financial interest in their firms than professional CEOs, they have stronger monetary incentives to deploy their managerial abilities to make the acquisition implementation successful.

Moreover, we postulate that there are boundary conditions that influence the retention rates of target founder and professional CEOs differently. These conditions determine how uniquely valuable founder-CEOs' implementation abilities are for acquirers compared to those of professional CEOs. Such conditions also determine the strength of target founder-CEOs' incentives to deploy their implementation abilities. In particular, we expect the difference between the probability of post-acquisition retention of target founder and professional CEOs to be more pronounced when acquisitions are motivated by the intention of acquirers to access the technological assets and capabilities of target firms (i.e., the acquisition is technology-driven), and when target firms are younger. When these two conditions are intertwined in acquisitions, the implementation abilities of founder-CEOs are even more pivotal for acquirers than those of professional CEOs. In addition, target founder-CEOs have even greater incentives to deploy their implementation abilities than their professional peers in these acquisitions.

We test our hypotheses on a sample of 448 acquisitions of small firms (i.e., firms with 500 or fewer employees) operating in high-tech industries by larger firms (i.e., firms with more than 1,000 employees). We consider this setting an ideal testbed for our study for various reasons. First, small high-tech firms are more likely to be the target of technology-driven acquisitions than firms operating in other industries. Indeed, these acquisitions, aimed at technology sourcing, are an important component of the open innovation strategies of large incumbent firms. Some notable recent examples of such deals are Merck's acquisition of biotech startup Peloton Inc. for \$2.2 bn, PayPal's acquisition of Swedish FinTech firm iZettle for \$2.2bn, Salesforce's purchase of MuleSoft for \$6.5 bn, and the acquisition of WhatsApp by Facebook for \$19.6 bn. Moreover, previous studies highlight that these acquisitions face serious implementation challenges (e.g., Graebner et al., 2010). Second, when the target of an acquisition is a small firm, it is easy to detect whether the acquisition is technology-driven or has a different objective (e.g., entry into a new market). Conversely, acquisitions of large firms generally encompass multiple objectives⁵. Finally, in high-tech industries, individuals frequently pursue an entrepreneurial career path to commercially exploit a technology-based business idea (Dobrev and Barnett, 2005). Thus, we expect a higher presence of founder-CEOs in these sectors, particularly at the helm of smaller target firms (Graebner et al., 2010).

The results of our econometric estimates show that target founder-CEOs are more likely to be retained than their professional peers, only in technology-driven acquisitions of young firms which allegedly impose severe implementation challenges. We run several robustness checks to warrant that our findings are not driven by observable or unobservable confounding factors. We also rule out alternative explanations for the higher likelihood of the retention of founder-CEOs that differ from our perspective, including the greater entrenchment of target founder-CEOs and the intention of acquirers to pre-empt future competitive threats from target founder-CEOs leaving the post-acquisition organization. Lastly, we provide admittedly partial and exploratory evidence suggesting that the firm-specific human capital and incentive theoretical mechanisms, which allegedly explain the higher likelihood of post-acquisition retention of target founder-CEOs in technology-driven acquisitions of young firms, compared to their professional peers, are at work in combination.

This paper contributes to two distinct domains of literature. First, it adds to the stream of acquisition literature leveraging RBV to investigate the determinants of the post-acquisition retention of acquired executives. It argues that target founder CEOs are more likely to be retained

post-acquisition as acquirers perceive them as VRIN assets because of the crucial role they can play during acquisition implementation. It also points to boundary conditions – the technological motivation of the acquisition and the age of the target firm, that make target founder-CEOs especially valuable to acquirers, thus increasing the likelihood of their retention. Second, it contributes to the founder-CEO succession literature by offering new insights into whether the founder-CEOs are assets or liabilities in the common yet not academically scrutinized case of exit of their firms via acquisition.

2. CONCEPTUAL BACKGROUND

The antecedents of target CEO retention: the role of target CEOs' human capital

The RBV argues that acquisitions are a source of competitive advantage for acquirers if the increase in the value of the acquirers' assets generated by their combination with the target firms' assets exceeds the price paid by acquirers for the acquisition (Barney, 1988). In this respect, acquirers are more likely to retain target CEOs in the aftermath of the acquisition if these individuals' human capital is a VRIN asset and their retention generates value (i.e., a managerial rent, Castanias and Helfat, 1991; 2001) for the acquirers in the post-acquisition period. Therefore, like any other asset, acquirers' decision to retain the target CEOs is driven by the cost-benefit analysis; that is, the managerial rent should be higher than the price acquirers pay to retain target CEOs.

Several previous studies take inspiration from this perspective. For example, Wulf and Singh (2011) show that acquirers are more likely to retain target CEOs who embody richer human capital, as reflected in their compensation and the performance of their firms during the pre-acquisition period (see Barger et al., 2017 and Fich et al., 2016 for similar evidence on the association between pre-acquisition firm performance and target CEO retention).⁶ Some scholars take a further step towards identifying which skillset of target CEOs increases the likelihood of their post-acquisition retention. For example, Buchholtz et al. (2003) report that target CEOs are more likely to be retained in unrelated acquisitions (i.e., when acquirers and target firms operate in different industries), as their industry-specific human capital makes them more difficult to replace by acquirers that do not operate in the same industry as the target firms.

Other studies on acquisition implementation (Bergh, 2001; Haspeslagh and Jemison, 1991; Jemison and Sitkin, 1986; Pablo, 1994) discuss the firm-specific human capital of target CEOs, related to their deep idiosyncratic knowledge of and strong embeddedness in their firms'

operations, structures, and processes. This component of the target CEOs' human capital is supposedly the most difficult for acquirers to replace. If deployed during acquisition implementation, the firm-specific human capital of target CEOs plays a crucial role in the realization of the combination potential and associated synergistic gains of the acquisition; hence, it is incredibly resourceful for acquirers.

First, target CEOs, who are retained during acquisition implementation, can provide acquirers with deep insights into the origin and evolution of the organization and corporate culture of the target firms, into their long-term relationships with major suppliers and customers, and into the inner workings of their underlying social structure, including information on who the "key" target firms' employees are, and how they can be retained. These insights help acquirers design more effective actions to integrate target operations with the rest of the organization (Coff, 1999; Haspeslagh and Jemison, 1991; Jemison and Sitkin, 1986). Second, target CEOs can play a fundamental and active role during acquisition implementation in preserving the target firms' "momentum" (Graebner, 2004). They can perform mobilizing actions that channel target employees' energy towards concrete tasks by setting specific goals and timelines for the target organizations, and push target employees to interact closely with their acquirers' colleagues, thus ensuring effective coordination with the acquirers' operations. Target CEOs can also perform mitigating actions to shield target employees from the organizational disruption, which acquisitions generally cause, by promptly addressing their acquisition-related concerns and sharing timely information with them on how the acquisition unfolds (see also Coleman and Lunnan, 2011). Finally, target CEOs can contribute to realizing serendipitous value (i.e., the value that was not anticipated by the acquirer before the acquisition) by taking on tasks and responsibilities that cross the two organizations. Thus, they can help acquirer and target employees exchange knowledge and experiences and find new and unanticipated sources of synergies (Graebner, 2004).

This literature has three shortcomings. First, we have a limited understanding of the sources of target CEOs' firm-specific human capital that generates a managerial rent for acquirers when deployed during acquisition implementation and thus favors their retention. For example, scholars argue that target CEOs with longer tenure in their firms are more valuable for acquirers, but the empirical evidence is mixed (Bergh, 2001, Buchholtz et al., 2003; Wulf and Singh, 2011). Second, the boundary conditions that influence the magnitude of the managerial rent eventually generated by target CEOs during acquisition implementation to the benefit of acquirers deserve

closer examination. In some acquisitions, the replacement of target CEOs, despite their firm-specific human capital, may be viewed by acquirers as an unavoidable value-enhancing step (e.g., when acquisitions are driven by eliminating redundancies and cost-saving objectives, Krug et al., 2014). Third, to the best of our knowledge, no previous study has investigated how the incentives of target CEOs may influence their willingness to deploy their managerial abilities during acquisition implementation to the advantage of acquirers. Castanias and Helfat (2001, p. 666-667) highlight the importance of incentive alignment as a precondition for managerial rent and argue that “*when superior managers expect to be able to collect rents to their human capital, this provides the CEOs with a positive incentive to generate those rents ... This creates a “win-win” situation.*”. Following a similar logic, we posit that acquirers are more likely to retain target CEOs if these individuals have greater incentives to deploy their managerial abilities during acquisition implementation.

In this study, we focus on target founder-CEOs and argue that, as a result of their unique characteristics, which we shall illustrate in the next section, these individuals have both greater acquisition implementation abilities and greater incentives to deploy these abilities than target professional CEOs to the benefit of acquirers.

What makes founder-CEOs unique

A rich stream of the entrepreneurship literature highlights specific characteristics of founder-CEOs that make them different from their professional peers.

Previous studies show that founder-CEOs own greater shares of their firms’ equity than professional CEOs, regardless of how ownership shares are computed, that is by including stock options or not (Fahlenbrach, 2009; He, 2008; Nelson, 2003; Wasserman, 2006; Willard et al., 1992). As founder-CEOs’ personal wealth is usually poorly diversified, their fortunes are closely connected to the destiny of their firms.

In addition, founder-CEOs, being the architects of their firms and the instigators of the business idea, have unique firm-specific human capital unparalleled by professional CEOs. First, in the early days of their firms, founder-CEOs typically “wear many hats” (Mathias and Williams, 2017). They assume many roles, take direct responsibility for many decisions, including operating decisions, and are directly involved in many, if not all, firms’ activities (Jayaraman et al., 2000). Since the inception of their firms, founder-CEOs actively shape the firms’ structure, strategy, and culture. In this respect, founder-CEOs confer their “imprint” on their firms, which strongly influences the firms’ behavior and future development (Baron et al., 2001; Burton and Beckman,

2007; Nelson, 2003). Therefore, founder-CEOs have deep tacit knowledge of their firms' operations and the individual and collective capabilities of other managers and employees. Second, because of their central position as key shareholders of their firms and originators of their vision and long-term goals, founder-CEOs serve as a focal point for other employees (Nelson, 2003), most of whom they personally hired and also even had the opportunity to work with before the firms' inception (Mathias and Williams, 2017). Founder-CEOs can leverage their charismatic leadership inherent in the founder status to motivate employees by appealing to their intrinsic motives (Dobrev and Barnett, 2005).

Although founder-CEOs' firm-specific human capital is a valuable asset for their firms in the early days, it is questionable whether it remains a valuable asset when firms mature. Organization life cycle theorists (e.g., Boeker and Karichalil, 2002; Boeker and Wiltbank, 2005) argue that firms must professionalize their management to grow in later stages. Quite often, when firms age, founder-CEOs step down and leave the management of the firms to professional CEOs, who transform their firms into professional organizations (e.g., Certo et al., 2001; Gerasymenko and Arthurs, 2014; Jain and Tabak, 2008; Pollock et al., 2009; Wasserman, 2003). Even if founders remain at the helm of their firms, their firms' structure, routine, and management systems become more standardized, codified, and transparent (e.g., Boeker and Fleming, 2010). Founder-CEOs, like any other CEO, increasingly devote their time and energies to strategic decisions and general management activities, and delegate operating tasks, including human resource management, to others inside their firms. As part of this transformation, the original imprint of the founder-CEOs diminishes significantly, and relations with other managers and employees become distant. Consequently, whether the firm's CEO is a founder or not makes no significant difference any longer.

3. HYPOTHESES

All else equal, notably keeping constant the price acquirers pay for retaining target CEOs, acquirers will be more inclined to retain target CEOs, the more they perceive these individuals as VRIN assets. Target CEOs are considered VRIN assets if they possess firm-specific human capital pertinent to acquisition implementation abilities and have the right incentive to deploy these abilities to the benefit of acquirers. Given these two conditions, we predict that target founder-CEOs are more likely to be retained after the acquisition than target professional CEOs.

First, as discussed earlier, founder-CEOs generally own greater shares of the equity of their firms than professional CEOs, and their personal wealth is closely linked to the value of these

shares. Since acquirers commonly offer a combination of cash and stock swaps to target shareholders (e.g., Eckbo et al., 1990), founder-CEOs, like other target shareholders, have a vested interest in the value of acquirers' equity, which is sensitive to the success of the acquisition (Slovin et al., 2005). Even in the case of an all-cash offer, acquirers usually pay the amount in multiple installments rather than in a lump sum. To protect their interests and reduce the risk of overpayment, acquirers typically use contingent earn-outs, a payment method in which the amount ultimately paid to the seller is adjusted by the future performance of the acquired operations (Eckbo et al., 1990). Therefore, target founder-CEOs have stronger monetary incentives than their professional peers to commit effort to make the acquisition implementation successful (Kohers and Ang, 2000).

Second, target founder-CEOs have firm-specific human capital, which equips them with implementation abilities unparalleled by those of professional CEOs. First, as initiators and architects of their firms, target founder-CEOs have deeper tacit knowledge of target operations than professional CEOs. For acquirer managers who are outsiders and have limited and possibly biased information on target operations (Coff, 1999; Graebner et al., 2010), this knowledge is instrumental in designing effective post-acquisition integration actions. Moreover, as discussed earlier, target founder-CEOs are often charismatic leaders and have special bonds with other target managers and employees. Therefore, target founder-CEOs are better positioned than their professional peers to maintain the momentum of their firms in the aftermath of the acquisition by performing mobilizing and mitigating actions, which channel the energy of key target personnel towards productive tasks and resolve their concerns about acquisition implementation (Graebner, 2004). Third, if target founder-CEOs are given cross-organizational responsibilities in the post-acquisition organization, as a result of their deep knowledge of and special position within their firms, they are more equipped than professional CEOs to discover the serendipitous value of the acquisition (Graebner, 2004), which can be created by combining the operations of the two firms.

Based on the above arguments, we hypothesize the following:

H1: Target CEOs are more likely to be retained in the aftermath of acquisitions if they are one of the founders.

Technology motivation

Previous studies make an important distinction between technology-driven acquisitions, which are motivated by acquirers' desire to control and leverage the technological assets residing in the target firms (Ahuja and Katila, 2001; Paruchuri et al., 2006), and acquisitions that have other

motivations, such as increasing market share, entering a foreign market or pursuing scale economies in production. We claim that the positive association between the founder status of target CEOs and the probability of their post-acquisition retention is stronger when acquisitions are technology-driven. Indeed, the implementation abilities of target founder-CEOs generate more value for acquirers in these acquisitions than those of professional CEOs to an extent unmatched by acquisitions driven by other motivations. Besides, in comparison to other acquisitions, target founder-CEOs have greater incentives to deploy their implementation abilities in technology-driven acquisitions.

First, in technology-driven acquisitions, information asymmetries between acquirers and target firms are greater than in other acquisitions (Coff, 1999; Graebner et al., 2010). The deeper tacit knowledge possessed by target founder-CEOs about the technological assets of their firms, compared to that of professional CEOs, is instrumentally helpful for acquirer managers to make the best use of these assets and to integrate them with other assets residing in acquirers effectively (Coff, 1999; Ranft and Lord, 2002; Graebner et al., 2010). Moreover, target firms' most valuable technological assets often reside in the human capital of talented scientists and engineers as well as in their social relations (Grant, 1996; Ranft and Lord, 2000). Previous studies document that mismanagement of acquisition implementation often disrupts the distinctive innovation capabilities of these individuals to the point that they may decide to leave the post-acquisition organization (Ernst and Vitt, 2000; Park et al., 2018). Even if they stay, they likely experience a substantial drop in post-acquisition innovation productivity (e.g., Kapoor and Lim, 2007; Puranam and Srikanth, 2007; Puranam et al., 2006). The disruption and organizational turmoil experienced by target scientists and engineers also make it impossible to realize the serendipitous value of the acquisition associated with the unanticipated synergies that could be created by combining the innovation capabilities of employees of target firms and acquirers (Graebner, 2004). We mentioned earlier that, compared to target professional CEOs, target founder-CEOs are more likely to be social focal points for target employees and exercise charismatic leadership over them. In technology-driven acquisitions, founder-CEOs' superior ability in performing mobilizing and mitigating actions to motivate target scientists and engineers to discover the serendipitous value of the acquisition is especially valuable for acquirers.

Second, when acquisitions are technology-driven, acquirers are mainly interested in the technological assets of target firms. These assets are surrounded by greater uncertainty than non-technological assets. The uncertainty stems from the hurdle in assessing the true market potential

of these assets and their synergistic value when combined with the technological and commercial assets of the acquirers. To mitigate the associated risks of overpayment, acquirers even more often resort to contingent methods of payment (i.e., stock swaps and earn-outs, Coff, 1999; Koher and Ang, 2000). We mentioned earlier that target founder-CEOs generally own greater shares of their firms' equity than target professional CEOs. Hence, using contingent methods creates stronger monetary incentives for target founder-CEOs than for target professional CEOs to deploy their acquisition implementation abilities to ensure the success of the acquisition.

Conversely, when acquirers have other motivations, preserving and leveraging the abilities of target employees are less crucial, and the challenges of acquisition implementation are less severe. Therefore, the value of deploying the superior implementation abilities of target founder-CEOs compared to that generated by target professional CEOs is smaller for acquirers.

Furthermore, acquirers have a better assessment of the non-technological assets of target firms, thus lowering the risk of overpayment and, therefore, their reliance on contingent payment methods. As a result, target founder-CEOs' financial gains are less connected to the acquisition outcome, which makes them less committed to the success of the acquisition. These arguments imply that the difference in the likelihood of post-acquisition retention between target founder and professional CEOs is more limited when acquisitions are not technology-driven. Hypothesis H2 follows.

H2: The positive association between the founder status of target CEOs and their likelihood of post-acquisition retention is stronger when acquisitions are technology-driven.

Target age

As we explained in the previous section, the technological motivations of acquisitions have a positive moderating effect on the association between the founder status of target CEOs and their post-acquisition retention. Here we argue that this positive moderating effect is stronger when target firms are younger.

In technology-driven acquisitions, the information asymmetries and uncertainty surrounding the technological assets of the target firms are greater when target firms are younger. Indeed, early-stage firms have a limited track record, and their operations are generally surrounded by greater uncertainty. This situation makes the evaluation of the technological assets of young target firms by outsiders even more difficult (Amit et al., 1990) and encourages the acquirers to use more stock swaps and other contingent payment methods to mitigate the greater risk of

overpaying for these target firms (Ragozzino and Reuer, 2009). Hence, in technology acquisitions of younger firms, target founder-CEOs have greater monetary incentives to deploy their acquisition implementation abilities than in similar acquisitions of older firms.

Moreover, the young age of target firms makes the firm-specific human capital of the target founder-CEOs and their associated acquisition implementation abilities an asset, which acquirers find especially hard to either imitate or substitute. In fact, in the early stage of the firms' organizational life cycle, founder-CEOs have a pivotal position within and deep tacit knowledge of their firms. They also have strong charismatic leadership to influence employees who, as early recruits, are directly selected by and maintain daily contact with them. Hence, the founder-CEOs of young target firms are much more effective than their professional peers in performing mobilizing and mitigating actions to the advantage of acquirers and stimulating target employees to collaborate with the acquirers' colleagues in discovering the serendipitous value of the acquisitions. As stated earlier, these actions are more important in technology-driven acquisitions as the implementation challenges are more severe than in other acquisitions. Conversely, in older firms, due to their managerial professionalization (Boeker and Fleming, 2010; Boeker and Karichalil, 2002), the tacit knowledge of founder-CEOs about their firms significantly diminishes and becomes less relevant for the acquirers. Moreover, the special bond between founder-CEOs and employees is not as strong as in younger firms. In sum, target firms' age narrows the gap in the acquisition implementation abilities of founder-CEOs and professional CEOs.

Based on the above arguments, we predict that target founder-CEOs are a more resourceful asset for acquirers than professional CEOs in technology-driven acquisitions of young firms. Conversely, when target firms are older, the founder status of target CEOs plays a less prominent role, regardless of whether acquisitions are technology-driven or not. Hypothesis H3 follows:

H3: The positive moderating effect of the technological motivation of acquisitions on the association between the founder status of target CEOs and their post-acquisition retention is stronger when target firms are younger.

INSERT Table I ABOUT HERE

Table I summarizes the theoretical mechanisms underlying the positive association between the founder status of target CEOs, the likelihood of their post-acquisition retention, and

the boundary conditions, which influence these mechanisms.

4. METHOD

We test our hypotheses on a sample of 448 acquisitions of small firms that operate in high-tech industries by large firms. In building the sample, we progressed through the following steps.

First, we collected data from Zephyr (Bureau Van Dijk) and Thompson SDC Platinum on all acquisitions, which met the following three criteria: i) the acquisition occurred between 2001 and 2005⁷; ii) all acquirers were listed firms, while target firms included both listed and unlisted (i.e., privately held) firms; and iii) both the acquirers and the target firms were headquartered either in the U.S. or in the European Union. We excluded target firms located in other geographic regions due to the relatively low coverage of these acquisitions in the two databases; this problem is exacerbated in this study because the target firms are small. We then narrowed the sample to target firms operating in high-tech industries. We selected the following industries in manufacturing and service sectors for this study: Drugs (SIC code: 283), Computer and office equipment (SIC code: 357), Electronic and other electrical equipment and components, except for computer equipment (SIC code: 36), Instruments (SIC code: 38) and Software programming (SIC code: 737). Conforming to the OECD (2003) and the US Bureau of Labor Statistics (see Hecker, 1999), all these industries are considered high-tech. We only considered acquisitions in which the acquirers owned 100 percent of the target firms' equity, as in this situation, acquirers had the autonomy to make all relevant decisions in the post-acquisition period, including whether to replace the target CEO. Finally, we analyzed prior studies on acquisitions of small high-tech firms by large firms (e.g., Ahuja and Katila, 2001; Ernst and Vitt, 2000; Puranam et al., 2006 and 2009) and used employee headcounts to determine firm size. Specifically, target firms had 500 or fewer employees, and acquirers had more than 1,000 employees in the year preceding the acquisition announcement. A population of 760 acquisitions met these criteria.

In the next step, we gathered the news published in the period between each acquisition's announcement and its completion date in online journals, daily newspapers, and professional industrial magazines for two purposes. First, following prior studies (e.g., Ahuja and Katila, 2001; Kapoor and Lim, 2007; Paruchuri et al., 2006; Puranam et al., 2006 and 2009), the news helped us to determine the motivation behind the acquisition, notably whether the acquisition was technology-driven. Second, following Wulf and Singh (2011), we leveraged the news to identify

the target CEOs. For the same purpose, we consulted the Bloomberg Businessweek Executive Profile and Biography Database and the target firms' websites. Overall, we were able to identify the CEOs of 544 target firms. In the next step, we collected personal information on target CEOs, including information on their retention or departure in the two years following acquisition completion using news gathered from Lexis Nexis, firm websites, Bloomberg Businessweek Executive Profile and Biography Database, and the personal information self-reported by target CEOs on LinkedIn (when available). From the same sources, we recorded other individual characteristics of target CEOs, including whether they established the focal firm and their tenure, age, and education. In the final step, we collected information about other firm-related characteristics (e.g., foundation year) from the Orbis database of Bureau Van Dijk. We also used this source to cross-check the number of employees for each target firm.

The final sample includes 448 acquisitions, for which we have information for all the variables of interest in our study. We extracted 43.1 percent and 32.8 percent of the acquisitions exclusively from Zephyr and SDC Platinum, respectively. The rest of the acquisitions (24.1%) were recorded in both databases. Table II summarizes the geographic and industrial distribution of the acquirers and target firms in the sample. To check whether the sample was representative of the population of 760 acquisitions from which it was drawn, we considered many characteristics of target firms and acquirers. T-tests did not show any difference in the mean size and age of target firms and acquirers between the sample and the population (Target size, $t=1.56$, $p=0.12$; Target age, $t=-0.79$, $p=0.43$; Acquirer size, $t=0.54$, $p=0.59$; Acquirer age, $t=-0.22$, $p=0.83$). We also did not find any significant difference between the sample and the population in the distribution of target firms and acquirers across industries. For target firms, we applied the high-tech classification illustrated above; for acquirers, we classified industries based on SIC 2-digit codes (Targets: $\chi^2(4)=5.78$, $p=0.22$; Acquirers: $\chi^2(32)=12.24$, $p=1.00$). Conversely, the χ^2 tests showed that the sample differs from the population in terms of the geographic distribution of target firms and acquirers (Target: $\chi^2(22)=37.29$, $p=0.022$. Acquirer: $\chi^2(17)=32.46$, $p=0.013$). Our sample is biased towards target firms and acquirers headquartered in the U.S. To further investigate the subject, we tested the geographic distribution of the sample of acquisitions for which we were able to identify target CEOs (544 acquisitions) against the distribution of the original population. The χ^2 tests did not show any significant difference between this initial sample and the population (Target: $\chi^2(22)=21.73$, $p=0.48$. Acquirer: $\chi^2(17)=20.88$, $p=0.23$). These

follow-up tests suggest that the source of the bias is the lack of personal information on CEOs of the European target firms.

INSERT TABLE II ABOUT HERE.

Variables

The dependent variable in our estimates is *CEO retention*. Following previous studies, this variable is constructed as a binary variable that equals one if the target CEO is still with the combined entity at the end of the second year after the acquisition, and zero otherwise. Using a two-year window to define target CEO retention is in line with most quantitative studies on this topic (Bargeron et al., 2017; Bergh, 2001; Cannella and Hambrick, 1993; Wulf and Singh, 2011). This approach is also supported by qualitative studies on post-acquisition integration (e.g., Colman and Lunnan, 2011), and thus matches this study's interest in the role of target CEOs in acquisition implementation. In an additional analysis, we further distinguished between target CEOs who were still with the combined entity by the second year after the acquisition; those who left immediately after completion of the acquisition or before (e.g., in the acquisition announcement); and those who left later within the two-year window after the completion of the acquisition.

Our key explanatory variable is *Founder CEO*. It is a dummy variable that equals one if the target CEO was one of the target founders, and zero otherwise. *Technology motivation*, our key moderator, is a dummy variable that equals one if obtaining the technological capabilities of the target firm is publicly mentioned as one of the reasons behind the acquisition (Paruchuri et al., 2006). As explained earlier, we constructed *Technology motivation* by codifying the acquirers' press releases in the news. The process involved two research assistants who independently codified the variable. We then compared their codes: the correlation was above 90 percent. For the few cases of disagreement, one of the authors re-codified the information and discussed it with the two research assistants until the correlation increased to 100 percent. The third variable of interest in this study is *Target age*. It is constructed as the difference between the firm's foundation year and the year in which the acquisition was announced.

Taking inspiration from previous empirical studies on the retention of target CEOs, we entered several control variables into the model specifications. The first set of controls relates to the individual characteristics of target CEOs. *Tenure CEO* is the number of years elapsed between the year in which the target CEO was appointed and the year in which the acquisition was

announced. This variable has been used by previous studies as an indicator of target CEOs' firm-specific human capital (e.g., Bergh, 2001; He, 2008; Wulf and Singh, 2001). *CEO duality* is a dummy variable that equals one if the target CEO was also the chairman of the firm's board of directors when the acquisition was announced. CEO duality reduces the board of directors' power to monitor the CEOs' activities and avoid their entrenchment (Gao and Jain, 2011; He, 2008; Hendricks et al., 2019; Tzabbar and Margolis, 2017). Duality allows target CEOs to pressure acquirers to secure a managerial position as a precondition of deal approval during acquisition negotiations.

The second set of controls includes characteristics of the target firms. We checked for the public status of the target firms (*Target listed*). *Technological artifact* is a dummy variable that equals one if the target firm had developed any product or had been granted any patent by the time the acquisition was announced. Prior work shows that, if target firms still do not have any patent or product at the time of the acquisition announcement, integration actions may be highly disruptive and have serious adverse effects on the innovation capabilities of target inventors (e.g., Puranam and Srikrishnan, 2007). Consequently, target CEOs' contributions to managing the acquisition implementation will be more valuable for acquirers, making them more inclined to retain target CEOs. To construct this variable, we checked Lexis Nexis for any pre-acquisition product announcements and consulted Thompson Innovation for any pre-acquisition patent registration activity. *VC-backed* is a dummy variable that equals one if the target firm was VC-backed at the time of the acquisition announcement. Entrepreneurship scholars unanimously consider receiving VC investment as a crucial milestone for high-tech firms, leading to their managerial professionalization (Hellman and Puri, 2002; Wasserman, 2003). Accordingly, if the CEOs of target VC-backed firms have superior managerial abilities, they may be more likely to be retained by acquirers in the aftermath of the acquisition. For targets headquartered in the U.S., information about VC investments was sourced from the Thomson One (formerly VentureXpert) database. As is common knowledge, Thomson One provides less coverage for VC investments in Europe than in the U.S. Hence, for target firms headquartered in Europe, we used additional sources (namely, Crunchbase, Zephyr, VICO, and Orbis) to check whether any VC investor was included among each target's shareholders. For all target firms, we also cross-checked the information collected from the aforementioned databases with information available on the websites of firms and VC investors.

We checked the relative size of the target firm, compared to that of the acquirer, based on employee headcounts at the time of the acquisition (*Relative size*). The relative size may influence the target CEO's intention to join the post-acquisition organization. The CEOs of small target firms who are accustomed to high status, autonomy, and discretionary power may anticipate a sudden loss of relative standing when their firms are acquired by larger firms. This loss increases the likelihood of voluntary departure (Bergh, 2001; Hambrick and Cannella, 1993; Wulf and Singh, 2011). We also checked for the familiarity of acquirers with the technologies developed by the target firms by measuring the overlap between the technological domains of the target firms and those of the acquirers. Higher overlap confers better assessment to acquirers about the target firms' technological assets, allowing acquirers to make better decisions during the acquisition implementation (Ahuja and Katila, 2001; Kapoor and Lim, 2007; Paruchuri et al., 2006). As a corollary, we expect acquirers to rely less on target CEOs to manage the acquisition implementation when the technology overlap is high. Prior studies commonly calculate the overlap based on comparing the patent portfolios of the two firms (e.g., Ahuja and Katila, 2001; Kapoor and Lim, 2007; Paruchuri et al., 2006). Albeit appropriate in acquisitions of larger target firms with presumably extensive patent portfolios, this method is not suitable to capture technological overlap in acquisitions that involve smaller target firms (Lanjouw and Schankerman, 2004).⁸ To solve this problem, we followed the approach employed by Dushnitsky and Lenox (2005). In the first step, we constructed the patent portfolios of the acquirers in the five-year window before the acquisitions and identified their corresponding IPC codes (at four-digit level) from the Thompson Innovation database. Then, we leveraged Silverman's (2002) IPC-SIC codes concordance matrix to develop an array of the SIC codes corresponding to the IPC codes of the acquirers' patent portfolios. In the last step, we measured the *Technology overlap* index as the number of common SIC codes between those of the target firms and those corresponding to their acquirers' patent portfolios divided by the total number of target firms' SIC codes. *Industry relatedness* reflects the extent of the overlap between the industries of target firms and those of acquirers. One expects that acquirers have a better understanding of target operations, customers, and suppliers in more related acquisitions. This situation reduces the value of the industry-specific human capital of the target CEOs for the acquirers and, therefore, lowers the likelihood of post-acquisition target CEOs' retention (Buchholtz et al., 2003; Wulf and Singh, 2011). Following Puranam et al. (2006), we calculated this variable as the number of 3-digit SIC codes common to both the acquirer and the target firm divided by the total number of 3-digit SIC

codes assigned to the target firm. We differentiated between local and international acquisitions through the dummy variable *Cross border*, which equals one for international acquisitions. The hurdle of international acquisitions' implementation is more significant than that of domestic acquisitions due to differences in language, culture, institutions, and greater geographic distance between the two firms (Chatterjee et al., 1992). Thus, we expect acquirers to be more inclined to retain target CEOs in international acquisitions.

Previous studies of acquisition implementation argue that prior transactions between acquirers and target firms give both firms a better understanding of each other's operations and enhance mutual trust among their top managers, which may influence target CEO retention (see, e.g., Graebner 2009). We thus consider whether the acquirer had a minority equity stake in the target before the acquisition (*Minority stake*) or had established an alliance with the target in the five years preceding the acquisition (*Alliance*). We also checked for acquirers' acquisition experience (*Acquirer experience*), which we constructed as the acquirer's number of acquisitions in the five years preceding the focal acquisition. More experienced acquirers are expected to rely less on target CEOs to manage the acquisition implementation (e.g., Zollo and Singh, 2004). We collected acquisition experience from the Zephyr and Thomson SDC Platinum databases. Finally, we included dummy variables in the model specifications to capture the fixed effects associated with the industry of the target firms.

Econometric specification

Given the binary nature of our dependent variable, we tested our hypotheses with Logit models. We clustered standard errors around acquirers in all the estimations because certain acquirers (such as Cisco and Microsoft) were involved in multiple acquisitions in our sample.

To test H1, following Hoetker (2007), we calculated the average marginal effect (AME) of *Founder-CEO* with all other variables set at their mean (or median for dummy variables) values through the delta method. To test H2, we calculated the AME of *Founder-CEO* with *Technology motivation* set alternatively at zero and one. To test H3, we split the sample based on the median age of target firms and calculated the AME of *Founder-CEO* with *Technology motivation* set alternatively at zero and one in the sub-samples composed of younger and older target firms, respectively.⁹

5. RESULTS

INSERT TABLE III ABOUT HERE.

Table III shows the descriptive statistics and correlation matrix of the variables. In our sample, 63 percent of the target CEOs stay with the post-acquisition organization up to the second year after the acquisition. This retention rate is slightly higher than those reported by prior studies (see note 2). Target founder-CEOs account for 44 percent of target CEOs, a higher value than the one (19%) reported by Bargeron et al. (2017). We suspect that this difference is due to the focus of our study on small high-tech target firms. The correlation between *CEO retention* and *Founder CEO* is positive (0.12, $p < 0.01$), which is in line with the prediction of hypothesis H1. In our sample, 70 percent of the acquisitions were technology-driven, and the average age of the target was 13 years. Quite unsurprisingly, the highest correlation is between *Founder CEO* and *Tenure CEO* (0.45; $p < 0.01$). Regarding any concern of multicollinearity, we estimated standard OLS models and computed variance inflation factors (VIFs). The highest VIF value is 1.69, and the average is 1.33. Besides, we calculated condition indices, and the maximum index is 28. None of these values exceeded the thresholds (10 and 6 for the maximum and average VIF, respectively, and 30-100 for the conditional index) that are generally associated with multicollinearity concerns (Besley et al., 2005).

INSERT TABLE IV ABOUT HERE.

Table IV reports the results of our estimates. Model 1 includes the control variables. Among these variables, *Technological artifact* and *Target listed* are negatively associated with the probability of CEO retention, as expected, with their AMEs equal to 14.1 and 10.3 percentage points ($p < 0.05$), respectively. The third control variable, which significantly affects our estimation, is *Cross border*. The probability of target CEO retention in a cross-border acquisition is 13.7 percentage points higher than in a domestic acquisition, all else being equal ($p < 0.01$). The remaining control variables exhibit no significant association with *CEO retention*. In Model 2, we added the independent variable, *Founder CEO*. The AME of *Founder CEO* is positive, large (14.5 percentage points), and significant ($p < 0.01$). The results confirm H1¹⁰.

In Model 3, we added the interaction term between *Founder CEO* and *Technology*

motivation. The AMEs of *Founder CEO* indicate that when *Technology motivation* is equal to one, and all remaining variables are at their mean (or median) values, the likelihood of target CEO retention is 21.3 percentage points higher if *Founder CEO* equals one ($p < 0.01$). Conversely, the AME of *Founder CEO* is small and not significant when the acquisition is not technology-driven. Figure 1 depicts the moderating effect of *Technology motivation*. The diagram shows that in technology-driven acquisitions (*Technology motivation*=1), the predicted probability of *CEO retention* increases from 56 percent when *Founder CEO* equals zero to 77 percent when *Founder CEO* equals one. For other acquisitions (*Technology motivation*=0), the predicted probability of *CEO retention* remains almost the same, irrespective of whether the target CEO is one of the firm's founders or not. These results confirm that, as predicted by H2, *Technology motivation* positively moderates the association between *Founder CEO* and *CEO retention*.

INSERT FIGURE 1 ABOUT HERE.

In Model 4a and 4b, we split the sample according to the median age of the target firms (*Target age* =10). The interactive term between *Founder CEO* and *Technology motivation* is significant in Model 4a when target firms are young. Conversely, for the subsample of older target firms, the interaction term is not significant, which is also confirmed by the $\Delta LR(\chi^2)$ test of Models 4a and 4b. Based on the estimates of Model 4a, the AME of *Founder CEO* is positive, high (38.8 percentage points), and significant ($p < 0.01$) only when the acquisition is technology-driven. Figure 2 also depicts the moderating effect of *Technology motivation* on *Founder CEO* on the sub-samples of firms with low and high values of *Target age*, which corresponds to Models 4a and 4b. The figure compares the predicted probability of *CEO retention* when both *Founder CEO* and *Technology motivation* assume zero and one respectively for younger target firms (Panel A) and older target firms (Panel B). For younger target firms (Panel A), *Technology motivation* almost doubles the predicted probability of *CEO retention* for founder CEOs (from 42 percent when *Technology motivation*=0 to more than 80 percent when *Technology motivation*=1), while it does not influence the probability of *CEO retention* for non-founder CEOs. For older target firms, we do not detect any moderating effect of *Technology motivation*. These results confirm H3 and support our prediction that founder-CEOs are resourceful assets for acquirers in technology-driven acquisitions of young target firms. When acquisitions are not technology-driven, or target firms

are older, the positive association between *Founder CEO* and the likelihood of the target CEO post-acquisition retention vanishes.

INSERT FIGURE 2 ABOUT HERE.

Robustness checks

The results illustrated in the previous section align with our argument that acquirers are more likely to retain target CEOs in the aftermath of acquisitions if they are the founders. This association is stronger if acquisitions are technology-driven and the target firms are young. Indeed, in these acquisitions, founder-CEOs are valuable assets for acquirers thanks to their implementation abilities. Moreover, they have greater incentives than their professional peers to deploy these abilities to the benefit of acquirers. One may cast doubt upon these conclusions by claiming that our results may stem from other characteristics of target founder-CEOs we did not consider, and the detected higher retention of target founder-CEOs is driven by alternative explanations that differ from our perspective. Indeed, the presence of competing arguments is salient in the M&A literature when it comes to explaining the retention or replacement of target CEOs (e.g., Krug et al., 2014). This section presents evidence ruling out these alternative explanations for founder-CEO retention to confirm the validity of our theoretical perspective.

First, founder-CEOs may possess certain (observable or unobservable) managerial abilities contributing to their survival as CEOs in the pre-acquisition period. As part of their generic human capital, these abilities can be the source of founder-CEOs' VRINness for acquirers and, therefore, explain their retention in the post-acquisition period, independently of their role during acquisition implementation. To examine if this alternative argument explains the higher retention of founder-CEOs, we leveraged two approaches.

In the first approach, we re-ran our empirical analysis on a more balanced sample of founder-led and non-founder-led target firms matched on certain observable demographic characteristics of the CEOs commonly used in prior studies that directly impact their survival as CEOs before the acquisition (e.g., Evans and Leighton, 1989; Fich et al., 2016; Gimeno et al., 1997; Wasserman, 2006). For matching, we adopted the coarsened exact matching (CEM) method (Iacus et al., 2011). The results of the estimations (available from the authors upon request) on the

matched sample resonate with those of the main estimations. While this approach may mitigate some of the concerns regarding the different abilities of target founder- and non-founder-CEOs associated with observable characteristics of these individuals, it does not address the concerns regarding the unobservable abilities leading to an omitted variable bias.

Unfortunately, our survey of literature does not lend us any set of reliable instrumental variables to address the omitted variable bias directly. In the absence of valid instruments, a common approach is to examine the sensitivity of the detected effect of *Founder CEO* to the potential influence of omitted variables. For this purpose, we adopted the bounded method recently developed by Oster (2019) to formally test the stability of the coefficient of *Founder CEO* against the possible influence of omitted variables. After carefully following the procedure suggested by Oster (2019), we found that the coefficient of *Founder CEO* seems to be stable and exhibits no substantial movement after the inclusion of a full set of controls. Our analysis also indicates that the unobservables would have to be almost 11 times more important than the observables to make the effect of *Founder CEO* disappear. These additional robustness checks suggest that the omitted variable bias is limited in our context.

A final comment on this issue is in order. Suppose that the unobservable abilities of founder-CEOs that explain their survival as CEOs before the acquisition also explain their retention after the acquisition. In that case, we should expect higher post-acquisition retention of founder-CEOs in older target firms. Being at the helm of older firms for founder-CEOs implies a higher possession of these unobservable abilities that secure their survival as CEOs for long. Yet, the estimates of a model in which we add the interactive term *Founder CEO x Target age* to the specification of Model 2, suggest the opposite (results are available from the authors upon request). The higher probability of retention of founder-CEOs of younger target firms corroborates our argument that the value of deploying their firm-specific human capital during acquisition implementation diminishes as the target firms become older. In sum, we are quite confident that our findings relating to the higher likelihood of retention of target founder-CEOs are not driven by an omitted variable bias.

Another alternative argument concerning target CEOs' post-acquisition retention is that acquirers do not have any a priori judgment about founder-CEOs' managerial abilities. Indeed, these abilities are difficult to (measure and) spot instantly. Therefore, following a real option logic, if acquirers are uncertain about the managerial abilities of target CEOs and the value they can generate post-acquisition, they postpone the decision on their replacement or retention until more

information is available. After the acquisition, as time passes, acquirers gradually become aware of the greater and more unique value generated by target founder-CEOs, compared to their professional peers. This real option logic provides an alternative explanation of the higher retention rate of founder-CEOs by the second year after the acquisition, which we noticed from the empirical findings.

INSERT TABLE V ABOUT HERE.

To check the validity of this counter-argument, we separated the immediate decision to replace target CEOs (i.e., target CEOs are replaced as soon as the acquisitions are completed or even before) from staged replacement (i.e., target CEOs are replaced in a later stage within the two-year window under consideration). The dependent variable, *Temporal CEO retention*, is a categorical variable with three potential outcomes. The base outcome (*Immediate replacement*) corresponds to a situation where the acquirers publicly announce that the target CEOs will step down from their position to pursue other career interests or the target CEOs officially state that they will consider other priorities instead of joining the combined entity, after the acquisition is announced and before its completion. *Staged replacement* corresponds to a situation where target CEOs are replaced by the second year after acquisition completion, but their replacement is not announced immediately after completing the acquisition or before (e.g., during the acquisition announcement). The third outcome, *Retention*, indicates that target CEOs are retained in the combined entity for at least two years after completing the acquisition. We relied on the database Lexis-Nexis to collect the relevant news and successfully determined *Temporal CEO retention* outcomes for 433 target CEOs in our sample. Following the same procedure as the main estimations, we tested the direct effect of *Founder-CEO* on the three potential outcomes of *Temporal CEO retention* contingent on the value of *Technology motivation* and *Target age*. Table V summarizes the results of the estimates. *Founder-CEO* has a positive AME (14.4, $p < 0.01$) on the probability of *Retention* and a negative AME of similar magnitude (-13.6, $p < 0.01$) on the probability of *Immediate replacement*. Instead, contrary to the real option argument, there is no significant association between *Founder-CEO* and the probability of *Staged replacement*. These effects are stronger when acquisitions are technology-driven. In Model 6, only when *Technology motivation* equals one, *Founder CEO* has significantly positive (AME=18.8, $p < 0.01$) and negative

(AME=-19.9, $p<0.01$) effects on the probability of *Retention* and *Immediate replacement*, respectively. According to Model 7, this effect for these two outcomes is more pronounced (AME=34.2, $p<0.01$ for *Retention* and AME=-29.8, $p<0.01$ for *Immediate replacement*) for young target firms. The fact that acquirers tend to immediately announce their intention to retain target founder-CEOs is in line with our theoretical arguments. If the real option-based argument explained the higher retention rate of target founder-CEOs, one would observe a stronger negative effect of *Founder-CEO* on *Staged replacement*. Our results do not support this rationale.

Another plausible alternative explanation for the greater likelihood of post-acquisition retention of target founder-CEOs lies in their entrenchment. Indeed, the literature on founder-CEO succession argues that founder-CEOs, as shareholders of their firms, resist their replacement (e.g., Wasserman, 2003 and 2017). One can draw a similar conjecture that when founder-CEOs receive an acquisition offer for their firms, they negotiate their post-acquisition employment contracts with acquirers as a condition of completing the acquisition. The entrenchment effect explaining retention of target founder-CEOs should not depend on whether the acquisition is technology-driven, while our findings suggest otherwise. However, to rule out this competing explanation, we also ran an additional test. If founder-CEOs are old, they may be reluctant to look for another job and more willing to negotiate with the acquirers for a position in the combined entity until they reach retirement age (see Barger et al., 2017 for a similar argument). To examine the explanatory power of this argument, we inserted the dummy variable *CEO age* in our model specifications - it equals one if the target CEO is aged over 60 years and equals zero otherwise - and its interaction with the variable *Founder-CEO*. Due to missing data, our sample is limited to 352 observations. Once again, the results of the estimates (available upon request from the authors) do not lend any support to the entrenchment argument.

Finally, another possible explanation for the greater likelihood of retaining target founder-CEOs is that retention is a pre-emptive action taken by acquirers to remove competitive threats that target founder-CEOs may create by departing and founding another (rival) venture (Santos and Eisenhardt, 2009). In high-tech industries, acquisitions driven by the intention of acquirers to eliminate competitive threats are rampant (Graebner et al., 2010). Thus, one may suspect the high probability of retention of target founder-CEOs in these industries to be driven by acquirers' intention to avoid (entrepreneurial) rivalry, and not necessarily by target founder-CEOs' valuable acquisition implementation abilities and incentives to deploy these abilities to the benefits of acquirers. According to this argument, one would expect a greater probability of founder-CEO

retention for targets operating in low capital-intensive industries in which entry barriers are relatively low and competitive threats are high. To test this possible alternative explanation, we included the dummy variable *Low capital intensity* in our model specifications - it equals one if the target operates in low capital-intensive industries - and its interaction with the variable *Founder-CEO*. Like Wasserman (2017), we considered software and medical instruments to be low capital-intensive industries. The results of the estimates (available upon request from the authors) do not point to any significant difference in the probability of retaining founder-CEOs, which depends on the capital intensity of the target firms' industry.

Further investigation on the validity of the proposed theoretical mechanisms

In this section, we aim to disentangle the influence of the theoretical mechanisms in determining the high post-acquisition retention rate of the target founder-CEOs. These mechanisms are the human capital of target founder-CEOs suitable for acquisition implementation and their incentives to deploy it to the benefit of acquirers. As in most studies based on secondary data, these mechanisms are latent and not directly observable. To address this challenge, we consider some boundary conditions where the presence of one mechanism is stronger (or weaker), whereas the other mechanism stays the same, and vice versa. Following our prediction that acquirers depend on target founder-CEOs to manage the implementation of technology-driven acquisitions, we define two boundary conditions.

One boundary condition is defined by considering the extent of the acquirer's familiarity with the technological assets developed inside the target firm. As explained earlier, when there is a high technological overlap between the two firms, acquirer managers are knowledgeable about the technological assets of the target firms. Therefore, the firm-specific human capital of target founder-CEOs is relatively more imitable and substitutable than in a situation where the technological overlap is lower. The incentives of target founder-CEOs to make the acquisition successful do not depend on the extent of technological overlap between the two firms. Therefore, when the technology overlap is low, both the human capital mechanism and the incentive mechanism are contextually at work. Conversely, when the technology overlap is high, the human capital mechanism is considerably weakened. To test the validity of the argument, we split the sample based on the threshold of 0.5 for *Technology overlap*¹² and re-ran the estimations. The results indicate that *Technology motivation* positively and significantly moderates the association between *Founder-CEO* and *CEO retention* only when the *Technology overlap* is low (see Model 8a and 8b in Table VI).

INSERT TABLE VI ABOUT HERE.

As the second boundary condition, we differentiated between privately-held and listed target firms. Previous studies indicate that the equity shares owned by founder-CEOs are significantly diluted after their firms go public¹³. Hence, the wealth of founder-CEOs of listed firms presumably is more diversified and less sensitive to their firms' performance than that of founder-CEOs of privately held firms. Moreover, unlike privately-held target firms, more information is available to assess the value of listed target firms (including their stock price) (Ragozzino and Reuer, 2009). Besides, the preparation, enforcement, or later renegotiation of earn-out contracts are much more complicated and challenging in the case of listed target firms as acquirers have to deal with many shareholders compared to privately-held target firms with one or few shareholders (Kohers and Ang, 2000). In this respect, acquirers are generally less inclined to use earn-out and other contingent payment provisions for listed target firms than for privately-held target firms. Therefore, when target firms are listed, the personal wealth of the target founder-CEOs is less tied up to the acquisition outcome. Conversely, the founder-CEOs of privately-held target firms have more to lose if the acquisition is not successful, and therefore have more incentives to deploy their firm-specific human capital during the acquisition implementation. As to the human capital mechanism, there is no compelling reason to presume that the key role target founder-CEOs can play during acquisition implementation varies depending on whether the target firms are privately-held or listed. Hence, when target firms are privately-held again, both the human capital mechanism and the incentive mechanism are contextually at work. For listed target firms, however, the incentive mechanism is weakened. Model 9a and 9b in Table VI present the results obtained by splitting the sample based on the listed status of target firms. The results suggest that *Technology motivation* positively and significantly moderates the association between *Founder-CEO* and *CEO retention* only in privately-held target firms¹⁴.

Lastly, as an additional check, we also distinguish acquisitions of privately held target firms with low technology overlap from the remaining acquisitions. In Models 10a and 10b, we split the sample based on the joint values of *Technology overlap* and *Target listed*. These results indicate that founder-CEOs are particularly valuable for acquirers in technology-driven acquisitions of privately held target firms, which have limited technology overlap with acquirers.

In this situation, the acquisition implementation abilities of target founder-CEOs make them difficult to substitute. At the same time, they are highly motivated to deploy their abilities to make the acquisition successful for the acquirers.

These results provide admittedly partial validation of the human capital and incentive mechanisms as the basis of our hypotheses. They suggest that both mechanisms have a pivotal influence in determining the higher post-acquisition retention rate of target founder-CEOs.

6. DISCUSSION AND CONCLUSION

This paper applies the lens of the RBV and managerial rent perspective combined with insights from the literature on acquisition implementation and founder-CEOs' succession to examine the retention of target founder-CEOs in the aftermath of acquisitions. We considered a large sample of small high-tech firms, both privately held and public, based in either the U.S. or in Europe, that were acquired by large firms. We find that when young firms are the target of technology-driven acquisition, target CEOs are more likely to be retained after the acquisition if they are the founders of the target firms. If target firms are older or acquisitions are not technology-driven, whether the target CEO is one of the firms' founders does not influence the likelihood of their retention.

This paper advances current knowledge in two domains. First, it adds to the literature on post-acquisition managerial turnover (see Krug et al., 2014 for a review). Building on the RBV, this literature has investigated several characteristics of target CEOs, notably their generic and industry-specific human capital that makes them a VRIN asset for acquirers and thus positively influence the likelihood of their post-acquisition retention (Bargeron et al., 2017; Bergh, 2001; Buchholtz et al., 2003; Fich et al., 2016; Wulf and Singh, 2011). We contribute to this literature in several ways. First, we shed light on an important but so far (almost) neglected characteristic of target CEOs: the fact that they established the target firms (for an exception, see Bargeron et al., 2017). We argue that, compared to target professional CEOs, target founder-CEOs have unique firm-specific human capital related to the tacit knowledge of target operations and charismatic influence over target firms' employees, which provide them with superior acquisition implementation abilities. Target founder CEOs also have greater monetary incentives to deploy these abilities in the aftermath of acquisitions to the benefit of acquirers. These two characteristics of target founder-CEOs explain the greater probability of their retention in the aftermath of acquisitions with severe implementation challenges such as technology-driven acquisitions involving young target firms. Interestingly, however, if acquisitions have different motivations

(i.e., they are not technology-driven), the founder status of target CEOs does not lead to their post-acquisition retention. The same holds if target firms are old, independently of the motivation of the acquisition. These findings highlight very strict boundary conditions that influence the strength of target founder-CEOs' incentives and the value of their firm-specific human capital for acquirers in comparison to target professional CEOs. Besides, our results are not consistent with the argument that the retention of target founder-CEOs simply relates to their (observable) characteristics in terms of greater generic human capital and managerial skills or their unobservable characteristics, which become apparent only much later after the acquisition is completed. Moreover, our robustness checks rule out alternative explanations of retention due to the entrenchment of target founder-CEOs or the competitive threat that their departure would pose to the acquirers.

Second, to the best of our knowledge, our study is the first to bring to the fore the issue of target CEO incentives while examining the antecedents of their post-acquisition retention. In fact, in line with a more general contention made by Castanias and Helfat (2001), even if the human capital of target CEOs is a potentially VRIN asset generating managerial rent for acquirers, this rent does not materialize in the aftermath of acquisitions if the target CEOs lack adequate incentives to deploy their human capital to the benefit of acquirers. Under these circumstances, acquirers will not be more likely to retain target CEOs.

Finally, most previous studies exploring the antecedents of target CEOs' post-acquisition retention limited their analysis to acquisitions of U.S. public firms. It is questionable whether the results of these studies are generalizable to privately held firms or firms located in other countries. By examining the post-acquisition turnover of target CEOs of both privately held and public firms located either in the U.S. or in Europe, we heed the call of the acquisition literature (see again Krug et al., 2014) for more comprehensive coverage of the acquisition phenomenon.

This study makes an important novel contribution to the stream of entrepreneurship literature exploring the succession of founder-CEOs. Previous studies have associated this succession either with the organic growth of firms (Boeker and Karichalil, 2002; Boeker and Wiltbank, 2005; Jayaraman et al., 2000) or with reaching a certain milestone in the firms' life cycle, such as the delivery of the first product to customers, the receipt of the first round of VC financing, and the listing through an IPO (Certo et al., 2001; Gerasymenko and Arthurs, 2014; Jain and Tabak, 2008; Nelson, 2003; Pollock et al., 2009; Wasserman, 2003 and 2017). Acquisitions are another fundamental milestone in that firms cease to operate as independent entities. Despite the current prevalence of acquisitions as a more frequent exit option than IPOs, founder-CEO

succession after acquisition has not received appropriate academic scrutiny. The central argument in the founder-CEO succession literature is that as firms mature and reach the abovementioned milestones, they require managerial abilities, which founder-CEOs usually do not possess; hence the need to replace founder-CEOs arises. Our findings that in technology-driven acquisitions of young firms, acquirers are more likely to retain target CEOs if they are among the founders of the target firm, point to a possible drawback of the early replacement of founder-CEOs with professional managers neglected by this literature. If a young firm possesses technological assets that make it a potentially attractive acquisition target, having a founder-CEO likely makes the firm even more attractive because of the pivotal role this individual can play during acquisition implementation. From this perspective, our results echo those of studies offering a more positive view of the performance effect of founder management (e.g., Fahlenbrach, 2009; Nelson 2003; Tzabbar and Margolis, 2017), especially those reporting a positive association between founder management at the helm of target firms and the wealth of the target shareholders (Bargeron et al., 2017; Gao and Jain, 2012). In the acquisition context, these works argue that founder-CEOs have greater incentives than their professional peers to negotiate a better deal with the acquirers, which leads to receiving offers with higher premiums for the benefit of remaining shareholders. Our findings suggest another rationale behind the higher premium paid by acquirers, which revolves around their anticipation of the managerial rent generated by keeping the founder-CEOs during the implementation of the acquisition.

Our study has limitations that open avenues for future research. First, we focus on founder-CEOs. However, firms are typically established by teams of individuals (Klotz et al., 2014), and these individuals often hold executive positions when their firms are acquired. The extension of our analysis to the post-acquisition retention of target firms' other top executives is a fruitful direction for future research. Moreover, the presence of other founders in the top management teams of target firms may influence the retention of founder-CEOs. Specifically, following the line of reasoning developed in this study, in this situation, one may expect the incentive of founder-CEOs to commit effort during the acquisition implementation to weaken and the value of their firm-specific human capital for acquirers to diminish. Second, we do not have information on acquisition performance. If this information were available, one could directly test whether the retention of target founder-CEOs as VRIN resources facilitates acquisition implementation and ultimately contributes to the success of the acquisition. In particular, previous studies show that acquisitions of small high-tech firms lead to a drop in productivity of acquired inventors (Kapoor

and Lim, 2007), mainly when the acquired operations are absorbed into the acquirers' organization (Puranam and Srikanth, 2007). It would be interesting to check whether the retention of target founder-CEOs alleviates these problems. In this regard, it is worth noting that we do not have information on retained CEOs' roles in the combined entity. A natural extension of our research is to explore the target founder-CEOs' value for the acquirers when they continue to manage target operations as separate units or when the target firms are absorbed into the acquirers' organization, a situation in which one would expect more organizational disruption. Third, our analysis is limited to acquisitions of firms operating in high-tech industries and headquartered in Western countries (i.e., the U.S. and Europe). We encourage future studies to explore whether target founder-CEOs are a VRIN asset for acquirers in other types of acquisitions that impose similar implementation challenges to those of the small high-tech acquisitions under consideration in this study. We believe that the results of this study are generalizable to all acquisitions that pose serious implementation challenges because of the centrality of the human capital of target key employees and acquirers' lack of adequate implementation abilities (e.g., low- and medium-tech acquisitions of culturally distant firms or acquisitions of design- and brand-intensive firms). Lastly, our results are in line with the theoretical arguments that founder-CEOs have both greater acquisition implementation abilities and greater incentive to deploy these abilities to the advantage of acquirers than target professional CEOs. However, these theoretical mechanisms remain unobserved in the absence of more fine-grained data (e.g., target CEOs' wealth). Examining these mechanisms in greater detail through qualitative methods of inquiry would be another interesting area to explore.

Despite the above limitations, this study has important practical implications for acquiring managers involved in acquisitions of high-tech firms. The decision regarding the retention of the founder CEOs of these target firms is pivotal and often imposes additional costs for the acquiring managers. For example, in the acquisition of Whatsapp, Facebook agreed to offer a substantial premium (i.e., a \$3.6 billion stock grant in addition to the \$16 billion paid by Facebook) if the founder-CEOs of WhatsApp stayed with Facebook for the following four years. While founder-CEOs are resourceful assets for implementation purposes and the results of our analysis strongly corroborate this view, acquiring managers should factor in the cost of retention. The acquisition objective and the state of maturity of the target firm are two important determinants to be considered in the cost-benefit analysis of retention. Our results are in accordance with the view that the retention of founder-CEOs is especially appropriate for technology-driven acquisitions of

young firms. When the target firms are mature, or the acquiring managers pursue other objectives, the fact that the target CEO is one of the firm's founders does not influence post-acquisition retention. These results advise acquiring managers, particularly those who have less acquisition experience, to be prudently selective regarding when and why retaining (or replacing) target founder-CEOs.

7. NOTES

¹ Needless to say, this decision is not entirely unilateral. Even if acquirers want to retain target CEOs, the latter may wish to depart voluntarily. For instance, Hambrick and Cannella (1993) provide evidence that the loss of relative status triggers the departure of target CEOs. Wulf and Singh (2011) show that the retention of target CEOs is more likely when the governance environment of the acquirers maintains managerial discretion. This paper adopts the acquirers' perspective by assuming that target CEOs are more likely to be retained when they are more valuable to acquirers. We consider the target CEOs' perspective in several robustness checks.

² Buchholtz et al. (2003) report that 81 out of the 181 target CEOs considered in their study of tender offers in the 1987-1990 period left their firms by the second year after the acquisition. Wulf and Singh (2011) examine 220 acquisitions in the 1994-1998 period, and show that the retention rate of target CEOs as an officer of the post-acquisition organization is 33 percent by the end of the year immediately following the acquisition, and drops to 22 percent in the subsequent year. More recent studies covering longer periods and considering larger samples document target CEO retention rates in the range of 30-50 percent (Bargeron et al., 2017; Fich et al., 2016). Similar figures pointing to the relatively high post-acquisition turnover of target CEOs and other acquired top managers are reported by the pioneering works of Walsh (1989) and Cannella and Hambrick (1993).

³ This increase can be substantial. For example, when Facebook acquired Whatsapp, it added \$3.6 billion to the original \$16 billion price as a contingent compensation to WhatsApp's CEOs for staying with the combined entity for a four-year period after completion of the acquisition (see <https://money.cnn.com/2014/02/19/technology/social/facebook-whatsapp/index.html>). This is indirect evidence of how important acquirers anticipate target CEOs can be for the success of the acquisition.

⁴ For example, 58 percent of the IPO firms considered by Jain and Tabak (2008), 48 percent of those considered by Gao and Jain (2011), and 41 percent of those considered by Hendricks et al. (2019) have founder-CEOs (see also Certo et al., 2001, Nelson, 2003, Wasserman, 2017 for similar data). In the sample of acquisitions considered by Bargeron et al. (2017), 23 percent of firms acquired by a private equity investor and 18 percent of those acquired by a public firm have founder-CEOs.

⁵ For example, in 2017, Abbott Laboratories acquired St. Jude Medical. According to press releases, Abbott Laboratories anticipated gaining benefits from market expansion, increased product portfolios, and access to technological breakthroughs from the acquisition. (see <https://abbott.mediaroom.com/2017-01-04-Abbott-Completes-the-Acquisition-of-St-Jude-Medical>)

⁶ This evidence is also in line with the prediction of the “market for corporate control” perspective (Martin and McConnell, 1991). Scholars adhering to this perspective argue that firms are likely to become the target of acquisition if they are poorly managed, or their CEOs indulge in excessive perquisites. What attracts acquirers is the wedge between the low market value of mismanaged target firms and the anticipated higher market value of those firms under effective management. After the acquisition, acquirers replace inefficient target CEOs (and other top executives) to restore efficiency conditions (see also Walsh and Kosnik, 1993; Zollo and Singh, 2004).

⁷ We limit the scope of our study to this period to keep a distance from the disruptive effect of the dotcom boom of 1999 and 2000, as well as the hyper-credit crisis of 2007 and 2008. These periods present acquisitions driven by bandwagon effects that encourage firms to engage in acquisitions without proper due diligence when selecting the target firms (McNamara et al., 2008). Moreover, firms entering the acquisition market as late movers are only left with overpriced low performing target firms (Fiol and O’Connor, 2003). These two conditions usually result in poorly conceived acquisitions that later force the acquirers to make considerable efforts to restructure the target firms and recap some gains by removing inefficiencies. Often, target CEOs are the subjects of these restructuring attempts. They are replaced irrespective of the potential value of their firm-

specific human capital pertinent to acquisition implementation and their monetary incentives to contribute to the success of the acquisition (Krug et al., 2014).

⁸ Accordingly, in our sample, 248 target firms do not have any patents, and the majority of the remaining target firms just have few patents.

⁹ Alternatively, to interpret the interaction effects, we applied the simulation approach suggested by Zelner (2009). The results of this technique confirm our interpretations from the delta method. They are available from the authors upon request.

¹⁰ In Model 2, the target age coefficient becomes significant (and positive), indicating that CEOs of older target firms are more likely to be retained than those of younger target firms, possibly because they have better human capital and managerial abilities. If that were not the case, they would have probably been replaced before the acquisition with more competent managers. As older firms are more likely than their younger counterparts to have professional CEOs (i.e., the correlation between *Founder-CEO* and *Target age* equals -0.2 and is highly significant), this positive effect of *Target age* was confounded by the absence of *Founder-CEO* in Model 1's specification.

¹² The index has a skewed distribution. *Technology overlap* equals 0 in 326 acquisitions and 1 in 98 acquisitions. For a robustness check, we set the threshold equal to the mean value of the index. The results remain unchanged and are available from the authors upon request.

¹³ For example, Wasserman (2003) reported a 47 percent average ownership for founder-CEOs in his study of privately held firms, while Jain and Tabak (2008) and Gao and Jain (2011) reported average ownership of 26.30 percent and 22.20 percent for CEOs, respectively, in their sample of founder-led listed firms.

¹⁴ There is a potential confounding effect of listed status and age of the target firms, and one may suspect a higher presence of listed target firms among older firms in our sample. This situation calls the empirical findings regarding the effect of listed status into question. To address this concern, we compare the distribution of the age of private and listed target firms. The average age

in the two groups does not suggest significant differences and rules out confounding effects. The average age for the subsample, including only private target firms, is 14.75 with SD 15.94, and it is 15.22 with SD 13.71 for the subsample including only the listed target firms.

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8. REFERENCES

- Ahuja, G. and Katila, R. (2001). 'Technological acquisitions and the innovation performance of acquiring firms: A longitudinal study'. *Strategic Management Journal*, **22**, 197-220.
- Amit, R., Glosten, L. and Muller, E. (1990). 'Entrepreneurial ability, venture investments, and risk sharing'. *Management Science*, **36**, 1232-45.
- Bargeron, L., Schlingemann, F., Stulz, R. and Zutter, C. (2017). 'What is the shareholder wealth impact of target CEO retention in private equity deals?'. *Journal of Corporate Finance*, **46**, 186-206.
- Barney, J. (1988). 'Returns to bidding firms in mergers and acquisitions: Reconsidering the relatedness hypothesis'. *Strategic Management Journal*, **9**, 71-18.
- Barney, J. (1991). 'Firm resources and sustained competitive advantage'. *Journal of Management*, **17**, 99-120.
- Bergh, D. (2001). 'Executive retention and acquisition outcomes: A test of opposing views on the influence of organizational tenure'. *Journal of Management*, **27**, 603-22.
- Besley, D., Kuh, E. and Welsch, R. (2005). *Regression diagnostics: Influential data and source of collinearity*. John Wiley & Sons.
- Boeker, W. and Fleming, B. (2010). 'Parent firm effects on founder turnovers: Parent success, founder legitimacy and founder tenure'. *Strategic Management Journal*, **4**, 2252-67.

- Boeker, W. and Karichalil, R. (2002). 'Entrepreneurial transition: Factors influencing founder departure'. *Academy of Management Journal*, **45**, 818-26.
- Boeker, W. and Wiltbank, R. (2005). 'New venture evolution and managerial capabilities'. *Organization Science*, **16**, 123-33.
- Barney, J. (1988). 'Returns to bidding firms in mergers and acquisitions: Reconsidering the relatedness hypothesis'. *Strategic Management Journal*, **9**, 71-78.
- Buchholtz, A., Ribbens, B. and Honle, I. (2003). 'The role of human capital in post-acquisition CEO departure'. *Academy of Management Journal*, **46**, 506-14.
- Burton, M. and Beckman, C. (2007). 'Leaving a legacy: Position imprints and successor turnover in young firms'. *American Sociological Review*, **72**, 239-66.
- Cannella, A. and Hambrick, D. (1993). 'Effects of executive departures on the performance of acquired firms'. *Strategic Management Journal*, **14**, 137-52.
- Castanias, R. and Helfat, C. (2001). 'The managerial rents model: Theory and empirical analysis'. *Journal of Management*, **27**, 661-78.
- Castanias, R. and Helfat, C. (1991). 'Managerial resources and rents'. *Journal of Management*, **17**, 155-71.
- Certo, S., Covin, J., Daily, C. and Dalton, D. (2001). 'Wealth and the effects of founder management among IPO-stage new ventures'. *Strategic Management Journal*, **22**, 641-58.
- Chatterjee, S., Lubatkin, M., Schweiger, D. and Weber, Y. (1992). 'Cultural differences and shareholder value in related mergers: Linking equity and human capital'. *Strategic Management Journal*, **13**, 319-34.
- Coff, R. (1999). 'How buyers cope with uncertainty when acquiring firms in knowledge intensive industries: Caveat emptor'. *Organization Science*, **10**, 144-61.
- Colman, H. and Lunnan, R. (2011). 'Organizational identification and serendipitous value creation in post-acquisition integration'. *Journal of Management*, **37**, 839-60.
- Daily, C. and Dalton, D. (1992). 'The relationship between governance structure and corporate performance in entrepreneurial firms'. *Journal of Business Venturing*, **7**, 375-86.

- Dobrev, S. and Barnett, W. (2005). 'Organizational roles and transition to entrepreneurship'. *Academy of Management Journal*, **48**, 433-49.
- Dushnitsky, G. and Lenox, M. (2005). 'When do incumbents learn from entrepreneurial ventures? Corporate venture capital and investing firm innovation rates'. *Research Policy*, **34**, 615-39.
- Eckbo, B., Giammarino, R. and Heinkel, R. (1990). 'Asymmetric information and the medium of exchange in takeovers: Theory and tests'. *Review of Financial Studies*, **3**, 651-75.
- Ernst, H. and Vitt, J. (2000). 'The influence of corporate acquisitions on the behaviour of key inventors'. *R&D Management*, **30**, 105-19.
- Evans, D. and Leighton, L. (1989). 'Some empirical aspects of entrepreneurship'. *American Economic Review*, **79**, 519-35.
- Fahlenbrach, R. (2009). 'Founder-CEOs, investment decisions, and stock market performance'. *Journal of Financial and Quantitative Analysis*, **44**, 439-66.
- Fich, E., Rice, E. and Tran, A. (2016). 'Contractual revisions in compensation: Evidence from merger bonuses to target CEOs'. *Journal of Accounting and Finance*, **61**, 338-68.
- Fiol, M. and O'Connor, E. (2003). 'Waking up! Mindfulness in the face of bandwagons'. *Academy of Management Review*, **28**, 54-70.
- Gao, N. and Jain, B. (2011). 'Founder CEO management and the long-run investment performance of IPO firms'. *Journal of Banking and Finance*, **35**, 1669-82.
- Gerasymenko, V. and Arthurs, J. (2014). 'New insights into venture capitalists' activity: IPO and time-to-exit forecast as antecedents of their post-investment involvement'. *Journal of Business Venturing*, **29**, 405-20.
- Gimeno, J., Folta, T., Cooper, A. and Woo, C. (1997). 'Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firm'. *Administrative Science Quarterly*, **42**, 750-83.
- Graebner, M. (2004). 'Momentum and serendipity: How acquired leaders create value in the integration of technology firms'. *Strategic Management Journal*, **25**, 751-77.

- Graebner, M. (2009). 'Caveat venditor: Trust asymmetries in acquisitions of entrepreneurial firms'. *Academy of Management Journal*, **52**, 435–72.
- Graebner, M., Eisenhardt, K. and Roundy, P. (2010). 'Success and failure in technology acquisitions: Lessons for buyers and sellers'. *Academy of Management Perspectives*, **24**(3), 73-92.
- Grant, R. (1996). 'Toward a knowledge-based theory of the firm'. *Strategic Management Journal*, **12**, 109-22.
- Hambrick, D. and Cannella, A. (1993). 'Relative standing: A framework for understanding departures of acquired executives'. *Academy of Management Journal*, **36**, 733-62.
- Haspeslagh, P. and Jemison, D. (1991). *Managing Acquisitions: Creating Value Through Corporate Renewal*. Free Press, New York.
- He, L. (2008). 'Do founders matter? A study of executive compensation, governance structure and firm performance'. *Journal of Business Venturing*, **23**, 257-79.
- Hecker, D. (1999). 'High-technology employment: A broader view'. *Monthly Labor Review*, **122**(6), 18-29.
- Hellmann, T. and Puri, M. (2002). 'Venture capital and the professionalization of start-ups firms: Empirical evidence'. *Journal of Finance*, **57**, 169-97.
- Hendricks, B., Howell, T. and Bingham, C. (2019). 'How much do top management teams matter in founder-led firms?'. *Strategic Management Journal*, **40**, 959-86.
- Hoetker, G. (2007). 'The use of logit and probit models in strategic management research: Critical issues'. *Strategic Management Journal*, **28**, 331-43.
- Iacus, S., King, G. and Porro, G. (2011). 'Multivariate matching methods that are monotonic imbalance bounding'. *Journal of the American Statistical Association*, **106**(493), 345-61.
- Jain, B. and Tabak, F. (2008). 'Factors influencing the choice between founder versus non founder CEOs for IPO firms'. *Journal of Business Venturing*, **23**, 21-45.
- Jayaraman, N., Khorana, A., Nelling, E. and Covin, J. (2000). 'CEO founder status and firm financial performance'. *Strategic Management Journal*, **21**, 1215-24.

Jemison, D. and Sitkin, S. (1986). 'Corporate acquisitions: A process perspective'. *Academy of Management Review*, **11**, 145-63.

Kapoor, R. and Lim, K. (2007). 'The impact of acquisitions on the productivity of inventors at semiconductor firms: A synthesis of knowledge-based and incentive-based perspectives'. *Academy of Management Journal*, **50**, 1133-55.

Klotz, A., Hmieleski, K., Bradley, B. and Busenitz, L. (2014). 'New venture teams: A review of the literature and roadmap for future research'. *Journal of Management*, **40**, 226-55.

Kohers, N. and Ang, J. (2000). 'Earnouts in mergers: Agreeing to disagree and agreeing to stay'. *Journal of Business*, **73**, 445-76.

Krug, J., Wright, P. and Kroll, M. (2014). 'Top management team turnover following mergers and acquisitions: Solid research to date but still much to be learned'. *Academy of Management Perspective*, **28**, 147-63.

Lanjouw, J. and Schankerman, M. (2004). 'Patent quality and research productivity: Measuring innovation with multiple indicators'. *The Economic Journal*, **114**(495), 441-65.

Larsson, R. and Finkelstein, S. (1999). 'Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: A case survey of synergy realization'. *Organization Science*, **10**, 1-26.

Martin, K. and McConnell, J. (1991). 'Corporate performance, corporate takeovers and management turnover'. *Journal of Finance*, **46**, 671-87.

Mathias, B. and Williams, D. (2017). 'The impact of role identities on entrepreneurs' evaluation and selection of opportunities'. *Journal of Management*, **43**, 892-918.

McNamara, G., Haleblan, J. and Dykes, B. (2008). 'The performance implications of participating in an acquisition wave: Early mover advantages, bandwagon effects, and the moderating influence of industry characteristics and acquirer tactics'. *Academy of Management Journal*, **51**, 113-30.

Nelson, T. (2003). 'The persistence of founder influence: Management, ownership and performance effect at initial public offering'. *Strategic Management Journal*, **24**, 707-24.

OECD. (2003). *OECD Science, technology, and industry scoreboard*. Paris: OECD.

- Oster, E. (2019). 'Unobservable selection and coefficient stability: Theory and evidence'. *Journal of Business & Economic Statistics*, **37**, 187-204.
- Pablo, A. (1994). 'Determinants of acquisition integration level: A decision making perspective'. *Academy of Management Journal*, **37**, 803-36.
- Park, H. H., Howard, M. D. and Gomulya, D. M. (2018). 'The impact of knowledge worker mobility through an acquisition on breakthrough knowledge'. *Journal of Management Studies*, **55**, 85-107.
- Paruchuri, S. N. (2006). 'Acquisition integration & productivity losses in the technical core: Disruption of inventors in acquired companies'. *Organization Science*, **17**, 545-62.
- Pollock, T., Fund, B. and Baker, T. (2009). 'Dance with the one that brought you? Venture capital firms and the retention of founder-CEOs'. *Strategic Entrepreneurship Journal*, **3**, 199-217.
- Puranam, P. and Srikanth, K. (2007). 'What they know vs. what they do: How acquirers leverage technology acquisitions'. *Strategic Management Journal*, **28**, 805-25.
- Puranam, P., Singh, H. and Chaudhuri, S. (2009). 'Integrating acquired capabilities: When structural integration is (un)necessary?'. *Organization Science*, **20**, 313-28.
- Puranam, P., Singh, H. and Zollo, M. (2006). 'Organizing for innovation: managing the coordination-autonomy dilemma in technology acquisitions'. *Academy of Management Journal*, **49**, 263-81.
- Ragozzino, R. and Reuer, J. (2009). 'Contingent earnouts in acquisitions of privately held targets'. *Journal of Management*, **35**, 857-79.
- Ranft, A. and Lord, M. (2000). 'Acquiring new knowledge: The role of retaining human capital in acquisitions of high-tech firms'. *Journal of High Technology Management Research*, **11**, 295-319.
- Ranft, A. and Lord, M. (2002). 'Acquiring new technologies and capabilities: A grounded model of acquisition implementation'. *Organization Science*, **13**, 420-42.
- Santos, F. and Eisenhardt, K. (2009). 'Constructing markets and shaping boundaries: Entrepreneurial power in nascent fields'. *Academy of Management Journal*, **52**, 643-71.

- Silverman, B. (2002). *Technical resources and the logic of corporate diversification*. (third ed.). Routledge.
- Slovin, M., Sushka, M. and Polonchek, J. (2005). 'Methods of payment in asset sales: Contracting with equity versus cash'. *Journal of Finance*, **60**, 2385-407.
- Tzabbar, D. and Margolis, J. (2017). 'Beyond the startup stage: The founding team's human capital, new venture's stage of life, founder-CEO duality, and breakthrough innovation'. *Organization Science*, **28**, 857-72.
- Walsh, J. (1988). 'Top management turnover following acquisitions'. *Strategic Management Journal*, **9**, 73-83.
- Walsh, J. and Kosnik, R. (1993). 'Corporate raiders and their disciplinary role in the market'. *Academy of Management Journal*, **36**, 671-700.
- Wasserman, N. (2003). 'Founder-CEO succession and the paradox of entrepreneurial success'. *Organization Science*, **14**, 149-72.
- Wasserman, N. (2006). 'Stewards, agents and the founder discount: executive compensation in new ventures'. *Academy of Management Journal*, **49**, 960-76.
- Wasserman, N. (2017). 'The throne vs. the kingdom: Founder Control and value creation in start-ups'. *Strategic Management Journal*, **38**, 255-77.
- Willard, G., Krueger, D. and Feeser, H. (1992). 'In order to grow, must the founder go: A comparison of performance between founder and non-founder managed high-growth manufacturing firms'. *Journal of Business Venturing*, **7**, 181-94.
- Wulf, J. and Singh, H. (2011). 'How do acquirers retain successful target CEO? The role of governance'. *Management Science*, **57**, 2101-14.
- Zelner, B. (2009). 'Using simulation to interpret results from logit, probit, and other non-linear models'. *Strategic Management Journal*, **30**, 1335-48.
- Zollo, M. and Singh, H. (2004). 'Deliberate learning in corporate acquisitions: Post-acquisition strategies and integration capability in US bank mergers'. *Strategic Management Journal*, **25**, 1233-56.

9. TABLES AND FIGURES

Table I - The theoretical mechanisms explaining the higher retention rate of target founder-CEOs

| Theoretical mechanism | Main effect | Boundary conditions | |
|--|---|---|---|
| | | <i>Technology-driven acquisitions</i> | <i>Acquisitions of young firms</i> |
| <i>Incentives</i> | + | + | + |
| Target founder-CEOs have stronger <i>monetary incentives</i> than target professional CEOs to make the acquisition successful | Greater share of target firm's equity | More frequent use of contingent methods of payment | More frequent use of contingent methods of payment |
| <i>Human capital</i> | + | + | + |
| Target founder-CEOs have unique <i>firm-specific human capital</i> that makes them a more precious asset for acquirers during acquisition implementation than target professional CEOs | Deeper tacit knowledge of target operations Social focal point and charismatic leader for target employees | Greater information asymmetry More serious acquisition implementation challenges | Tacit knowledge of the target operations less imitable and substitutable than in older target firms Stronger bond with target employees than in older target firms |

Table II - Geographical and industrial distribution of acquisitions in the sample

Panel A

| | Country of acquirer | | | | | | | | | | | | <i>Total</i> |
|----------------------|---------------------|----|----|----|----|----|----|----|----|----|----|-----|--------------|
| | BE | CH | DE | DK | ES | FI | FR | GB | IT | NL | SE | US | |
| BE (Belgium) | 2 | | | | | | 1 | | | 1 | | 2 | 6 |
| CH (Switzerland) | 1 | | 1 | | | | | | | | | 2 | 4 |
| DE (Germany) | | | 5 | | | 3 | 1 | 1 | | | | 7 | 17 |
| DK (Denmark) | | | | 1 | | 1 | | | | | | 1 | 3 |
| ES (Spain) | | | | | | | | | | | 1 | 2 | 3 |
| FI (Finland) | | | | | | 3 | | | | | 1 | 1 | 5 |
| FR (France) | 1 | | | | 1 | | 7 | 2 | | | 1 | 11 | 23 |
| GB (Great Britain) | 1 | 2 | 1 | | | 1 | 3 | 21 | 1 | | 1 | 26 | 57 |
| HU (Hungary) | | | | | | | | | | | | 1 | 1 |
| IE (Ireland) | | | | | | | | 1 | | | | 1 | 2 |
| IL (Israel) | | | | | | | | | | | | 1 | 1 |
| IT (Italy) | | | 1 | | | | 1 | | 2 | | | | 4 |
| NL (The Netherlands) | | | | | | | 1 | 1 | 1 | 1 | | 4 | 8 |
| NO (Norway) | | | 1 | | | | | | | | | 3 | 4 |
| PT (Portugal) | | | | | 1 | | | | | | | | 3 |
| SE (Sweden) | | | | | | 1 | | | | | 5 | 5 | 11 |
| US (USA) | 1 | 1 | 3 | 1 | | 1 | 3 | 15 | | 2 | 2 | 269 | 298 |
| <i>Total</i> | 5 | 4 | 12 | 2 | 2 | 10 | 17 | 41 | 4 | 4 | 11 | 336 | 448 |

Panel B

| Industry | Target | |
|--|---------------|-----------------|
| | firm | Acquirer |
| Drugs (US SIC 283) | 45 | 28 |
| Computer and office equipment (US SIC code 357) | 20 | 16 |
| Electronic and other electrical equipment (US SIC code 36) | 57 | 40 |
| Instruments (US SIC code 38) | 42 | 38 |
| Software and computer programming (US SIC code 737) | 284 | 93 |
| Other | | 98 |

Table III - Descriptive statistics and pairwise correlation matrix

| Variables | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1. CEO retention | 0.63 | 0.44 | 1 | | | | | | | | | | | | | | |
| 2. Founder CEO | 0.44 | 0.5 | 0.12 | 1 | | | | | | | | | | | | | |
| 3. Technology motivation | 0.7 | 0.46 | -0.03 | 0.02 | 1 | | | | | | | | | | | | |
| 4. Target age | 13.38 | 9.71 | 0.08 | -0.2 | -0.01 | 1 | | | | | | | | | | | |
| 5. Tenure CEO | 6.05 | 2.18 | 0.07 | 0.45 | 0.07 | 0.35 | 1 | | | | | | | | | | |
| 6. CEO duality | 0.18 | 0.39 | -0.04 | 0.08 | 0.08 | 0.04 | 0.14 | 1 | | | | | | | | | |
| 7. Technological artifact | 0.72 | 0.45 | -0.14 | -0.1 | -0.37 | 0.12 | -0.06 | 0 | 1 | | | | | | | | |
| 8. VC backed | 0.43 | 0.5 | -0.11 | -0.02 | 0.23 | -0.22 | -0.21 | 0.05 | 0.07 | 1 | | | | | | | |
| 9. Target listed | 0.37 | 0.48 | -0.16 | -0.16 | 0.01 | 0.07 | -0.16 | 0.25 | 0.22 | 0.06 | 1 | | | | | | |
| 10. Technology overlap | 0.24 | 0.41 | 0.01 | -0.01 | 0.04 | 0.17 | 0 | -0.01 | 0.2 | -0.07 | 0.1 | 1 | | | | | |
| 11. Industry relatedness | 0.64 | 0.44 | -0.1 | -0.07 | 0.19 | -0.14 | -0.2 | 0.1 | 0 | 0.07 | 0.15 | 0 | 1 | | | | |
| 12. Relative size | 0.04 | 0.06 | -0.03 | -0.06 | -0.05 | 0.06 | -0.02 | 0.16 | 0.09 | 0.06 | 0.33 | -0.03 | 0.12 | 1 | | | |
| 12. Cross border | 0.29 | 0.46 | 0.16 | 0.01 | -0.01 | 0.06 | 0.05 | -0.16 | -0.04 | -0.04 | -0.25 | 0.1 | 0.05 | -0.05 | 1 | | |
| 13. Alliance | 0.22 | 0.42 | 0.01 | 0.01 | 0.08 | -0.09 | -0.02 | 0.03 | -0.03 | 0.02 | 0.05 | -0.06 | -0.01 | -0.08 | -0.01 | 1 | |
| 14. Minority stake | 0.06 | 0.24 | 0.05 | 0 | -0.15 | -0.01 | 0.02 | 0.02 | 0.04 | -0.11 | 0.13 | -0.02 | -0.05 | 0 | 0.04 | 0.46 | 1 |
| 15. Acquirer experience | 15.57 | 18.14 | -0.01 | -0.05 | 0 | -0.1 | -0.11 | -0.03 | -0.02 | 0.03 | 0 | -0.05 | 0.02 | -0.26 | -0.01 | 0.17 | -0.01 |

The correlation above 0.09 and 0.12 at absolute values are significant at $p < 0.05$ and $p < 0.01$, respectively.

Table IV - Results of the estimates: antecedents of the probability of target CEO retention (logit model)^a

| VARIABLES | | | Target age=young | | Target age=old |
|-------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | Model 1 | Model 2 | Model 3 | Model 4a | Model 4b |
| Founder CEO | | 0.720*** (0.266) | 0.046 (0.423) | 0.132 (0.576) | -0.465 (0.676) |
| Founder CEO × Technology motivation | | | 1.011** (0.486) | 1.814*** (0.691) | 0.229 (0.720) |
| Technology motivation | -0.145 (0.298) | -0.102 (0.302) | -0.539 (0.374) | -0.915* (0.531) | -0.299 (0.506) |
| Target age | 0.022 (0.014) | 0.038** (0.015) | 0.040** (0.016) | | |
| Tenure CEO | -0.005 (0.020) | -0.039* (0.023) | -0.040* (0.023) | -0.074 (0.067) | -0.004 (0.032) |
| CEO duality | 0.078 (0.309) | 0.055 (0.317) | 0.056 (0.323) | 0.313 (0.542) | -0.102 (0.475) |
| Technological artifact | -0.687** (0.308) | -0.666** (0.307) | -0.657** (0.313) | -0.301 (0.478) | -1.094** (0.463) |
| VC backed | -0.215 (0.249) | -0.241 (0.250) | -0.188 (0.250) | -0.017 (0.363) | -0.370 (0.398) |
| Target listed | -0.503** (0.251) | -0.496** (0.251) | -0.460* (0.253) | -0.333 (0.408) | -0.740* (0.385) |
| Technology overlap | 0.117 (0.346) | 0.023 (0.363) | 0.019 (0.368) | 0.094 (0.555) | 0.116 (0.492) |
| Industry relatedness | -0.320 (0.261) | -0.331 (0.264) | -0.306 (0.263) | -0.318 (0.378) | -0.212 (0.410) |
| Relative size | 0.951 (1.890) | 1.171 (1.931) | 1.186 (1.936) | 3.380 (3.311) | 0.082 (2.604) |
| Cross border | 0.666*** (0.258) | 0.680*** (0.257) | 0.628** (0.256) | 0.876** (0.404) | 0.259 (0.393) |
| Alliance | -0.002 (0.313) | -0.016 (0.315) | -0.070 (0.325) | -0.365 (0.456) | 0.885 (0.607) |
| Minority stake | 0.589 (0.574) | 0.614 (0.574) | 0.630 (0.566) | 0.694 (0.788) | 0.756 (1.193) |
| Acquirer experience | 0.008 (0.006) | 0.002 (0.006) | 0.003 (0.006) | 0.007 (0.008) | -0.002 (0.011) |

| | | | | | |
|---------------------------------------|------------------|------------------|------------------|------------------|---------------------|
| Industry dummies | Included | Included | Included | Included | Included |
| Constant | 0.927 (0.675) | 0.615 (0.691) | 0.849 (0.708) | 0.043 (1.220) | 2.367*** (0.896) |
| <i>N</i> | 448 | 448 | 448 | 229 | 219 |
| <i>Log likelihood</i> | -267.8 | -264.1 | -261.9 | -130.2 | -119.5 |
| <i>LR</i> (χ^2) | 38.286*** | 45.678*** | 50.175*** | 42.807*** | 29.134* |
| ΔLR (χ^2) ^b | | 7.392** | 4.497* | 7.053** | 0.100 |

^a Robust standard errors in brackets *** p<0.01, ** p<0.05, * p<0.1

^b For Model 2, ΔLR (χ^2) captures the difference between the *LR* values of Model 2 and the model excluding the independent variable, Model 1. For Model 3, ΔLR (χ^2) captures the difference between the *LR* values of Model 3 and Model 2. For Model 4a and Model 4b, ΔLR (χ^2) captures the difference between the *LR* values of the current model specifications and the models excluding the interaction term for the respective sub-samples.

Table V - Robust estimation based on unpacking the temporal effect of target CEO retention. ^{a, b}

| VARIABLES | Full sample | | Full sample | | Target age=young | | Target age=old | |
|-------------------------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|
| | Model 5 | | Model 6 | | Model 7a | | Model 7b | |
| | Outcome: Staged replacement | Outcome: Retention | Outcome: Staged replacement | Outcome: Retention | Outcome: Staged replacement | Outcome: Retention | Outcome: Staged replacement | Outcome: Retention |
| Founder CEO | 0.707 (0.519) | 1.033*** (0.355) | -0.538 (0.778) | -0.110 (0.649) | -1.068 (1.139) | 0.0165 (0.852) | -1.188 (1.306) | -0.857 (1.153) |
| Founder CEO × Technology motivation | | | 1.682* (0.937) | 1.485** (0.704) | 2.520* (1.412) | 2.386** (0.988) | 0.838 (1.462) | 0.572 (1.158) |
| Technology motivation | -0.984* (0.545) | -0.799* (0.416) | -1.621** (0.699) | -1.346** (0.523) | -0.686 (1.009) | -1.153 (0.767) | -2.439** (1.027) | -1.505** (0.700) |
| Target age | 0.021 (0.028) | 0.044** (0.018) | 0.023 (0.028) | 0.046** (0.018) | | | | |
| Tenure CEO | 0.039 (0.039) | -0.014 (0.029) | 0.035 (0.039) | -0.016 (0.029) | 0.185 (0.117) | -0.005 (0.086) | 0.117* (0.060) | 0.031 (0.037) |
| CEO duality | -0.273 (0.587) | -0.103 (0.392) | -0.243 (0.584) | -0.081 (0.395) | 0.436 (0.830) | 0.247 (0.653) | -1.119 (1.036) | -0.398 (0.587) |
| Technological artifact | 0.180 (0.534) | -0.585 (0.374) | 0.204 (0.540) | -0.568 (0.382) | 1.281 (0.799) | 0.145 (0.635) | -0.972 (0.938) | -1.145* (0.603) |
| VC backed | 0.101 (0.402) | -0.029 (0.297) | 0.150 (0.402) | 0.011 (0.293) | -0.267 (0.561) | 0.0554 (0.475) | 0.328 (0.698) | -0.106 (0.429) |

| | | | | | | | | |
|----------------------|-------------------|---------------------|--------------------|---------------------|---------------------|---------------------|----------------------|---------------------|
| Target listed | -0.428 (0.532) | -0.700** (0.294) | -0.415 (0.535) | -0.685** (0.299) | -0.100 (0.760) | -0.477 (0.506) | -0.465 (0.817) | -1.166** (0.501) |
| Technology overlap | 0.910 (0.668) | 0.662 (0.475) | 0.922 (0.661) | 0.680 (0.484) | 1.922 (1.384) | 1.517 (1.150) | 1.353 (1.088) | 0.747 (0.669) |
| Industry relatedness | -0.648 (0.545) | -0.914** (0.375) | -0.615 (0.550) | -0.891** (0.377) | -2.029** (0.930) | -1.604** (0.708) | 0.894 (0.751) | -0.257 (0.553) |
| Relative size | 0.950 (3.412) | 1.043 (2.350) | 1.063 (3.429) | 1.112 (2.399) | 5.059 (5.644) | 5.404 (4.111) | -0.588 (4.958) | -0.768 (3.109) |
| Cross border | 0.120 (0.493) | 0.726** (0.332) | 0.049 (0.501) | 0.665** (0.332) | 0.075 (0.764) | 0.706 (0.508) | 0.285 (0.778) | 0.493 (0.531) |
| Alliance | -0.306 (0.567) | -0.191 (0.374) | -0.358 (0.567) | -0.240 (0.383) | -0.161 (0.669) | -0.524 (0.542) | -13.96*** (0.810) | 0.944 (0.738) |
| Minority stake | 0.432 (1.037) | 1.089 (0.679) | 0.436 (1.040) | 1.098 (0.672) | 0.441 (1.393) | 1.569* (0.897) | -0.297 (1.186) | 0.103 (1.176) |
| Acquirer experience | -0.009 (0.011) | 0.001 (0.007) | -0.008 (0.011) | 0.002 (0.007) | -0.008 (0.012) | 0.007 (0.009) | -0.017 (0.035) | -0.008 (0.013) |
| Industry dummies | Included | Included | Included | Included | Included | Included | Included | Included |
| Constant | -0.452 (1.295) | 1.598* (0.910) | -0.0476 (1.354) | 1.976** (0.983) | -0.369 (2.200) | 1.283 (1.524) | -0.108 (1.892) | 3.736*** (1.182) |
| | <i>N</i> | 433 | 433 | 433 | 220 | 220 | 213 | 213 |

| | | | | |
|---------------------------------------|-----------|-----------|-----------|----------|
| <i>Log likelihood</i> | -317.3 | -314.8 | -153.2 | -136.6 |
| <i>LR</i> (χ^2) | 82.177*** | 87.162*** | 76.866*** | 57.849** |
| ΔLR (χ^2) ^c | 9.277** | 4.985* | 5.966* | 0.403 |

^a *Temporal CEO retention* is a categorical variable that has three possible outcomes, namely: *Immediate replacement*, when the target CEO is replaced immediately after acquisition completion, or before (e.g. in the acquisition announcement); *Staged replacement*, when the target CEO is replaced within the two-year window after acquisition completion but not immediately after the acquisition; and, *Retention*, when the target CEO is retained for at least two years in the combined entity. The model is based on *mlogit* specification, and the results are presented according to the base outcome of *Immediate replacement*.

^b Robust standard errors in brackets *** p<0.01, ** p<0.05, * p<0.1.

^c For Model 5, $\Delta LR(\chi^2)$ captures the difference between the *LR* values of Model 5 and the model excluding the independent variable. For Model 6, $\Delta LR(\chi^2)$ captures the difference between the *LR* values of Model 6 and Model 5. For Model 7a and Model 7b, $\Delta LR(\chi^2)$ captures the difference between the *LR* values of the current model specifications and the models excluding the interaction term for the respective sub-samples.

Table VI - Estimations capturing the strength of the proposed theoretical mechanisms^a

| VARIABLES | Technology overlap=0 | Technology overlap=1 | Target listed=0 | Target listed=1 | Technology overlap=0 & Target listed=0 | Other |
|-------------------------------------|-------------------------|-------------------------|---------------------|--------------------|---|----------------------|
| | Model 8a | Model 8b | Model 9a | Model 9b | Model 10a | Model 10b |
| Founder CEO | -0.0681 (0.491) | 0.948 (1.098) | -0.184 (0.552) | 0.240 (0.689) | -0.465 (0.635) | 0.387 (0.579) |
| Founder CEO × Technology motivation | 1.017* (0.558) | 0.857 (1.340) | 1.408** (0.647) | 1.095 (0.954) | 1.573** (0.709) | 0.984 (0.765) |
| Technology motivation | -0.477 (0.421) | -0.622 (0.870) | -0.619 (0.548) | -0.324 (0.559) | -0.800 (0.619) | -0.551 (0.513) |
| Target age | 0.039** (0.017) | 0.053 (0.035) | 0.057** (0.029) | 0.035 (0.025) | 0.067** (0.026) | 0.032 (0.021) |
| Tenure CEO | -0.027 (0.027) | -0.076 (0.056) | -0.078** (0.039) | -0.009 (0.036) | -0.085** (0.040) | -0.028 (0.031) |
| CEO duality | 0.152 (0.366) | -0.348 (0.834) | -0.666 (0.502) | 0.497 (0.448) | -0.260 (0.562) | 0.231 (0.420) |
| Technological artifact | -0.449 (0.363) | -2.295** (1.098) | -0.379 (0.394) | -1.104* (0.656) | -0.260 (0.469) | -1.465*** (0.528) |
| VC backed | -0.146 (0.277) | -0.113 (0.662) | -0.509 (0.350) | 0.340 (0.435) | -0.524 (0.403) | 0.108 (0.364) |
| Target listed | -0.506* (0.296) | -0.563 (0.628) | | | | |
| Technology overlap | | | -0.635 (0.462) | 0.802 (0.669) | | |
| Industry relatedness | -0.448 (0.311) | 0.086 (0.770) | -0.109 (0.328) | -0.647 (0.487) | -0.216 (0.369) | -0.466 (0.405) |
| Relative size | 0.527 (2.034) | 3.612 (4.925) | 0.460 (4.166) | 1.579 (2.458) | -0.112 (4.211) | 1.913 (2.301) |
| Cross border | 0.649** (0.314) | -0.241 (0.545) | 0.701** (0.318) | -0.041 (0.543) | 0.565 (0.362) | 0.629 (0.386) |
| Alliance | -0.083 (0.353) | 0.035 (0.780) | -0.272 (0.418) | 0.358 (0.508) | -0.300 (0.436) | 0.237 (0.489) |

| | | | | | | |
|---------------------------------------|------------------|-------------------|-------------------|-------------------|------------------|------------------|
| Minority stake | 1.110 (0.687) | -0.726 (1.011) | 0.625 (0.951) | 0.633 (0.796) | 0.876 (1.183) | 0.210 (0.690) |
| Acquirer experience | 0.001 (0.006) | 0.011 (0.017) | 0.003 (0.007) | 0.001 (0.010) | 0.003 (0.007) | 0.003 (0.010) |
| Industry dummies | Included | Included | Included | Included | Included | Included |
| Constant | 0.311 (0.893) | 3.099* (1.710) | 1.623* (0.914) | -0.489 (1.319) | 1.518 (1.219) | 0.888 (0.926) |
| <i>N</i> | 347 | 101 | 284 | 164 | 223 | 219 |
| <i>Log likelihood</i> | -200 | -52.40 | -151.6 | -97.59 | -121.1 | -131 |
| <i>LR</i> (χ^2) | 47.473*** | 21.347 | 34.468** | 29.728* | 28.678** | 31.338** |
| ΔLR (χ^2) ^b | 3.543* | 0.459 | 4.775* | 1.767 | 4.696* | 2.019 |

^a Robust standard errors in brackets *** p<0.01, ** p<0.05, * p<0.1.

^b $\Delta LR(\chi^2)$ captures the difference between the *LR* values of the current model specifications and the models excluding the interaction term for the respective sub-samples.

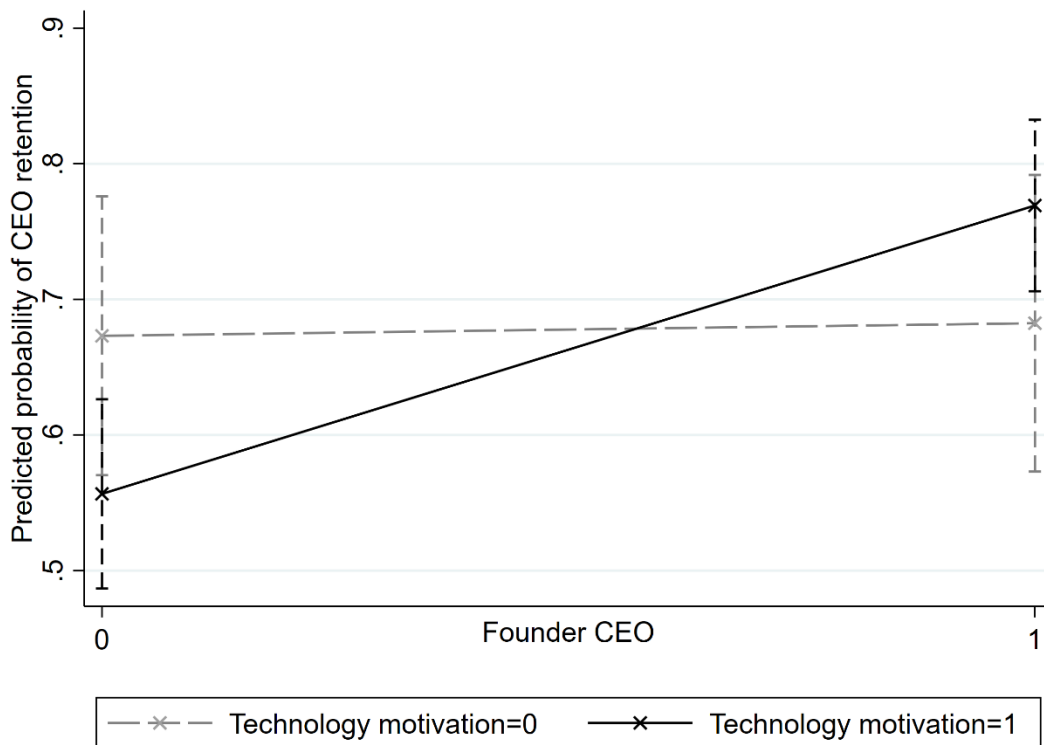


Figure 1: The predicted probability of target CEO retention at different *Founder CEO* and *Technology motivation* values according to Model 3 estimation results (the predictive margins are at $p < 0.05$).

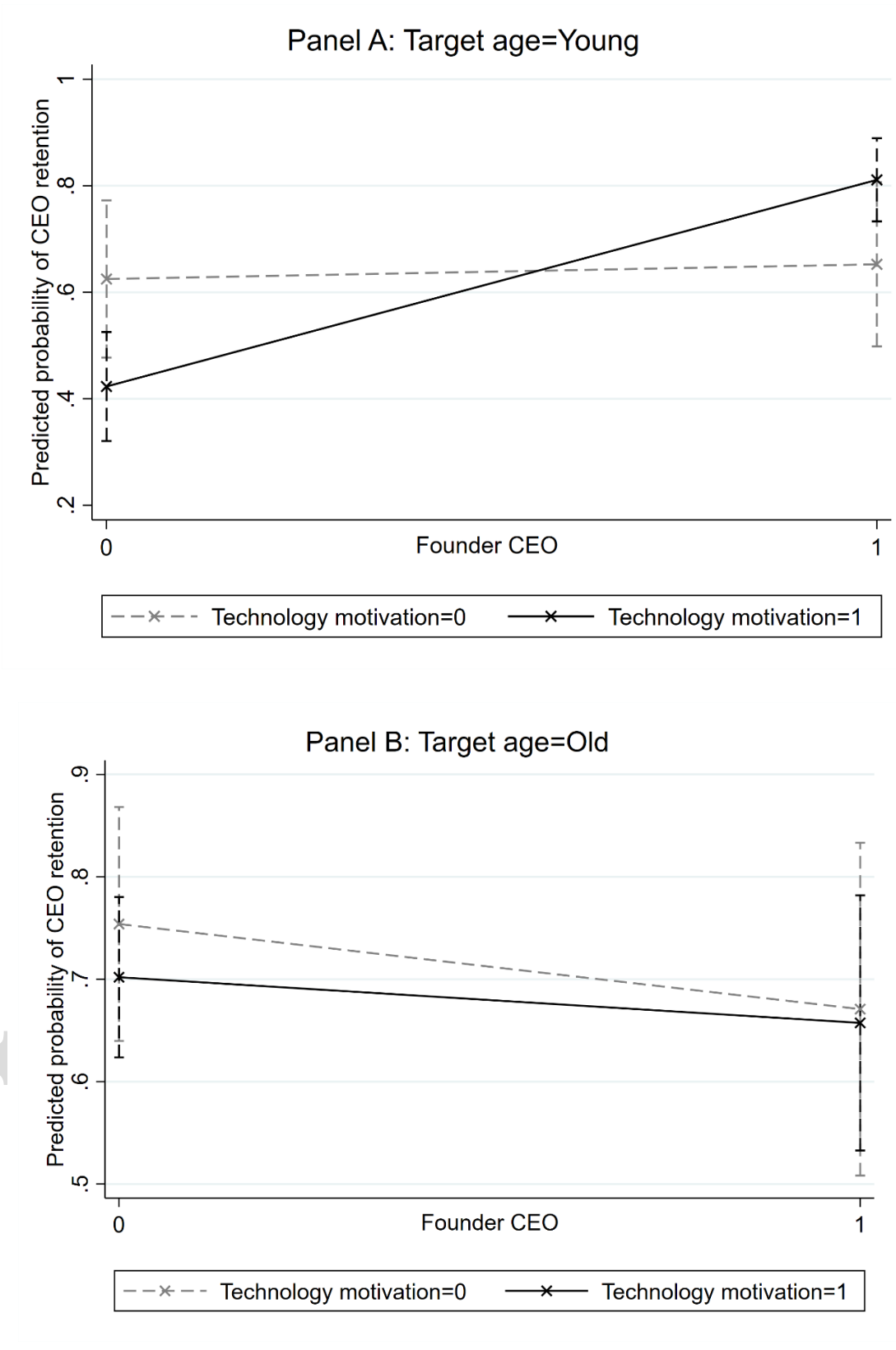


Figure 2: The predicted probability of target CEO retention at different *Founder CEO* and *Technology motivation* values for the subsamples including only young and old target firms

according to Model 4a and 4b estimation results, respectively (the predictive margins are at $p < 0.05$).

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