Online Appendix

Does CEO Succession Planning (Disclosure) Create Shareholder Value?

A.1 Further examples of in-passing and in-depth disclosures

A.1.i Examples of in-depth disclosures

In this section, we present further examples of statements classified as "in-depth" proxy disclosures of CEO succession planning.

New York Times Company (2006):

Chairman, CEO and Vice Chairman Evaluation and Management Succession

7.1 In consultation with all non-management Directors, the Compensation Committee will conduct an annual review of the Chairman's, the Chief Executive Officer's and the Vice Chairman's performance, as further set forth in its charter.

7.2 Recognizing the critical importance of executive leadership to the success of the Company, the Board will work with senior management to ensure that effective plans are in place for both short-term and long-term management succession. As part of this process, senior management will make periodic reports to the Board on succession planning. The Board will evaluate potential successors to the Chairman, the Chief Executive Officer and the Vice Chairman.

Verizon Communications, Inc. (2016):

Succession planning and management development

Verizon's Board of Directors recognizes that one of its most important duties is to ensure senior leadership continuity by overseeing the development of executive talent and planning for the efficient succession of the CEO. Our Board has delegated primary oversight responsibility for succession planning to the Human Resources Committee, which oversees assignments to key leadership positions.

The Committee reports on its activities to the full Board, which addresses succession planning during executive sessions that typically occur in connection with each regularly scheduled meeting.

To ensure that the succession planning and management development process supports and enhances Verizon's strategic objectives, the Board and Human Resources Committee regularly consult with the CEO on Verizon's organizational needs and competitive challenges, the potential of key managers, and plans for future developments and emergency situations. As part of this process, the Board and the Committee also routinely seek input from the Chief Administrative Officer, as well as advice on related compensation issues from the Committee's independent compensation consultant.

Our Board generally conducts an in-depth review of senior leader development and succession planning at least once a year. Led by the CEO and the Chief Administrative Officer, this review addresses Verizon's management development initiatives, assesses senior management resources, and identifies individuals who should be considered as potential future senior executives.
Our goal is to develop well-rounded and experienced senior leaders. High potential executives are challenged regularly with additional responsibilities, new positions, promotions or similar assignments to expose them to our diverse operations. These individuals are often positioned to interact more frequently with the Board, both in full Board meetings and in less formal settings and small groups, so the Directors can get to know and assess them.

A.1.ii Examples of in-passing disclosures

In this section, we present further examples of statements classified as "in-passing" proxy disclosures of CEO succession planning.

Allegheny Energy, Inc. (AE) in 2004:

Corporate Governance Practices

Corporate Governance Guidelines. The Board adopted a comprehensive set of Corporate Governance Guidelines on July 10, 2003. These guidelines address a number of important governance issues including director independence, criteria for Board membership, expectations regarding attendance and participation at meetings, authority of the Board and committees to engage outside independent advisors as they deem appropriate, succession planning for the Chief Executive Officer, and annual Board evaluation. These guidelines require the directors to make every effort to attend annual meetings of the Company's stockholders. Of the nine director nominees and directors whose terms continued, all except for Julia L. Johnson and Frank A. Metz, Jr. attended the 2003 Annual Meeting of Stockholders held on November 14, 2003. The Board met 32 times in 2003. In 2003, all directors other than H. Furlong Baldwin attended more than 75% of the meetings of the Board and committees on which they served that were held during the periods they served as directors.

LinkedIn Corp. (2016)

Board Leadership and Role in Risk Oversight

Governance and Nominating Committee	Risks and exposures associated with director and management succession planning, corporate governance and overall Board effectiveness.

A.2 Keywords search for control variables in Table 4

We use textual analysis to identify 10 items that have been shown in prior studies to have a valuation effect and that also often appear in proxy statements. The 10 items are nominations of new independent directors, nomination of new female directors, nominations of new directors with financial expertise, introduction of supermajority voting requirements, introduction of majority voting in director elections, declassifications of staggered boards, resolutions related to executive compensation, say-no-on-pay proposals, use of an executive compensation consultant, and other corporate governance, social or environmental issues. To identify these, we use R web crawling script to extract all proxy statements from the Edgar website for the years 1998–2016 for firms with CIK numbers in our sample. We then use a Python text-reading algorithm to extract each table of contents section or its equivalent.

We conduct a keyword search of the table of contents to identify sections in which the 10 items of interest are likely to appear. With flexibility in wording and punctuation, we search for section titles dealing with director nominations, amendments to corporate charters, executive compensation, and shareholder proposals. (In a limited number of cases wherein a table of contents or its equivalent is not identified, human intervention identifies the equivalent proxy sections.) The relevant material is collected by extracting all words between the section heading of interest and the following section heading. Words are then ranked according to their frequency of appearance in the relevant passages. Those words that are among the most 75% of all words that appear are dropped. That is, common words are excluded. Starting with the most recent proxy statement for each CIK, we search among the smaller set of words in each relevant section for keywords that appear for the first time over a three-year period. The keywords for each section and related item of interest are reported in Table A1. This search identifies instances

in which items of interest appear for the first time. For example, the first time a new name appears in the section of director nominations and is coupled with “her” the proxy is identified as having a female director for the first time.

A.3 Why do some firms not plan and disclose when the implied CAR is positive?

In the probit model analysis of Section 6 in which we sought to identify the characteristics of firms for which succession planning is a positive (or negative) NPV project, we omitted firms that had not yet disclosed succession planning and for which the CAR around October 27 2009, was positive. Our assumption is that these firms were not value maximizing. That is, we presume that for these firms, CEO succession planning would have been a positive NPV project had they chosen to do so, and that the positive CAR reflects the greater likelihood that the SEC’s mandate increased the probability that such firms would, in the not-too-distant future, be induced to do so. The question arises as to what types of firms would choose not to plan for CEO succession when doing so would be a value increasing undertaking? We conjecture that firms with weak boards and, perhaps, an entrenched CEO are more likely to fall into that category.

To consider this conjecture, we estimate a probit regression using firms that had disclosed succession planning in depth prior to October 27, 2009, and firms that had made no such disclosures and had positive CARs around October 27, 2009. The independent variables include the firm characteristics listed in Table 7 along with the Bebchuk, Cohen, and Ferrell (2008) entrenchment index,[1] the fraction of independent directors, the size of the board, and the tenure of the CEO. The results of the regression are given in Table A2. As shown in the table, the coefficients of the governance index and CEO tenure are negative and statistically significant

[1] The Bebchuk, Cohen, and Ferrell (2008) sample includes S&P 1500 firms for the years 1998–2006. We follow the Bebchuk et al. procedure to create the index for non-S&P 1500 firms in our sample for the years 1998–2006 and for all firms in our sample for the years 2007 and 2008.

(both p-values < 0.01) and the coefficient of the fraction of independent directors is positive and statistically significant (p-value < 0.01). These results suggest that firms for which succession planning would have been a positive NPV project, but had not yet disclosed such planning as of October 27, 2009, are characterized by weaker corporate governance and more entrenched CEOs, perhaps reflecting an agency problem.

A.4 An alternative interpretation of certain results

Certain of our results lend themselves to an alternative interpretation. That interpretation goes as follows: suppose there are two types of CEOs, good CEOs and bad CEOs, and investors know which type each firm has. Further, suppose that the board also knows which one its firm has. Knowing this, the boards of firms with bad CEOs signal the imminent departure of the CEO by announcing in-depth that a plan of succession has been put in place. The boards of firms with good CEOs make no such announcements. In this scenario, the disclosure in-depth of a succession plan would give rise to a positive valuation effect for the firms that make such announcements, not because planning per se creates value, but because the board is indicating that the bad CEO is about to depart. Now consider the firms with good CEOs. These boards have no plans to dismiss the CEO and, therefore, nondisclosure in a proxy would be a signal that the good CEO is not about to depart. Thus, the absence of a disclosure would contain no news (though it could also be expected to be greeted as good news in that the good CEO is not about to depart). In any event, in this view of the world, an in-depth disclosure would be associated with a positive CAR, which is what we find, and a proxy with a nondisclosure would have a zero CAR (though a positive CAR for nondisclosure could also occur), and the effect would be due to news about the CEO's departure not about succession planning.

An implication of this interpretation is that CEO turnover is imminent in firms with in-depth succession planning disclosure. Assessing whether CEO turnover is imminent following a disclosure requires a benchmark of what is "normal" time-to-departure following filing of a proxy statement. As a benchmark, we use the time-to-departure of the CEO for firms with no disclosure of succession planning. We compare the time-to-departure of in-depth disclosing firms with the benchmark. More specifically, for each first-time in-depth disclosing firm, over the years 2003–2013, we calculate the number of months between the proxy month of the disclosure and the announcement month of CEO turnover. We calculate the average of these for each calendar year. We begin with 2003 because that is the first year in which *Capital IQ* provides CEO turnover data. We end with 2013 because the number of months over which turnover can be observed following 2013 is truncated at 36.

The results are presented in the second column of Table A3. As the table shows, of necessity, the average time-to-departure becomes shorter through time because the maximum number of months that can be observed becomes shorter through time.

As a benchmark, for each year of 2003-2013, for each in-depth disclosure firm, we identify the 10 nondisclosure firms in the same Fama-French 48 industries that are closest in total assets to the in-depth disclosure firm. We calculate the time-to-departure for each nondisclosure firm that has a turnover in the CEO position so long as the turnover occurs prior to an in-depth disclosure by that firm, and prior to the end of 2016. For each calendar year, we calculate the average time-to-departure for these nondisclosure firms.

If the in-depth disclosure of succession planning is an indication that turnover is imminent and if a nondisclosure is an indication of the opposite, the average time-to-departure for the in-depth disclosure firms should be less (perhaps much less) than that of the

nondisclosure firms. A comparison of the second and fifth columns of Table A3 shows that not to be the case. Indeed, in seven of the 11 years, the average number of months-to-departure is larger for the in-depth disclosure firms than for the nondisclosure firms, and in an eighth year the number is the same. These data weigh heavily against the alternative interpretation of the announcement period CARs.

A.5 Using all disclosures

We report that the extent and quality of disclosure statements about CEO succession planning vary considerably across firms with a key finding of our analysis being that the extent of disclosure "matters." That finding is based on our classification of in-depth vs. in-passing disclosures wherein an in-depth disclosure is one in which a free-standing passage is devoted to the topic of CEO succession planning and the passage bears a title specifically related to succession planning or executive review and evaluation. Based on this observation, we focus on in-depth disclosures in the tests that follow. A reasonable concern is that classification of in-depth vs. in-passing involves subjective consideration and that a different subjective choice would change the outcome of the tests. To examine whether that is the case, we conduct the tests being agnostic as to whether the disclosure statement is in-depth or in-passing by including every firm with any type of disclosure of succession planning in its proxy as being a disclosure firm.

The relevant tests are those reported in Tables 4 and 7. Given the evidence that some firms that disclosed succession planning after October 27, 2009, did so even though doing so was a negative NPV project, we focus on firms with pre-2009 disclosures. With respect to Table 4, when we use the full set of pre-October 27, 2009, disclosure firms, the magnitudes of the coefficients of succession planning disclosure indicator variable are both positive with p-values $<$ 0.01. With respect to Table 7, the variables of Ln (Total assets), #Business segments, stock

return volatility, and sales growth continue to be statistically and economically significant. In short, our key conclusions do not depend on our classification of in-depth vs. in-passing disclosures.

A.6 CEO turnover and in-depth disclosure

In Section 7, we calculate abnormal returns around CEO turnover announcements. The average abnormal return around turnovers is less negative for turnover events that were preceded by in-depth succession planning disclosures. We report that, on average, such announcements precede the turnover event by 31 months. A concern might be that investors perceived the in-depth disclosures as "pre-announcements" of an impending CEO turnover and, thus, had already embedded the news of the turnover in the firm's stock price. If so, that could explain the less negative CAR for such turnover events. To address that concern, we conduct an event study for CEO turnover announcements that occurred at least five years after the firms in question first made an in-depth disclosure of CEO succession planning. This sample includes 219 observations vs. the 492 observations of the full sample in Table 8. The three-day CAR around these CEO turnover announcements is -0.37% in comparison with the CAR of -0.38% for the full sample. Further, the CAR of -0.37% is significantly different from the CAR of the nondisclosure sample (i.e., -0.72%) with a p-value < 0.01 for the difference between the two. These results argue against the possibility that the CAR upon CEO turnover is biased toward zero due to immediately preceding in-depth disclosure of succession planning.

Table A1: Keywords for the construction of control variables

Variable of Interest	Keywords
Section: Director Nominations	
Director with financial expertise	Financial, finance, bank, banking, audit, business, management, account, accounting, accountant, CPA, economics
Female director	Female, her, hers, she, gender diversity, women, woman
Independent directors	Independent
Section: Amendments to Corporate Charters	
Introduction of supermajority voting requirements	Super majority voting, shareholder rights, >75 percent of common stocks (In each instance, human intervention audits to ensure accuracy.)
Introduction of majority voting in director elections	Majority voting, director election (In each instance, human intervention audits to insure accuracy.)
Declassifications of staggered boards	Declassification, stagger, tenure (In each instance, human intervention audits to insure accuracy.)
Section: Executive Compensation	
Use of an executive compensation consultant	Executive compensation consultant
Section: Shareholder Proposal	
Resolutions related to executive compensation	Compensation, options, pay, bonus, salary, award, executive, long-term, stock
Say-no-on-pay proposals	Say no on pay
Other corporate governance, social or environmental issues	All other proposals

Table A2: Characteristics of firms for which CEO succession planning and disclosure is value-creating

This table presents the results of estimating a probit model with a dependent variable of 1 identifying in-depth disclosure firms prior to October 27, 2009, and 0 identifying firms that had not disclosed any information about CEO succession planning as of October 27, 2009, but for which the CAR around October 27, 2009, was positive. An in-depth disclosure is a disclosure statement using a free-standing passage with a title related to succession planning or executive review and evaluation as described in Section 3. Independent variables are firm characteristics defined in Appendix B. Entrenchment Index is defined as in Bebchuk, Cohen, and Ferrell (2008). The model is used to calculate the probability that a firm discloses CEO succession-planning-related information as a function of firm characteristics and corporate governance. The p-values are shown in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1) Prob (in-depth disclosure)
ln(Total assets)	0.273***
	(0.00)
# Business segments	1.274***
	(0.00)
Industry homogeneity	-0.022
	(0.44)
Industry-adjusted return on assets	-2.847**
	(0.02)
Stock return	-0.073
	(0.21)
Stock return volatility	0.174**
	(0.03)
Sales growth	-0.054
	(0.43)
Market-to-Book	0.022
	(0.34)
Entrenchment index	-2.450**
	(0.02)
Independent directors (%)	0.588***
	(0.00)
Board size	0.100***
	(0.00)
CEO tenure	-0.029***
	(0.00)
Constant	-4.066***
	(0.00)
Year dummy	Yes
Observations	2,838
R-square	0.14

Table A3: Months between proxy disclosure of succession planning and CEO turnover

This table presents the number of months between proxy filing and the announcement of CEO turnover (i.e., time-to-departure) for firms with first-time in-depth disclosure of succession planning and for firms with no disclosure of succession planning. Proxy year is the year in which the proxy is filed. A firm is a first-time in-depth disclosure firm if the first time that the firm discloses any information about succession planning the information is set forth in a separate free-standing passage with a title related to succession planning or executive review and evaluation as described in Section 3. Time-to-departure is the number of months between a proxy filing month and an announcement month of the following CEO turnover. Number of firms in column (1) is the number of first-time in-depth disclosure firms in the relevant year that experience turnover in the CEO position prior to the end of 2016. "Non-disclosure firms" are firms that never disclose CEO succession-planning-related information in their proxy statement prior to CEO turnover. Matched sample of nondisclosure firms are nondisclosure firms that are matched to first-time in-depth disclosure firms based on size and industry. For each first-time in-depth disclosure firm, we select 10 nondisclosure firms in the same Fama-French 48 industry that are closest in total assets to the first-time in-depth disclosure firm. Columns (2) and (3) report the mean and standard deviation of the time-to-departure of the first-time in-depth disclosure firms, respectively. Columns (5) and (6) report the mean and standard deviation of the time-to-departure of the matched sample of nondisclosure firms.

	(1)	(2)	(3)	(4)	(5)	(6)
	Time to departure					
	First-time in-depth disclosure firms			Matched sample of nondisclosure firms		
Proxy filing year	Number of firms	Mean time-to-departure (months)	Standard Deviation (months)	Number of firms	Mean time-to-departure (months)	Standard deviation (months)
2003	33	52	38.0	330	54	42.8
2004	26	50	45.2	260	48	33.2
2005	18	51	38.0	180	46	34.4
2006	4	40	38.0	40	40	34.4
2007	6	60	20.0	60	46	35.6
2008	12	34	21.2	120	37	24.8
2009	6	50	21.2	60	34	27.2
2010	48	33	14.2	480	27	18.8
2011	31	28	18.0	310	21	15.2
2012	9	20	14.0	90	15	12.8
2013	6	8	7.0	60	13	11.0