Six Decades of CEO Successions: The Importance of Being an Insider

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Spanning six decades of widely varying expectations of CEO behavior, we examine the changing nature of succession patterns in U.S. firms. We investigate how the choice between an internal or external candidate influences strategically critical decisions. We find that firm size, fixed assets, and accounting performance are associated with a greater likelihood of internal appointments. ROA and Tobin's q are significantly higher for firms with internal CEOs. Internal CEOs prefer to pay dividends, spend less on R&D, but outspend with capital expenditures. Internal CEOs make fewer merger offers, tend to buy larger firms, and pay less often with cash.

INTRODUCTION

When trying to hire a new Chief Executive Officer (CEO), a firm can promote an insider to that position or decide upon an external succession. Although the corporate finance and management literatures contain numerous studies examining the choice between an internal and external CEO succession (Dalton & Kesner, 1983; Borokhovich, Parrino & Trapani, 1996; Taylor, 2010; Kaplan, Klebanov & Sorensen, 2011), they only emphasize an analysis of cross-sectional firm differences for the selection choice. Other studies of CEO succession are limited by the length of their time-series. Parrino's (1997) examination period is 1969-1989 while Huson, Parrino, and Starks (2001) limit their analysis to 1971 to 1994. Denis and Denis (1995) focus on executive termination and restrict themselves to a four-year sample period, 1985-1989. Consequently none of these existing studies are able to determine what effect that changes in required and expected CEO behaviors have upon succession patterns. But, even more significantly, there is no major longitudinal study of the effect that CEO successions have on strategic corporate decisions such as dividends, capital expenditures, and merger and acquisition. This study seeks to correct these omissions in the literature and provide us with a more comprehensive understanding of both the determinants and effect of CEO succession choice.

Correcting that omission is critical because of a variety of events that have occurred in the legal and business environments, changing how CEOs must now behave. The rise of hedge funds and their activist investors in the 1990s reflects an increased demand by investors that CEOs focus even more on value creation (Brav, Jiang, Partnoy & Thomas, 2008). CEOs are held accountable by the hedge fund investors

in their firm according to the rigorous metrics of share price growth and earnings performance. Failure to deliver the required improvements often triggers the hedge fund to aggressively seek the CEO removal. The activism of hedge funds is a new check on the behavior of CEOs, changing the bottom line expectations historically required of a firm's senior executive.

The passage of SOX in 2002 signaled that regulators and investors now demanded increased corporate accountability, with even greater responsibilities placed on CEOs. CEOs are now required to personally sign the firm's financial statements, making them personally liable for their veracity. Beyond the legal implications of this requirement, it is also symbolic of a new set of expectations regarding CEO oversight, understanding, and decision-making regarding corporate operations. Regulators and their investors would no longer tolerate CEOs delegating their ultimate responsibility for the firm's financing practices and performances to others.

Further, the recent attention that has been directed at executive compensation (Cai & Walkling, 2011; Ferri & Maber, 2013) shows that it is not business as usual for corporate CEOs. Proposals for a "say on pay" and greater accountability on executive compensation payouts show that expectations for CEOs are changing. Increasingly, shareholders are demanding that CEOs justify their salaries by the delivery of greater corporate value and efficiency.

These changing expectations for CEOs have important implications for the choice between internal and external successions. The demand for greater accountability by CEOs emphasizes the ease with which internal candidates can be screened for a history of ethical behavior. It is more difficult to complete a corresponding assessment for external candidates. The structural changes and performance improvement demanded by hedge funds might be more easily delivered by an external hire who is less committed to current business practices. Further, the implementation of new salary review processes or the benchmarking of compensation against performance metrics might be more acceptable to an external candidate than one who has advanced through the current process.

But, there also exist important theoretical arguments regarding the preferred choice between an internal and external CEO. Vancil (1987) and Cannella and Lubatkin (1993) contend that there is less organizational disruption or "turbulence" when the leadership transfer occurs internally. That is, internal candidates have significant company-specific human capital that allows them to easily assume the CEO role and execute the firm's strategies without interruption. Ocasio (1999) argues that an internal candidate can obtain on the job training through access to the incumbent CEO that an external candidate lacks. The choice of an internal candidate might also signal greater stability to the firm's stakeholders since it suggests that the succession process is under control (Cannella & Lubatkin, 1993).

Alternatively, externally selected CEOs have the potential to bring unique value to the firm (Kesner & Sebora, 1994; Finkelstein & Hambrick, 1996). An outsider CEO can offer new ideas or perspectives that would be difficult for an, internally selected, heir apparent to offer. Further, an external CEO's views and experience have not been shaped by the firm's current policies or practices. This makes it easier for an external CEO to be innovative and overcome organizational inertia. An external CEO might also be more capable of challenging existing power blocks or internal political coalitions to advance organization change.

Given the uncertainty regarding the relative value provided by internal and external CEOs, this study constructs a lengthy time-series of CEO successions to address two research questions. First, has the high rate of internal corporate successions been the norm or is it largely a recent phenomenon due to the performance expectations of hedge funds and more demanding governance requirements? Second, how does succession type affect strategically important corporate finance decisions such as dividend distributions, investment policy, and merger activity?

We obtain a number of important findings regarding the choice of successor origin and its effect on major corporate decisions. We find during our 60 year sample period that internal succession is the norm, with over 78% of all successions filled by an internal candidate. We find that the majority of CEO successions are internal, regardless of firm age. Further, we observe that internally appointed CEOs remain in their positions by one and half years longer than their external peers. We discover that forced turnover is much more common in firms that make external appointments. Departing CEOs followed by

internal successors are older by about four years compared to those who are succeeded by external hires. It is also more likely that the departing CEO's age is greater than 60 for cases of internal successions. This suggests that internal turnovers are more likely to occur as part of a planned succession program. Further, we determine that firms with internal succession have larger boards and higher overall valuations as measured by Tobin's q.

We identify a number of significant determinants of the choice between an internal and external CEO. We find that larger firm and board size, an older departing CEO, a higher percentage of fixed assets, and stronger firm performance are associated with a greater likelihood of an internal appointment. Firms with greater leverage and a more independent board are less likely to pursue internal appointments. Forced turnover also significantly reduces the likelihood that the successor is internally selected.

We also determine how successor type can influence strategically critical financial decisions. Internal CEOs prefer to pay dividends and to pay them at a higher level than an external CEO. Internally selected CEOs tend to spend less on R&D, but outspend their externally appointed peers in capital expenditures. Firms that are led by internally selected CEOs, or have a history of internal CEOs, participate less often in the merger market. We observe, however, that when firms with internal CEOs do make acquisitions, they tend to be larger in size and less often paid for with cash.

The remainder of the study is organized as follows. The following section discusses our data and sample construction procedures. Section 3 documents the patterns in executive successions over our six decade sample period. Section 4 provides an empirical analysis of the valuation and performance consequences based on succession type. Sections 5, 6, and 7 respectively, focus on the broader implications of successor type for dividend practices, investment behavior, and acquisition policy. Section 8 concludes with a summary and a discussion of the implications of our findings.

DATA AND SAMPLE CONSTRUCTION

The sample used in this study includes all CEO successions at S&P 500 firms over the 1951-2010 period. We construct our sample by combining three major databases. Successions that occur during the 1951-1969 period are obtained from *Mergent* Online. CEO successions between 1970 and 1994 are obtained from Huson et al. (2001), who construct their sample based on the *Forbes* annual compensation surveys and the *Wall Street Journal Index*. Lastly, we use S&P's *Execucomp* database to identify CEO turnovers for the period of 1995-2010. For each of these turnovers we require that the name of the departing and incumbent CEO are available. After excluding turnovers that involve an interim CEO (i.e., those who held CEO position for less than one year), we obtain a sample of 2,524 CEO turnovers.

We classify new CEOs as being either internal or external based on the length of their tenure with the firm at the time of their appointment. Consistent with Parrino (1997) and Huson et al (2001), new CEOs who have been with the firm for one year or less at the time of appointment are classified as external. All other CEOs are considered to be internal selections.

In some regressions, we control for whether the turnover is forced or voluntary. A three-step process is used to identify forced departures, following Parrino (1997) and Huson et al. (2001). First, if news articles from a *Factiva* search directly mention that the CEO is fired, ousted, forced from the position, or departs due to unspecified policy differences, then the turnover is classified as forced. Second, for the remaining cases, the succession is classified as forced if the departing CEO is under age 60 and news articles announcing the succession: (1) do not report the reason for the departure as involving death, poor health, or the acceptance of another position (elsewhere or within the firm), or (2) reports that the CEO is retiring, but does not announce the retirement at least six months before the succession. Third, the circumstances surrounding the departures of the second group are further investigated by searching *Factiva* for relevant news articles. These successions are reclassified as voluntary, if the incumbent takes a comparable position elsewhere or departs for previously undisclosed reasons unrelated to the firm's activities. Due to difficulties associated with news searches for the early period of our sample, we are able to identify forced versus voluntary turnovers only for the post-1970 period. Consequently, all the analyses that employ the forced turnover indicator variable are limited to the years between 1971 and 2010.

Information on the CEO's age and tenure are obtained from the *Forbes* surveys, *Wall Street Journal* announcements, Marquis *Who's Who* publications, and Dun and Bradstreet's *Reference Book of Corporate Managements* for the 1951-1994 period. We use the *Execucomp* and *BoardEx* databases to obtain this information for the later part of our sample period. For those CEOs who remain in office as of 31 December 2010, we compute their tenure as of this date.

We categorize firms into three groups based on the regularity of internal successions. Using a thirty-year rolling window, we calculate the fraction of internal successions among all successions that occur during the past 30 years for each year and firm.[1] We annually classify a firm as *Predominant Insider Focus (PIF)* firm, if this fraction is equal to one (i.e., all successions over the past 30 years are internal). Similarly, a firm is classified as a *Predominant Outsider Focus (POF)* firm, if this fraction equals zero (i.e., all successions over the past 30 years are external). Due to the data requirements associated with the construction of these classifications, the earliest year for which the PIF and POF measures are obtained is 1981. Therefore, all analyses that include the PIF and POF measures are limited to the sub-period from 1981 to 2010. Of the 7,540 firm-years for which PIF and POF measures are available, 74.1% are classified as PIF and 7.5% are classified as POF. This pattern is consistent with the fact that close to 80% of all successions in our sample are internal.

Our other variables are obtained from several widely used databases. All firm-level financial and accounting data come from the *Compustat* database. Data on firm-level board and governance characteristics are obtained from Huson et al. (2001) for the sub-period spanning 1971 to 1995, and from the *RiskMetrics* database for the sub-period from 1996 to 2010.[2] Unfortunately, board and governance characteristics are not available for the earlier period. Therefore, we use the post-1970 sub-period whenever we include board and governance variables in the analysis. Lastly, we use the *SDC Platinum* database to gather data on merger and acquisition activity.

PATTERNS IN EXECUTIVE SUCCESSION

In this section we examine 60 years' worth of CEO successions among our sample firms to determine whether there are patterns or trends in the replacement of corporate CEOs. In Panel A of Table 1, we present a time series of CEO turnover across our sample period, 1951-2010. We immediately notice that the majority of successions are by internal candidates and that such a pattern is consistent over the entire sample period. This pattern is also confirmed in Panel A of Figure 1 where we observe the consistently high percentage of internal appointments for each of our sample years. The lowest percentage for internal succession occurs in 1953 when only half the successions are internal. If we eliminate those years with ten or fewer CEO replacements, then the lowest annual percentage for internal successions is 63.9% occurring in 1990. The average annual percent of CEO successions filled by internal candidates over the entire sample period is 78.8%.

In Panel B of Table 1, we provide an aggregated view of executive succession by decade and highlights two major patterns in the data. First, it emphasizes the consistency in the corporate preference for internal candidates to serve as CEOs; the average percent of firms selecting an internal CEO by decade varies within a narrow range of 72.7% (2000s) to a high of 86.1% (1970s). Second, in spite of the high percentage of internal successions, there appears to be a trend towards more external appointments. The decade average percentage of internal successions have been declining steadily from a high in the 1970s. Indeed, the immediate past decade of 2001-2010 exhibits the lowest incidence of internal CEOs for the six decades of our study.

TABLE 1
DISTRIBUTION OF SUCCESSION TYPE BY YEAR AND DECADE

This table presents a time series of CEO successions across our sample period, 1951-2010. The sample consists of 2,524 successions within S&P 500 companies during the sample period. In Panel A we provide an annual distribution of successions while Panel B presents the distribution by decade.

Year	Total Number of Successions	Number of Internal Successions (Percent of Total)		Number of External Successions (Percent of Total)	
Panel A: Annual distribution of succession type					
1951	7	5	(71.4)	2	(28.6)
1952	10	9	(90.0)	1	(10.0)
1953	2	1	(50.0)	1	(50.0)
1954	6	4	(66.7)	2	(33.3)
1955	3	3	(100.0)	0	(0.0)
1956	2	2	(100.0)	0	(0.0)
1957	9	7	(77.8)	2	(22.2)
1958	40	32	(80.0)	8	(20.0)
1959	30	27	(90.0)	3	(10.0)
1960	41	30	(73.2)	11	(26.8)
1961	35	28	(80.0)	7	(20.0)
1962	32	23	(71.9)	9	(28.1)
1963	45	33	(73.3)	12	(26.7)
1964	33	27	(81.8)	6	(18.2)
1965	50	38	(76.0)	12	(24.0)
1966	41	35	(85.4)	6	(14.6)
1967	41	36	(87.8)	5	(12.2)
1968	14	11	(78.6)	3	(21.4)
1969	15	12	(80.0)	3	(20.0)
1970	9	5	(55.6)	4	(44.4)
1971	53	46	(86.8)	7	(13.2)
1972	52	43	(82.7)	9	(17.3)
1973	49	43	(87.8)	6	(12.2)
1974	46	38	(82.6)	8	(17.4)
1975	46	40	(87.0)	6	(13.0)
1976	46	41	(89.1)	5	(10.9)
1977	49	44	(89.8)	5	(10.2)
1978	52	44	(84.6)	8	(15.4)
1979	58	49	(84.5)	9	(15.5)
1980	58	50	(86.2)	8	(13.8)
1981	54	48	(88.9)	6	(11.1)
1982	47	45	(95.7)	2	(4.3)
1983	63	58	(92.1)	5	(7.9)
1984	53	44	(83.0)	9	(17.0)
1985	61	46	(75.4)	15	(24.6)
1986	53	48	(90.6)	5	(9.4)
1987	69	56	(81.2)	13	(18.8)
1988	83	62	(74.7)	21	(25.3)
1989	56	41	(73.2)	15	(26.8)
1990	61	39	(63.9)	22	(36.1)

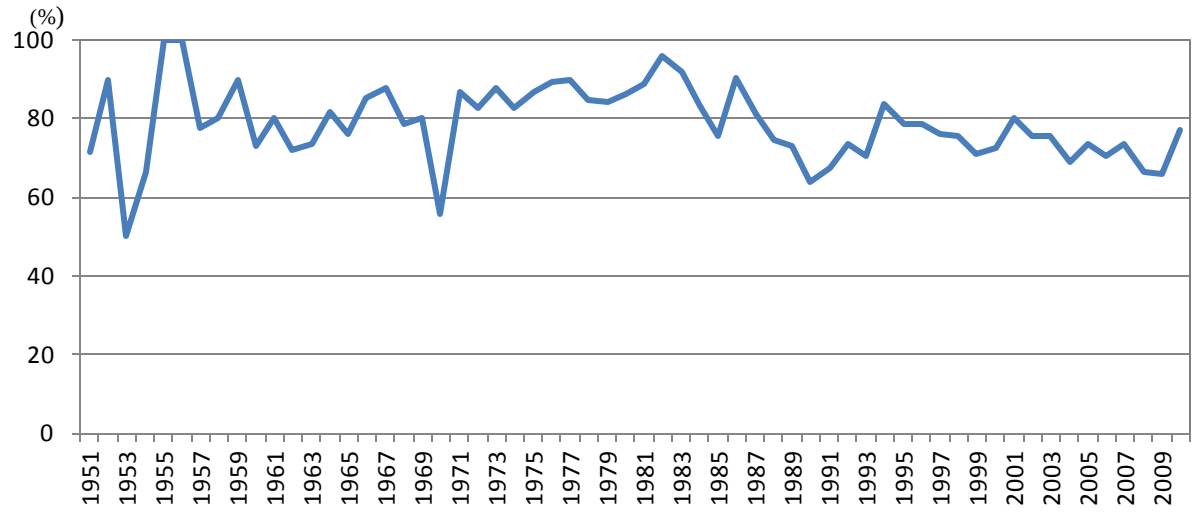
Continued on next page

Table 1- *Continued*

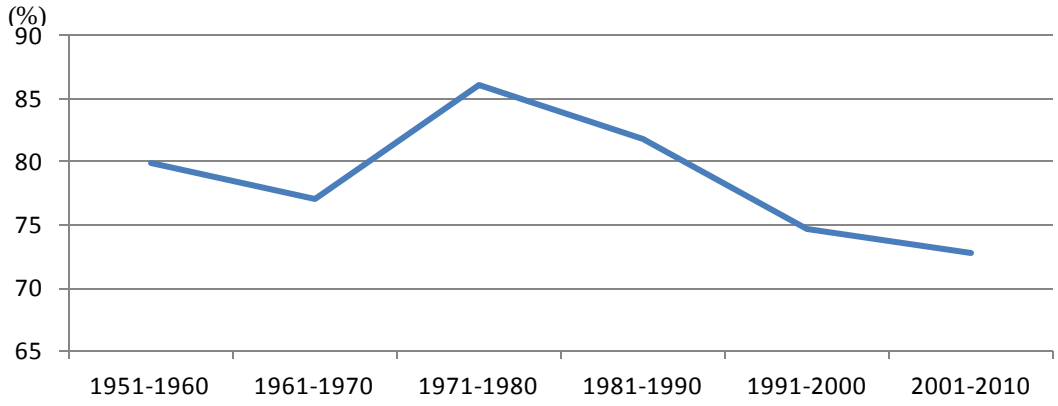
1991	52	35	(67.3)	17	(32.7)
1992	38	28	(73.7)	10	(26.3)
1993	71	50	(70.4)	21	(29.6)
1994	67	56	(83.6)	11	(16.4)
1995	42	33	(78.6)	9	(21.4)
1996	28	22	(78.6)	6	(21.4)
1997	42	32	(76.2)	10	(23.8)
1998	45	34	(75.6)	11	(24.4)
1999	45	32	(71.1)	13	(28.9)
2000	65	47	(72.3)	18	(27.7)
2001	35	28	(80.0)	7	(20.0)
2002	41	31	(75.6)	10	(24.4)
2003	49	37	(75.5)	12	(24.5)
2004	58	40	(69.0)	18	(31.0)
2005	53	39	(73.6)	14	(26.4)
2006	51	36	(70.6)	15	(29.4)
2007	60	44	(73.3)	16	(26.7)
2008	45	30	(66.7)	15	(33.3)
2009	50	33	(66.0)	17	(34.0)
2010	13	10	(76.9)	3	(23.1)
Total	2,524	1,990	(78.8)	534	(21.2)
Panel B: Number of observations by 10-year sub-period					
1951-1960	150	120	(79.9)	30	(20.1)
1961-1970	315	248	(77.0)	67	(23.0)
1971-1980	509	438	(86.1)	71	(13.9)
1981-1990	600	487	(81.9)	113	(18.1)
1991-2000	495	369	(74.7)	126	(25.3)
2001-2010	455	328	(72.7)	127	(27.3)

FIGURE 1
DISTRIBUTION OF THE PERCENTAGE OF INTERNAL SUCCESSIONS OVER 1951-2011

Panel A: Distribution across sample years



Panel B: Distribution across the sample decades



We conclude from this initial analysis that the selection of an individual originating from outside the firm as CEO is unusual and occurs only about 21% of the time. We further note that this preference for insiders is remarkably robust over time. In only two of the sixty years of our sample is the percentage of internal successions less than 60%; for only eight sample years is this percentage less than 70%. Nevertheless, there appears to be a thirty-year trend towards less use of internal candidates as CEOs.

We next examine whether there are industry or firm age influences on the CEO selection decision. In Panel A of Table 2 we create two groups of industries based on the percentage of internal successions. More specifically, we create one group that contains those ten industries with the highest percentage of internal successions and another group of ten with the highest percentage of external appointments. We find only modest evidence that industry homogeneity contributes to an explanation of cross-sectional differences in the choice between internal and external candidates.

We first estimate industry homogeneity as described by Parrino (1997), but employ monthly return data between January 1960 and December 2009 to better capture industry homogeneity over our sample period. Any industries with less than 35 firms during the sample period are dropped. For industries with more than 50 firms, we randomly select 50 firms to use. This approach is consistent with the methodology of Parrino. We find no statistically significant difference between industry groups using this method for estimating homogeneity.

As an alternative estimation technique, we directly compare the industry homogeneity measures reported by Parrino (1997) and find a marginally significant difference between industry groups. We find that more homogenous industries make greater use of external successions. This might reflect the need for new leadership with fresh ideas as these industries experience shocks from regulatory change, global competition, or new technologies. This is especially likely in the air transportation and oil/gas extraction industries which we identify as industries with high rates of external succession and greater homogeneity. The evidence is also consistent with the argument that in less homogeneous industries tournament style competitions among internal candidates might be more popular as a means for choosing CEO successors.

Panel B presents our analysis of firm age on the choice of CEO successor. We divide our sample of CEO successions into six age groups where firm age is proxied by the number of years the firm has existed in the *Compustat* database. We find that for our entire sample of CEO turnovers, there is little difference in the percentage of internally selected CEOs across firm age. The youngest firms choose 71.9% of their CEOs from internal candidates, while 76.1% of the oldest companies use an internal succession to fill their CEO position. We test the robustness of this result by further examining turnovers at a set of 129 firms that have existed throughout the entire 60 year sample period. With this analysis we find a suggestion in the data that firms earlier in their life cycle might be more inclined to use internal candidates than older firms. We discover that the two youngest groups of firms average a 91.6% selection rate for internal appointments compared to 78.1% for the two oldest groups of firms.

TABLE 2
INDUSTRY AND FIRM AGE EFFECTS ON CEO SUCCESSION TYPE

This table presents variation in internal versus external succession across industries and firm age. In Panel A, we report the frequency as well as the industry homogeneity measure for the top- and bottom-10 industries based on the percentage of internal successions. Industries with less than five turnovers during the sample period are excluded from the analyses. Industry homogeneity is computed by averaging, across all firms in each two-digit Standard Industrial Classification (SIC) industry, the partial correlation coefficient for an industry return index in a two-factor market model that also includes a market return index, following Parrino (1997). The values of industry homogeneity reported in column 4 of Panel A are estimated using CRSP monthly stock returns over the period between January 1960 and December 2009. Those in column 5 are directly obtained from Table 5 of Parrino (1997), who estimates the measure over the January 1970 to December 1988 period. Also reported at the bottom of Panel A are the averages of industry homogeneity measure for each category as well as the *p*-value to test whether the difference is statistically different from zero. In Panel B, we present the frequency of each type of successions across firm age. A firm's age in a given year is defined as the difference between the current year and the year in which the firm first appears in the Compustat database. In the first 5 columns we employ all succession events in our sample, and in the last 5 columns we employ only the turnovers for a set of 129 firms that have existed throughout the entire 60 year sample period.

Panel A: Industry distribution

2-digit SIC		Total Number of Successions	Number of Internal Successions (Percent of Total)	Number of External Successions (Percent of Total)	Industry Homogeneity	Industry Homogeneity (Parrino, 1997)
Top 10 Industries Based on Internal Succession Percentage						
22	Textile Mill Products	6	6(100.0)	0 (0.0)	0.4199	0.2636
23	Apparel And Other Finished Products Made From Fabrics And Similar Materials	7	7(100.0)	0 (0.0)	0.3843	0.2907
50	Wholesale Trade-durable Goods	8	8(100.0)	0 (0.0)	0.3081	0.2185
58	Eating And Drinking Places	11	11(100.0)	0 (0.0)	0.3694	0.2534
24	Lumber And Wood Products, Except Furniture	9	8 (88.9)	1(11.1)	0.4114	0.2848
67	Holding And Other Investment Offices	9	8 (88.9)	1(11.1)	0.3239	n.a.
39	Miscellaneous Manufacturing Industries	8	7 (87.5)	1(12.5)	0.2984	0.2100
28	Chemicals And Allied Products	175	150 (85.7)	25(14.3)	0.3161	0.2798
40	Railroad Transportation	21	18 (85.7)	3(14.3)	0.4085	0.4113
20	Food And Kindred Products	110	94 (85.5)	16(14.5)	0.2941	0.2386

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Table 2 – *Continued*

	Bottom 10 Industries Based on Internal Succession Percentage					
45	Transportation By Air	17	12 (70.6)	5(29.4)	0.3909	0.4433
54	Food Stores	39	27 (69.2)	12(30.8)	0.3684	0.3278
56	Apparel And Accessory Stores	16	11 (68.8)	5(31.3)	0.4017	0.2793
73	Business Services	60	41 (68.3)	19(31.7)	0.3220	0.2627
13	Oil And Gas Extraction	38	25 (65.8)	13(34.2)	0.4173	0.4483
62	Security And Commodity Brokers, Dealers, Exchanges, And Services	23	15 (65.2)	8(34.8)	0.3417	0.3414
70	Hotels, Rooming Houses, Camps, And Other Lodging Places	5	3 (60.0)	2(40.0)	0.4212	0.3679
80	Health Services	12	7 (58.3)	5(41.7)	0.3160	0.2448
72	Personal Services	7	4 (57.1)	3(42.9)	0.3608	
55	Automotive Dealers And Gasoline Service Stations	6	3 (50.0)	3(50.0)	0.3700	
	Top 10 Average				0.3534	0.2723
	Bottom 10 Average				0.3710	0.3394
	Difference				-0.0176	-0.0671
	(*p*-value)				(0.39)	(0.07)

Panel B: Firm age distribution

Sample	All turnovers			Turnovers at 129 firms that have existed throughout the entire sample period		
Age group	Total Number of Successions	Number of Internal Successions (Percent of Total)	Number of External Successions (Percent of Total)	Total Number of Successions	Number of Internal Successions (Percent of Total)	Number of External Successions (Percent of Total)
0~10	274	197(71.9)	77(28.1)	28	26(92.9)	2 (7.1)
11~20	490	393(80.2)	97(19.8)	62	56(90.3)	6 (9.7)
21~30	485	401(82.7)	84(17.3)	79	66(83.5)	13(16.5)
31~40	345	286(82.9)	59(17.1)	65	59(90.8)	6 (9.2)
41~50	251	196(78.1)	55(21.9)	129	102(79.1)	27(20.9)
51~60	134	102(76.1)	32(23.9)	118	91(77.1)	27(22.9)
Total	1,979	1,575(79.6)	404(20.4)	481	400(83.2)	81(16.8)

We continue with our examination of CEO succession patterns by comparing the duration of CEO tenure across succession type. We report in Table 3 that internally selected CEOs enjoy a mean tenure of 7.5 years compared to only 6.2 years for external hires. This difference is statistically significant at the one percent level. There is a comparable spread in the median values. At the extreme edges of the distribution such as the top quartile, the gap actually widens. CEOs for these firms, on average, enjoy an additional two years of service. We conclude from our findings that internally appointed CEOs tend to remain in their positions longer than those hired from outside for one to two years.

TABLE 3
DURATION OF CEO TENURE BY SUCCESSION TYPE (YEARS)

This table presents the duration of CEO tenure in years across succession type. Also reported at the bottom of the table are the *t*-statistics to test the difference in means (t-test) and *z*-statistics to test the difference in medians (rank sum test).

CEO Origin	Obs	Mean		Median		25th Pctl.	75th Pctl.	SD
Internal	1,641	7.5		6.0		4.0	10.0	5.4
External	423	6.2		5.0		3.0	8.0	5.5
Combined	2,064	7.2		6.0		3.0	10.0	5.5
Diff.		1.3	(4.27)***	1.0	(5.75)***	1.0	2.0	

We complete our initial review of succession type patterns with a comparison of key financial, accounting, and governance variables between the two groups. In Panel A of Table 4 we observe several important differences between firms that appoint internally compared to those selecting an external candidate. We observe that internal firms are larger in total equity capitalization, although not in total assets. They are also more profitable, with a greater industry-adjusted ROA. Further, these firms are less levered than those hiring externally. Finally, we determine that internal firms have more fixed assets, perhaps reflecting the extensive use of internal succession by heavily capitalized industries such as chemicals, manufacturing, and railroad transportation as reported in Table 2.

In Panel B of Table 4 we compare a number of corporate governance characteristics across succession type. Since we are able to categorize turnovers as forced or voluntary only beginning in 1971 and governance data is unavailable prior to 1971, our results are limited to the 1971-2010 sub-period. We discover that forced turnover is more common for firms that make external appointments. We find that 41.5% of the external appointments occur as the result of forced turnover compared to only 10.9% for internal successions. Departing CEOs are older by about four years at the time of their departure when they are followed by an internal candidate relative to external successions. We also find that departing CEOs are more commonly older than 60 when there is an internal succession. This practice is consistent with the greater incidence of forced turnover among external CEOs. Further, we determine that firms with internal succession have larger boards, perhaps reflecting the desire to maintain a greater pool of potential executives. Finally, we find that internal firms have fewer independent directors on their board, further suggesting that such companies use their boards to nurture the executive talent that they ultimately promote to CEO.

TABLE 4
DIFFERENCES IN FIRM CHARACTERISTICS BY SUCCESSION TYPE

This table shows the difference in firm-level characteristics between internal and external successions in our sample. In Panel A financial and accounting variables are compared for all succession events during the entire sample period. In Panel B governance characteristics are compared for the succession events during the period 1971-2010. All variables are recorded at the end of fiscal year prior to the announcement of succession. All financial and accounting data are obtained from *Compustat*. Firm-level board and governance data are obtained from Huson et al. (2001) for the sub-period spanning 1971 to 1995, and from the *RiskMetrics* database for the sub-period from 1996 to 2010.All continuous variables are winsorized at the1 % and 99% level. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

	Sample period/sub-period	Internal		External		
		Obs.	Mean	Obs.	Mean	Diff. (t-stat)
Panel A: Financial and accounting characteristics						
Ln(market capitalization)	1951-2010	1,459	7.552	371	7.307	0.244 (2.24)**
Ln(total assets)	1951-2010	1,575	7.914	404	8.060	-0.146 (-1.49)
Industry-adjusted ROA	1951-2010	1,561	0.055	400	0.026	0.029 (8.61)***
Long-term debt/total assets	1951-2010	1,530	0.229	384	0.255	-0.026 (-2.80)***
Fixed assets/total assets	1951-2010	1,540	0.365	397	0.300	0.065 (4.55)***
Sales/total assets	1951-2010	1,572	1.051	396	1.032	0.019 (0.37)
Current assets/total assets	1951-2010	1,310	0.419	318	0.419	0.000 (0.02)
Panel B: Governance characteristics						
Forced turnover	1971-2010	1,628	0.109	441	0.415	-0.306 (-15.88)***
Departing CEO age	1971-2010	1,625	61.92	438	58.29	3.62 (11.32)***
Departing CEO age≥ 60	1971-2010	1,625	0.736	438	0.484	-0.252 (10.31)***
Non-officer directors (%)	1971-2010	1,515	74.1%	392	79.4%	-5.2% (-6.88)***
Board size	1971-2010	1,515	13.57	392	12.26	1.30 (5.40)***
CEO shares (%)	1971-2010	1,085	0.87%	307	0.91%	-0.03% (-0.21)
Non-CEO officer&directors shares (%)	1971-2010	1,091	3.87%	308	4.29%	-0.42% (-0.81)

We conclude this overview of corporate succession practices regarding the choice between an internal and external CEO with a multivariate examination of the determinants of that decision. In Table 5 we present our findings across six different model specifications. Our selection of independent variables is motivated in part by those appearing in the literature (Parrino, 1997; Agrawal, Knoeber & Tsoulouhas, 2006; Pan & Wang, 2012; Eisfeldt & Kuhnen, 2013; Fee, Hadlock, & Pierce, 2013) and the results of our own univariate analysis. The dependent variable in our Logit analysis assumes a value of one, if the succession is internal, and zero otherwise.

TABLE 5
LOGIT ANALYSIS OF INTERNAL VS. EXTERNAL SUCCESSIONS

This table presents the Logit regression results examining the determinants of internal succession. Coefficient estimates and corresponding *p*-values are reported. The dependent variable is an indicator variable that takes a value of one if an insider is appointed CEO, and zero otherwise. In columns 1-3, all turnover events during the entire sample period are considered, while a subsample of turnovers occurring after 1971 is considered in columns 4-6 due to limitation on governance data. *Dum1961-1970, Dum1971-1980, Dum1981-1990, Dum1991-2000, and Dum2001-2010* are six dummy variables indicating each of the six sub-periods, respectively. All independent variables are as of the fiscal year-end prior to the announcement of successions. All financial and accounting data are obtained from the *Compustat* annual database. Firm-level board and governance data are obtained from Huson et al. (2001) for the sub-period spanning 1971 to 1995, and from the *RiskMetrics* database for the sub-period spanning 1996 to 2010.All continuous variables are winsorized at the1 % and 99% level. Year fixed effects are included in columns 1-2 and 4-5. Industry fixed effects are included in columns 2-3 and 5-6. Standard errors are Huber-White-Sandwich heteroscedasticity-robust estimators. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Ln(total assets)	0.205***	0.255***	0.202***	0.141	0.167*	0.113
	(0.000)	(0.000)	(0.001)	(0.141)	(0.098)	(0.232)
Industry-adjusted ROA	7.403***	7.396***	7.070***	5.132***	5.653***	4.825***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.002)
Long-term debt/total assets	-0.900**	-0.886*	-0.984**	-0.623	-0.337	-0.583
	(0.015)	(0.084)	(0.047)	(0.276)	(0.638)	(0.403)
Fixed assets/total assets	0.683***	1.802***	2.084***	0.642**	1.864**	1.942***
	(0.002)	(0.001)	(0.000)	(0.014)	(0.010)	(0.006)
Ln(firm age)	0.285***	0.281**	0.281**	0.140	0.203	0.262
	(0.001)	(0.033)	(0.027)	(0.324)	(0.253)	(0.123)
Industry homogeneity	-2.106*			-2.401		
	(0.084)			(0.120)		
Forced turnover				-1.394***	-1.468***	-1.416***
				(0.000)	(0.000)	(0.000)
Departing CEO age				0.035***	0.033*	0.032**
				(0.009)	(0.054)	(0.049)
% Non-officer directors				-3.895***	-4.252***	-3.955***
				(0.000)	(0.000)	(0.000)
Board size				0.088***	0.082**	0.081**
				(0.003)	(0.025)	(0.016)
CEO shares				3.501	3.764	1.839
				(0.460)	(0.457)	(0.717)
Non-CEO officer & directors shares				-0.320	-0.258	-0.237
				(0.790)	(0.838)	(0.857)
Dum1961-1970			-0.763			
			(0.101)			
Dum1971-1980			-0.583			
			(0.200)			

Continued on next page

Table 5 – *Continued*

Dum1981-1990			-0.866*			0.140
			(0.061)			(0.728)
Dum1991-2000			-1.599***			-0.399
			(0.001)			(0.363)
Dum2001-2010			-1.885***			0.004
			(0.000)			(0.993)
Year F/E	Yes	Yes	No	Yes	Yes	No
Industry F/E	No	Yes	Yes	No	Yes	Yes
Sample period/sub-period	1951-2010	1951-2010	1951-2010	1971-2010	1971-2010	1971-2010
Number of observations	1,853	1,809	1,829	1,079	1,034	1,040
Pseudo R2	0.094	0.116	0.094	0.189	0.212	0.182

The multivariate results are generally consistent with our previously documented univariate findings. We find that larger firm size as measured by total assets is generally associated with a greater likelihood of an internal appointment. This is consistent with Parrino (1997) who uses sales as a measure of firm size. Firm performance is consistently significant and positively associated with the firm's choice of an internal appointment. Firms appear to reward strong performance with promotion of the existing management team. These results are broadly supportive of Parrino (1997) and Agrawal et al. (2006). We observe that firms with greater leverage are less likely to pursue internal appointments while those with a higher percent of fixed assets are consistently more likely to choose an internal succession. We find mixed evidence concerning the likelihood that older firms will tend to appoint insiders to the CEO position. Industry homogeneity, estimated as Parrino (1997), exerts only a marginal effect on the likelihood of an internal succession.[3] The occurrence of a forced turnover has a strong and negative effect on the likelihood of an internal appointment. This result is consistent with our previous finding that firms making external appointments experience forced turnover with four times greater frequency than those selecting internal candidates. Consistent with our univariate results, we also determine in Table 5 that older departing CEOs are associated with a greater likelihood of an internal appointment, as is larger board size. A board that contains more independent directors tends to move the appointment decision towards an external selection.

Finally, we observe some limited evidence of time effects in the successor choice. We find that the 1991-2000 and 2000-2010 binary variables are associated with a reduced likelihood of an internal successor. This result might be partially explained by the attention directed to corporate governance following a number of widely publicized scandals and forced resignations during these years.

FIRM PERFORMANCE, VALUATION, AND SUCCESSOR TYPE

In this section we investigate what succession type is more successful for improving firm performance and valuation. An externally hired CEO brings new perspectives and experiences that can positively transform a firm that is suffering from aggressive competition and the challenges of new technologies. Thus, an external CEO might be the best to generate the performance improvement that shareholders demand. Alternatively, internally selected CEOs face no learning curve for mastering the firm's operations and are well aware of the resources and investment potentialities of the firm. An internal candidate is better positioned to make an immediate change to corporate practices and represents continuity in business operations. It might be that internally chosen CEOs most improve corporate financial performance.

Table 6 contains our analysis of performance and valuation across firms classified by succession type. We measure firm valuation by Tobin's q while firm performance is captured as the industry-adjusted return on assets (ROA). In Panel A we observe that the mean q is significantly higher for firms with an internal successor. The evidence regarding operating performance, however, is more mixed. Internal successors are associated with a significantly higher average annual ROA, but a lower three-year growth in ROA. In Panel B we further examine this issue by dichotomizing our sample based on whether all successions over the past thirty years are internal or not. Our results for this analysis are similar to those obtained in Panel A except that we do not find a significant difference in the three-year change in ROA between the two groups. In Panel C we dichotomize our sample based on whether all successions over the past thirty years are external or not. We find that firms with this type of succession pattern are associated with neither higher valuations nor superior operating performance.

TABLE 6
DIFFERENCES IN PERFORMANCE

This table presents a comparison of accounting-based and market-based performance measures between the firms that select their CEO internally and those that hire CEO externally. The sample is all CEO-years including both turnover and non-turnover years. In Panel A, firms having insider CEO in office are compared to those having externally hired CEO in office. In Panel B and C, firms are dichotomized based on the regularity of the internal/external successions. In a given year, a firm is classified as *'PIF (POF)'* if all successions over the past 30 year are internal (external). In Panel B we compare performance measures of *PIF* to those of non-*PIF* firms. In Panel C we compare *POF* to non-*POF* firms. Tobin's Q is computed as market value of equity plus book value of debt, divided by book assets. Industry-adjusted ROA is computed by subtracting industry median value from the firm's own ROA. Industry-adjusted ROA is evaluated in two ways: the average and changes over the next three years. All data are from the *Compustat* annual database. All continuous variables are winsorized at the1 % and 99% level. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A: Differences in performance by CEO origin

	Sample period/sub-period	Insider CEO in office		External CEO in office		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
Q_t	1951-2010	10,753	1.177	2,358	1.098	0.080(3.41)***
Industry-adjusted ROA: (t+1), (t+2), (t+3) average	1951-2010	11,480	-0.001	2,436	-0.009	0.009(9.10)***
Δ industry-adjusted ROA: (t+3)-t	1951-2010	11,473	-0.003	2,434	0.002	-0.004(-3.75)***

Panel B: Differences in performance between PIF firms and Non-PIF firms

	Sample period/sub-period	PIF		Non-PIF		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
Q_t	1981-2010	4,852	1.185	1,739	1.135	0.050(1.96)**
Industry-adjusted ROA: (t+1), (t+2), (t+3) average	1981-2010	4,757	-0.002	1,620	-0.006	0.004(3.01)***
Δ industry-adjusted ROA: (t+3)-t	1981-2010	4,757	-0.002	1,620	0.000	-0.001(-0.90)

Panel C: Differences in performance between POF firms and Non-POF firms

	Sample period/sub-period	POF		Non-POF		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
Qt	1981-2010	500	1.189	6,091	1.170	-0.018(-0.43)
Industry-adjusted ROA: (t+1), (t+2), (t+3) average	1981-2010	457	-0.004	5,920	-0.003	0.001(0.26)
Δ industry-adjusted ROA: (t+3)-t	1981-2010	457	-0.002	5,920	-0.001	0.001(0.33)

Our multivariate analysis of how succession type might influence firm valuation is presented in Table 7. Using Lang and Stulz (1994), Shin and Stulz (2000), and Fahlenbrach (2009) to model q, we observe several important findings regarding the role of successor type on a firm's value. In model (1) we include as a binary indicator variable whether the incumbent CEO is internally appointed. We find that the presence of an internally-selected CEO has a significantly positive influence on firm value. In model (2) we create a new binary indicator variable to represent a history of internally appointed CEOs. In model (3) we replace the binary indicator variable for a history of internal appointments with one representing a history of external selections. We find that these variables, which reflect the regularity of internal versus external successions, are not statistically significant. These results suggest that the successor type of the current CEO rather than the firm's historical selection practices matters most for firm value.

TABLE 7
MULTIVARIATE ANALYSIS OF Q INCLUDING CEO ORIGIN

This table presents the effect of CEO origin on Q. OLS regression coefficient estimates and corresponding *p*-values are reported. The dependent variable is Tobin's Q, measured by market value of equity plus book value of debt, divided by book assets. The sample is all CEO-years, including both turnover and non-turnover years. '*Insider CEO in office'* is an indicator variable that takes a value of one if internally appointed CEO is in office in a given year, and zero otherwise. '*PIF (POF)'* is an indicator variable that takes a value of one if all CEO successions made in the firm during the past 30 years are internal (external), and zero otherwise. All other control variables are obtained from the *Compustat* annual database and reported as of the previous fiscal year-end. All regressions include year fixed effects and industry fixed effects. Standard errors are corrected for clustering at the firm level. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

	(1)	**(2)**	**(3)**
Insider CEO in office	0.182***		
	(0.000)		
PIF		0.028	
		(0.666)	
POF			0.085
			(0.448)
Ln(total assets)	-0.021	-0.031	-0.028
	(0.405)	(0.389)	(0.426)
R&D/total assets	8.461***	9.413***	9.409***
	(0.000)	(0.000)	(0.000)
Dividend payment indicator	0.169**	0.246**	0.250**
	(0.030)	(0.022)	(0.020)
Ln(firm age)	-0.330***	-0.377	-0.386
	(0.000)	(0.124)	(0.116)
Year F/E	Yes	Yes	Yes
Industry F/E	Yes	Yes	Yes
Sample period/sub-period	1951-2010	1981-2010	1981-2010
Number of observations	13,084	6,579	6,579
Adjusted R^2	0.323	0.347	0.348

CORPORATE DIVIDEND POLICY AND SUCCESSOR TYPE

Dividends are not contractual payments to shareholders and can be reduced, suspended, or eliminated by CEO and board action. Externally recruited CEOs might feel less constrained by current or historical dividend practices than those hired internally. Thus, it will be useful to examine how succession type influences the firm's dividend policy. We analyze four different decisions that must be made concerning dividends: the dollar amount of the dividend, the growth rate of dividends, initiation or resumption of dividends, and termination or suspension.

In Panel A of Table 8 we compare the decisions regarding these four characteristics of dividend policy between external and internally selected CEOs. We observe that the dividend payout ratio is significantly higher for firms with internally selected CEOs. Further, these firms also enjoy a higher growth rate of dividends. Not surprisingly however, internally chosen CEOs are less likely to make changes in existing dividend policy. That is, they initiate/resume dividend payments less frequently than do externally appointed CEOs. They also terminate/suspend dividends less often than their external peers.

In Panels B and C we examine the effect that historical patterns in executive succession have on dividend policy. We observe in Panel B that firms which have a history of all internal successions pay higher dividends than those which hire both internal and external CEOs. We also find that these firms tend to make less change in their dividend policy, especially regarding dividend terminations or suspensions. These results confirm those obtained in Panel A that internally selected CEOs are associated with higher dividends distributed under policies that are more resistant to change.

We examine the behavior of firms with a pattern of externally hired CEOs in Panel C. We immediately notice that the dividends paid by these firms are lower than those distributed by firms with a mixed history of executive successions. Further, we find that these firms are significantly more willing to initiate, resume, terminate, or suspend dividends. These results show that firms with a sustained history of external CEOs pay smaller dividends and are more willing to make important changes in the payment and termination of dividends to shareholders.

Based on the dividend models appearing in the corporate finance literature (Fama & French, 2001; Baker &Wurgler, 2004; DeAngelo, DeAngleo & Stulz, 2006; Ferris, Jayaraman, & Sabherwal, 2013), we specify a number of regression models to explain dividend policy and how it is related to the presence of an internal or external CEO in Table 9. We also include a number of other independent variables that control for catering, life cycle, and other effects that might explain the corporate dividend decision. These variables include proxies for the size, profitability, growth opportunities, internal financing capabilities, dividend history, and the market's preference for dividend paying stocks.

In Table 9 we investigate four different aspects of dividend policy: the dividend payout ratio, status as a dividend payer or not, the initiation/resumption of dividends, and the termination/suspension of dividends. In Models (1) through (3), we examine the dividend payout ratio. We find that the presence of an internally selected CEO as well as a pattern of internal successions has a significantly positive effect on dividend payments while a pattern of externally selected CEOs has a significant negative influence. These results confirm our earlier univariate findings concerning the effect that the choice of an internal CEO has on corporate dividend distributions. Models (4) through (6) are Logit estimates of the dividend paying status of the firm. Both models (4) and (5) offer strong evidence that the selection of an insider as CEO is positively associated with the likelihood of paying dividends. We examine the impact of CEO type on the initiation and resumption of dividends in models (7) through (9). We find that the presence of an internally selected CEO reduces the likelihood of dividends being started or resumed. A sustained pattern of internal CEO appointments, however, is not significantly associated with this dimension of dividend policy. Our last set of regressions focuses on the decision of a firm to terminate or suspend the payment of dividends. Our results offer strong evidence that firms with an internal CEO in office or a history of such appointments are less likely to do this. Firms that repeatedly select an external CEO, however, are more likely to terminate or suspend their dividends, but the effects are statistically insignificant.

TABLE 8
CEO ORIGIN AND DIFFERENCES IN DIVIDEND POLICY

This table presents the difference in dividend policy between the firms that select their CEO internally and those that hire an external CEO. The sample is all CEO-years including both turnover and non-turnover years. In Panel A, firms having an insider CEO in office are compared to those having an externally hired CEO. In Panel B and C, firms are dichotomized based on the regularity of the internal/external successions. In a given year, a firm is classified as *'PIF (POF)'* if all successions over the past 30 year are internal (external). In Panel B we compare dividend policy of *PIF* firms to those of non-*PIF* firms. In Panel C we compare *POF* to non-*POF* firms. '*Dividend payout ratio*' is total dividend paid divided by net income. '*Annual dividend growth*' is computed as total dividend paid this year divided by total dividend paid in the previous year, minus one. '*Dividend initiation/resumption*' is an indicator variable that takes value of one if the firm starts to pay regular dividends after not paying regular dividends for at least four quarters, and zero otherwise. '*Dividend termination/suspension*' is an indicator variable that takes a value of one if the firm stops paying dividends for at least four quarters, and zero otherwise. Data on dividend payout policy are from the *Compustat* database. All continuous variables are winsorized at the1 % and 99% level. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A: Differences in dividend policy by CEO origin

	Sample period/sub-period	Insider CEO in office		External CEO in office		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
Dividend payout ratio	1951-2010	13,142	0.410	2,937	0.310	0.100(10.09)***
Annual dividend growth	1951-2010	12,145	0.086	2,408	0.074	0.012(1.71)*
Dividend initiation/resumption	1951-2010	13,163	0.007	2,947	0.017	-0.011(-5.70)***
Dividend termination/discontinuance	1951-2010	13,163	0.008	2,947	0.023	-0.014(-6.72)***

Panel B: Differences in dividend policy between PIF firms and Non-PIF firms

		PIF		Non-PIF		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
Dividend payout ratio	1981-2010	5,582	0.435	1,940	0.359	0.076(5.27)***
Annual dividend growth	1981-2010	5,290	0.071	1,786	0.065	0.006(0.76)
Dividend initiation/resumption	1981-2010	5,580	0.006	1,938	0.007	-0.001(-0.39)
Dividend termination/discontinuance	1981-2010	5,580	0.007	1,938	0.017	-0.010(-3.82)***

Panel C: Differences in dividend policy between POF firms and Non-POF firms

		POF		Non-POF		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
Dividend payout ratio	1981-2010	556	0.275	6,966	0.427	-0.151(-6.28)***
Annual dividend growth	1981-2010	492	0.066	6,584	0.070	-0.003(-0.24)
Dividend initiation/resumption	1981-2010	556	0.013	6,962	0.006	0.007(2.03)**
Dividend termination/discontinuance	1981-2010	556	0.020	6,962	0.009	0.011(2.52)**

TABLE 9
MULTIVARIATE ANALYSIS OF DIVIDEND PAYOUT POLICY INCLUDING CEO ORIGIN

This table presents the effect of CEO origin on the firm's payout policy. Coefficient estimates from OLS regressions (when the dependent variable is continuous) or Logit regressions (when the dependent variable is binary) and corresponding *p*-values are reported. The dependent variable is the ratio of total dividends to net income (*Dividend payout ratio*) in columns 1-3, an indicator of dividend payment (*Dividend payment indicato*r) in columns 4-6, an indicator of starting to pay regular dividends after not paying regular dividends for at least four quarters (*Dividend initiation/resumption*) in columns 7-9, and an indicator for stopping dividends for at least four quarters (*Dividend termination/suspension*) in columns 10-12, respectively. The sample is all CEO-years, including both turnover and non-turnover years. '*Insider CEO in office'* is an indicator variable that takes a value of one if internally appointed CEO is in office in a given year, and zero otherwise. '*PIF (POF)'* is an indicator variable that takes a value of one if all CEO successions made in the firm during the past 30 years are internal (external), and zero otherwise. Following Baker and Wurgler (2004) and Ferris et al. (2009), '*Dividend premium*' is calculated as the difference in the logs of the equal-weighted average market-to-book ratios of payers and nonpayers. We require that there are at least ten payers and ten non-payers in a given year for which we compute the dividend premium. All other control variables are reported as of the previous fiscal year-end unless mentioned as 'current'. Data to compute all variables are obtained from the *Compustat* annual database. Standard errors are double-clustered by both firm and year. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Dependent var.	Dividend payout ratio (OLS regressions)			Dividend payment indicator (Logit regressions)			Initiation/resumption (Logit regressions)			Termination/discontinuation (Logit regressions)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Insider CEO in office	0.04**			0.38***			-0.61***			-0.63***		
	(0.01)			(0.01)			(0.01)			(0.01)		
PIF		0.05**			0.59**			0.21			-0.65*	
		(0.04)			(0.01)			(0.60)			(0.09)	
POF			-0.11***			-0.37			0.31			0.53
			(0.00)			(0.21)			(0.59)			(0.29)
Current industry-adjusted ROA	0.98***	1.29***	1.31***	7.40***	10.07***	10.15***	-2.05	-0.80	-0.62	-6.65***	-9.27***	-9.38***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.30)	(0.79)	(0.84)	(0.00)	(0.00)	(0.00)
Industry-adjusted ROA	-0.07	0.08	0.08	4.55***	3.93	4.18	3.39**	6.25***	6.37***	-6.07**	-0.78	-0.76
	(0.39)	(0.46)	(0.48)	(0.00)	(0.13)	(0.11)	(0.04)	(0.00)	(0.00)	(0.02)	(0.84)	(0.84)
Market-to-book	-0.03***	-0.05***	-0.05***	-0.47***	-0.22	-0.21	-0.14	-0.34	-0.34	0.10	-1.12*	-1.14*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.38)	(0.39)	(0.31)	(0.13)	(0.12)	(0.59)	(0.09)	(0.08)
Ln(total assets)	0.01	-0.00	-0.00	0.15***	0.15	0.14	-0.10*	-0.31**	-0.29**	-0.21***	-0.23*	-0.22
	(0.28)	(0.79)	(0.68)	(0.01)	(0.17)	(0.22)	(0.09)	(0.03)	(0.05)	(0.00)	(0.10)	(0.12)

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Table 9 - *Continued*

Retained earnings/Total equity	-0.00	0.02	0.02	0.56***	0.62***	0.64***	-0.79***	-0.92***	-0.91***	-0.31	-0.62*	-0.64*
	(0.96)	(0.43)	(0.42)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.19)	(0.09)	(0.09)
Total equity/total assets	0.09**	0.00	0.01	0.72	1.73**	1.77**	-0.16	-1.26	-1.16	-1.78***	-2.66**	-2.80**
	(0.04)	(0.95)	(0.91)	(0.13)	(0.02)	(0.02)	(0.78)	(0.33)	(0.36)	(0.00)	(0.03)	(0.02)
Cash/total assets	-0.39***	-0.67***	-0.67***	-1.68***	-2.41	-2.70*	3.08***	5.25***	4.82***	1.77**	4.56***	4.71***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.12)	(0.08)	(0.00)	(0.00)	(0.00)	(0.02)	(0.00)	(0.00)
Dividend payment indicator	0.34***	0.35***	0.35***	6.65***	6.90***	6.87***						
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)						
Dividend premium (EW)	0.11**	0.19	0.19	1.58**	-0.23	-0.18	-0.40	-6.57**	-6.56**	-0.80	-1.53	-1.73
	(0.01)	(0.15)	(0.13)	(0.02)	(0.91)	(0.93)	(0.69)	(0.01)	(0.02)	(0.11)	(0.42)	(0.37)
Sample period/sub-period	1963~2010	1981-2010		1963~2010	1981-2010		1963~2010	1981-2010		1963~2010	1981-2010	
Number of observations	14,746	7,278	7,278	14,746	7,278	7,278	14,746	7,278	7,278	14,746	7,278	7,278
Adjusted (Pseudo) R^2	0.073	0.049	0.050	0.759	0.728	0.726	0.066	0.121	0.121	0.099	0.166	0.161

The empirical findings for this section suggest a consistent behavior by internally selected CEOs regarding dividends. Such CEOs prefer to pay dividends and to pay them at a higher level than an outsider. Internal CEOs also make less changes to existing corporate polices and are significantly less active in starting and stopping dividend payments to shareholders. Innovation or alterations to existing dividend practices does not appear to be a characteristic of internally selected CEOs. Such changes are more likely to occur when the firm goes outside to hire its CEO.

SUCCESSOR INFLUENCES ON INVESTMENT DECISION MAKING

Corporate investment expenditures are widely recognized in the literature as a discretionary decision made by the CEO along with the board of directors (Fracassi & Tate, 2012). Further, the intensity of commitment to a particular investment strategy or existing capital project is likely to change when an outsider is hired as the firm's senior executive. The literature on innovation (Bertrand & Schoar, 2003; Hirshleifer, Low & Teoh, 2012; Aghion, Van Reenen & Zingales, 2013) also discusses the role that outsiders bring to championing change or introducing new technologies and products to a company. Hence it is useful to examine how CEO successor type might influence corporate capital expenditures.

TABLE 10
CEO ORIGIN AND DIFFERENCES IN INVESTMENT DECISION MAKING

This table presents the difference in investment policy between the firms that select their CEO internally and those that hire an external CEO. The sample is all CEO-years including both turnover and non-turnover years. In Panel A, firms having insider CEO in office are compared to those having an externally hired CEO in office. In Panel B and C, firms are dichotomized based on the regularity of the internal/external successions. In a given year, a firm is classified as *'PIF (POF)'* if all successions over the past 30 year are internal (external). In Panel B we compare investment policy of *PIF* to those of non-*PIF* firms. In Panel C we compare *POF* to non-*POF* firms. Data on investment policy are from the *Compustat* database. All continuous variables are winsorized at the1 % and 99% level. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A: Differences in investments by CEO origin (Sample: All CEO-years)

	Sample period/subperiod	Insider CEO in office		External CEO in office		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
R&D/total assets	1951-2010	13,219	0.015	2,959	0.018	-0.002(-3.99)***
Capex/total assets	1951-2010	11,756	0.066	2,585	0.055	0.011(11.34)***
Fixed assets/total assets	1951-2010	13,064	0.367	2,919	0.308	0.059(11.53)***

Panel B: Differences in investments between PIF firms and Non-PIF firms (Sample: All CEO-years)

		PIF		Non-PIF		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
R&D/total assets	1981-2010	5,585	0.017	1,955	0.019	-0.002(-2.11)**
Capex/total assets	1981-2010	5,319	0.063	1,868	0.055	0.008(7.33)***
Fixed assets/total assets	1981-2010	5,567	0.390	1,945	0.341	0.049(7.88)***

Panel C: Differences in investments between POF firms and Non-POF firms (Sample: All CEO-years)

		POF		Non-POF		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
R&D/total assets	1981-2010	562	0.019	6,978	0.018	0.002(1.29)
Capex/total assets	1981-2010	525	0.057	6,662	0.061	-0.004(-2.23)**
Fixed assets/total assets	1981-2010	558	0.324	6,954	0.381	-0.057(-5.54)***

In Panel A of Table 10 we examine several measures of capital investment across CEO succession type. We begin with R&D expenditures and determine that externally appointed CEOs spend more on this expense than their internal peers. This is consistent with the conjecture that external CEOs are more willing to explore new projects or technologies for their firms. Internally selected CEOs, however, make more capital expenditures than those hired externally. These CEOs are also associated with firms that are more capital intensive as measured by the percentage of their assets that are fixed in nature.

In Panels B and C we explore the effect that a history of succession type has on the firm's investment decision. Panel B analyzes those firms with a thirty year history of internally selected CEOs. Our findings confirm those obtained for our examination of incumbent CEOs. That is, firms with a pattern of internal CEOs spend less on R&D, but more on capital investment outlays. The firms they lead also have higher levels of investment in fixed assets. Panel C investigates the effect that a history of externally recruited CEOs has on corporate investment behavior. Our findings confirm those we obtain for internally selected CEOs. Those firms with a preference for external CEOs invest less in capital projects. They are also significantly less invested in fixed assets than firms with a more mixed pattern of executive succession.

We continue our investigation of the relation between succession type and investment practices with a multivariate analysis presented in Table 11. Consistent with the preceding univariate examination, we use standardized R&D, capital expenditures, and fixed assets as our dependent variables. In addition to the origin of the current CEO and a pair of binary indicator variables to measure the thirty-year succession pattern, we include a number of control variable suggested by the studies of Weisbach (1995), Malmendier and Tate (2008), and Pan and Wang (2012).

In the first three models, we investigate the effect that succession type has on corporate R&D expenses. Although the coefficients are consistent with the results in our univariate analysis, they lose statistical significance in these multivariate tests.

We investigate the level of capital expenditures in models (4) through (6). We observe that the presence of an internal CEO has a positive, but statistically insignificant, effect on corporate investment levels. This effect becomes significantly positive, however, when we focus on those firms with a history of internally selected CEOs. We obtain a negative, but insignificant, coefficient for the binary indicator variable that captures a firm's historical preference for externally selected CEOs.

Our last three models explore how succession type might explain the level of fixed assets that a firm elects to hold. We find that an internally selected CEO has a significant and positive influence on the fixed asset composition of the firm. This effect is further confirmed when we introduce the history of internal appointments in model (8). Firms that repeatedly hire external CEOs have a lower percentage of fixed assets, but the effect is not statistically significant.

TABLE 11
MULTIVARIATE ANALYSIS OF R&D AND CAPITAL EXPENDITURES INCLUDING CEO ORIGIN

This table presents the effect of CEO origin on the firm's investment policy. OLS regression coefficient estimates and corresponding *p*-values are reported. The dependent variable is the ratio of R&D expense to total assets in columns 1-3, the ratio of capital expenditure to total assets in columns 4-6, and the ratio of fixed assets to total assets in columns 7-9, respectively. The sample is all CEO-years, including both turnover and non-turnover years. '*Insider CEO in office*' is an indicator variable that takes a value of one if an internally appointed CEO is in office in a given year, and zero otherwise. '*PIF (POF)*' is an indicator variable that takes a value of one if all CEO successions made in the firm during the past 30 years are internal (external), and zero otherwise. All other control variables are obtained from the *Compustat* annual database and reported as of the previous fiscal year-end. All regressions include year and industry fixed effects. Standard errors are corrected for clustering at the firm level. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Dependent var.	R&D/total assets			Capex/total assets			Fixed assets/total assets		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Insider CEO in office	-0.0003			0.0009			0.0018**		
	(0.1030)			(0.1110)			(0.0231)		
PIF		-0.0001			0.0011**			0.0019*	
		(0.5961)			(0.0444)			(0.0849)	
POF			0.0002			-0.0012			-0.0009
			(0.4269)			(0.2148)			(0.6661)
Lagged R&D/total assets	0.9207***	0.9501***	0.9501***						
	(0.0000)	(0.0000)	(0.0000)						
Lagged Capex/total assets				0.7237***	0.7393***	0.7399***			
				(0.0000)	(0.0000)	(0.0000)			
Lagged Fixed assets/total assets							0.9410***	0.9346***	0.9351***
							(0.0000)	(0.0000)	(0.0000)
EBITDA/total assets	-0.0003	-0.0024	-0.0025	0.0646***	0.0482***	0.0485***	0.0352***	0.0193	0.0196
	(0.8469)	(0.1618)	(0.1585)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.1790)	(0.1722)
Market-to-book	0.0006***	0.0007***	0.0007***	-0.0010**	0.0001	0.0001	-0.0015**	-0.0005	-0.0005
	(0.0000)	(0.0001)	(0.0001)	(0.0280)	(0.8189)	(0.8141)	(0.0165)	(0.6460)	(0.6551)
Ln(total assets)	0.0001**	0.0002**	0.0002**	0.0004	-0.0000	-0.0000	0.0012***	0.0011*	0.0011*
	(0.0148)	(0.0166)	(0.0152)	(0.1761)	(0.9350)	(0.8779)	(0.0004)	(0.0527)	(0.0524)
Long-term debt/total assets	-0.0012**	0.0001	0.0001	-0.0090***	-0.0120***	-0.0118***	-0.0027	-0.0046	-0.0044
	(0.0462)	(0.9374)	(0.9420)	(0.0000)	(0.0000)	(0.0000)	(0.3610)	(0.3063)	(0.3304)
Std.Dev. of ROA- 3 years	-0.0057	-0.0056*	-0.0057*	0.0183**	0.0181**	0.0173**	0.0177	0.0370*	0.0350*
	(0.1316)	(0.0681)	(0.0682)	(0.0138)	(0.0376)	(0.0470)	(0.3070)	(0.0799)	(0.0972)
Missing R&D indicator	-0.0018***	-0.0007***	-0.0007***						
	(0.0000)	(0.0000)	(0.0000)						
Year F/E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F/E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample period/sub-period	1951-2010	1981-2010		1951-2010	1981-2010		1951-2010	1981-2010	
Number of observations	15,027	7,422	7,422	13,315	7,045	7,045	14,969	7,411	7,411
Adjusted R^2	0.945	0.962	0.962	0.741	0.747	0.747	0.976	0.971	0.971

We can draw several important conclusions from these results. Internally selected CEOs tend to spend less on R&D, a result which is broadly consistent with previous research on the source and implementation of innovation (Smith, 1990; Dechow & Sloan, 1991; Manso, 2011). These same CEOs, however, outspend their external peers in the area of capital expenditures. This might reflect prior commitments or participation in capital projects by these individuals at earlier stages in their career or an anchoring of their view regarding corporate investment policies (Tversky & Kahneman, 1982). Finally, we determine that internal CEOs are associated with more capital intensive firms, perhaps reflecting the cumulative effect of their greater capital expenditures.

THE EFFECT OF SUCCESSION TYPE ON MERGER ACTIVITY

There is an extensive literature regarding the influence of CEOs on the corporate merger decision, including individual attributes such as hubris (Roll, 1986) or overconfidence (Malmendier & Tate, 2008; Ferris et al., 2013). Whether the CEO has a history with the firm or originates from outside represents another attribute that can influence decision-making. Consequently, it is reasonable to ask how succession type might affect the decision to merge as well as how such a decision is executed.

In Panel A of Table 12 we present our initial findings for the sub-period for which merger data is available. We find that internal CEOs make significantly fewer acquisitions than do external CEOs. However, there is no significant difference between the two groups of CEOs in terms of the total dollar value of acquisitions. Combining these two results, the average size of firm acquired by internal CEOs seem to be larger than that of firm acquired by external CEOs. That is, internal CEOs undertake fewer M&As, but they get involved in relatively larger deals when they do. Internal CEOs are also less likely to use cash to pay for the purchase.

Panels B and C contain our results conditioned on the firm's history of CEO recruitment. Panel B shows that firms with a demonstrated preference for internal succession appear to make a smaller number of acquisitions. However, there is no significant difference in terms of the total value of acquisitions measured either as an absolute dollar amount or as relative to firm size. They also less frequently undertake diversifying acquisitions or cash-only deals. The pattern that external CEOs are more active in acquisitions market is confirmed in Panel C.

To further investigate the relation between successor type and corporate merger activity, we estimate a series of multivariate regressions in Table 13.[4] The first three models we estimate examine the number of acquisitions made in a given year. We find that an internally selected incumbent has a negative effect on the number of acquisitions, but the effect is statistically insignificant. Stronger results are obtained when we introduce a pattern of internal successions into the analysis. We find that such a history has a significantly negative effect on the number of acquisitions made by these firms. In particular, the coefficient for PIF is -0.231 and statistically significant at the 5% level. Models (4) through (6) test whether the CEO succession type influences the total dollar amount spent on acquisitions relative to firm size. We fail to observe any significant influence of CEO succession type on the level of acquisition activity. These firms also tend to undertake diversifying acquisitions less frequently and use cash less often when acquiring their targets as shown in models (7) through (12).

TABLE 12
CEO ORIGIN AND DIFFERENCES IN M&A ACTIVITIES

This table presents the difference in M&A activities between the firms that select their CEO internally and those that hire an external CEO. The sample is all CEO-years including both turnover and non-turnover years. In Panel A, firms having insider CEO in office are compared to those having an externally hired CEO in office. In Panel B and C, firms are dichotomized based on the regularity of the internal/external successions. In a given year, a firm is classified as *'PIF (POF)'* if all successions over the past 30 year are internal (external). In Panel B we compare M&A activities of *PIF* and non-*PIF* firms. In Panel C we compare *POF* to non-*POF* firms. '*Acquisition count*' is the number of completed domestic mergers and acquisitions (M&A) of private, public, and subsidiary targets made by the firm in a given calendar year. For acquisitions, we consider only the one in which a majority of interest is acquired. '*Total value of acquisitions*' is the sum of the deal values of all such M&As in a given year. '*Acquisition ratio'* is the total value of acquisitions scaled by the average of market value of the acquiring firm at the beginning and end of the year. '*% diversifying acquisitions*' is the percentage of diversifying acquisitions among all acquisitions made in a given year, where diversifying acquisition is defined as the one for which the target shares the same two-digit SIC code with the acquirer. '*% cash-only acquisitions*' is the percentage of cash-only acquisitions among all acquisitions made in a given year. The number and characteristics of M&As are obtained from *SDC Platinum* database. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Panel A: Differences in M&A activities by CEO origin

	Sample period/sub-period	Insider CEO in office		External CEO in office		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
Acquisition count	1979-2010	8,668	0.331	2,048	0.406	-0.075(-4.08)***
Total value of acquisitions ($M)	1979-2010	8,668	382.1	2,048	352.2	29.9(0.42)
Acquisition ratio	1979-2010	8,145	0.026	1,897	0.032	-0.005(-1.77)*
% diversifying acquisitions	1979-2010	8,668	0.466	2,048	0.415	0.052(1.15)
% cash only acquisitions	1979-2010	8,668	0.401	2,048	0.403	-0.002(-2.92)***

Panel B: Differences in M&A activities between PIF firms and Non-PIF firms

		PIF		Non-PIF		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
Acquisition count	1981-2010	4,826	0.255	1,635	0.327	-0.071(3.92)***
Total value of acquisitions ($M)	1981-2010	4,826	331.8	1,635	274.2	57.6(0.78)
Acquisition ratio	1981-2010	4,806	0.027	1,615	0.029	-0.002(-0.46)
% diversifying acquisitions	1981-2010	4,826	0.124	1,635	0.157	-0.033(-2.82)***
% cash only acquisitions	1981-2010	4,826	0.108	1,635	0.148	-0.040(-3.63)***

Panel C: Differences in M&A activities between POF firms and Non-POF firms

		POF		Non-POF		
		Obs.	Mean	Obs.	Mean	Diff.(t-stat)
Acquisition count	1981-2010	439	0.378	6,022	0.266	0.112(3.57)***
Total value of acquisitions ($M)	1981-2010	439	247.7	6,022	322.3	-74.598(-0.59)
Acquisition ratio	1981-2010	439	0.035	5,982	0.027	0.008(1.40)
% diversifying acquisitions	1981-2010	439	0.130	6,022	0.132	-0.003(-0.12)
% cash only acquisitions	1981-2010	439	0.114	6,022	0.118	-0.004(-0.22)

TABLE 13
MULTIVARIATE ANALYSIS OF M&A ACTIVITIES INCLUDING CEO ORIGIN

This table presents the effect of CEO origin on the firm's M&A activities. The first three columns present the results from a zero-inflated Poisson (ZIP) regression. The dependent variable is '*Acquisition count*', which is defined as the number of completed domestic M&As of private, public, and subsidiary targets per firm per year. Columns 4-12 present the results of a Tobit regression. The dependent variable in columns 4-6 is '*Acquisition ratio*', which is defined the sum of the value of all acquisitions during a year scaled by the average of market value of the acquiring firm at the beginning and end of the year. The dependent variable in columns 7-9 and columns 10-12 is the percentage of diversifying acquisitions and the percentage of cash-only acquisitions, respectively. The sample is all CEO-years, including both turnover and non-turnover years. '*Insider CEO in office*' is an indicator variable that takes a value of one if internally appointed CEO is in office in a given year, and zero otherwise. '*PIF (POF)*' is an indicator variable that takes a value of one if all CEO successions made in the firm during the past 30 years are internal (external), and zero otherwise. All other control variables are obtained from the *Compustat* annual database and measured as of the previous fiscal year-end. All regressions include year and industry fixed effects. *p*-values are reported in parentheses. Standard errors are corrected for clustering at the firm level. ***, **, and * correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Dependent var.	Acquisition count (zero-inflated Poisson regression)			Acquisition Ratio (Tobit regression)			% Diversifying acquisitions (Tobit regression)			% Cash-only acquisitions (Tobit regression)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Insider CEO in office	-0.129			-0.015			-0.066			-0.036		
	(0.232)			(0.362)			(0.329)			(0.591)		
PIF		-0.231**			-0.018			-0.148**			-0.132*	
		(0.020)			(0.293)			(0.042)			(0.084)	
POF			0.376**			0.023			-0.082			-0.087
			(0.045)			(0.490)			(0.522)			(0.524)
Ln(market-to-book)	0.270*	0.055	0.056	-0.045*	-0.070**	-0.070**	0.174*	0.148	0.162	0.137	-0.106	-0.095
	(0.052)	(0.716)	(0.705)	(0.056)	(0.028)	(0.029)	(0.094)	(0.275)	(0.233)	(0.160)	(0.447)	(0.498)
Ln(total assets)	0.158***	0.148***	0.147***	0.005	0.006	0.005	0.162***	0.163***	0.157***	0.137***	0.156***	0.150***
	(0.002)	(0.001)	(0.001)	(0.415)	(0.487)	(0.505)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ln(firm age)	-0.332**	-0.069	0.059	-0.030*	-0.005	0.003	0.066	1.000***	1.024***	-0.110*	-0.002	0.028
	(0.032)	(0.824)	(0.847)	(0.064)	(0.934)	(0.958)	(0.340)	(0.001)	(0.000)	(0.080)	(0.993)	(0.914)
EBITDA/total assets	1.335**	2.186***	2.230***	0.319**	0.606***	0.602***	0.514	1.649**	1.588**	0.295	2.599***	2.539***
	(0.046)	(0.001)	(0.001)	(0.015)	(0.000)	(0.000)	(0.346)	(0.020)	(0.026)	(0.575)	(0.001)	(0.001)
Year F/E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry F/E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample period/sub-period	1979-2010	1981-2010		1979-2010	1981-2010		1979-2010	1981-2010		1979-2010	1981-2010	
Number of observations	9,941	6,392	6,392	9,930	6,386	6,386	9,941	6,392	6,392	9,941	6,392	6,392
Number of non-zero (uncencored) observations	2,027	1,301	1,301	2,026	1,301	1,301	1,011	699	699	982	628	628
Pseudo R^2	0.107	0.096	0.097	0.129	0.121	0.120	0.091	0.101	0.100	0.097	0.092	0.091

These findings provide several useful insights regarding the relation between the CEO and corporate merger activity. Firms that are led by internally selected CEOs or have a history of internal CEOs participate less in the merger market and prefer organic growth. Such firms make fewer acquisitions than those whose CEOs are external. This might be the result of reluctance on the part of an insider to pursue strategies that could change the culture of the firm which has been so beneficial to him. This finding is also consistent with the literature on organizational change and the importance of external factors in stimulating innovation and growth (Chemmanur & Tian, 2012; Aghion et al 2013; Sapra, Subramanian & Subramanian, 2013; Bereskin & Hsu, 2013). We also find that when firms with internal CEOs do make acquisitions, they tend to be larger in size and less often paid with cash. Given the work by Malmendier and Tate (2008) and Ferris et al (2013) who argue that overconfident CEOs tend to use cash rather than stock for merger purchase due to their belief that their equity is undervalued, this finding appears to suggest that internal CEOs are less overconfident than those appointed externally.

SUMMARY AND CONCLUSION

This study is a unique analysis of six decades of CEO successions experienced by large U.S. firms. The rise of hedge funds and the growth of shareholder activism has emphasized the importance of value and performance improvement by the CEO. Further, the passage of SOX and the implementation of various stock exchange regulations has increased the level of personal accountability and ethical behavior expected of CEOs. Thus, the changing nature of the CEO position itself demands a long time period over which to determine what constitutes established management practices in the U.S. concerning executive succession. With our six decades of analysis, we authoritatively establish across time and industry the distribution of internal and external CEO successions. Further, this lengthy time-series allows us to create two unique subsamples consisting of firms that exclusively rely on either internal or external succession. Our approach allows us to gain new insights into the relation between CEO origin and critical decision-making by the corporate entity concerning such issues as dividends, capital investments, and mergers.

Our study focuses on the CEO's origin. Is the CEO an internal candidate or does the individual come from outside the firm? This dimension is critically important since it captures a number of aspects of the CEO profile that influence decision-making. For instance, the candidate's origin will determine the extent to which the individual is aware of current corporate culture, possesses familiarity with industry practices, and is entrenched in existing corporate practices and policies.

From our empirical analysis we obtain a number of useful findings regarding the distribution of CEO origin and its effect on major corporate decisions. We find over our 60 year sample that internal succession is the norm, with over 78% of all successions being filled with an internal candidate. We find only modest evidence that industry homogeneity contributes to an explanation of cross-sectional differences in the choice between an internal and external candidate. We find that, for our entire sample of CEO turnovers, there is little difference in the percentage of internally selected CEOs across firm age. The youngest firms choose 71.9% of their CEOs from internal candidates while 76.1% of the oldest companies fill their CEO position with an internal appointment. We find that internally selected CEOs enjoy a mean tenure of 7.5 years compared to only 6.2 years for external hires. We conclude that internally appointed CEOs tend to remain in their positions longer than those hired from outside for one to two years.

We also establish a number of patterns in the turnover of CEOs attributable to succession type. We discover that forced turnover is much more common for firms that make external appointments. We find that 41.5% of the external appointments occur as the result of forced turnover compared to only 10.9% for internal successions. Departing CEOs are older by about four years on average when they are followed by internal successors. Consistent with this, we find that departing CEOs tend to be over 60 years old more often when the firm appoints from within. Further, we determine that firms with internal succession have larger boards.

We discover several important determinants of the decision to choose between an internal and external CEO. We find that larger firm size is generally associated with a greater likelihood of an internal

appointment. Firm performance is consistently positively associated with the selection of an internal candidate. We observe that firms with greater leverage are less likely to pursue internal appointments, while those with a higher percent of fixed assets are more likely to use an internal succession. We find mixed evidence concerning the likelihood that older firms will tend to appoint insiders to their CEO position. Industry homogeneity exerts only a marginal effect on the likelihood of an internal succession, while the occurrence of a forced turnover has a strong negative effect on internal appointments. A board that contains more independent directors tends to move the appointment decision towards an external selection.

We also examine which succession type is more successful in improving firm performance and valuation. We observe that q is significantly higher for firms with an internal successor. The evidence regarding operating performance, however, is more mixed. Internal successors are associated with a significantly higher average annual ROA, but a lower growth in ROA over the three years following their appointment.

We obtain a number of results concerning CEOs and their influence on important corporate finance decisions. Our findings suggest a consistent behavior by internally selected CEOs regarding dividends. Such CEOs prefer to pay dividends and to pay them at a higher level than an external CEO. Internal CEOs also make less changes to existing corporate polices. Innovations or alterations to existing dividend practices is not a characteristic of internally selected CEOs.

We find that there is a robust effect of successor type on the firm's investment practices. Internally selected CEOs tend to spend less on R&D, but outspend their external peers in the area of capital expenditures. They are also associated with firms having more fixed assets.

We gain several insights regarding the relation between the CEO and corporate merger activity. Firms that are led by internally selected CEOs, or have a history of internal CEOs, participate less in the merger market. We also find that when firms with internal CEOs do make acquisitions, they tend to be larger in size and less often paid with cash.

We believe that there are several useful implications of this study for both practitioners of the managerial art and academic researchers. We think that this study can generate important future research that will blend the insights from behavioral finance with more traditional corporate finance to learn how CEOs and other senior corporate executives make strategically critical decisions.

It appears that the CEO's origin exerts an influence on a range of corporate decisions that should be considered when assessing CEO candidates. The precise linkage between CEO origin and the nature of the decisions made cannot be determined from this analysis, but our findings show that it exists. The attitudes of internal CEOs might be molded by their firm's culture or they might have a deep psychic commitment to a specific project or division due to their previous employment with the firm. External CEOs might bring perspectives and attitudes that are sufficiently divergent from existing corporate norms so that major financial decisions are altered.

We also document the presence of pronounced preferences by individual firms for either internal or external candidates that span decades. Clearly more research needs to be done to determine why this occurs. What is it about these firms or industries that cause them to repeatedly hire internally or to go outside for their next CEO? This same question has implications regarding the relative importance of innovation versus continuity in corporate decision-making and success.

Finally, this research raises the question of whether this dramatic preference for insiders applies internationally. Might the desire for internal candidates be mitigated by various national cultural, legal, economic, or social factors? It is not obvious that these findings will apply with equal robustness around the world.

ENDNOTES

1. The fraction is not calculated if there is no succession during the past 30 years.

2. Huson et al. (2001) obtain the data by searching various sources including the firm's proxy statement, Dun and Bradstreet's *Million Dollar Directory*, and *Moody's* manual. We are grateful to Robert Parrino for providing the data.
3. Parrino estimates his industry homogeneity measure in two steps. Individual firm returns are regressed against a market and industry index. The partial correlation coefficient for the industry return index in this regression is then averaged across all firms in an industry to obtain a measure of industry homogeneity.
4. In multivariate analysis, we estimate zero-inflated Poisson (ZIP) regressions instead of plain Poisson regressions for acquisition counts

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