



RIETI Discussion Paper Series 26-E-074

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The Research Institute of Economy, Trade and Industry
<https://www.rieti.go.jp/en/>

Management Succession under Long-term Tournaments: Evidence from Japanese listed subsidiaries¹

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Abstract

Using Japanese data, we show that for broadly defined listed subsidiaries, when parent firms maintain long-horizon internal employee tournaments, they are more likely to carry out parent-appointed CEO successions (appointing a CEO sent from the parent company). Compared with non-parent-appointed successions, parent-appointed successions are less sensitive to subsidiary performance. We further find that parent-appointed successions are associated with significantly poorer post-succession operating performance, particularly when the parent firm operates relatively long-term internal tournaments. Taken together, these findings suggest that managerial succession serves as an important channel to preserve incentive effects of internal tournaments and may create opportunities for parent firms in terms of expropriation of minor shareholders in listed subsidiaries. Finally, subsidiaries with lower cash holdings are more likely to experience parent-appointed successions, whereas those undertaking non-parent-dispatched successions tend to increase their cash holdings following the succession event.

Keywords: Tournament; Management succession; Listed subsidiary; Firm performance; Cash holdings

JEL classification: D23, L22, L25, M10

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¹This study is conducted as a part of the project “Frontiers in Corporate Governance Analysis” undertaken at the Research Institute of Economy, Trade and Industry (RIETI). The draft of this paper was presented at the RIETI DP seminar for the paper, the 2026 Annual Conference of Nippon Finance Association, the 2026 Annual Meeting of Japan Finance Association, and the TMU Workshop on Finance 2026. I would like to thank participants of the RIETI DP Seminar for their helpful comments. The author is also grateful for helpful comments and suggestions by Xin Chang (Nanyang Technological Univ.), Ryosuke Fujitani (Hitotsubashi Univ.), Katsushi Suzuki (Gakushuin Univ.), and Yusuke Tsujimoto (Waseda Univ.).

1. Introduction

The labor economics literature highlights promotion tournaments as a core incentive mechanism within firms, motivating employees to exert effort in pursuit of advancement (Lazear and Rosen, 1981; Green and Stokey, 1983; Rosen, 1986; Main, O'Reilly, and Wade, 1993). Building on this framework, finance research has examined tournament incentives among senior executives, demonstrating that executive promotion contests influence risk-taking, compensation design, insider trading, post-tournament executive leaves, and firm performance (e.g., Kale et al., 2009; Kini and Williams, 2012; Shen and Zhang, 2018; Chan et al., 2022; Ahn et al., 2025; Lasfer and Ye, 2025). Despite the well-recognized importance of internal labor markets, relatively little is known about how promotion tournaments among rank-and-file employees shape firms' managerial succession decisions. This gap is notable because employee competition influences the development of leadership pipelines, with managerial positions representing the highest rewards in such tournaments. Moreover, when parent firms integrate subsidiary management positions into their internal promotion tournaments, these arrangements may give rise to agency conflicts between controlling and minority shareholders in subsidiaries. This study addresses these issues by examining whether firms design managerial succession policies to preserve the incentive effects of internal promotion tournaments and whether cross-firm succession decisions affect the performance of affiliated firms.

Tournament theory posits that employees exert effort in anticipation of promotion, but this incentive mechanism is effective only when advancement opportunities are perceived as credible. Demeré et al. (2016) show that relative performance measures for promotion generate larger (smaller) performance gains when an employee's probability of promotion is high (low). Similarly, Ahn et al. (2025) document that tournament incentives are positively associated with firm performance, particularly when promotion probabilities are sufficiently high. We apply these insights to managerial successions under employee tournaments. As tournament horizons lengthen, contestants incur higher opportunity costs and accumulate greater firm-specific human capital over time. To sustain participation and continued effort, employees must believe that the likelihood of eventual advancement remains meaningful. To the extent that promotion probabilities are inferred from realized turnovers, longer tournament horizons may require more frequent managerial successions to preserve the credibility of the promotion process and to reinforce internal career incentives.

A key empirical challenge is that unobservable firm characteristics may jointly influence both a firm's tournament horizon and its succession frequency. Moreover, firms optimally design succession policies to maximize firm value, complicating the identification of performance effects associated with tournament-driven successions. To address these concerns, we focus on broadly defined listed subsidiaries as our empirical setting and hereafter refer to them simply as listed subsidiaries. Parent firms often possess both the authority and the incentives to use managerial positions in their subsidiaries as prizes in internal promotion tournaments for their own employees. Although these positions may represent lower-value prizes than managerial positions at the parent firm, they nonetheless provide valuable promotion opportunities and help sustain employees' tournament incentives. Consistent with this argument, we hypothesize that the frequency of parent-appointed successions, defined as successions in which incoming managers have prior employment experience at the parent firm, increases with the length of the parent firm's internal tournament horizon. To the extent that the optimal succession frequency differs between parent firms and their subsidiaries, this research design mitigates biases arising from unobserved determinants of succession timing. We also examine the performance consequences of parent-appointed successions to evaluate our conjecture that such successions are intended primarily to support parent firms' internal tournaments rather than to maximize subsidiary value. This analysis sheds light on a potential dark side of tournament incentives.

We test our arguments using Japanese firms, where internal labor markets are characterized by long-term employment relationships and well-defined promotion ladders. Lifelong employment remains prevalent in Japan, and many managers spend their entire careers within a single firm or its corporate group. For example, Nippon Steel implemented a management succession on April 1, 2024, appointing Tadashi Imai as president after 36 years of service as an employee, executive, and director. His predecessor, Eiji Hashimoto, similarly devoted 45 years to the company in various roles before assuming the presidency. Within such long-horizon promotion structures, advancement to top management constitutes the most salient prize in internal tournaments and a key source of motivation for insiders. In addition, listed subsidiaries are common in Japan (Boulifa and Uchida, 2022), providing a suitable setting to examine how internal tournaments interact with corporate governance across organizational boundaries. Our data identify 24 listed firms at the peak (339 firm-year observations over the sample period) in which Nippon Steel holds equity stakes of at least 10%. Among these observations, managers have previous job experience at Nippon Steel in 270 cases. Taken

together, these institutional features make Japan an appropriate laboratory for studying how tournament incentives shape managerial succession decisions and influence the governance and performance of listed subsidiaries.

Our sample consists of Japanese listed firms with at least one listed corporate shareholder holding 10% or more of the firm's outstanding shares during the 2002-2022 fiscal years. We assume that a 10% ownership stake provides the parent firm with sufficient influence to appoint its employees to managerial positions in the subsidiary. Consistent with this assumption, our data indicate that approximately 18% of management successions involve the appointment of a manager from the parent firm even when the parent's ownership stake is between 10% and 20%. Adopting this relatively low ownership threshold also enables us to retain a sufficiently large sample of management successions for empirical analysis. Because we employ one-year lead variables for management successions, the dataset also incorporates managerial information for fiscal year 2023.

We measure the horizon of internal employee tournaments for both sample firms and their parent firms using the number of years between the incumbent president's entry into the firm and appointment as a director.² The data indicate that the average incumbent manager of parent firms spends 21.5 years (median of 28.4 years) with the firm before being promoted to director. Longer tournament horizons are more costly for contestants and reflect a deeper pool of capable internal talent. To sustain the incentive power of such long-term tournaments, subsidiaries must conduct management successions more frequently in order to provide sufficient promotion opportunities for the next cohort of insiders at the parent firm. Consistent with this view, we find a positive and statistically significant relationship between parent firms' tournament horizons and the likelihood that their subsidiaries implement parent-appointed successions. Quantitatively, subsidiaries conduct parent-appointed successions once every 10.4 years, on average, when their parent firms maintain employee tournaments lasting 30 years. By contrast, this frequency declines to once every 20 years when the incumbent manager of the parent firm spent

² This tournament measure is conceptually distinct from CEO tenure following appointment, which prior studies commonly use as a proxy for firm-specific human capital, including accumulated knowledge, skills, and internal networks (e.g., Wang et al., 2017; Oh et al., 2018; Brochet et al., 2021). By focusing instead on the duration of the internal promotion tournament preceding an executive's appointment to a managerial position, our measure captures the intensity of internal tournament incentives rather than the attributes accumulated by individual CEOs.

fewer than 10 years before being promoted to a director position.

To mitigate concerns that our results are driven by observable or unobservable characteristics associated with parent-appointed successions and parent firms' tournament horizons, we employ a two-stage least squares (2SLS) approach using the largest shareholder's ownership stake in the parent firm and an indicator for firms that went public before 1990 as instrumental variables. The results reveal a positive and statistically significant relationship between the instrumented tournament horizon and the likelihood of a parent-appointed succession. We further conduct propensity score matching analyses, treating subsidiaries whose parent firms have maintained internal tournaments for more than 30 years (less than 10 years) as the treatment group. The results indicate that subsidiaries affiliated with parents hosting long-term tournaments are significantly more likely to undertake parent-appointed successions, whereas those affiliated with parents hosting short-term tournaments are significantly less likely to do so, relative to subsidiaries without such parent firms.

We posit that parent-appointed successions are not primarily designed to maximize subsidiary value. Indeed, parent-appointed successions are less sensitive to firm performance, compared with non-parent-appointed ones. Importantly, we find that parent-appointed successions are associated with significantly worse changes in operating performance than non-parent-appointed successions, especially when the parent firm maintains relatively long tournaments. Finally, we find that subsidiaries with low cash holdings are more likely to engage in parent-appointed successions. Following such successions, subsidiaries generally maintain their levels of cash holdings, while non-parent-appointed successions are associated with a significant increase in cash holdings. A possible interpretation is that subsidiaries need to improve their liquidity status when they do not offer their management positions to their parent firms.

This study contributes to the literature in several ways. First, it speaks directly to the literature on tournament incentives (e.g., Kale et al., 2009; Kini and Williams, 2011; Shen and Zhang, 2018; Tan, 2024; Ahn et al., 2025; Lasfer and Ye, 2025). Existing studies have focused on executive pay structures and the promotion probability to measure tournament incentives. In contrast, we exploit the length of service of incumbent managers prior to promotion, and show that tournaments among employees play a critical role in shaping top management succession decisions. This finding contrasts with Ahn et al.'s (2025) argument that upper-layer tournaments are the main drivers of the positive association between the pay disparity and firm performance. Furthermore, while much of the existing

literature emphasizes the beneficial effects of tournament incentives—such as increased risk-taking and improved performance—we identify an important dark side of internal tournaments from the perspective of subsidiaries. In this regard, our findings complement Huang et al. (2023), who show that industry-level tournament incentives are associated with value-destroying behaviors such as earnings manipulation.

Second, our study contributes to the literature on management successions. Prior research shows that within-firm successions often facilitate smoother leadership transitions than outsider appointments, owing to greater firm-specific knowledge and organizational continuity (Zhang and Rajagopalan, 2004, 2010; Tao and Zhao, 2018). Moreover, effective succession planning enables internal successions to minimize disruption arising from changes in management structure (McConnell and Qi, 2022; Cvijanovic et al., 2023). We extend this literature by showing that internal successions achieve better performance changes than parent-affiliated successions.

We also emphasize that our approach differs from the traditional CEO turnover literature, which largely views management turnover as a disciplinary mechanism and studies how the sensitivity of forced turnovers to firm performance mitigates agency conflicts between shareholders and top managers (e.g., Denis et al., 1997; Knyazeva et al., 2013; Guo and Masulis, 2015; Dasgupta et al., 2018). In contrast, we conceptualize management successions—particularly routine, non-forced transitions—as an integral component of internal employee tournaments. By focusing on routine successions through the lens of tournament incentives rather than disciplinary turnover, our study offers a novel perspective on how managerial transitions function as incentive devices for corporate insiders, rather than solely as governance mechanisms to dismiss underperforming executives.

Finally, our study contributes to the literature on ownership structure and minority shareholder expropriation. Prior research shows that concentrated ownership and business-group affiliations can facilitate the transfer of wealth from minority shareholders to controlling owners (Shleifer and Vishny, 1997; Johnson et al., 2000; Claessens et al., 2002; Faccio et al., 2001; Bertrand et al., 2002; Baek et al., 2006; Bae et al., 2012). Our findings suggest that parent-appointed successions resulting from long-term tournaments within parent firms may represent an important governance channel through which such expropriation occurs.

The rest of this paper is organized as follows. Section 2 describes our hypothesis,

sample selection, and data. Section 3 presents empirical results for the frequency of management successions in subsidiaries and the tournament horizon of parent companies. Section 4 investigates the performance effects of parent-appointed successions. Section 5 presents results of additional analyses. This paper is summarized and concluded in Section 6.

2. Hypothesis, sample selection, and data

Within a tournament framework, management succession represents the awarding of the ultimate prize to the winner (Coles and Uchida, 2018). As tournaments lengthen, contestants must invest greater effort and incur higher opportunity costs to remain competitive. For the tournament to remain an effective incentive system, firms need to conduct successions frequently enough to ensure that participants continue to perceive a credible likelihood of promotion that justifies these costs. We test this idea by using Japanese data, where life-long employment and seniority system are still common.

We examine management successions in listed subsidiaries and relate these events to the tournament horizon of their parent companies. Parent firms typically possess the authority to appoint internal candidates to managerial positions within their subsidiaries, which provides a useful empirical setting. This research design helps mitigate endogeneity concerns arising from unobserved firm characteristics that may jointly affect both tournament horizons and succession frequencies. Moreover, concerns about reverse causality are attenuated because the tournament horizon of a parent firm is unlikely to be influenced by subsequent management successions in its subsidiaries. Based on this framework, we propose the following hypothesis.

Hypothesis 1: *The frequency of parent-appointed successions is positively associated with the tournament horizon of parent firms.*

Hypothesis 1 is based on the premise that parent-appointed successions are motivated primarily by the incentive needs of parent firms' internal promotion tournaments rather than by considerations of subsidiary value maximization. By construction, parent-appointed managers also possess limited experience within the subsidiary relative to managers promoted internally. This lack of subsidiary-specific experience may impair

their ability to manage the subsidiary effectively, particularly when appointments are made to support the parent firm's tournament system. Accordingly, we formulate the following hypothesis.

Hypothesis 2: *Parent-appointed successions show inferior changes in operating performance to non-parent-appointed successions, especially when the parent firm hosts long-term tournaments.*

To construct our sample, we obtain director information of Japanese listed companies from Toyokeizai Director Data from year 2002 to 2023. This database contains name, title, birthdate, the year and month joining the firm as an employee or director, the year and month being appointed as a director, main previous job, etc., for individual directors. The Japanese company law offers three institutional designs (firms with audit and supervisory boards, firms with audit committees, and firms with nominating committees), and we remove firms with nominating committees, which are relatively uncommon among Japanese companies, from the analysis due to the different management structure.³ Financial institutions are also deleted due to different financial statement formats and their stringent regulatory environments.

We identify the top manager from the director list by using the title and ranking.⁴ In Japan, *president* is the most common title for the top decision maker, partly because boards of directors have not traditionally been organizationally separated from executive officers (indeed, there were no formally designated executives until the late 1990s). Although the *CEO* title has recently become common, the president is still identified as the top manager in most cases. Accordingly, this paper uses *manager* rather than *CEO* to refer to the top manager.

³ Since the Company Law mandates firms with nominating committees to appoint executive officers, the top manager of these companies (CEO) is selected from executive officers. Meanwhile, the other institutional designs are not legally required to appoint executive officers, and the top manager is selected from directors (mostly *president*). Firms with audit and supervisory boards were the traditional institutional design, and firms with audit committee has recently increased. We remove firms with nominating committee since these firms are likely to have different promotion paths from those with the other two designs, making it difficult to create a unified promotion variable.

⁴ The Toyo Keizai Director Data are based on survey responses. The survey asks firms to report detailed information for all of their directors, and the order in which directors are listed is recorded as their ranking

After identifying the manager, we compute the length of years from the incumbent manager joining the firm as an employee or director to taking the director position (*Yr_JoinDirec*). We mainly use this variable, assuming that the length of years for the incumbent manager to become a director represents the firm's tournament policy. Also, the period from the incumbent manager taking a director position to becoming the manager is denoted by *Yr_DirecTop*. Manager age (*MgrAge*), manager tenure since assuming the manager position (*MgrTenure*), the number of directors (*Boardsize*), and the proportion of outside directors (*%Outdir*) are also obtained from this database. We also compute the percentage of inside directors younger than the incumbent manager over all directors (*%Junior*), since Coles and Uchida (2018) find a positive relationship between *%Junior* and the frequency of management successions in Japanese companies. See Appendix for definitions of variables.

The data are then merged with firm-level financial, governance, and ownership data obtained from Nikkei NEEDS FinancialQuest and Cges. After constructing the firm-level dataset, we restrict the sample to firms with at least one listed corporate shareholder holding 10% or more of the firm's outstanding shares. To assess the robustness of our results, we alternatively apply 20% and 30% ownership thresholds when defining sample firms. The results remain qualitatively unchanged across these alternative specifications, with the exception of the post-succession performance analyses under the 30% threshold, where the substantially smaller sample size reduces statistical power.

The largest corporate shareholder is designated as the parent company of a given firm. If multiple corporate shareholders hold the same ownership stake, the shareholder appearing first on the shareholder list is designated as the parent company. *Yr_JoinDirec* is computed for the subsidiary's own manager (*Yr_JoinDirec_S*) and for its parent firm (*Yr_JoinDirec_P*). For all variables, the suffixes *_S* and *_P* indicate the subsidiary and parent entities, respectively. While our tournament view predicts that *Yr_JoinDirec_S* is positively associated with the frequency of inside management successions, this relationship may stem from unobservable characteristics that are related to the optimal tournament horizon and the succession frequency in the subsidiary. Therefore, our research mainly investigates the relationship between *Yr_JoinDirec_P* and the frequency of parent-appointed successions.

We identify a management succession whenever the manager changes, regardless of the reason for the turnover. We designate a succession as parent-appointed if the incoming manager has prior work experience at the parent firm. *DSuccession_P* is an indicator

variable equal to one for firm-years in which a parent-appointed succession occurs. We also make a dummy variable that equals one for firm-years involving non-parent-appointed successions (*DSuccession_nonP*). Since our main analyses implement logit regressions using one-year lead variables of these succession dummies (*DSuccession_P_{t+1}* and *DSuccession_nonP_{t+1}*), our sample covers the period during the fiscal years 2002-2022. Firms with missing data for main regression variables are excluded. As a result, our entire sample comprises 11,714 firm-year observations from 1,264 distinct subsidiaries.

Panel A of Table 1 shows the frequency of management successions. The mean *DSuccession_P_{t+1}* is 0.08 (969 parent-appointed successions), suggesting that the average subsidiary conducts parent-appointed successions once every 12 years on average. The mean *DSuccession_nonP_{t+1}* is also 0.08 (938 non-parent-appointed successions). The average subsidiary conducts non-parent-appointed successions as frequently as parent-appointed ones. As a result, the mean *DSuccession_{t+1}*, which is a dummy variable that equals one for all succession years, is 0.16 (1907 successions). The average sample firm replaces managers once every six years. We investigate these succession events to test Hypothesis 2.

[Insert Table 1 about here]

To examine non-parent-appointed successions in greater detail, we construct an indicator variable for internal successions (*DSuccession_Int_{t+1}*), defined as non-parent-appointed successions in which the incoming manager has at least five years of prior employment experience within the subsidiary. We adopt the five-year threshold to ensure that internal successors compete with other talents in the subsidiary. Panel A indicates that sample firms implement internal successions once every 20 years, on average, as reflected by the mean value of *DSuccession_Int_{t+1}* of 0.05. This mean further implies that more than 60% of non-parent-appointed successions are classified as internal. All remaining non-parent-appointed successions are classified as external, and the indicator variable *DSuccession_Ext* equals one for firm-years involving such external successions. The mean value of *DSuccession_Ext_{t+1}* is 0.03, suggesting that sample firms conduct external successions only once every 33 years, on average.

Panel A also reports summary statistics for the tournament-related variables. The mean value of *Yr_JoinDirec_P* is 21.5 years, with a median of 28 years, indicating that incumbent managers of parent firms typically spend more than two decades between

joining the firm and attaining a director position. This long promotion horizon suggests that parent firms in our sample operate long-term tournaments, which in turn create incentives to appoint internal parent-firm talent to managerial positions in their subsidiaries in order to sustain tournament incentives.⁵ By contrast, the median value of *Yr_JoinDirec_S* is only 0.17 years (approximately two months). This finding indicates that managers of subsidiary firms tend to become directors almost immediately upon joining the subsidiary, consistent with the fact that most such managers are appointed from parent firms rather than promoted internally within the subsidiary.

Panel B reports the frequency of management successions across subsamples defined by the parent firm's tournament horizon (*Yr_JoinDirec_P*). When parent firms operate long-term tournaments—defined as promotion horizons exceeding 30 years (*Yr_JoinDirec_P* > 30)—their subsidiaries conduct parent-appointed successions approximately once every 10.5 years (mean *DSuccession_P_{t+1}* = 0.096). Consistent with Hypothesis 1, this frequency declines sharply to once every 20 years (mean *DSuccession_P_{t+1}* = 0.05) when managers at the parent firm reach directorship within 10 years (*Yr_JoinDirec_P* < 10). In contrast, subsidiaries of parent firms with short tournament horizons engage more frequently in non-parent-appointed successions, occurring approximately once every 10.6 years. This frequency decreases to once every 13.3 years (mean *DSuccession_nonP_{t+1}* = 0.075) when the parent firm hosts tournaments exceeding 30 years. Especially, Panel B of Table 1 suggests that external successions decline as the parent firm's tournament horizon lengthens. Meanwhile, long-term tournaments in parent firms do not restrain internal successions in subsidiaries.

Table 2 summarizes the remaining variables. Our regressions of *DSuccession_P_{t+1}* adopt the return on equity (*ROE*) as a performance variable, which is computed by the net income scaled by the book value of equity. Table 2 shows that parent firms report higher *ROE* than subsidiaries. To examine the performance around management successions, we also use operating income over assets (*ROA*) and operating income over sales (*OpMargin*), which are presented only for subsidiaries.

[Insert Table 2 about here]

In addition to *Yr_JoinDirec*, we employ the following variables to capture the cost of

⁵ This is in line with the Boulifa and Uchida's (2024) finding that long-tenure Japanese managers with tend to conduct equity carve-outs and spin-offs to generate listed subsidiaries, especially when the divesting firm has a concentrated ownership structure.

the tournament: (i) the number of years the incumbent manager spent in the firm before being appointed to a managerial position (*Yr_JoinMgr*); (ii) the average number of years inside directors spent in the firm before being appointed to the board (*AvYr_JoinDirec*); and (iii) the ratio of the number of employees to the number of inside directors (*EmpDirecR*). Table 2 shows that managers in parent firms are appointed to their positions after an average of 28 years of service with the firm (median = 35 years), whereas managers in subsidiary firms are appointed after an average of 13 years (median = 5.8 years). Parent firms also exhibit a substantially higher *EmpDirecR* than subsidiaries (6,572 versus 390), suggesting more intense competition among employees for promotion to directorship positions in parent firms.

The average manager of parent firms spends 6.8 years between obtaining a director position and being appointed as a manager (*Yr_DirecMgr_P*), while the average manager of subsidiaries spends 4.6 years (*Yr_DirecMgr_S*). Both for parents and subsidiaries, junior directors account for about half of the board members. Parent firms have slightly older managers than subsidiaries (63 versus 61 years old). The average parent firm has the largest shareholder holding 12.9% of its outstanding shares with the median of 8.9% (*LOWN_P*). By definition, the minimum value of the largest shareholder ownership is more than 10% (10.1%) for subsidiaries (*LOWN_S*). The average *LOWN_S* is 33%, suggesting that parent firms can exert power on management successions of their subsidiaries.

Firm size is controlled by the natural logarithm of assets (*lnAssets*). Naturally, parent firms are even larger than subsidiaries. Cash holdings (*CASH*) are computed by using cash and equivalents over assets. We compute leverage as total liabilities over assets (*Leverage*). Table 2 finds that parent firms have smaller cash holdings and higher leverage than subsidiaries. This difference potentially suggests that parents have better access to debt financing than subsidiaries. *Tobin's Q*, which is computed by the market value of common stocks and book value of liabilities over the book value of assets is adopted to control for the firm's growth opportunity and valuation. Parent firms show higher *Tobin's Q* than subsidiaries (1.1 versus 0.8).

Finally, we construct an indicator variable that equals one for firms that went public before 1990 (*TradFirm*), reflecting the view that internal employee tournaments are more prevalent among traditional firms. The collapse of Japan's asset price bubble in the early 1990s ushered in the so-called "Lost Decades," a period that substantially altered Japanese employment practices and corporate governance. We define this variable only

for parent firms. Consistent with the prevalence of long-established firms in our sample, 85% of parent firms are classified as traditional firms.

3. Long-term tournaments and management succession

3.1 Baseline results

To test Hypothesis 1 while controlling for various factors, we implement logit regressions of succession variables for the entire sample. The natural logarithm of $Yr_JoinDirec_P$, the tournament horizon of the parent firm, is adopted as a key independent variable ($lnYr_JoinDirec_P$). We also apply log transformations to the tournament horizon of the focal subsidiary ($lnYr_JoinDirec_S$), the number of years from the manager's appointment as director to assuming the management position ($lnYr_DirecMgr$), manager age ($lnMgrAge$), tenure ($lnMgrTenure$), and total assets ($lnAssets$).

The first two models of Table 3 are logit regressions for the parent-appointed succession ($DSuccession_P_{t+1}$). Model (1) does not control for parent firms' characteristics except $lnYr_JoinDirec_P$, while Model (2) adds these variables. These estimations yield a positive and statistically significant coefficient on $LOWN_S$. A larger equity stake affords parent firms greater influence over managerial appointments at their subsidiaries, thereby increasing the likelihood that parent-firm employees are selected for top management positions. After controlling for the ownership effect, both models produce positive and statistically significant coefficients on $lnYr_JoinDirec_P$, suggesting that a longer tournament horizon is associated with a higher likelihood of parent-appointed successions at subsidiaries. The number in the bracket indicates the change in the probability of the given type of management succession, when the independent variable increases by one. Model (2) suggests that a one-standard-deviation increase in $lnYr_JoinDirec_P$ (1.325) is associated with 1.2% increase in the parent-appointed succession. This economic impact is sizable, given that the unconditional probability of parent-appointed successions is 8.3%. This result is consistent with our hypothesis that parent-appointed successions are designed as an integral part of their parent firms' tournaments.

[Insert Table 3 about here]

Models (3) and (4) implement the logit regression for non-parent-appointed successions ($DSuccession_{nonP_{t+1}}$). In the framework of parent firms' tournaments, non-parent-appointed successions by their subsidiaries disincentivize contestants, by reducing their perceived probability of winning the prize. Consistent with this idea, these estimations provide a negative and significant coefficient to $\ln Yr_JoinDirec_P$. A one-standard-deviation increase in $\ln Yr_JoinDirec_P$ is associated with a 0.8% decline in non-parent-appointed successions. In contrast, we do not find strong evidence that the parent firm's equity stake ($LOWN_S$) influences the frequency of non-parent-appointed successions. Models (5) and (6) of Table 3 implement the logit regression for all management successions ($DSuccession_{t+1}$). This estimation does not offer a significant coefficient on $\ln Yr_JoinDirec_P$. Parent firms' tournaments are not influential on the frequency of total management successions in their subsidiaries, while such tournaments foster parent-appointed successions. Meanwhile, $LOWN_S$ carries a positive and statistically significant coefficient, suggesting that parent firms with larger equity stakes are more likely to replace the managers of their subsidiaries.

As for the subsidiary's own tournament variable, the regressions for the parent-appointed succession (Models (1) and (2)) offer a negative and significant coefficient on $\ln Yr_JoinDirec_S$, while the estimations for non-parent-appointed successions (Model (3) and (4)) carry a positive and significant coefficient. A one-standard-deviation increase in $\ln Yr_JoinDirec_S$ (1.46) is associated with a 3.2% reduction in parent-appointed successions and a 1.6% increase in non-parent-appointed ones. Given that internal successions account for a significant portion of non-parent-appointed successions, these findings potentially suggest that tournaments within subsidiaries also award their winners with management positions, with a caveat that the relationship may stem from unobservable omitted variables. Nevertheless, Models (5) and (6) suggest that the frequency of all successions is negatively related to $\ln Yr_JoinDirec_S$.

Models (1) and (2) provide a negative and significant coefficient to $\ln Yr_DirecMgr_S$. This is probably because parent-appointed managers are appointed as the manager soon after taking the board seat. All estimations carry a positive and significant coefficient on $\%Junior_S$, $\ln MgrAge_S$, and $\ln MgrTenure_S$. Given that junior directors are candidates for the next manager, firms holding many junior directors are ready to replace the manager. Older and longer tenure managers are more likely to be replaced. In contrast, parent firms' managerial attributes are not influential on the subsidiary's frequency of management successions.

All models engender a negative and significant coefficient on *ROE*. Although we examine routine management turnovers as well as forced ones, management successions are associated with poor performance (Kaplan and Minton, 2011; Jenter and Lewellen, 2021). It is noteworthy that the regression for parent-appointed successions (Models (1) and (2)) provides a significantly smaller coefficient than that for the other successions (Models (3) and (4)). Model (4) suggests that a one-standard-deviation decline in *ROE_S* (0.136) is associated with a 1.5% increase in the non-parent-appointed succession. This marginal effect is economically significant, given that the unconditional probability of the non-parent-appointed succession is 8%. Remarkably, this impact declines to 0.9% for parent-appointed successions. Untabulated regressions indicate that parent-appointed successions are not significantly associated with annual stock returns, whereas non-parent-appointed successions exhibit a significant negative relation with stock returns. These results are consistent with the view that parent-appointed successions primarily serve to reward winners of parent firms' promotion tournaments rather than to discipline underperforming managers.

The coefficient on *%Outdirec_S* is positive and statistically significant across all models. Given that outside directors in subsidiaries are frequently appointed by parent firms, they tend to facilitate parent-appointed successions. Consistent with this interpretation, *%Outdirec* exhibits a larger marginal effect on parent-appointed successions than on non-parent-appointed successions. Parent firms' corporate governance structures do not have a significant coefficient except for *lnBoardSize_P* in Model (6).

With respect to financial variables, parent firm size (*lnAssets_P*) is positively related to the frequency of parent-appointed successions (Model (2)), while the negative relationship is observed for non-parent-appointed successions (Model (4)). In contrast, the regression of parent-appointed successions (Model (2)) offers a negative and significant coefficient on the subsidiary's size (*lnAssets_S*), while the variable is positively associated with the frequency of non-parent-appointed successions. These findings suggest that relative size matters for management successions in subsidiaries. Large subsidiaries possess greater autonomy and bargaining power in selecting their own managers.

Cash holdings display opposite effects across succession types: while larger cash reserves by subsidiaries (*CASH_S*) are negatively associated with the frequency of parent-appointed successions (Models (1) and (2)), they are positively associated with non-

parent-appointed successions (Models (3) and (4)). A potential interpretation is that subsidiaries facing liquidity constraints seek financial support from parent firms in exchange for managerial control. We discuss this mechanism in more detail in the following section. Finally, Models (1) and (2) suggest that parent-appointed successions are conducted when the subsidiary has low *Tobin's Q*.

3.2 2SLS regression

Although subsidiaries are legally separate entities from their parent firms, concerns remain that unobserved parent-firm characteristics may be correlated with both the parent firm's tournament horizon and the likelihood of parent-appointed successions in its subsidiaries. To mitigate this concern, we employ a two-stage least squares (2SLS) approach in which the parent firm's tournament horizon (*lnYr_Join_Direc_P*) is treated as an endogenous variable.

In this analysis, we use the parent firm's largest-shareholder ownership (*LOWN_P*) as an instrumental variable. Parent firms with highly concentrated ownership are more likely to appoint managers from their major shareholders. As a result, *LOWN_P* is expected to be negatively associated with the tournament horizon in parent firms. Importantly, Table 3 indicates that *LOWN_P* is not significantly related to the frequency of parent-appointed successions in subsidiaries, supporting its validity as an instrument. We also employ as an instrument a dummy variable equal to one if the parent firm was listed before 1990 (*TradFirm_P*). Lifetime employment and internal labor-market tournaments became deeply embedded in Japanese corporations during the postwar period, and these practices tend to be more prevalent among older firms. However, the long-term economic slump (lost three decades) starting in the early 1990s made it difficult for Japanese firms to maintain the traditional employment practices. Moreover, younger firms necessarily exhibit shorter values of *Yr_Join_Direc*, as this measure cannot exceed firm age. Meanwhile, the listing year of the parent firm is unlikely to exert a direct effect on the frequency of parent-appointed successions in its subsidiaries.

Results are reported in Table 4. The first two columns present a set of 2SLS estimations in which parent-firm characteristics other than the main tournament variable (*lnYr_JoinDirec_P*) are excluded from the specification. The first-stage regression (Model (1)) yields a negative and highly significant coefficient on *LOWN_P* and a positive and statistically significant coefficient on *TradFirm_P*. The partial R-square is 0.26, indicating substantial explanatory power of the excluded instruments for the

endogenous variable. In addition, the first-stage F-statistic for the excluded instruments is highly significant, suggesting that the instruments are sufficiently relevant. The Anderson canonical correlation LR statistic is also highly significant, rejecting the null hypothesis of underidentification and confirming that the instruments are correlated with the parent firm's tournament horizon.

[Insert Table 4 about here]

The second-stage regression (Model (2)) produces a positive and statistically significant coefficient on *lnYr_JoinDirec_P*, consistent with the prediction that a longer parent-firm tournament horizon increases the likelihood of parent-appointed successions in subsidiaries. Finally, Hansen's J statistic is not statistically significant, indicating that the null hypothesis of valid overidentifying restrictions cannot be rejected and thereby providing support for the exogeneity of the instrumental variables.

Models (3) and (4) reimplement the analysis while controlling for additional parent-firm characteristics. Consistent with the baseline results, the first-stage diagnostics indicate that the instrumental variables are strongly correlated with the parent firm's tournament horizon, and the Hansen J test fails to reject the validity of the overidentifying restrictions. Importantly, Model (4) reports a positive and statistically significant coefficient on *lnYr_JoinDirec_P*, supporting Hypothesis 1.

3.3 Propensity score matching

Parent firms with longer tournament horizons may differ systematically from those with shorter tournament horizons, and these differences may be reflected in the characteristics of their subsidiaries. Consequently, the estimated effect of parent-firm tournament horizons on parent-appointed successions may be driven by these observable differences rather than by tournament horizons per se. To address this concern, we employ propensity score matching (PSM). We define a long-tournament indicator equal to one if *Yr_JoinDirec_P* exceeds 30 years and treat these observations as the treatment group. Our sample identifies 5152 companies sustaining such a long-term tournament. We then estimate the propensity score for each firm-year observation and implement nearest-neighbor matching with a caliper of 0.01. The resulting matched sample is balanced on observable characteristics, thereby reducing bias arising from observable heterogeneity.

Model (1), Panel A of Table 5 reports the covariate balance summary after the propensity score matching without replacement. It suggests that the mean and median standardized biases are 0.7% and 0.5%, respectively, and the LR chi-square statistic is statistically insignificant. The matching procedure achieves excellent balance between the treatment and control groups.

[Insert Table 5 about here]

Using this matched sample, we estimate a regression in which $DSuccession_{P_{t+1}}$ is regressed on *Treatment* (indicator for $Yr_JoinDirec_P > 30$) to assess whether longer tournament horizons of parent firms are associated with a higher likelihood of parent-appointed successions. Model (1), Panel B of Table 5 presents the regression results, producing a positive and statistically significant coefficient on *Treatment*. This finding supports our hypothesis that subsidiaries are more likely to undertake parent-appointed successions when their parent firms have long tournament horizons. We also perform propensity score matching with replacement and obtain qualitatively the same results (untabulated).

Furthermore, we conduct propensity score matching, treating the 3,096 firm-year observations with $Yr_JoinDirec_P$ shorter than 10 years as the treatment group. Model (2) of Panel A suggests that the mean and median standardized biases are 2.0% and 1.6%, respectively, and the LR chi-square statistic is statistically insignificant, indicating that the matching without replacement procedure achieves excellent balance between the treatment and control groups. Model (2) of Panel B estimates a regression in which the parent-appointed succession dummy is regressed on *Treatment* (indicator for $Yr_JoinDirec_P < 10$). *Treatment* exhibits a negative and statistically significant coefficient, suggesting that subsidiaries are less likely to undertake parent-appointed successions when their parent firms have short tournament horizons. Together, these findings support Hypothesis 1 that subsidiaries' management-succession decisions are shaped by the tournament structures of their parent firms.

[Insert Table 5 about here]

4. Performance effects of tournament-based successions

This section analyzes managerial characteristics and changes in operating performance

surrounding management successions.

Panel A of Table 6 reports the attributes of incoming and outgoing managers for the 1,907 successions identified in our sample. By construction, parent-appointed successions involve managers with less experience within the subsidiary. Consistent with this expectation, the median *Yr_JoinDirec* for incoming managers in parent-appointed successions is zero, indicating that most parent-appointed managers join the subsidiary directly as directors without prior employment experience there. In contrast, managers appointed through non-parent successions typically possess 16 to 20 years of subsidiary-level experience, suggesting that they generally advance through an internal promotion tournament within the subsidiary.

[Insert Table 6 about here]

Parent firms' lengthy screening and evaluation process tends to identify and deploy more seasoned talent, resulting in the appointment of relatively older managers to subsidiaries. However, parent-appointed managers are as old as those of non-parent-appointed managers (medians are 60 and 59 years old, respectively), although the difference is statistically significant. The small difference likely reflects the fact that non-parent-appointed managers also participate in a long-term promotion process—albeit within the subsidiary rather than the parent firm.

Panel A also suggests that outgoing managers in parent-appointed successions have relatively short experience within the subsidiary. Their median *Yr_JoinDirec* is zero and the median tenure as a manager (*MgrTenure*) is only 4 years. Japanese companies have a practice that appoints the immediately past manager as a board member with the title of *Kaicho*. *Kaicho* gives advice to the incumbent manager and is sometimes deeply involved with decision makings. Panel A suggests that only 28% of outgoing managers remains in the board as *Kaicho* after parent-appointed successions. The frequency of outgoing managers becoming *Kaicho* significantly increases to 42% after non-parent-appointed successions. This fact suggests that parent firms' successful contestants tend not to stay long in subsidiaries. Overall, both incoming and outgoing managers typically possess limited prior experience within the subsidiary, and outgoing managers exit the subsidiary's board without assuming the post-presidency role. Together, these features imply that parent-appointed successions are likely to involve less smooth managerial transitions and weaker incentives for incoming managers to improve subsidiary performance. These facts align with Hypothesis 2.

To test Hypothesis 2, we compute the operating performance change by using five-year data around the management succession. For successions occurring at $t = 0$, the performance change is computed by the following equation if no succession occurs at $t = 1$ and 2:

$$\sum_{t=1}^2 \frac{Performance_t}{2} - \sum_{t=-2}^{-1} \frac{Performance_t}{2}$$

If succession occurs at $t = 2$ and did not at $t = 1$, it is computed by:

$$Performance_{t=1} - \sum_{t=-2}^{-1} \frac{Performance_t}{2}$$

We do not compute the performance change if the firm replaces the manager at $t = 1$. *ROA* (operating income over assets) and operating income over sales (*OpMargin*) are examined to measure operating performance.

Panel A of Table 6 reports operating performance changes for parent- and non-parent-appointed management successions. Parent-appointed successions show declines in operating performance, although its mean and median values are not significantly different from zero. In contrast, non-parent-appointed successions exhibit improvements in operating performance. Importantly, we observe statistically significant differences between the two groups in performance measures.

[Insert Table 6 about here]

Panel B of Table 6 implements regression analyses. A key independent variable is an indicator variable, *DSuccession_P*, that equals one for parent-appointed successions. We use data from $t = -1$ for independent variables, including the operating performance measure. Model (1) offers a negative and significant coefficient on *DSuccession_P* using the change in *ROA* as a dependent variable. The result suggests that parent-appointed successions underperform non-parent-appointed ones by 0.6%. Similarly, Model (2) suggests that parent-appointed successions experience a 1.2% inferior change in operating margin (*OpMargin*) than non-parent-appointed ones. These findings are consistent with Hypothesis 2.

We further investigate whether parent-appointed successions are associated with poorer performance when parent firms host long-term tournaments. Specifically, we construct *DSuccession_P_LongT*, which equals one for parent-appointed successions in firms where the parent company's tournament duration exceeds 30 years. Similarly, *DSuccession_P_MiddleT* equals one for parent-appointed successions in which *Yr_JoinDirec_P* ranges from 10 to 30 years. Finally, *DSuccession_P_ShortT* takes a value of one when the new manager is appointed by a parent firm whose tournament duration is shorter than 10 years.

Models (3) and (4) of Panel B show the regression results. These estimations yield negative and statistically significant coefficients for *DSuccession_P_LongT* and *DSuccession_P_MiddleT*, whereas parent-appointed successions do not exhibit significant underperformance when the parent firm's tournament horizon is shorter than 10 years (the coefficient of *DSuccession_P_ShortT* is statistically insignificant). This finding supports our view that management successions driven by parent-firm tournaments are detrimental to subsidiary performance.

Since various factors affect post-succession performance, this analysis may not accurately capture the effect of management successions. To reduce the concern, we perform propensity score matching for management successions. Specifically, we estimate each firm's propensity to conduct a management succession using a probit model (the treatment group consists of all succession firm-years). Then, a non-succession firm-year is assigned as a matched observation to a given succession firm-year using nearest-neighbor matching with a caliper of 0.01. Panel A of Table 7 shows covariate balance summary after the matching without replacement. The mean and median standardized bias are 1.9% and 1.6%, respectively, and the LR chi-square is statistically insignificant. These measures suggest that the propensity score matching successfully constructs a balanced sample.

[Insert Table 7 about here]

Panel B of Table 7 exhibits regression results using the performance changes as dependent variables. Models (1) and (2) adopt the interaction term of *Treatment* (one for succession firm-years and zero for non-succession observations) and *DSuccession_P*. The coefficient of *Treatment* represents the difference in performance change between non-parent-appointed successions and comparable non-succession observations. These estimations provide an insignificant coefficient on *Treatment*, suggesting that non-parent-

appointed successions do not experience significantly better or worse performance changes compared to non-succession observations. Importantly, the interaction term of *Treatment* and *DSuccession_P* has a negative and significant coefficient in Models (1) and (2). Parent-appointed successions show significantly worse adjusted changes in ROA and operating margin than non-parent-appointed successions.

Models (3) and (4) replace *DSuccession_P* with the three tournament-horizon-specific dummy variables. The estimation results show negative and statistically significant coefficients on *DSuccession_P_LongT* and *DSuccession_P_MiddleT*, whereas the coefficient on *DSuccession_P_ShortT* is insignificant. These findings support our argument that parent-appointed successions are detrimental to subsidiary performance when such appointments are driven by parent-firm tournament incentives. More broadly, the results suggest that parent firms may exploit minority shareholders of listed subsidiaries by using subsidiary management positions as prizes in their internal promotion tournaments. This evidence highlights a potential dark side of both tournament-based incentives (Huang et al., 2023) and listed subsidiary structures (Boubakri et al., 2013). Parent-appointed successions arising from employee tournaments within parent firms may represent an important governance mechanism through which controlling shareholders are able to divert wealth from minority shareholders (Shleifer and Vishny, 1997; Johnson et al., 2000; Claessens et al., 2002; Faccio et al., 2001; Bertrand et al., 2002; Baek et al., 2006; Bae et al., 2012).

5. Further analyses

5.1 Alternative tournament variables

We use the number of years between an incumbent manager's entry into the firm and appointment to the board as a measure of the tournament horizon. While this variable captures the duration of the promotion tournament among employees leading to a directorship, the time required to attain a managerial position reflects the overall length of the tournament. As a robustness check, we re-estimate our main regressions using the natural logarithm of one plus the number of years between the parent firm's manager joining the firm and being appointed manager (*lnYr_JoinMgr_P*) as an alternative measure of tournament horizon.

Model (1) of Table 8 shows the logit regression results with using $DSuccession_P_{t+1}$ as a dependent variable. This estimation carries a positive and statistically significant coefficient on the tournament variable ($lnYr_JoinMgr_P$), suggesting that subsidiaries conduct parent-appointed successions more frequently as their parent firms sustain longer tournaments, represented by the longer duration for the incumbent manager to take the managerial position. Meanwhile, $lnYr_JoinMgr_S$ has a negative and significant coefficient, suggesting that subsidiaries are less likely to conduct parent-appointed successions when they host long-term tournaments by their own.

[Insert Table 8 about here]

Our tournament measure assumes that a firm's tournament horizon is reflected in the time required for the incumbent manager to attain a directorship or managerial position. However, the average promotion duration among directors may better capture the firm's overall promotion policy. Accordingly, we compute the average number of years that inside directors in the parent firm spend with the firm before being appointed to the board. Model (2) of Table 8 re-estimates the regressions by using the natural logarithm of this variable ($lnAvYr_JoinDirec_P$) as a key independent variable. This estimation engenders a positive and significant coefficient on this variable, while the variable on the subsidiary side ($lnAvYr_JoinDirec_S$) has a negative and significant coefficient.

Finally, we use the ratio of the number of employees to the number of inside directors ($EmpDirecR$) as a proxy for tournament costs. A higher $EmpDirecR$ reflects more intense competition among employees for directorship positions and, therefore, a greater need for firms to refresh management positions to sustain tournament incentives. Model (3) re-estimates the logit regression using the natural logarithm of one plus $EmpDirecR$ ($lnEmpDirecR$). Consistent with our argument, the estimation yields a positive and statistically significant coefficient on $lnEmpDirecR_P$, indicating that parent firms with higher tournament costs are more likely to appoint managers to their subsidiaries. In contrast, $lnEmpDirecR_S$ carries a negative and statistically significant coefficient, suggesting that subsidiaries facing stronger internal tournament incentives are less likely to experience parent-appointed successions.

5.2 Cash holdings around successions

The preceding analysis shows that subsidiaries with weaker liquidity positions are more likely to experience parent-appointed successions. One possible explanation is that liquidity-constrained subsidiaries rely on financial support from their parent firms and may accept parent-appointed managers in return for such assistance. Parent firms, in turn, have strong incentives to provide support to subsidiaries that offer managerial positions as part of their internal personnel allocation and promotion systems. Furthermore, parent-appointed successions may signal the parent firm's commitment to supporting the subsidiary, thereby enhancing the subsidiary's access to external financing. By contrast, parent firms may have weaker incentives to extend comparable support to subsidiaries that do not allocate managerial positions to parent-firm employees. Taken together, these arguments imply that subsidiaries experiencing non-parent-appointed successions are likely to maintain larger cash holdings as a precaution against financing constraints.

Panel A of Table 9 reports the change in *CASH* around management successions, which is computed analogously to the operating performance changes in Table 6, as the difference between the average level in the two years following the succession and the average level in the two years preceding it. The result does not indicate that subsidiaries experiencing parent-appointed successions exhibit a significant change in the level of cash holdings. By contrast, subsidiaries significantly increase cash holdings following non-parent-appointed successions. Importantly, Panel A documents a statistically significant difference in post-succession changes in cash holdings between parent-appointed and non-parent-appointed successions. This finding is consistent with the view that subsidiaries need to improve their liquidity status if they do not accept parent-appointed managers.

[Insert Table 9 about here]

Given the close business relationships between parent firms and their subsidiaries, parent firms are often able to provide financial support through trade credit arrangements. However, their incentive to extend such support may weaken when they are unable to appoint their own employees to managerial positions within the subsidiary. Panel A of Table 9 reports changes in accounts payable around management successions. The results suggest that subsidiaries experience a decline in trade credit following non-parent-appointed successions, whereas no comparable reduction is observed following parent-appointed successions.

To further examine cash holdings and access to trade credit around management

successions, Panel B reports estimates, which regress changes in these variables on succession characteristics for firm-year observations involving successions (coefficients on control variables are omitted for brevity). Model (1) yields a negative and statistically significant coefficient on *DSuccession_P*, indicating that non-parent-appointed successions experience a larger increase in cash holdings than parent-appointed successions.⁶ In contrast, Model (2) reports a negative and significant coefficient on *DSuccession_P*, suggesting that subsidiaries undergoing non-parent-appointed successions exhibit significantly larger reductions in accounts payable relative to those experiencing parent-appointed successions.

Models (3) and (4) re-estimate the specification by classifying parent-appointed successions into three groups according to the parent firm's tournament horizon. Model (3) yields negative and statistically significant coefficients on *DSuccession_P_LongT* and *DSuccession_P_MiddleT*, whereas the coefficient on *DSuccession_P_ShortT* is not statistically significant. These results are consistent with the view that subsidiaries do not need to maintain higher cash holdings when they accept managers appointed by parent firms that sustain long-term tournament incentives. Such appointments may maintain the subsidiary's access to financial support from the parent firm, thereby reducing the need for precautionary cash reserves.

Consistent with the tournament hypothesis, Model (4) yields a positive and statistically significant coefficient on *DSuccession_P_LongT*. However, the coefficient on *DSuccession_P_MiddleT* is not statistically significant, while *DSuccession_P_ShortT* exhibits a positive coefficient that is only marginally significant. It is unclear whether the observed increase in trade credit reflects subsidiaries' access to financial support from parent firms that maintain long-term tournaments.

We further conduct these regression analyses using the propensity score matched sample constructed in Table 7. Panel C of Table 9 indicates that subsidiaries increase their cash holdings by less following parent-appointed successions, particularly when the parent firm operates a relatively long-term tournament. Taken together, these findings support the view that subsidiaries increase precautionary cash holdings following non-parent-appointed successions. Consequently, concerns about liquidity shortfalls and financial constraints may encourage subsidiaries to accept parent-appointed managers,

⁶ One might argue that non-parent-appointed successions lead to larger increases in cash holdings because they outperform parent-appointed successions. However, our results reveal no significant association between changes in operating performance and changes in cash holdings.

even though such managers may not be primarily motivated to maximize subsidiary value.

5.3 Internal and external successions

Our earlier analysis shows that parent-appointed successions are associated with worse post-succession performance than non-parent-appointed successions. It is noteworthy that non-parent-appointed successions encompass two distinct forms: internal and external successions. We define internal successions as non-parent-appointed successions in which the incoming manager has at least five years of prior employment experience within the subsidiary. The five-year employment requirement is imposed to ensure that internal successions capture appointments of tournament winners within the subsidiary. Even under this restrictive definition, 589 successions (62.8%) of the 938 non-parent-appointed successions in our sample are classified as internal, with the remaining non-parent-appointed successions categorized as external.

To assess which types of non-parent-appointed successions drive these superior outcomes, we construct indicator variables for internal and external successions (*DSuccession_Int* and *DSuccession_Ext*, respectively). Internal successions may yield stronger performance improvements because incoming managers possess firm-specific knowledge and established internal networks that parent-appointed managers typically lack. In contrast, external successions may generate better performance effects if outside managers are better positioned to implement substantial organizational restructuring. To evaluate these competing hypotheses, we reimplement the regression specification in Table 6 using the above-mentioned dummy variables. This estimation allows us to distinguish performance effects across internal and external successions.

Panel A of Table 10 reports regression results. Models (1) and (2) yield a positive and significant coefficient on *DSuccession_Int*, suggesting that internal successions experience better operating performance changes than parent-appointed successions. This finding is consistent with the view that internal successions facilitate smoother managerial transitions, owing to the incoming managers' extensive firm-specific experience. Put differently, parent-appointed successions based on the parent's long-term tournaments are detrimental to subsidiary performance since incoming managers lack within-subsidiary experience.

[Insert Table 10 about here]

Model (3) examines changes in cash holdings around management successions. The estimation yields positive and statistically significant coefficients on both *DSuccession_Int* and *DSuccession_Ext*, indicating that subsidiaries increase their cash holdings following non-parent-appointed successions regardless of whether the incoming manager is promoted internally or hired from outside the firm. Notably, the coefficient on *DSuccession_Ext* is substantially larger than that on *DSuccession_Int*. Appointing an external manager who is not affiliated with the parent firm is likely to be particularly costly for the parent firm's tournament system, as it eliminates a potential promotion opportunity for parent-firm employees. As a result, such appointments may weaken the parent firm's incentives to provide financial support to the subsidiary. Anticipating reduced support, subsidiaries may respond by increasing their liquidity buffers to a greater extent following external appointments than following internal promotions.

Finally, we re-estimate the regressions using the propensity score matched sample constructed in Table 7, with interaction terms between *Treatment* and the two succession-type dummies serving as the key explanatory variables. Panel B of Table 10 reports qualitatively similar results. Models (1) and (2) produce positive and statistically significant coefficients on the interaction term between *Treatment* and *DSuccession_P_Int*, indicating that subsidiaries experiencing internal successions exhibit more favorable performance changes than those undergoing parent-appointed successions. The interaction term involving *DSuccession_P_Ext* also has a positive coefficient, although its statistical significance is only marginal.

Model (3) similarly yields positive and statistically significant coefficients on both interaction terms, with the coefficient on $Treatment \times DSuccession_P_Ext$ exceeding that on $Treatment \times DSuccession_P_Int$. These findings suggest that subsidiaries increase their cash holdings when appointing managers who are not drawn from the parent firm's tournament system, particularly when the appointees originate from external organizations. Such appointments may weaken the subsidiary's access to parent-firm support, thereby increasing the need to maintain precautionary liquidity reserves.

6. Conclusion

Effective incentive mechanisms for employees are essential for creating and sustaining competitive advantage. Yet, despite the importance of management succession in strengthening the motivational power of internal tournaments, this dimension has received limited scholarly attention. Our study contributes to filling this gap by examining the Japanese context, where lifetime employment has traditionally been widespread. We capture the tournament horizon using the number of years the incumbent manager spent with the firm before becoming a director, which reflects the implicit cost borne by contestants in long-term promotion tournaments. To reduce endogeneity concerns, we focus on listed subsidiaries and relate their management successions to the tournament horizon of their parent companies.

We find that subsidiaries are more likely to conduct parent-appointed successions when their parent firms maintain longer-term internal tournaments. This pattern suggests that managerial rotation in subsidiaries functions as an integral component of parent-firm insider tournaments. Compared with non-parent-appointed successions, parent-appointed successions are less sensitive to subsidiary performance. Moreover, parent-appointed successions are followed by weaker performance improvements than non-parent-appointed successions, especially when parent firms conduct relatively long-term tournaments. Finally, non-parent-appointed successions are associated with increased cash holdings, suggesting that subsidiaries need to improve liquidity when they do not accept management appointed from their parent firms.

This study contributes to the literature in several ways. First, it closely relates to the tournament literature (Bilinski et al., 2020; Kale et al., 2009; Kini and Williams, 2012; Shen and Zhang, 2018). Unlike prior work, we measure long-term tournaments among employees using the length of service of incumbent managers prior to becoming directors, and we link this measure to the frequency of management successions in subsidiaries. This analysis also uncovers the potential dark side of employee tournaments. Second, we add to the CEO turnover literature. While numerous studies focus on the sensitivity of forced managerial turnover to firm performance (Denis et al., 1997; Knyazeva et al., 2013; Guo & Masulis, 2015; Dasgupta et al., 2018), our analysis offers a novel perspective by showing that management turnover functions as an integral component of long-term employee tournaments. Finally, we contribute to the corporate governance literature by showing that employee tournaments may constitute a previously overlooked channel through which minority shareholder expropriation can occur (Shleifer and Vishny, 1997; Johnson et al., 2000; Claessens et al., 2002; Faccio et al., 2001; Bertrand et al., 2002; Baek et al., 2006; Bae et al., 2012).

Although our findings suggest that parent-appointed successions associated with parent-firm employee tournaments adversely affect subsidiary performance, these tournaments may nevertheless improve parent-firm performance and enhance overall group value. Accordingly, assessing the net costs and benefits of employee tournaments at the group level remains an important task for future research.

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Appendix A

Definition of variables

This appendix provides definitions of all variables. For variables measured at both the parent-firm and subsidiary levels, the suffixes *_P* and *_S* are added to the corresponding variable names, respectively. When a variable appears in natural logarithmic form, the prefix *ln* is added to the variable name.

Variable	Definition
Succession indicators	
<i>DSuccession_P</i>	Dummy variable that equals one for firm-years in which parent-appointed management successions occur (incoming manager has prior work experience at the parent firm), and zero otherwise.
<i>DSuccession_nonP</i>	Dummy variable that equals one for firm-years in which non-parent-appointed management successions occur (incoming manager has no work experience at the parent firm), and zero otherwise.
<i>DSuccession</i>	Dummy variable that equals one for firm-years in which (any types of) management successions occur, and zero otherwise.
<i>DSuccession_Int</i>	Dummy variable that equals one for firm-years in which internal successions occur (incoming manager has at least five year of prior employment experience in the firm), and zero otherwise.
<i>DSuccession_Ext</i>	Dummy variable that equals one for firm-years in which external successions occur (incoming manager is not appointed from the parent firm and has less than five year of prior employment experience in the firm), and zero otherwise.
<i>DSuccession_P_LongT</i>	Dummy variable that equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons longer than 30 years, and zero otherwise.
<i>DSuccession_P_MiddleT</i>	Dummy variable that equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons of 10 to 30 years, and zero otherwise.
<i>DSuccession_P_ShortT</i>	Dummy variable that equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons of less than 10 years, and zero otherwise.
Tournament	
<i>YrJoinDirec</i>	Number of years for the firm's incumbent manager from joining the firm (as an employee or director) to becoming the director.
<i>Yr_JoinMgr</i>	Number of years for the firm's incumbent manager from joining the firm (as an employee or director) to becoming the manager.
<i>AvYr_JoinDirec</i>	Average number of years for incumbent directors from joining the firm (as an employee or director) to becoming the director.
<i>EmpDirecR</i>	The ratio of the number of employees to the number of inside directors.
Manager attributes	
<i>Yr_DirecMgr</i>	Number of years for the incumbent manager from being appointed as a director to becoming the manager.
<i>MgrAge</i>	Manager age
<i>MgrTenure</i>	Manager tenure since taking the manager position
Governance	
<i>LOWN</i>	Percentage ownership of the largest shareholder
<i>%Junior</i>	Proportion of inside directors younger than the manager over all board members
<i>Boardsize</i>	Number of board members
<i>%OutDirec</i>	Proportion of outside directors over all board members
Performance	
<i>ROE</i>	Return on equity, computed by net income divided by book equity
<i>ROA</i>	Return on assets, computed by operating income divided by assets
<i>OpMargin</i>	Operating income over sales

Financial*Assets*

Book value of total assets

CASH

Cash and equivalents divided by the assets

LEVER

Total liabilities divided by the assets

Tobin's Q

Market value of common stocks and book value of liabilities over the book value of assets

TradFirm

Dummy variable that equals one for firms that went public before 1990, and zero otherwise

Table 1**Tournament and management succession**

Panel A summarizes the succession and tournament variables. *DSuccession_P* equals one for firm-years in which parent-appointed successions occur, and zero otherwise. *DSuccession_nonP* equals one for firm-years in which non-parent-appointed successions occur, and zero otherwise. *DSuccession* equals one for firm-years in which (any types of) management successions occur, and zero otherwise. *DSuccession_Int* equals one for firm-years in which internal successions occur, and zero otherwise. *DSuccession_Ext* equals one for firm-years in which external successions occur, and zero otherwise. Panel B summarizes these succession indicators by subsamples created by *Yr_JoinDirec_P*, which is the number of years from the parent firm's incumbent manager's entry to director appointment.

<i>Panel A: Summary of succession and tournament variables</i>						
	Mean	S.D.	Min.	Median	Max.	N
Succession indicators						
<i>DSuccession_P_{t+1}</i>	0.083	0.275	0	0	1	11714
<i>DSuccession_nonP_{t+1}</i>	0.080	0.271	0	0	1	11714
<i>DSuccession_{t+1}</i>	0.163	0.369	0	0	1	11714
<i>DSuccession_Int_{t+1}</i>	0.050	0.219	0	0	1	11714
<i>DSuccession_Ext_{t+1}</i>	0.030	0.170	0	0	1	11714
Tournament variables						
<i>Yr_JoinDirec_P</i>	21.521	13.367	0	28.417	38.167	11714
<i>Yr_JoinDirec_S</i>	8.711	12.361	0	0.167	36.167	11714
<i>Panel B: Frequency of management succession by the length of the tournament</i>						
<i>Yr_JoinDirec_P</i>	Shorter than 10 years		Between 10 and 30 years		Longer than 30 years	
	Mean	N	Mean	N	Mean	N
<i>DSuccession_P_{t+1}</i>	0.050	3096	0.093	3466	0.096	5152
<i>DSuccession_nonP_{t+1}</i>	0.094	3096	0.076	3466	0.075	5152
<i>DSuccession_{t+1}</i>	0.144	3096	0.168	3466	0.171	5152
<i>DSuccession_Int_{t+1}</i>	0.043	3096	0.050	3466	0.055	5152
<i>DSuccession_Ext_{t+1}</i>	0.051	3096	0.026	3466	0.020	5152

Table 2**Descriptive statistics: Entire sample**

This table shows summary statistics of variables. Please see Appendix for definitions. The suffixes *_P* and *_S* denote parent-firm and subsidiary variables, respectively.

	Mean	SD	Min	Median	Max	N
Tournament						
<i>Yr_JoinDirec_P</i>	21.521	13.367	0	28.417	38.167	11714
<i>Yr_JoinMgr_P</i>	28.417	13.536	0	35	59.083	11713
<i>AvYrJoinDirec_P</i>	23.737	10.072	0.217	27.242	36.467	11710
<i>EmpDirecR_P</i>	6571.9	10889.3	35.333	2258.3	61811.7	11146
<i>Yr_JoinDirec_S</i>	8.711	12.361	0	0.167	36.167	11714
<i>YrJoinMgr_S</i>	13.452	14.995	0	5.833	52.25	11714
<i>AvYrJoinDirec_S</i>	14.395	8.763	0	14.30	32.667	11712
<i>EmpDirecR_S</i>	390.015	732.9	8	144.5	4828.4	11385
Manager attributes						
<i>Yr_DirecMgr_P</i>	6.821	5.869	0	6	32.917	10947
<i>MgrAge_P</i>	63.189	5.696	44	63.667	78.583	11507
<i>MgrTenure_P</i>	5.399	6.162	0.75	3.75	35.75	11506
<i>Yr_DirecMgr_S</i>	4.667	5.372	0	3	24	11714
<i>MgrAge_S</i>	61.422	6.250	41.167	62.417	75.167	11714
<i>MgrTenure_S</i>	4.767	4.719	0.75	3.75	26.583	11714
Governance						
<i>LOWN_P</i>	0.129	0.110	0.038	0.089	0.577	11503
<i>%Junior_P</i>	0.480	0.273	0	0.5	0.95	11507
<i>Boardsize_P</i>	12.323	5.044	5	11	32	11507
<i>%OutDirec_P</i>	0.202	0.170	0	0.182	0.6	11507
<i>LOWN_S</i>	0.339	0.166	0.101	0.312	0.709	11714
<i>%Junior_S</i>	0.467	0.268	0	0.5	0.917	11714
<i>Boardsize_S</i>	8.846	3.086	4	8	20	11714
<i>%OutDirec_S</i>	0.181	0.161	0	0.167	0.6	11714
Performance						
<i>ROE_P</i>	0.079	0.103	-0.379	0.079	0.383	11494
<i>ROE_S</i>	0.058	0.136	-0.633	0.059	0.509	11714
<i>ROA_S</i>	0.047	0.050	-0.134	0.043	0.215	11707
<i>OPMargin_S</i>	0.049	0.065	-0.183	0.041	0.327	11700
Financial						
<i>Assets_P</i>	4873320	8667561	12215	1590667	5.19E+07	11455
<i>CASH_P</i>	0.103	0.083	0.009	0.082	0.439	11455
<i>LEVER_P</i>	0.610	0.172	0.150	0.633	0.937	11455
<i>Tobin's Q_P</i>	1.118	0.320	0.653	1.042	2.763	11454
<i>Assets_S</i>	134356.8	302394.9	1665	43569	2274547	11714
<i>CASH_S</i>	0.156	0.138	0.006	0.115	0.704	11714
<i>LEVER_S</i>	0.501	0.198	0.111	0.501	0.933	11714
<i>Tobin's Q_S</i>	1.132	0.633	0.514	0.960	4.826	11714
<i>TradFirm_P</i>	0.846	0.361	0	1	1	11508

Table 3**Logit regression of management successions**

This table shows logit regression results. Models (1) and (2) adopt $DSuccession_P_{t+1}$ that equals one for firm-years in which parent-appointed successions occur in the subsequent year as the dependent variable. Models (3) and (4) use $DSuccession_nonP_{t+1}$ that equals one for firm-years in which non-parent-appointed successions occur in the subsequent year. Models (5) and (6) regress $DSuccession_{t+1}$ that equals one for firm-years in which (any types of) management successions occur as a dependent variable. See Appendix for definitions of the other variables. Firm-clustering robust standard errors are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively. Numbers in brackets indicate the change in the probability of conducting the given succession when the independent variable increases by one.

	(1)	(2)	(3)	(4)	(5)	(6)
Estimation	Logit					
Dependent variable	<i>DSuccession_P_{t+1}</i>		<i>DSuccession_nonP_{t+1}</i>		<i>DSuccession_{t+1}</i>	
Tournament						
<i>lnYr_JoinDirec_P</i>	0.175*** (0.0387)	0.127*** (0.0419)	-0.132*** (0.0304)	-0.0930** (0.0389)	0.00540 (0.0243)	0.00605 (0.0289)
<i>lnYr_JoinDirec_S</i>	-0.348*** (0.0448)	-0.323*** (0.0480)	0.162*** (0.0314)	0.158*** (0.0341)	-0.0504** (0.0244)	-0.0452* (0.0262)
Manager attributes						
<i>lnYr_DirecMgr_P</i>		-0.0493 (0.0549)		-0.0610 (0.0531)		-0.0583 (0.0413)
<i>lnMgrAge_P</i>		-0.826 (0.844)		-0.633 (0.649)		-0.875 (0.595)
<i>lnMgrTenure_P</i>		0.0465 (0.0494)		-0.109** (0.0468)		-0.0524 (0.0355)
<i>lnYr_DirecMgr_S</i>	-0.225*** (0.0471)	-0.189*** (0.0505)	0.0760 (0.0470)	0.0779 (0.0511)	-0.0972*** (0.0367)	-0.0883** (0.0386)
<i>lnMgrAge_S</i>	2.969*** (0.742)	3.745*** (0.878)	1.920*** (0.675)	1.713** (0.755)	2.605*** (0.547)	2.764*** (0.622)
<i>lnMgrTenure_S</i>	0.525*** (0.0549)	0.517*** (0.0581)	0.400*** (0.0500)	0.467*** (0.0567)	0.481*** (0.0439)	0.519*** (0.0464)
Governance						
<i>LOWN_P</i>		0.376 (0.517)		-0.0333 (0.479)		0.0968 (0.365)
<i>%Junior_P</i>		0.357 (0.289)		0.147 (0.261)		0.323 (0.204)
<i>lnBoardsize_P</i>		-0.111 (0.128)		-0.205 (0.134)		-0.194** (0.0988)
<i>%OutDirec_P</i>		-0.175 (0.461)		0.643 (0.425)		0.406 (0.347)
<i>LOWN_S</i>	3.012*** (0.240)	3.191*** (0.266)	-0.460* (0.258)	-0.352 (0.290)	1.371*** (0.179)	1.488*** (0.196)
<i>%Junior_S</i>	2.429*** (0.305)	2.406*** (0.343)	1.867*** (0.265)	2.000*** (0.281)	2.322*** (0.207)	2.387*** (0.228)
<i>lnBoardsize_S</i>	-0.0370 (0.132)	-0.114 (0.140)	-0.290** (0.130)	-0.248* (0.150)	-0.176* (0.0967)	-0.192* (0.109)
<i>%OutDirec_S</i>	2.179*** (0.421)	2.346*** (0.471)	1.210*** (0.414)	1.364*** (0.447)	1.772*** (0.320)	1.918*** (0.350)
Performance						
<i>ROE_P</i>		0.367 (0.434)		-0.403 (0.413)		-0.0861 (0.319)
<i>ROE_S</i>	-0.736** (0.291)	-0.945*** (0.316)	-1.782*** (0.257)	-1.627*** (0.280)	-1.526*** (0.216)	-1.536*** (0.235)

Table 3
(Continued)

Financial						
<i>lnAssets_P</i>		0.138*** (0.0367)		-0.0723** (0.0339)		0.0158 (0.0259)
<i>CASH_P</i>		-3.020*** (0.837)		-0.0720 (0.692)		-1.231** (0.562)
<i>LEVER_P</i>		0.128 (0.328)		0.212 (0.314)		0.175 (0.243)
<i>Tobin's Q_P</i>		0.269 (0.172)		-0.149 (0.154)		0.00721 (0.132)
<i>lnAssets_S</i>	-0.0409 (0.0379)	-0.116** (0.0453)	0.109*** (0.0351)	0.164*** (0.0423)	0.0366 (0.0264)	0.0468 (0.0326)
<i>CASH_S</i>	-1.868*** (0.488)	-1.413*** (0.486)	1.145*** (0.419)	1.421*** (0.465)	-0.310 (0.345)	0.0589 (0.363)
<i>LEVER_S</i>	0.373* (0.221)	0.337 (0.256)	0.391* (0.218)	0.399* (0.233)	0.356** (0.152)	0.341** (0.169)
<i>Tobin's Q_S</i>	-0.332*** (0.107)	-0.290** (0.116)	0.101 (0.0880)	0.102 (0.0965)	-0.0475 (0.0733)	-0.0312 (0.0796)
Constant	-17.15*** (3.036)	-18.02*** (4.415)	-12.95*** (2.784)	-8.834** (3.693)	-14.83*** (2.279)	-11.95*** (3.154)
Observations	11,289	10,225	11,289	10,225	11,289	10,225
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Table 4**2SLS regression results**

This table reports the results of the two-stage regression analysis. In the first-stage regressions (Models (1) and (3)), the tournament variable, $\ln Yr_JoinDirec_P$, is treated as the dependent variable, with $LOWN_P$ and $TradFirm_P$ serving as instrumental variables. In the second-stage regressions (Models (2) and (4)), $DSuccession_P_{t+1}$ is the dependent variable, and the fitted value of $\ln Yr_JoinDirec_P$ obtained from the first stage is included as the key explanatory variable. $DSuccession_P_{t+1}$ is a dummy variable equal to one for firm-years in which a parent-appointed management succession occurs in the subsequent year. $LOWN_P$ denotes the ownership of the largest shareholder in the parent firm. $TradFirm_P$ is an indicator variable equal to one if the parent firm was publicly listed before 1990, and zero otherwise. See Appendix for definitions of the other variables. Firm-clustering robust standard errors are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
Dependent variable	1 st Stage $\ln Yr_JoinDirec_P$	2 nd Stage $DSuccession_P_{t+1}$	1 st Stage $\ln Yr_JoinDirec_P$	2 nd Stage $DSuccession_P_{t+1}$
Instrumental variable				
$LOWN_P$	-3.2277*** (0.0973)		-3.0930*** (0.1050)	
$TradFirm_P$	1.4220*** (0.0314)		1.3504*** (0.0328)	
Tournament				
$\ln Yr_JoinDirec_P$		0.0169*** (0.00386)		0.0131*** (0.00457)
$\ln Yr_JoinDirec_S$	0.0065 (0.0081)	-0.0178*** (0.00206)	0.0311*** (0.0083)	-0.0163*** (0.00220)
Manager attributes				
$\ln Yr_DirecMgr_P$			0.1712*** (0.0124)	-0.00376 (0.00313)
$\ln MgrAge_P$			-2.0081*** (0.1652)	-0.0164 (0.0384)
$\ln MgrTenure_P$			-0.2213*** (0.0116)	0.00289 (0.00303)
$\ln Yr_DirecMgr_S$	-0.0161 (0.0113)	-0.0172*** (0.00289)	-0.0092 (0.0113)	-0.0159*** (0.00302)
$\ln MgrAge_S$	0.4614*** (0.1354)	0.0784** (0.0315)	0.7108*** (0.1411)	0.102*** (0.0347)
$\ln MgrTenure_S$	-0.0447*** (0.0118)	0.0305*** (0.00324)	-0.0342*** (0.0119)	0.0300*** (0.00329)
Governance				
$\%Junior_P$			0.3783*** (0.0662)	0.0173 (0.0168)
$\ln Boardsize_P$			-0.1072*** (0.0348)	-0.00984 (0.00852)
$\%OutDirec_P$			0.0022 (0.1075)	0.00352 (0.0256)
$LOWN_S$	0.1259* (0.0645)	0.193*** (0.0161)	0.2987*** (0.0660)	0.198*** (0.0172)
$\%Junior_S$	0.0759 (0.0590)	0.142*** (0.0135)	0.0096 (0.0602)	0.140*** (0.0144)
$\ln Boardsize_S$	0.0030 (0.0344)	0.00168 (0.00805)	-0.0232 (0.0350)	-0.000495 (0.00847)
$\%OutDirec_S$	0.8213*** (0.0921)	0.0984*** (0.0210)	0.7993*** (0.0933)	0.100*** (0.0223)

Table 4
(Continued)

Performance				
<i>ROE_P</i>			0.1355 (0.1058)	0.0186 (0.0270)
<i>ROE_S</i>	0.2190*** (0.0737)	-0.0451** (0.0180)	0.2035*** (0.0752)	-0.0516*** (0.0187)
Financial				
<i>lnAssets_P</i>			0.1204*** (0.0083)	0.00440** (0.00211)
<i>CASH_P</i>			-1.0472*** (0.1618)	-0.112*** (0.0372)
<i>LEVER_P</i>			-0.3502*** (0.0740)	0.0139 (0.0182)
<i>Tobin's Q_P</i>			0.0460 (0.0349)	0.0154* (0.00796)
<i>lnAssets_S</i>	0.0908*** (0.0090)	-0.00269 (0.00235)	0.0197* (0.0102)	-0.00442* (0.00263)
<i>CASH_S</i>	-0.1426 (0.0946)	-0.0990*** (0.0243)	0.0304*** (0.0998)	-0.0769*** (0.0248)
<i>LEVER_S</i>	0.1225** (0.0564)	0.0112 (0.0139)	0.2628*** (0.0583)	0.0136 (0.0156)
<i>Tobin's Q_S</i>	-0.1467*** (0.0185)	-0.0110*** (0.00386)	-0.1136 (0.0189)	-0.0104** (0.00407)
Constant	-1.3439** (0.5424)	-0.411*** (0.132)	5.1507*** (0.7602)	-0.412** (0.182)
Partial R-square	0.262		0.226	
F-value	124.96***		105.87***	
Anderson canon. corr. LR	3497.86***		2729.58***	
Hansen J		1.486	1.617	
Observations		11,503		10,645
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Table 5

Logit regressions of management successions: Propensity score matching for parent firms' tournament

This table presents the results of the propensity score matching (PSM) analyses. Panel A reports the post-matching balance diagnostics, while Panel B presents the regression results using $DSuccession_{P_{t+1}}$ as the dependent variable. $DSuccession_{P_{t+1}}$ is a dummy variable equal to one for firm-years in which a parent-appointed management succession occurs in the subsequent year. The key independent variable is *Treatment*, an indicator variable equal to one for treated firms and zero for matched control firms. In Model (1), the treatment group consists of subsidiaries whose parent firms have tournament horizons exceeding 30 years ($Yr_JoinDirec_P > 30$). In Model (2), the treatment group consists of subsidiaries whose parent firms have tournament horizons shorter than 10 years ($Yr_JoinDirec_P < 10$). Nearest-neighbor matching is performed without replacement using a caliper of 0.01. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Covariate balance summary after matching		
	(1)	(2)
Treatment	<i>Yr JoinDirec P</i> > 30 years	<i>Yr JoinDirec P</i> < 10 years
Replacement	No	No
Pseudo R2	0.001	0.005
LR Chi-sq	9.66 (1.00)	33.90 (0.907)
Mean Standardized Bias	0.7	2.0
Median Standardized Bias	0.5	1.6
B-statistic	7.0	16.2
R-statistic	1.01	0.99
% Variance ratios	77	62
Panel B: Regression results for the matched sample		
	(1)	(2)
Dependent variable	$DSuccession_{P_{t+1}}$	$DSuccession_{P_{t+1}}$
<i>Treatment</i>	0.0143** (0.00695)	-0.0260*** (0.00791)
Constant	0.0797*** (0.00475)	0.0815*** (0.00601)
Observations	7,950	5,152
R-square	0.001	0.003
Industry FE	Yes	Yes
Year FE	Yes	Yes

Table 6**Performance change around management successions**

Panel A reports attributes of incoming and outgoing managers, and changes in operating performance (*ROA* and *OpMargin*) around management successions. The sample consists of all firm-year observations in which a management succession occurs in the subsequent year ($DSuccession_{t+1} = 1$). *ROA* is return on assets, defined as operating income divided by total assets. *OpMargin* is operating margin, computed as operating income divided by sales. Panel B presents regression results in which changes in operating performance are the dependent variables. Key independent variables are binary variables for succession types. *DSuccession_P* equals one for parent-appointed successions, and zero for non-parent-appointed successions. *DSuccession_P_LongT* equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons longer than 30 years, and zero otherwise. *DSuccession_P_MiddleT* equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons between 10 and 30 years, and zero otherwise. *DSuccession_P_ShortT* equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons of less than 10 years, and zero otherwise. Definitions of the remaining variables are provided in the Appendix. Robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

<i>Panel A: Summary statistics</i>								
	Parent-appointed successions			Non-parent appointed successions			Difference test	
	Mean	Median	N	Mean	Median	N	t-value	Z-value
Incoming manager								
<i>Yr_JoinDirec</i>	0.937	0	969	16.627	20.167	938	33.641***	24.946***
<i>MgrAge</i>	59.484	60	969	58.141	59.417	938	-5.267***	-4.265***
Outgoing manager								
<i>Yr_JoinDirec</i>	3.111	0	969	12.304	3.167	938	17.976***	15.764***
<i>MgrAge</i>	64.545	65.167	969	64.242	65.417	938	-1.141	1.543
<i>MgrTenure</i>	5.119	4.167	969	6.366	5.208	938	6.210***	5.631***
<i>Become Kaicho</i>	0.279***	0	969	0.418	0	938	6.453***	6.385***
Change in								
<i>ROA (%)</i>	-0.250	0.001	736	0.313	0.294	740	2.449**	1.950*
<i>t/Z-value</i>	-1.529	-0.188		1.937*	2.431**			
<i>Operating Margin (%)</i>	-0.278	0.076	736	0.260	0.324	739	2.264**	1.992**
<i>t/Z-value</i>	-1.619	0.310		1.582	2.903***			

Table 6
(Continued)

<i>Panel B: Regression results</i>				
	(1)	(2)	(3)	(3)
Sample	<i>DSuccession_{t+1} = 1</i>			
Dependent variable	Change in	Change in	Change in	Change in
Performance	<i>ROA (%)</i>	<i>OpMargin (%)</i>	<i>ROA (%)</i>	<i>Operating Margin (%)</i>
Succession type				
<i>DSuccession_P</i>	-0.635*** (0.238)	-0.679*** (0.251)		
<i>DSuccession_P_longT</i>			-0.567** (0.263)	-0.678** (0.292)
<i>DSuccession_P_MiddleT</i>			-0.727*** (0.264)	-0.706** (0.302)
<i>DSuccession_P_ShortT</i>			-0.676 (0.591)	-0.626 (0.520)
Governance				
<i>LOWN_S</i>	0.670 (0.686)	0.679 (0.837)	0.667 (0.686)	0.681 (0.835)
<i>lnBoardsize_S</i>	0.190 (0.375)	-0.225 (0.406)	0.185 (0.377)	-0.227 (0.408)
<i>%OutDirec_S</i>	0.518 (1.170)	0.0913 (1.121)	0.477 (1.154)	0.0944 (1.127)
Performance				
<i>Performance_S</i>	-30.35*** (3.626)	-27.99*** (4.837)	-30.37*** (3.627)	-27.96*** (4.832)
Financial				
<i>lnAssets_S</i>	0.103 (0.121)	0.235** (0.112)	0.105 (0.115)	0.237** (0.111)
<i>CASH_S</i>	-0.372 (1.620)	-1.175 (1.888)	-0.375 (1.622)	-1.175 (1.887)
<i>LEVER_S</i>	-0.616 (0.713)	-1.595* (0.850)	-0.626 (0.715)	-1.596* (0.852)
<i>Tobin's Q_S</i>	0.744 (0.487)	0.605 (0.438)	0.747 (0.485)	0.603 (0.435)
Constant	-14.35*** (1.673)	-6.925*** (1.772)	-14.32*** (1.631)	-6.935*** (1.739)
Observations	1,476	1,475	1,476	1,475
R-squared	0.190	0.174	0.190	0.174
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Table 7

Performance changes around management successions: Propensity score matching

This table reports the results of the propensity score matching (PSM) analyses. The treatment group consists of subsidiary firm-year observations that experience a management succession in the subsequent year ($DSuccession_{t+1} = 1$). Nearest-neighbor matching is performed without replacement using a caliper of 0.01. Panel A reports post-matching balance diagnostics, while Panel B presents regression results in which changes in operating performance (ROA and $OpMargin$) serve as the dependent variables. ROA is return on assets, measured as operating income divided by total assets. $OpMargin$ is operating margin, measured as operating income divided by sales. $Treatment$ is an indicator variable equal to one for treated firms and zero for matched control firms. Key independent variables are interaction terms of $Treatment$ and succession type dummies. $DSuccession_P$ equals one for parent-appointed successions, and zero for non-parent-appointed successions. $DSuccession_P_LongT$ equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons longer than 30 years, and zero otherwise. $DSuccession_P_MiddleT$ equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons between 10 and 30 years, and zero otherwise. $DSuccession_P_ShortT$ equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons of less than 10 years, and zero otherwise. Definitions of all other variables are provided in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Covariate balance summary after matching				
Treatment	DSuccession _{t+1} = 1			
Replacement	No			
Pseudo R2	0.003			
LR Chi-sq (p-value)	18.37 (1.00)			
Mean Standardized Bias	1.9			
Median Standardized Bias	1.6			
B-statistic	13.9			
R-statistic	0.93			
% Variance ratios	21			
Panel B: Logit regression results				
	(1)	(2)	(3)	(3)
Dependent variable	Change in	Change in	Change in	Change in
Performance	ROA (%)	OpMargin (%)	ROA (%)	OpMargin (%)
Treatment	0.123 (0.219)	0.0296 (0.226)	0.123 (0.219)	0.0296 (0.227)
Treatment*DSuccession_P	-0.589*** (0.227)	-0.568** (0.230)		
Treatment*DSuccession_P_LongT			-0.573** (0.251)	-0.610** (0.268)
Treatment*DSuccession_P*MiddleT			-0.709** (0.278)	-0.639** (0.317)
Treatment*DSuccession_P_ShortT			-0.391 (0.614)	-0.282 (0.523)
Constant	0.208 (0.140)	0.256* (0.145)	0.208 (0.140)	0.256* (0.145)
Observations	2,695	2,697	2,695	2,697
R-squared	0.003	0.003	0.003	0.003
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Table 8
Alternative tournament variables

This table shows logit regression results using $DSuccession_{P_{t+1}}$ as the dependent variable. $DSuccession_{P_{t+1}}$ equals one for firm-years in which a parent-appointed succession occurs in the subsequent year, and zero otherwise. As for tournament variables, Model (1) uses the natural logarithm of the number of years from the firm's incumbent manager joining the firm to assuming the manager position ($lnYr_JoinMgr$). Model (2) uses the natural logarithm of the mean number of years from the firms' directors joining the firm to becoming a director ($lnAvYr_JoinDirec$). Model (3) adopts the ratio of the number of employees to the number of inside directors ($EmpDirecR$). See Appendix for definitions of the other variables. Firm-clustering robust standard errors are in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Dependent variable	(1)	(2)	(3)
	Logit $DSuccession_{P_{t+1}}$	Logit $DSuccession_{P_{t+1}}$	Logit $DSuccession_{P_{t+1}}$
Tournament			
$lnYr_JoinMgr_P$	0.112** (0.0528)		
$lnAvYr_JoinDirec_P$		0.323*** (0.0919)	
$lnEmpDirecR_P$			0.143** (0.0624)
$lnYr_JoinMgr_S$	-0.371*** (0.0330)		
$lnAvYr_JoinDirec_S$		-0.316*** (0.0641)	
$lnEmpDirecR_S$			-0.0910 (0.0695)
Manager attributes			
$lnYr_DirecMgr_P$		-0.0275 (0.0554)	-0.00614 (0.0570)
$lnMgrAge_P$	-1.607** (0.773)	-1.676** (0.847)	-1.745** (0.849)
$lnMgrTenure_P$	0.0337 (0.0477)	0.0388 (0.0494)	0.0270 (0.0516)
$lnYr_DirecMgr_S$		-0.350*** (0.0457)	-0.394*** (0.0480)
$lnMgrAge_S$	3.989*** (0.823)	4.509*** (0.876)	5.120*** (0.945)
$lnMgrTenure_S$	0.525*** (0.0558)	0.480*** (0.0581)	0.501*** (0.0605)
Governance			
$LOWN_P$	0.136 (0.464)	0.114 (0.521)	-0.206 (0.519)
$\%Junior_P$	0.461* (0.280)	0.483* (0.293)	0.524* (0.299)
$lnBoardsize_P$	-0.0806 (0.127)	-0.158 (0.132)	0.0335 (0.145)
$\%OutDirec_P$	0.218 (0.395)	-0.104 (0.468)	-0.157 (0.479)
$LOWN_S$	3.353*** (0.253)	3.194*** (0.283)	3.598*** (0.285)
$\%Junior_S$	2.306*** (0.319)	2.401*** (0.350)	2.239*** (0.354)
$lnBoardsize_S$	-0.0928 (0.137)	0.0279 (0.149)	-0.163 (0.156)
$\%OutDirec_S$	2.341*** (0.449)	2.162*** (0.486)	2.446*** (0.492)

Table 8
(Continued)

Performance			
<i>ROE_P</i>	0.336 (0.418)	0.212 (0.428)	0.524 (0.448)
<i>ROE_S</i>	-0.848*** (0.303)	-0.898*** (0.311)	-0.838** (0.328)
Financial			
<i>lnAssets_P</i>	0.147*** (0.0361)	0.164*** (0.0383)	0.0923 (0.0625)
<i>CASH_P</i>	-3.105*** (0.825)	-2.807*** (0.860)	-3.046*** (0.889)
<i>LEVER_P</i>	0.0542 (0.317)	0.0877 (0.342)	-0.0190 (0.361)
<i>Tobin's Q_P</i>	0.198 (0.179)	0.266 (0.175)	0.158 (0.192)
<i>lnAssets_S</i>	-0.130*** (0.0437)	-0.156*** (0.0456)	-0.0989 (0.0738)
<i>CASH_S</i>	-1.341*** (0.466)	-1.443*** (0.497)	-1.556*** (0.512)
<i>LEVER_S</i>	0.386 (0.247)	0.341 (0.274)	0.356 (0.285)
<i>Tobin's Q_S</i>	-0.319*** (0.113)	-0.299** (0.119)	-0.320** (0.128)
Constant	-15.96*** (4.072)	-17.68*** (4.547)	-19.89*** (4.744)
Observations	10,964	10,219	9,806
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Table 9

Cash holdings and trade credit

Panel A reports changes in cash holdings (*CASH*) and accounts payable, each scaled by total assets, around management successions. Panel B presents regression results using these changes as the dependent variables. The sample consists of all firm-year observations in which a management succession occurs in the subsequent year ($DSuccession_{t+1} = 1$). The key explanatory variables are indicator variables for the succession type. $DSuccession_P$ equals one for parent-appointed successions, and zero for non-parent-appointed successions. $DSuccession_P_LongT$ equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons longer than 30 years, and zero otherwise. $DSuccession_P_MiddleT$ equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons between 10 and 30 years, and zero otherwise. $DSuccession_P_ShortT$ equals one for parent-appointed successions in subsidiaries whose parent firms have tournament horizons of less than 10 years, and zero otherwise. Panel C re-estimates the regressions using the propensity score matched (PSM) sample constructed in Table 7. *Treatment* is an indicator variable equal to one for firms that experience a management succession in the subsequent year and zero otherwise. The key explanatory variables are the interaction terms between *Treatment* and the succession-type indicators described above. Definitions of the remaining variables are provided in the Appendix. Robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Summary statistics								
	Parent-appointed successions			Non-parent appointed successions			Difference test	
	Mean	Median	N	Mean	Median	N	t-value	Z-value
Change in								
CASH (%)	0.043	0.000	738	1.019	0.216	740	3.034***	3.107***
T/Z-value	0.232	-0.057		3.862***	4.100***			
Accounts payable/Assets (%)	-0.100	-0.041	687	-0.629	-0.475	595	-2.535**	-2.662***
t/Z-value	-0.735	-1.382		-3.957***	-4.780***			
Panel B: Regression results for the succession sample								
Sample	(1)		(2)	(3)	(4)			
Dependent variable	Change in CASH (%)		Change in Accounts payable/Assets (%)	Change in CASH (%)	Change in Accounts payable/Assets (%)			
DSuccession_P	-1.204*** (0.349)		0.733*** (0.214)	-1.133*** (0.357)	0.909*** (0.248)			
DSuccession_P_LongT				-1.574*** (0.387)	0.413 (0.265)			
DSuccession_P_MiddleT				-0.700 (0.827)	0.796* (0.412)			
DSuccession_P_ShortT				7.304*** (2.451)	-4.202*** (1.495)			
Constant	7.456*** (2.447)		-4.255*** (1.515)					
Control variables	Yes		Yes	Yes	Yes			
Observations	1477		1282	1477	1282			
R-squared	0.078		0.183	0.079	0.184			
Industry FE	Yes		Yes	Yes	Yes			
Year FE	Yes		Yes	Yes	Yes			

Table 9
(Continued)

<i>Panel C: Regression results for the PSM-matched sample</i>				
Sample	(1)	(2)	(3)	(4)
Dependent variable	Change in CASH (%)	PSM sample (Treatment: $DSuccession_{t+1} = 1$) Change in Accounts payable/Assets (%)	Change in CASH (%)	Change in Accounts payable/Assets (%)
<i>Treatment</i>	0.154 (0.326)	0.0635 (0.198)	0.154 (0.326)	0.0635 (0.198)
<i>Treatment*DSuccession_P</i>	-0.934*** (0.343)	0.514** (0.206)		
<i>Treatment*DSuccession_P_LongT</i>			-0.853** (0.351)	0.498** (0.240)
<i>Treatment*DSuccession_P_MiddleT</i>			-1.253*** (0.378)	0.298 (0.266)
<i>Treatment*DSuccession_P_ShortT</i>			-0.545 (0.824)	0.990** (0.430)
Constant	0.825*** (0.196)	-0.691*** (0.125)	0.825*** (0.196)	-0.691*** (0.125)
Observations	2,698	2,240	2,698	2,240
R-squared	0.004	0.005	0.004	0.006
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Table 10**Internal and external successions**

This table reports regression results examining changes in operating performance (*ROA* and *OpMargin*) and cash holdings (*CASH*) around management successions. *ROA* is return on assets, measured as operating income divided by total assets. *OpMargin* is operating margin, measured as operating income divided by sales. *CASH* is defined as cash and equivalents scaled by assets. In Panel A, the sample consists of all firm-year observations in which a management succession occurs in the subsequent year ($DSuccession_{t+1} = 1$). The key independent variables are indicator variables for internal successions ($DSuccession_Int$) and external successions ($DSuccession_Ext$). Panel B presents results based on the propensity score matched (PSM) sample described in Table 7, where the treatment group consists of firm-year observations that experience a management succession in the subsequent year ($DSuccession_{t+1} = 1$). *Treatment* is an indicator variable equal to one for treatment firms and zero for control firms. Definitions of all other variables are provided in Appendix A. Robust standard errors clustered at the firm level are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

<i>Panel A: Regression results for the succession sample</i>			
Sample Dependent variable	(1)	(2)	(3)
	Change in ROA (%)	$DSuccession_{t+1} = 1$ Change in Operating income/Sales (%)	Change in CASH (%)
<i>DSuccession_Int</i>	0.695*** (0.246)	0.760*** (0.270)	0.751** (0.369)
<i>DSuccession_Ext</i>	0.531 (0.369)	0.537 (0.372)	2.000*** (0.561)
Constant	-15.01*** (1.669)	-7.626*** (1.765)	5.652** (2.409)
Control variables	Yes	Yes	Yes
Observations	1,476	1,475	1,477
R-squared	0.190	0.157	0.082
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
<i>Panel B: Regression results for the PSM-matched sample</i>			
Sample Dependent variable	(1)	(2)	(3)
	Change in ROA (%)	PSM sample ($DSuccession_{t+1} = 1$) Change in Operating income/Sales (%)	Change in CASH (%)
<i>Treatment</i>	-0.466** (0.215)	-0.538** (0.224)	-0.780*** (0.269)
<i>Treatment*DSuccession_P_Int</i>	0.487** (0.224)	0.503** (0.244)	0.657** (0.319)
<i>Treatment*DSuccession_P_Ext</i>	0.782* (0.402)	0.691* (0.379)	1.463** (0.646)
Constant	0.208 (0.140)	0.256* (0.145)	0.825*** (0.196)
Observations	2,695	2,697	2,698
R-squared	0.003	0.003	0.005
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes