International Journal of
Financial Studies

MDPI

Article

CEO Turnovers: Transparency of Announcements and the Outperformance Puzzle

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Abstract: This study investigates market reactions to announcements of CEO turnover and finds that forced turnovers are not accompanied by positive returns, which contradicts the broad view that firing a CEO sends a positive signal to the market. This contradiction is further explored by focusing on the nature of not only turnover but also a firm's past performance. This study finds that the market seems to incorporate both types of information in reacting to CEO turnover announcements. Firing an underperforming CEO is viewed as a positive signal, whereas firing an outperforming CEO is viewed as a negative signal. Rather than taking early action against CEOs for a deterioration in their performance, firms appear to be firing outperforming CEOs owing to their apparent nonperformance-related reasons. This study also explores reasons behind the decision to fire a CEO from different news databases and finds that giving no clear reasons for a CEO's departure increases uncertainty in the market, thereby causing a negative market reaction. However, stating performance as the reason for the departure assures investors about the future trajectory of the firm and results in a positive market reaction.

Keywords: CEO turnover; CEO performance; internal conflict; reason for departure

JEL Classification: G14; G30; G34; M51

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Citation: Farah, Paul, and Hui Li. 2021. CEO Turnovers: Transparency of Announcements and the Outperformance Puzzle. *International Journal of Financial Studies* 9: 34. https://doi.org/10.3390/ijfs9030034

Academic Editors: Sabri Boubaker and Robert Martin Hull

Received: 17 April 2021
Accepted: 21 June 2021
Published: 25 June 2021

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1. Introduction

Dismissing chief executive officers (CEOs) is commonly viewed as a vital tool that the board of directors (BOD) uses to tackle poor firm performance. While the CEO turnover literature (e.g., Jenter and Kanaan 2006) has documented an inverse relationship between CEO dismissal and past firm performance, several important questions that have practical implications remain underinvestigated. Can a CEO be fired despite his good performance? What is the reason for this dismissal? Will the BOD be able to find a better replacement? How does the market react to the announcements of firing an outperforming CEO? Is this reaction substantially different from that of firing an underperforming CEO? What is the effect of the announcement transparency on the market reaction?

In order to answer these questions, this study examines the change in shareholder wealth around announcements of CEO turnover for firms in the Standard and Poor's (S&P) 1500 Index. Based on a sample of 187 forced CEO departures during the period from 2003 to 2012, this study does not document any significant positive abnormal returns. When classifying CEOs as outperforming or underperforming based on past firm performance, this study provides new evidence that firing an outperforming CEO results in a negative market reaction, whereas firing an underperforming CEO leads to a positive market reaction.

While performance is the main reason for CEO dismissals, other factors, such as internal conflicts with the BOD and/or shareholders and business misconduct, are important as well. For example, Jack Griffin, the former CEO of Time, was ousted because of his rough

management style, which conflicted with the company's culture. Advance Micro Device's Dirk Meyer was dismissed as his management style interfered with the company's shift from chip making to mobile devices. Nissan's Carlos Ghosn was ousted as result of a power struggle among top executives despite his superior performance. Based on these examples, firing a CEO with no obvious poor past performance can arguably be driven by internal power struggles rather than by performance.

This study finds that in the forced turnover sample, around 30% of the turnovers are accompanied by positive past stock performance, suggesting that 30% of the CEOs in our sample outperformed a benchmark but were still ousted. Despite the common view in the literature that the main reason behind firing a CEO is poor performance (e.g., Huson et al. 2004), it is somewhat puzzling to observe positive past performance for this non-negligible portion of the forced turnover sample. In addition, this study finds a significant difference between the subsequent firm performance after firing outperforming as well as underperforming CEOs. Firing an outperforming CEO results in a subsequent relatively poor performance, while firing an underperforming CEO leads to subsequent good performance. Accordingly, internal conflict could be a significant reason for firing outperforming CEOs if it appears that the BOD has replaced a high-calibre leader with a lower-calibre one. Using different news databases, this study looks for the stated reasons behind forced CEO turnovers. It finds that stating no clear reason for CEO departure is associated with a negative price reaction and stating performance as the reason of departure is associated with a positive price reaction.

This study contributes to the CEO literature in several ways. First, it provides further insight into the relatively small amount of event-study literature of CEO turnover using hand-collected data for a large sample of firms. Second, it finds strong evidence that the nature of a firm's past performance affects the market reaction to CEO turnover announcements. Third, we examine the special case of firing outperforming CEOs, highlighted by Ertugrul and Krishnan (2011), in which firing CEOs is an early preventive measure against performance deterioration; however, we are unable to find evidence supporting this prediction. Instead, the results suggest that those outperforming CEOs are fired owing to nonperformance reasons. Fourth, we document a negative relationship between the transparency of forced CEO turnover announcements and price reactions, supporting the view that the degree of information disclosure affects shareholder wealth.

The remainder of the paper is organised as follows: Section 2 presents the literature review and hypothesis development. Section 3 explains the sample, data, variables, and methodology. Sections 4 and 5 present the findings, and Section 6 concludes.

2. Literature Review and Hypotheses Development

2.1. CEO Turnover Announcement and Performance

According to Hambrick and Mason (1984), the characteristics of an organisation's top executives determine the strategic choices made and subsequently its performance. As such, the attributes of the CEO of a firm, which is the very top executive position, can be regarded as the most important determinant of organisational success. Fama (1980) shows that CEO pay is adjusted to reflect the performance of the management; it can be considered as a disciplinary mechanism to punish poorly performing managers and reward superior performing ones. Incentive plans, especially those related to a company's stock performance, are an effective way to align the interests of the management with those of the shareholders. However, the threat of dismissal is a more powerful alternative in the case of poor performance as CEO reputation in the managerial labour market deteriorates. Most of the theoretical literature modelling the CEO dismissal decision envisions a situation in which the corporate boards learn from a firm's performance and other public and private signals about the quality of its current CEO (see, e.g., Hermalin and Weisbach 1998; Adams et al. 2005, among many others).

CEO compensation and turnover can be jointly determined in certain circumstances. For example, Mobbs (2013) reports that when an inside director with outside connections

is a readily available replacement for the CEO, the board might act immediately and fire a poor performing CEO, and his/her compensation are far more sensitive to stock performance. By investigating the banking sector, Cerasi et al. (2020) find support for the connection between CEO turnover and compensation. They report that CEO turnover is negatively related to the share of variable compensation over total compensation.

In a seminal study, Coughlan and Schmidt (1985) find that CEO incentives are strongly related to a change in the stock performance of a company; they also find that a CEO exhibiting poor performance is more likely to lose his job than a CEO exhibiting good performance. The latter relation is strongly supported by the corporate finance literature (Weisbach 1988; Warner et al. 1988; Gilson 1989; Murphy and Zimmerman 1993; Denis and Denis 1995; Huson et al. 2001; Huson et al. 2004; among many others). According to these studies, firm performance seems to be the main factor the BOD takes into consideration when making decisions regarding the dismissal of the CEO. All other factors studied in the literature, such as internal governance mechanisms, external governance mechanisms, and information disclosure, are considered from the perspective of the turnover–performance relationship[1].

Since performance is the main element affecting the decision of CEO departures, the market reaction to an announcement of a CEO turnover should be positive. As the incumbent is ousted from the leadership, investors expect that the BOD picks, or will pick[2], a suitable substitute to reverse the company's poor performance. The BOD is aware of a company's bad performance, and a key option the company has is to oust the CEO and replace him with a more qualified successor, signalling a big change in future performance to the market.

The incoming CEO may help increase, decrease, or not affect shareholder wealth. However, if the incoming CEO is expected to decrease shareholder wealth, the BOD does not replace the incumbent in the first place, as firing a CEO is a very costly decision. In this case, there is no point replacing the incumbent if the company is performing poorly and is expected to continue to do so even after a change in management, as this will only result in the company losing out on a substantial chunk of severance pay and spending valuable resources in the quest for a replacement. Ideally, a change in management is expected to either convert poor performance to good performance or at least mitigate the current poor performance. In both cases, the firm value is expected to increase at the time of the announcement, as the stock price would have been adjusted to reflect the future expectations accompanying the event.

A small strand of the turnover literature studies the impact of CEO turnover announcements on shareholder wealth. Most of the studies find a positive market reaction to announcements of management replacement (Furtado and Rozeff 1987; Worrell et al. 1993; Denis and Denis 1995; Huson et al. 2001; Shen and Cannella 2003; Adams and Mansi 2009). There are a few exceptions—for example, Reinganum (1985) and Warner et al. (1988)—which could not find a significant market reaction to the announcements. On the other hand, some studies (e.g., Khanna and Poulsen 1995; Dedmana and Lin 2002) find negative abnormal returns around the announcement of management turnovers. Investors appear to perceive management changes as value-enhancing actions; however, the existing evidence remains far from compelling.

Although poor performance is a significant reason for CEO turnover, CEOs may leave a company even when the performance of firms under their tenure is positive. Ertugrul and Krishnan (2011) document that almost half of their CEO turnover sample experienced good performance in the preturnover period. Since the quality and skills of the CEOs are observed through a firm's performance (Kim 1996), firing an underperforming CEO can be viewed as a departure of a relatively lower-calibre leader, while firing an outperforming CEO can be viewed as the departure of a relatively higher-calibre leader. Accordingly, the first hypothesis is as follows:

Hypothesis 1 (H1). *Market reactions to announcements of firing an underperforming CEO are positive and market reactions to announcements of firing an outperforming CEO are negative.*

A natural or voluntary CEO departure occurs when the CEO reaches the retirement age; this type of turnover is mostly expected and has a lower effect on the overall firm strategy than forced turnovers (Denis and Denis 1995; Huson et al. 2004). Ideally, a voluntary departure of an underperforming or outperforming CEO would not be as significant, in terms of price reaction to the announcement, compared with a forced departure of an underperforming or outperforming CEO. Irrespective of whether a CEO underperforms or outperforms, the likely reason behind his voluntary departure is his age[3].

However, in the case of forced turnovers, the departure of an outperforming CEO is not as simple as compared with the departure of an underperforming CEO. There are two possible explanations for firing an outperforming CEO: (1) firing an outperforming CEO can be regarded as a proactive measure by the BOD to dismiss low-ability CEOs who can cause significant damage to firm value (Ertugrul and Krishnan 2011) or (2) firing an outperforming CEO can be a result of reasons unrelated to performance.

The CEO turnover literature often uses performance as a proxy for managerial skills (Kim 1996). The poorer the performance of the firm is, the lower the skills of the CEO are and the higher is his probability of being replaced. However, there are other managerial attributes that may not directly affect performance but that the BOD takes into consideration when making decisions regarding a change in management. Management style is a broad term for many specific CEO traits that describe the manner in which a CEO behaves with the board, employees, and other stakeholders. CEOs are subject to the scrutiny of the media and stakeholders, as a company's image is highly dependent on the personality and leadership style of its chief (Gamache and McNamara 2019). The downside of management styles has caused several CEOs to be replaced.[4] Often CEOs recognise their areas of expertise and spend time to hone these skills; however, it can be difficult to perceive the flipside of these strengths. For example, a CEO who sees himself as efficient may be viewed by his employees (or the BOD) as abrupt or uncaring. In another case, a leader who strives to be thoughtful and strategic may be perceived as moving too slowly. Being mindful of the narrow line between strengths and weaknesses may be critical to fine-tuning areas of proficiency.

Schneider (1987) explains the individual turnover in organisations as a result of the heterogeneity within a company. An organisation's members tend to have similar perceptions and ways of thinking; however, clashes among firm members may occur as a result of different opinions or behaviours, which can lead to the less similar members exiting the firm. Moreover, in line with the social categorisation theory developed by Turner et al. (1987), an organisation's members categorise certain types of traits, such as attractiveness, trustworthiness, and cooperation, into an 'in-group' and all others into an 'out-group'. The 'in-group' members tend to be treated more favourably than the 'out-group' members.

It is not unusual to have power struggles among the top decision makers within an organisation (Agrawal and Chen 2017); conflicts may arise between the CEO and the chairman and/or the BOD regarding strategic or operating issues, resulting in diverse opinions and a great deal of friction, which may lead to one party attempting to eliminate the other in order to implement its views of conducting business. On the other hand, conflicts may arise between the controlling shareholders and the management, which may lead to a proxy fight and power battle to win control of the company. Consequently, CEOs may be forced out of companies for reasons that go beyond current or past performance, leaving the market in an unclear state about the future performance of the firm.

The BOD does not initiate a change in management unless it expects an incremental increase in shareholder value under the new CEO's tenure, as the incoming CEO must be of a higher calibre than the outgoing CEO[5] (Huson et al. 2004). Directors infer managerial quality from current and past firm performance; whenever performance is sufficiently poor

and the benefits of replacing the incumbent CEO exceed the cost, a change in management is more likely to occur. In this line of reasoning, when poor performance is not observed, it is very unlikely that the change in management is performance related or solely initiated by the BOD[6], and a deterioration in performance is likely to occur. Accordingly, the second hypothesis is as follows:

Hypothesis 2 (H2). *Firm performance following outperforming CEO dismissal is lower than firm performance following underperforming CEO dismissal.*

Performance is expected to improve after firing a lower calibre underperforming CEO. On the other hand, outperforming CEOs are, by definition, high-calibre managers; therefore, if performance is the reason for the turnover of these managers, it is expected that the incoming managers would be of an even higher calibre. If so, the performance under the new CEO tenure should be even higher than the performance under the old CEO. Otherwise, Hypothesis 2 predicts that it is very unlikely that the outperforming CEO gets forced out for performance-related reasons.

2.2. Transparency in CEO Dismissal Announcements

The BOD's discretion regarding the reasons for ousting a CEO increases the information asymmetry between management and shareholders. The BOD is supposed to monitor the management and take action, when necessary, on behalf of the shareholders. Providing sensible reasons for the departure of the CEO makes investors less uncertain about the board's justification of its action. However, firing the CEO and leaving the market to speculate about the real reason may increase uncertainty among investors, especially when poor performance is not observed.

The literature documents that investors perceive securities with low-information disclosure as riskier securities and demand a higher rate of return on their investments (Klein and Bawa 1977; Bawa et al. 1979; Barry and Brown 1984; Barry and Brown 1985; Barry and Brown 1986). On the other hand, the clarity of communications and information disclosure can drastically increase firm value (Leftwich 1980; Watts and Zimmerman 1983; Healy and Palepu 2001). Accordingly, this study expects that the lack of transparency in the announcement of CEO dismissals causes a negative price reaction, and the clarity of the announcement results in a positive price reaction. Accordingly, the third hypothesis is as follows:

Hypothesis 3 (H3). *Price reactions to nontransparent CEO turnover announcements are lower than those of transparent CEO turnover announcements.*

When the reason for a CEO's dismissal is stated as performance related, the BOD sends a signal to the market that it is confident regarding the decision it has made, and that a better replacement is expected. However, this is not the case when other reasons are given for the dismissal of the CEO. For example, the BOD assigns more weight to the ethical side when dismissing the CEO as a result of business misconduct. In this line of reasoning, this study expects that stating performance alone as the reason for turnover would result in a positive price reaction, but this is not so when other nonperformance reasons are stated. Accordingly, the fourth hypothesis is as follows:

Hypothesis 4 (H4). *Price reactions to CEO turnover announcements that state performance as the reason for dismissal are positive.*

3. Sample, Data, and Methodology

3.1. Sample

Our sample includes CEO turnover for companies belonging to the S&P 1500 Index for the period from 2003 to 2012. This period experienced corporate governance reforms after

the Sarbanes–Oxley Act (SOX) was passed in 2002, which resulted in intense monitoring activities by the board and the financial press. CEO changes were followed for these companies from 2003 to 2012 or until the firms were delisted from the stock exchange.

The S&P 1500 Index can be seen as a good representative of the market as it includes companies of all sizes and industries. The vast majority of the studies in the literature examine CEO turnover in the largest 500 companies, as the data for these companies are easy to obtain from articles, since these companies are always in the media spotlight. As this study was able to extract articles for much of the turnover in the S&P 400 and S&P 600 companies, it has minimised the size bias. As in previous literature, we have controlled for different conditions of CEO turnover announcements (Lim 2021) by excluding CEO turnovers associated with merger and acquisitions, spinoffs, and CEO deaths. The final sample includes 735 CEO turnovers, which is considered large compared to the samples used in event studies of CEO turnover.

3.2. Data

Data are extracted from Execucomp, Factiva, Compustat, and Center for Research in Security Prices (CRSP) databases. The CRSP database is used to extract information on all companies listed in the S&P 1500 Index. The Execucomp database is used to obtain information regarding the top executives of these companies, such as the date that an executive was appointed, the date he left office, and his age, title, and name. This study uses Factiva to acquire all articles dealing with CEO turnover. Analysing these articles for each CEO turnover has enabled us to obtain the exact announcement date of the event and the nature of the turnover.

3.3. Turnover Classifications

This study relies on the articles extracted from Factiva to classify CEO departures as forced or voluntary. Based on the work of Denis and Denis (1995) and Parrino (1997), this study considers certain characteristics that make the departures most likely to be forced. When articles state that the CEO is forced out or ousted, this study classifies the turnover as forced, and when they state that the CEO is retiring, it classifies the turnover as voluntary if the CEO is over 60 years old. It further investigates those cases where the CEO is less than 60 years old, and the succession occurs within six months of the announcement. A turnover is classified as forced if it satisfies both the following conditions: (1) the CEO does not stay in the company in another position and (2) does not find a comparable position elsewhere or departs for previously undisclosed personal or business reasons. The same conditions are applied when the articles state that the CEO resigned, left by mutual agreement with the board, or left to pursue other interests. The final sample includes 187 forced CEO turnovers, which share the following characteristics: no succession or interim appointment, outside succession, the CEO's age is significantly below normal retirement age, there is a very short length of time between the announcement and the departure date, the CEO is leaving the company, the CEO is not taking any comparable position in another company, and unpredictability of the event. The final sample also includes 548 voluntary turnovers, which have the following common characteristics: the age of the CEO is very close to the retirement age, the CEO stays on in the company as chairman or consultant, predictability of the change in management, and relay successions (President or COO promoted to CEO).

3.4. The Reasons behind CEO Dismissals

In order to obtain the reasons for firing a CEO, this study combed the articles on Factiva looking for the justifications of the BOD for deciding to replace their leader. This study took into consideration companies' official statements when they were available. Moreover, when an article claims that a particular piece of information was taken from a reliable source, this study considers it as an unofficial statement stating the reason for firing the CEO. Based on these two procedures, this study classifies all forced turnovers in accordance with their officially or unofficially stated reasons. Performance is indicated

or hinted at[7] as the reason for a substantial number of forced turnovers. Other reasons such as options abuse and accounting manipulations are classified as business misconduct. When an article states that the turnovers were a result of a difference in strategy or conflict with the board, these turnovers are classified under internal conflicts.

This procedure resulted in 60 performance-related turnovers, 24 business misconduct–related turnovers, 14 internal conflict–related turnovers, and 17 other cases of early retirement or ethical misconduct. These dismissals are classified as 'transparent'. However, CEO dismissal can sometimes be shrouded or camouflaged. Boards may choose to state the reasons for a CEO leaving as 'he wanted to pursue other interests', without elaborating further; 'he left after a mutual agreement with the board'; or they simply state that 'the CEO has resigned'. These turnovers are classified as 'nontransparent'. The reason this study classifies the 'pursue other interests' turnovers as 'nontransparent' is because these departures are already classified as forced, suggesting that CEOs who departed from the firm did not find any comparable position elsewhere[8]. This study finally arrives at 72 cases of 'nontransparent' dismissals.

3.5. Variables and Methodology

In order to study the effects of a change in management, this study collects information related to the company, the departed and incoming CEO, and the nature of the turnover. Then, it applies a standard event study approach to measure the impact of the turnover event on shareholders' wealth. Performance is the main explanatory variable measured by the stock return. This study uses the cumulative abnormal returns method to measure preannouncement performance for the purpose of the classification of turnovers. Cumulative abnormal returns (CARs) are calculated by subtracting the expected or benchmark return from the company's stock return for the relevant period of time and then cumulated as follows:

$$CAR_{it} = \sum_{t=1}^{T} [R_{it} - E(R_{it})] \,, \tag{1}$$

where R_{it} is the monthly return for a sample firm i and $E(R_{it})$ is the expected return for the sample firm. Benchmark or expected returns are calculated using two approaches: (1) the CRSP index return and (2) the returns on Fama–French's 48 industry portfolios for industry classification.

This study uses CARs to classify whether a CEO is outperforming or underperforming; if a firm's market adjusted cumulative monthly abnormal stock returns in the three years leading to the announcement are positive, the departing CEO is classified as outperforming; otherwise, he is classified as underperforming. Our classification is greatly influenced by Ertugrul and Krishnan (2011) who used similar classification procedures to divide their early and late dismissal samples. As in the study of Ertugrul and Krishnan (2011), this study solely relies on past stock returns for its main classification of outperforming and underperforming CEOs since stock returns reflect information about the future cash flow of a firm, which is the main factor that the BOD takes into consideration when making a decision regarding the top leader. In addition, a stock-based measure of performance captures revisions in the market's beliefs about the firm's entire future stream of operating performances. Therefore, any operating measure of performance will diverge somewhat from a stock-based measure of performance (Bacidore et al. 1997).

For the cross-sectional regression analysis, the dependent variable is the cumulative abnormal returns calculated over a three- and five-day event window using the market model. The parameters of the market model are estimated over 250 days and end 20 days prior to the announcement of a change in management. The main independent variable is past performance. Accordingly, the model is as follows:

$$\begin{aligned} CAR_t = \beta_0 + \beta_1 outperformance_i + \beta_2 no\ reason_i + \\ \beta_3 perfromance\ as\ reason_i + \beta_4 control_t + \varepsilon_t \end{aligned} \tag{2}$$

where CAR_t is the cumulative abnormal returns for an event window t; $outperformance_i$ is a dummy variable that equals 1 if the market adjusted monthly CARs are positive in the three years leading to the turnover, and 0 otherwise; and *no reason* is a dummy variable that equals 1 if no clear reason is provided for the CEO turnover. *Performance as reason* is a dummy variable that equals 1 if performance is stated as the reason for CEO turnover.

CEO-specific control variables include tenure and duality status of the departing CEO, which measure the power and influence of the departed CEO, and which may have a positive effect on the market reaction, as firing a powerful CEO is not anticipated (Goyal and Park 2002; Dikolli et al. 2014). A dummy variable is included in case the incoming CEO is appointed from outside a firm, as the successor origin of the outsider may have a positive effect on the price reaction of the succession's announcements (Parrino 1997). Age of the departing CEO may dampen the surprise element of the announcement, as the closer the age of the CEO is to retirement, the more anticipated the turnover is (Kind and Schläpfer 2010). Finally, to account for any cross-sectional effects of size and book-to-market ratio of companies, this study includes the logarithm of market equity and book-to-market ratio as firm-specific control variables.

Post event long-term performance is measured by the conventional buy-and-hold abnormal return (BHAR) method. Barber and Lyon (1997) and Lyon et al. (1999) report that BHAR is a good measurement for long-term market performance. Loughran and Ritter (2000) report that BHARs capture around 80–90% of true abnormal returns. BHARs that accurately measure investor experience serve as appropriate performance indicators. BHARs are calculated as the return on a buy-and-hold investment in the sample firm less the expected return on a buy-and-hold investment in a benchmark as follows:

$$BHR_{IT} = \prod_{t=1}^{T}[1 + R_{it}] - \prod_{t=1}^{T}[1 + E(R_{it})] \quad (3)$$

where R_{it} is the return for a sample firm i for the month t, and $E(R_{it})$ is the expected return for the sample firm. The expected return is one of the following: (1) the CRSP index weighted-value return or (2) the return on Fama–French's 48 industry portfolios.

4. Results

4.1. Characteristics of Turnovers

Table 1 presents descriptive statistics for the full sample of CEO turnovers. Companies belonging to the S&P 1500 Index experienced around 26% forced turnovers and 74% voluntary turnovers for the 10-year period under investigation; the forced turnover sample clearly differs from the voluntary turnover sample, according to the characteristics shown in the table. The average age and tenure of a fired CEO is much lower than that of a CEO who voluntarily leaves the office; more importantly, 49% of the forced turnover cases do not have a permanent replacement for the fired CEO, and only 3% of the fired CEOs stay in their firms compared to 42% of the voluntary turnovers sample. This lack of succession planning indicates the surprising nature of the turnovers. Appointing a CEO from outside the firm seems to be more prevalent in the forced turnovers sample than the voluntary turnovers one. Moreover, for the forced turnovers sample, fewer days separate the announcement of the change in management and the actual departure of the CEO. Table 1 also shows that forced turnovers have a poorer past market performance when compared with voluntary turnovers. Most of the fired CEOs do not hold the additional title of chairman, while most that depart voluntarily hold a duality status, which is in line with the argument that firing a CEO who holds the chairman's title is much harder than firing one that does not. Forced turnovers seem to clearly exhibit a certain kind of behaviour that differentiates them from voluntary turnovers.

Table 1. Descriptive statistics.

Variables	Full Sample $N = 721$		Forced $N = 184$		Voluntary $N = 537$		Difference	
	Mean	SD	Mean	SD	Mean	SD	Mean	*T*-Value
Age	58.63	6.32	54.24	5.64	60.13	5.85	−5.89	(−12.23) ***
Tenure	9.12	5.60	5.97	3.52	10.20	5.34	−4.23	(−9.62) ***
No Succ	23.53%	0.41	49.30%	0.48	14.70%	0.33	34.60%	(10.32) ***
Outsider	24.81%	0.26	35.32%	0.19	21.21%	0.48	14.11%	(3.27) ***
Stayed	32.28%	0.43	2.93%	0.22	42.34%	0.46	−39.41%	(−10.24) ***
Time-diff	57.79	33.65	9.24	8.01	74.43	68.55	−65.19	(−8.34) ***
duality	61.10%	0.48	34.21%	0.45	70.32%	0.45	−36.11%	(−8.56) ***
Preturnover ret	−3.30%	0.41	−25.13%	1.37	4.18%	0.42	−29.31%	(−7.88) ***
size	8.15	1.61	8.00	1.66	8.20	1.70	−0.20	(−1.59)
BE/ME	0.57	0.45	0.69	0.66	0.53	0.41	0.16	(4.15) ***

This table presents descriptive statistics for the full turnover sample and the two groups, forced and voluntary turnovers, and the mean differences between the two groups. Age and tenure of the CEO are measured in years, the time difference (time-diff) between the announcement of turnover and the departure of the CEO is expressed in days. No succession (no succ) represents the lack of an appointment of a permanent CEO, and outsider indicates the appointment of a CEO from outside the firm; duality indicates that the departed CEO is also the chairman, stayed indicates the percentage of CEOs that stayed in the firm in another position after resigning from the CEO post; these variables are measured as a percentage of the sample (mean*100). Preturnover ret is the average of monthly CAR stock returns over two years to the turnover announcement, adjusted for market return. Size is measured by the natural logarithm of market equity, and BE/ME is the book equity to market equity ratio. Firms with available stock data are reported. *T*-values are reported in parentheses and *** stands for statistical significance at the 1%.

4.2. Performance and CEO Turnover

Table 2 presents price reactions for clean announcements of top management changes. The cumulative abnormal returns for the three- and five-day windows are positive but insignificant for the full sample and for both types of forced and voluntary turnovers[9].

Table 2. Price reaction to CEO turnovers.

	Full Sample	Forced	Voluntary	Difference
CAR[−1, 1]	0.003 (1.36)	0.006 (1.02)	0.002 (0.82)	0.004 (0.95)
CAR[−2, 2]	0.001 (0.41)	−0.003 (−0.39)	0.003 (1.08)	0.006 (0.94)
N	682	181	501	

This table reports the three- and five-day mean cumulative abnormal returns for the full CEO turnover sample and the two main classifications, forced and voluntary. CAR[−1, 1] (CAR[−2, 2]) is the 3-day (5-day) cumulative abnormal returns with day 0 being the announcement day. Abnormal returns are computed using the market model with the parameters of the market model being estimated over 250 days, ending 20 days before the announcements of the management change. Announcements accompanied with earnings releases are excluded from the analysis. Mean differences between the two groups are reported, and t-test statistics are presented in parentheses.

This study classifies departing CEOs as underperforming or outperforming based on past stock performance. Table 3 presents the price reaction to announcements for the two subsamples of CEO turnover; CEOs are classified as underperforming if the pre-event three-year market adjusted CARs are negative and outperforming if the pre-event three-year market adjusted CARs are positive. The cumulative abnormal returns around the announcement of firing an underperforming CEO are positive and significant for the full sample, whereas the CARs for firing an outperforming CEO are negative and significant for the five-day window. It appears that the market reacts positively to the dismissal of underperforming CEOs and negatively to the dismissal of outperforming

CEOs, particularly for the forced sample, thereby supporting Hypothesis 1. The difference in price reactions between the outperformance and underperformance samples is large in terms of statistical and economical significance for the forced sample compared with the full and voluntary samples. For example, in the five-day event window, the price reaction for firing outperforming CEOs is lower by 4.3% compared to underperforming CEOs.

Table 3. Previous performance and stated reasons of dismissal effects on price reactions to CEO turnover announcements.

Panel A: Abnormal Returns for Under- and Out-Performance Samples

		Underperformance (1)			Outperformance (2)			Difference (1)–(2)	
Variable	**Sample**	**Mean**	**Median**	**N**	**Mean**	**Median**	**N**	**Mean**	**Median**
CAR[−1, 1]	Full	0.009 ***	0.002 *	373	−0.003	−0.003	306	0.012 **	0.005 *
		(2.62)	(1.67)		(−1.01)	(−1.00)		(2.51)	(1.93)
	Forced	0.017 ***	0.004 *	125	−0.019 *	−0.009 *	53	0.036 ***	0.013 **
		(2.78)	(1.84)		(−1.76)	(−1.70)		(2.70)	(2.02)
	Voluntary	0.004	0.001	248	−0.001	−0.003	253	0.005	0.004
		(1.06)	(0.94)		(−0.24)	(−0.74)		(1.04)	(1.49)
CAR[−2, 2]	Full	0.007 *	0.001	373	−0.006 *	−0.006 *	306	0.014 **	0.007 **
		(1.74)	(1.16)		(−1.75)	(−1.86)		(2.50)	(2.20)
	Forced	0.010 *	0.003	125	−0.034 **	−0.025 **	53	0.043 ***	0.028 ***
		(1.73)	(1.08)		(−2.55)	(−2.51)		(2.98)	(2.83)
	Voluntary	0.006 *	0.001	248	−0.002	−0.005	253	0.008	0.006 *
		(1.66)	(0.60)		(−0.80)	(−0.85)		(1.42)	(1.79)

Panel B: Price Reaction for Announcements Transparency

		CAR[−1, 1]			CAR[−2, 2]		
Sample	**Statistic**	**Nontransparent**	**Transparent**	**Difference**	**Nontransparent**	**Transparent**	**Difference**
Forced sample (N = 181)	Mean	−0.007	0.014 *	−0.021 *	−0.032 *** 0.015 *	−0.047 ***	
		(−1.02)	(1.73)	(−1.87)	(−2.80)	(1.66)	(−3.25)
	Median	−0.009	0.007 **	−0.016 **	−0.026 ***	0.012 **	−0.038 ***
		(−1.56)	(2.29)	(−2.49)	(−3.67)	(2.35)	(−4.31)
	N	70	111		70	111	

Panel C: Transparent Announcements: Performance Versus Other Reasons

		CAR[−1, 1]			CAR[−2, 2]		
Sample	**Statistic**	**Nontransparent**	**Perf as Reason**	**Other Reasons**	**Nontransparent**	**Perf as Reason**	**Other Reasons**
Forced sample (N = 181)	Mean	−0.007	0.022 **	0.004	−0.032 ***	0.027 **	0.004
		(−1.02)	(2.27)	(0.42)	(−2.80)	(2.26)	(0.31)
	Median	−0.009	0.012 **	0.008	−0.026 ***	0.017 **	0.007
		(−1.56)	(2.25)	(1.08)	(−3.67)	(2.18)	(0.92)
	N	70	57	54	70	57	54

Panel A of this table reports the 3- and 5-day mean and median cumulative abnormal returns for the two groups, under- and out-performance, for the full CEO turnover sample and the two main classifications, forced and voluntary. Underperformance (overperformance) refers to turnovers with three-year pre-event monthly CARs lower (higher) than that of the CRSP value-weighted index. Announcements accompanied with earnings releases are excluded from the analysis; only firms with available 3-year preannouncement stock data are reported for classification purposes in Panel A. Panel B of the table reports the price reaction to forced CEO turnover announcements in accordance with the transparency of announcements. Nontransparent includes announcements with no clear reason for dismissal. Transparent includes announcements with reasons stated as performance, business misconduct, and conflicts, among a few others. Panel C separates transparent announcements into performance related and other reasons. Significance levels of mean and median abnormal returns are reported in parentheses using the *t*-test statistic and Wilcoxon signed rank test statistic, respectively. This table also provides t-test statistics for the difference in mean abnormal returns and Wilcoxon–Mann–Whitney test statistics (Wilcoxon-z) for the difference in median abnormal returns across the different groups. ***, **, and * stand for significance at the 1%, 5%, and 10% levels, respectively.

Panel B of Table 3 presents the market reaction of CEO turnover based on the transparency of announcements. The 'transparent' sample is associated with positive price reactions, whereas the 'nontransparent' sample is associated with negative price reactions. The difference between the two groups is around 5% in the five-day window and statistically significant. Furthermore, the transparent sample is divided into performance-related reasons and other reasons in Panel C. Stating performance as the reason for CEO dismissal appears to be perceived as a positive signal by the market, as the CARs around the an-

nouncements are significantly positive. However, giving no reason for a CEO's departure seems to increase the speculation regarding the real reason for departure and results in a negative market reaction. The results shown in Panels B and C of Table 3 support Hypotheses 3 and 4. The lack of transparency between the BOD and investors regarding the change in management increases uncertainty in the market. On the other hand, stating performance as the reason for firing a CEO seems to enhance communication channels and increase firm value.

4.3. Cross-Sectional Regression

This study evaluates the cross-sectional information content of CEO turnovers by performing an ordinary least squares (OLS) regression in which the dependant variable is the CAR for the three- and five-day event window, and the main explanatory variable is the outperformance dummy. Table 4 presents the results of an OLS regression for the full turnover sample; this study uses CARs [−1; 1] in models 1 through 3 and CARs [−2; 2] in models 4 through 6. The coefficient of the outperformance dummy is negative and statistically significant in models 2 and 5, which supports our first hypothesis (Hypothesis 1); this relationship remains significant when *preturnover CAR* is included in models 1 and 4. The negative relationship between the price reaction to CEO departure announcements and past outperformance seems to be mostly driven by forced turnovers as the coefficient of the interaction term *outperf*forced* is negative and significant in models 3 and 6.

Table 4. Previous performance impact on price reactions of CEO turnover announcements.

	Dependent Variable: CAR[−1, 1]			**Dependent Variable: CAR[−2, 2]**		
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Intercept	−0.012	−0.008	−0.011	−0.022	−0.016	−0.020
	(−0.29)	(−0.18)	(−0.28)	(−0.37)	(−0.26)	(−0.35)
Outside succession	0.010	0.012	0.011	0.009	0.012	0.010
	(1.01)	(1.21)	(1.10)	(0.72)	(0.97)	(0.86)
Tenure	0.006	0.006	0.005	0.007	0.006	0.006
	(1.57)	(1.48)	(1.37)	(1.29)	(1.19)	(1.08)
Age	−0.001	−0.002	−0.002	−0.002	−0.003	−0.003
	(−0.21)	(−0.43)	(−0.45)	(−0.34)	(−0.58)	(−0.60)
Duality	0.005	0.004	0.004	−0.003	−0.004	−0.005
	(1.09)	(0.93)	(0.85)	(−0.61)	(−0.79)	(−0.86)
Size	−0.003	−0.003	−0.003	−0.003	−0.004	−0.004
	(−1.34)	(−1.37)	(−1.34)	(−1.17)	(−1.19)	(−1.17)
BE/ME	−0.005	−0.003	−0.002	−0.001	0.002	0.002
	(−0.46)	(−0.27)	(−0.24)	(−0.08)	(0.14)	(0.17)
Preturnover CAR	−0.016 **			−0.021 **		
	(−2.47)			(−2.46)		
Outperformance		−0.012 **	−0.004		−0.015 **	−0.007
		(−2.05)	(−0.84)		(−2.15)	(−0.99)
Forced	0.006	0.007	0.017 *	−0.009	−0.007	0.005
	(0.82)	(0.94)	(1.93)	(−0.92)	(−0.73)	(0.92)
Outperf*forced			−0.031 **			−0.037 **
			(−2.21)			(−2.28)
Year fixed effect	yes	yes	yes	yes	yes	yes
Adjusted R2	0.028	0.015	0.026	0.024	0.010	0.019
N	674	674	674	674	674	674

This table presents OLS regressions for the full sample of CEO turnovers. The dependent variable in models 1 to 3 is CAR[−1, 1] and in models 4 to 6 is CAR[−2, 2]. CEO turnover announcements accompanied with earnings releases are excluded from the regressions. Preturnover CAR is the monthly cumulative abnormal returns for the three years or 36 months leading to the announcements, adjusted for the returns of the CRSP index. Outperformance is a dummy variable that takes the value of 1 if the three-year preturnover CARs are higher than that of the CRSP index, and 0 otherwise. Forced is a dummy variable for forced CEO turnovers. Other control variables are defined in the variable definitions in Appendix A). Robust t-statistics are reported in parentheses, and ***, **, and * stand for statistical significance at 1%, 5%, and 10%, respectively.

Firing a CEO does not, per se, imply good news to the market, as the abnormal returns are negatively correlated with past performance. The market seems to perceive the decision of firing a CEO as good news when the CEO underperforms the market and as bad news

when the CEO outperforms the market. This argument is supported in Table 5, which represents regressions of the forced CEO turnover sample.

The results presented in Table 5 show that past performance is a significant variable in the explanation of the effect of firing a CEO on shareholder wealth; the negative coefficient of outperformance in models 2, 3, 5, and 6 directly supports our first hypothesis (Hypothesis 1), implying that the market reaction to firing an outperforming CEO is weaker than the market reaction to firing an underperforming CEO. The difference in price reaction between the under- and outperforming groups is substantially large, around 4% in the five-day event window. The outsider dummy is positive and significant in the first three models, which is in line with the argument that outsiders are better able to change the performance of a firm when a turnaround in policies is mostly needed (Parrino 1997). In this context, outside appointment is regarded by the market as a positive signal and a first step towards reversing the company's poor performance. Moreover, the price reaction to announcements is positively related to the departed CEO's tenure and duality status as measures of power and influence, as firing a powerful CEO is not anticipated (Goyal and Park 2002; Dikolli et al. 2014).

Table 5. Previous performance and official reasons of CEO dismissal impact on price reactions of forced CEO turnover announcements.

	Dependent Variable: CAR[−1, 1]			**Dependent Variable: CAR[−2, 2]**		
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Intercept	−0.052	−0.010	−0.027	−0.097	−0.019	0.017
	(−0.81)	(−0.15)	(−0.42)	(−1.37)	(−0.28)	(0.48)
Outside succession	0.103 *	0.093 *	0.090 *	0.095	0.078	0.073
	(1.92)	(1.71)	(1.65)	(1.33)	(1.07)	(1.01)
Tenure	0.025 ***	0.023 ***	0.024 ***	0.028 ***	0.024 **	0.026 ***
	(2.99)	(2.69)	(2.86)	(2.93)	(2.52)	(2.85)
Age	−0.005	−0.010	−0.011	−0.001	−0.010	−0.01
	(−0.35)	(−0.55)	(−0.59)	(−0.05)	(−0.52)	(−0.50)
Duality	0.018	0.019	0.018	0.005	0.008	0.004
	(1.60)	(1.62)	(1.50)	(0.67)	(0.57)	(0.31)
Size	−0.003	−0.004	−0.003	−0.003	−0.004	−0.002
	(−0.86)	(−0.94)	(−0.68)	(−0.54)	(−0.89)	(−0.42)
BE/ME	−0.011	−0.019	−0.020	−0.010	−0.022	−0.022
	(−0.75)	(−1.30)	(−1.40)	(−0.57)	(−1.22)	(−1.29)
Outperformance		−0.033 **	−0.032 **		−0.039 **	−0.039 **
		(−2.21)	(−2.28)		(−2.37)	(−2.49)
Nontransparent		−0.015			−0.042 ***	
		(−1.48)			(−2.69)	
Perf as Reason			0.022 *			0.045 ***
			(1.76)			(2.70)
Year fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R2	0.101	0.143	0.152	0.042	0.121	0.123
N	178	175	175	178	175	175

This table presents OLS regressions for the sample of forced CEO turnovers for companies belonging to the S&P 1500 index. The dependent variable in models 1 to 3 is CAR[−1, 1] and in models 3 to 6 is CAR[−2, 2]. CEO turnover announcements accompanied with earnings releases are excluded from the regressions. *Outperformance* is a dummy variable that takes the value of 1 if the three-year pre-event CAR is higher than that of the CRSP index, and 0 otherwise. *No reason* is a dummy variable that takes the value of 1 if no clear reason is given for firing the CEO in the articles. *Nontransparent* is a dummy variable that takes the value of 1 if the reason stated in the articles for firing the CEO is performance. Other control variables are defined in the variable definition table. Firms with preturnover available stock data are reported in models 2, 3, 5, and 6 for classification purposes. Robust t-statistics are reported in parentheses, and ***, **, and * stand for statistical significance at 1%, 5%, and 10%, respectively.

Table 5 also reports the effect of the transparency of announcements on price reactions; the main variables of interest are the *nontransparent* dummy, which is a variable attributed to the BOD not giving a clear reason for CEO dismissal, and the dummy variable *perf as reason* indicating that performance is stated as the reason for dismissal. The coefficients on *nontransparent* are negative in models 2 and 5 and statistically significant in model 5, thereby supporting Hypothesis 3. Moreover, regression tests are performed in models 3 and 6 including *perf as reason* as a dummy variable; the coefficients on this variable are positive and significant, thereby supporting Hypothesis 4.

4.4. Long-Term Performance

It is reasonable to understand the motive behind firing an underperforming CEO. The BOD would have assessed the calibre of the CEO through the company's stock performance and would have realised the necessity for a better calibre leader to revert to good performance. On the other hand, the market is aware of the poor performance of a company and approves the BOD's decision to replace a low-calibre leader with a higher calibre one. The positive abnormal returns observed in this case can be attributed to the positive expectations the market has regarding the future performance of the company. However, since performance is seen as a proxy for managerial quality, the decision to fire an outperforming CEO is a dilemma yet to be fully understood by the market. A stream of literature led by Hermalin and Weisbach (1998) attributes the negative market reaction for firing a CEO to the release of superior private information regarding the low calibre of the departing CEO. Another explanation is that firing a CEO without any obvious poor performance can be viewed as a proactive step towards preventing the company's performance from deteriorating (Ertugrul and Krishnan 2011).

Managerial qualities and skills are measured through a firm's stock performance. Regardless of information asymmetry, both arguments above attribute the reason of turnover to the poor calibre and skills of the departing CEO. In this context, the incoming CEO should be of a higher calibre than the departing one, or else the entire change in management exercise is meaningless. Table 6 presents the stock performance measured as the BHAR abnormal returns during the first three years following CEO turnovers for the full sample in Panel A and the forced turnovers sample in Panel B. A change in management seems to be beneficial for firms as the three-year BHAR for the full sample is positive and significant in Panel A; however, when the full sample is divided based on past performance, the underperformance sample experiences positive post-turnover abnormal returns, but the outperformance sample does not. The difference in postevent BHAR between the two samples is more than 20% and statistically significant.

Panel B of Table 6 also reports the post-turnover BHAR for the forced turnover sample. The BHAR for the underperformance sample is positive and significant. On the other hand, the BHAR for the outperformance sample is negative and significant, thereby supporting Hypothesis 2. It appears that firing an underperforming CEO will result in the appointment of a higher calibre leader who will convert a company's underperformance in the last three years to outperformance in the following three years. However, firing an outperforming CEO will result in bringing in a lower calibre chief who will not be able to sustain the company's past outperformance in the following three years[10]. The latter observation is a central puzzle, as the lack of performance, which is the main reason for firing a CEO, does not seem to explain this behaviour. Panel C of Table 6 shows that the results hold when turnovers arising from business misconduct are excluded. The exclusion of these turnovers minimises the effect of reversal of the misconducts on cash flows, following changes in management[11].

The superior information content accompanied by the announcement of a change in management can be attributed to the existence of certain nonperformance motives rather than a low-calibre CEO in the case of past outperformance. This superior information is attributed to the low-calibre CEO and suggests that even though the CEO is outperforming the market, he is still not able to efficiently use the company's resources to achieve the

desired return. In other words, the BOD believes that the performance of the company should be better, given the resources and opportunities available to the CEO. If so, the incoming higher calibre CEO should be able to fully exploit the company's assets and bring in superior returns for shareholders; however, the results presented in Table 6 prove otherwise, thereby supporting Hypothesis 2.

Table 6. Postevent three-year BHAR for under- and outperforming CEOs.

Panel A: Post-Succession 3-Year BHAR for The Full Sample								
	Full Sample		**Under−Perf (1)**		**Out−Perf (2)**		**Difference (1)–(2)**	
	Mean	**Median**	**Mean**	**Median**	**Mean**	**Median**	**Mean**	**Median**
BHR(1)	0.12 ***	0.03 ***	0.27 ***	0.11 ***	−0.05	−0.04	0.32 ***	0.30 ***
	(4.78)	(2.77)	(4.32)	(3.27)	(−0.91)	(−0.25)	(2.86)	(2.60)
BHR(2)	0.09 **	0.01	0.19 ***	0.03	−0.02	−0.06 *	0.21 ***	0.09 **
	(2.54)	(0.84)	(3.02)	(1.02)	(−0.78)	(−1.87)	(2.92)	(2.01)
N	706		382		324			
Panel B: Post Turnover 3-Year BHAR for the Forced Sample								
	Forced Sample		**Under-Perf (1)**		**Out-Perf (2)**		**Difference (1)–(2)**	
	Mean	**Median**	**Mean**	**Median**	**Mean**	**Median**	**Mean**	**Median**
BHR(1)	0.29 **	0.04 ***	0.45 ***	0.18 ***	−0.11	−0.13 *	0.55 **	0.30 ***
	(2.08)	(2.77)	(2.98)	(3.07)	(−1.31)	(−1.71)	(2.36)	(2.97)
BHR(2)	0.21 **	0.01	0.36 **	0.04 *	−0.14 *	−0.15 **	0.50 ***	0.19 ***
	(2.23)	(0.54)	(2.51)	(1.85)	(−1.78)	(−2.07)	(2.92)	(2.60)
N	177		126		51			
Panel C: BHAR for the Forced Sample, CEO Fired for Business Misconducts Excluded								
	Under-Perf (1)		**Out-Perf (2)**				**Difference (1)–(2)**	
	Mean	**Median**	**Mean**		**Median**		**Mean**	**Median**
BHR(1)	0.52 ***	0.19 ***	−0.10		−0.14		0.63 **	0.33 ***
	(3.17)	(3.07)	(−1.21)		(−1.54)		(2.46)	(3.07)
BHR(2)	0.42 ***	0.07 **	−0.13		−0.18 *		0.55 **	0.25 ***
	(2.68)	(2.25)	(−1.48)		(−1.83)		(2.42)	(2.64)
N	112		44					

This table reports post turnover long-term performance for under- and outperforming CEOs and the difference between those two types of turnovers. Panel A reports post-turnover market performance for the full sample, panel B reports for the forced sample, and panel C reports for the forced sample with CEOs fired for business misconduct excluded. Long-term performance is measured by the mean and median monthly buy and hold returns (BHAR) for three years post turnover; BHARs are computed from the end of the turnover month till 36 months postevent and adjusted against two benchmarks: BHR (1) are adjusted for market return (CRSP index) and BHR (2) for returns of Fama–French's 48 portfolios constructed based on industry classification. Underperformance (outperformance) refers to turnovers with three-year pre-announcement CARs lower (higher) than that of the CRSP index. Significance levels of mean and median abnormal returns are reported in parentheses using the *t*-test statistic and Wilcoxon signed rank test statistic, respectively. This table also provides *t*-test statistics for the difference in mean abnormal returns and Wilcoxon–Mann–Whitney test statistics (Wilcoxon-z) for the difference in median abnormal returns across the two groups. ***, **, and * stand for statistical significance at 1%, 5%, and 10%, respectively.

5. Robustness Check

The classification of underperforming and outperforming CEOs is solely based on the market returns and serves as a benchmark. In order to make the results robust, the returns of Fama–French's 48 portfolios based on industry classification are used as an alternative benchmark for classification. Panel A of Table 7 presents the price reaction of turnover announcements based on this alternative benchmark of expected returns. CARs are persistently positive if an underperforming CEO is fired and negative if an outperforming CEO is fired. Moreover, the regression models presented in Table 5 are repeated in Table 8 using the alternative benchmark for classification with no material deviation in the conclusions. To check the robustness of abnormal returns, this study applied the standard robustness check in Table 9 for the abnormal returns by performing standardised and standardised cross-sectional parametric *t*-tests.

Table 7. Alternative benchmark for underperformance and outperformance classifications.

	Dependent Variable: CAR[−1, 1]			Dependent Variable: CAR[−2, 2]		
	Full Sample	**Forced**	**Voluntary**	**Full Sample**	**Forced**	**Voluntary**
Underperformance	0.009 **	0.021 ***	0.002	0.009 **	0.011	0.008
	(2.42)	(2.89)	(0.48)	(2.09)	(1.61)	(1.36)
N	299	113	186	299	113	186
Outperformance	−0.002	−0.019 *	0.001	−0.006 *	−0.030 ***	−0.001
	(−0.65)	(−1.82)	(0.82)	(−1.83)	(−2.67)	(−0.30)
N	380	65	315	380	65	315
Difference	0.011	0.039	−0.001	0.015	0.042	0.007
	(2.39) **	(3.19) ***	(−0.19)	(2.80) ***	(2.79) ***	(1.45)
	[1.48]	[2.85] ***	[0.85]	[1.60]	[2.74] ***	[0.89]

This table reports the 3- and 5-day mean cumulative abnormal returns for the two groups, under- and outperformance, for the full CEO turnover sample and the two main classifications, forced and voluntary. Underperformance (outperformance) refers to turnovers with negative (positive) three-year preannouncement industry-adjusted CARs. This table also reports the mean difference between the two groups. *T*-test statistics are reported in parentheses and Wilcoxon-z in brackets. ***, **, and * stand for statistical significance at 1%, 5%, and 10%, respectively.

Table 8. Regressions with alternative benchmark for expected returns for under- and outperforming CEO classifications.

	CAR[−1, 1]		CAR[−2, 2]	
	(1)	**(2)**	**(3)**	**(4)**
intercept	−0.005	−0.020	−0.017	−0.062
	(−0.07)	(−0.32)	(−0.24)	(−0.91)
Outside succession	0.092 *	0.089 *	0.079	0.073
	(1.72)	(1.65)	(1.09)	(1.02)
Tenure	0.024 ***	0.024 ***	0.025 **	0.027 ***
	(2.65)	(2.81)	(2.52)	(2.83)
Age	−0.009	−0.010	−0.010	−0.009
	(−0.53)	(−0.58)	(−0.49)	(−0.47)
Duality	0.018	0.017	0.007	0.004
	(1.53)	(1.43)	(0.51)	(0.26)
Size	−0.003	−0.002	−0.004	−0.001
	(−0.81)	(−0.58)	(−0.77)	(−0.31)
BE/ME	−0.019	−0.020	−0.020	−0.021
	(−1.32)	(−1.41)	(−1.15)	(−1.23)
Outperformance	−0.034 ***	−0.033 ***	−0.036 **	−0.036 ***
	(−2.58)	(−2.63)	(−2.47)	(−2.60)
Nontransparent	−0.014		−0.041 ***	
	(−1.25)		(−2.60)	
Perf as reason		0.021 *		0.044 ***
		(1.68)		(2.64)
Year fixed effect	yes	yes	yes	yes
Adjusted R2	0.14	0.15	0.11	0.11
N	175	175	175	175

This table represents regressions similar to Table 5 with the difference being the performance benchmark for underperformance and outperformance classification. Outperformance takes the value of 1 if the preannouncement 3-year industry-adjusted CAR is positive, and 0 otherwise. Control variables are the same as in Table 5. Robust T-statistics are in parentheses, and ***, **, and * stand for statistical significance at 1%, 5%, and 10%, respectively.

Table 9. Robustness of abnormal returns.

	CAR[−1, 1]			CAR[−2, 2]		
	CAR	**Standardized Residuals**	**Standardized Cross-Sectional**	**CAR**	**Standardized Residuals**	**Standardized Cross-Sectional**
Full sample						
Outperf	−0.001	−1.83 *	−1.44	−0.005	−3.60 ***	−2.61 ***
Underperf	0.009	5.40 ***	3.29 ***	0.010	3.56 ***	2.41 **
Forced sample						
Outperf	−0.019	−5.89 ***	−2.60 ***	−0.030	−5.36 ***	−2.80 ***
Underperf	0.021	5.66 ***	2.75 ***	0.011	2.48 **	1.38

This table presents parametric tests of cumulative abnormal returns for the full turnover sample and the forced turnover sample. The parametric tests include the standardized residuals and the standardized cross-sectional residuals tests. Underperformance sample includes firms with three-year pre-turnover CARs lower than that of the industry; otherwise, firms are included in the outperformance sample. ***, **, and * stand for statistical significance at 1%, 5%, and 10%, respectively.

Moreover, in order to make our long-term performance results more robust, the calendar time portfolio approach advocated by Fama and French (1993) is presented in Table 10 to measure abnormal returns for companies that experienced CEO turnovers. The event portfolio is formed for each period to include all companies that have completed an event within the prior n periods. Abnormal returns are computed for n equals 12, 24, and 36 months postevent. In addition, long-term market performance results are further checked in Table 11 by using the returns of Fama–French's 48 portfolios that are constructed based on industry classification, as an alternative benchmark for underperformance and outperformance classification. The results obtained in Tables 10 and 11 use these robustness checks and reinforce the results obtained in Table 6.

$$R_{p_t} - R_{f_t} = \alpha + b\left(R_{m_t} - R_{f_t}\right) + sSMB_t + hHML_t + \varepsilon_t$$

Table 10. Calendar-time Fama and French three-factor model.

	Dependent Variable: Average Monthly Abnormal Return (a)					
	Full Sample			**Forced Sample**		
	n = 12	**n = 24**	**n = 36**	**n = 12**	**n = 24**	**n = 36**
Full sample	0.002	0.002 **	0.002	0.003	0.003	0.001
	(1.05)	(1.98)	(1.54)	(1.05)	(1.01)	(0.67)
Outperformance	−0.001	0.001	0.001	−0.007 *	−0.004	−0.003
	(−0.30)	(0.57)	(0.21)	(−1.70)	(−1.37)	(−1.26)
Underperformance	0.004 *	0.004 *	0.003 *	0.009 **	0.007 **	0.005 *
	(1.76)	(1.94)	(1.89)	(2.06)	(2.24)	(1.91)

This table reports post successions abnormal returns for the full sample and the forced sample. Dependent variables are event portfolio returns, *Rp*, in excess of the monthly Treasury bill rate, *Rf*. Each month, portfolios are formed of all sample firms that have completed the event within the previous n months. The event portfolio is rebalanced monthly to drop all companies that reach the end of their n months' period and to add all companies that have just had an event. This process is separately computed for firms that completed the event within n equalling 12, 24, and 36 months. The three factors are zero-investment portfolios representing the excess return of the market, *Rm-Rf*; the difference between a portfolio of small and big stocks, SMB; and the difference between a portfolio of high and low book-to-market stocks, HML. See Fama and French (1993) for details on the construction of the factors. The intercept *a* measures the average monthly abnormal return, given the model. We estimate the intercept for the full sample and the two subsamples, outperformance and underperformance. Underperformance sample includes firms with three-year pre-turnover CARs lower than that of the industry; otherwise, firms are included in the outperformance sample. Monthly event portfolios with less than 5 firms are excluded from the analysis. Robust *t*-statistics are in parentheses. ** and * represent significance at the 5% and 10% level, respectively. The three-factor model is as follows:

The operating performance surrounding forced CEO turnovers is presented in Table 12 and Figure 1. Table 12 presents the three-year average operating return on assets (OROA) (raw and industry adjusted) for the forced sample and the two subsamples, outperformance and underperformance. The three-year average post-turnover OROA seems to significantly

decline compared with the three-year average preturnover OROA for the outperformance sample; no statistically significant change in average OROA is observed for the underperformance sample. However, looking at the underperformance sample's OROA in Figure 1, it is predominant that the downward trend in the preturnover operating performance reverses to an upward trend in the post-turnover period. It appears that the preturnover deterioration in OROA improves in the post-turnover period for the underperformance sample; however, the opposite can be observed for the outperformance sample.

Table 11. Postevent BHAR with alternative benchmarks of expected returns for under- and outperforming CEO classifications.

Panel A: Post-Turnover 3-Year BHAR for the Full Sample								
	Full Sample		**Underperf (1)**		**Outperf (2)**		**Difference (1)–(2)**	
	Mean	**Median**	**Mean**	**Median**	**Mean**	**Median**	**Mean**	**Median**
BHR(1)	0.14 ***	0.03 ***	0.27 ***	0.11 ***	0.04	0.04	0.23 **	0.30
	(4.78)	(2.77)	(3.72)	(3.27)	(0.91)	(0.95)	(2.26)	(1.60)
BHR(2)	0.10 **	0.01	0.20 ***	0.03	0.02	−0.06 *	0.22 ***	0.09
	(2.57)	(0.84)	(3.02)	(0.62)	(0.78)	(−1.67)	(2.21)	(1.51)
N	706		297		409			
Panel B: Post Turnover 3-year BHAR for the Forced Sample								
	Forced Sample		**Underperf (1)**		**Outperf (2)**		**Difference (1)–(2)**	
	Mean	**Median**	**Mean**	**Median**	**Mean**	**Median**	**Mean**	**Median**
BHR(1)	0.28 ***	0.04 *	0.47 ***	0.18 ***	−0.05	−0.13	0.52 **	0.30 ***
	(2.58)	(1.87)	(2.88)	(3.07)	(−0.67)	(−1.01)	(2.36)	(2.97)
BHR(2)	0.22 ***	0.01	0.39 **	0.04 *	−0.09	−0.15 *	0.48 ***	0.19 ***
	(2.08)	(0.54)	(2.48)	(1.89)	(−1.31)	(−1.87)	(2.92)	(2.60)
N	177		113		64			

This table reports post-turnover long-term performance in a similar manner to Table 6 with the difference being the performance benchmark for underperformance and outperformance classifications. Panel A reports for the full sample, while Panel B reports for the forced sample. Underperformance (outperformance) sample includes firms with negative (positive) pre-turnover 3-year industry-adjusted CARs. Significance levels of mean and median BHR are reported in parentheses using the *t*-test statistic and Wilcoxon signed rank test statistic, respectively. This table also provides *t*-test statistics for the difference in mean BHAR and Wilcoxon–Mann–Whitney test statistics (Wilcoxon-z) for the difference in median BHAR between the two groups; ***, **, and * stand for statistical significance at 1%, 5%, and 10%, respectively.

Table 12. Pre- and post-turnover three-year average OROA.

	Preturnover	**Post-Turnover**	**Difference**	**T-Statistics**	**N**
A: Unadjusted OROA					
Full sample	0.089	0.069	−0.020 **	(−2.23)	165
Underperformance	0.081	0.069	−0.012	(−1.11)	102
Outperformance	0.099	0.070	−0.029 **	(−2.12)	63
B: Industry Adjusted OROA					
Full sample	0.055	0.032	−0.023 **	(−2.07)	165
Underperformance	0.037	0.029	−0.008	(−1.08)	102
Outperformance	0.072	0.037	−0.035 *	(−1.91)	63

This table reports the three-year average pre- and post-turnover operating return on assets (OROA) for the forced turnovers sample and the two subsamples, underperformance and outperformance. Underperformance sample includes firms with three-year pre-turnover CARs lower than that of the industry, otherwise firms are included in the outperformance sample. OROA is the operating income after depreciation divided by total assets, computed annually and averaged over three years. Panel A reports the unadjusted OROA, and Panel B reports the industry-adjusted OROA using the 2-digit SIC code for matching by subtracting the median industry OROA. Transition year is excluded from the analysis. The mean difference between the post- and preturnover OROA is reported and T-values are in parentheses; * and ** represent statistical significance at the 10% and 5% levels.

Further robust tests are implemented but not reported for space constraints. Operating performance is used as the basis for classification of under- and outperformance. Price reactions are measured using industry adjusted cumulative abnormal returns. Quantile regressions with bootstrapped errors are performed to deal with normality and outliers. Finally, long-term performance is adjusted against a matched control group. All the robust tests support the conclusions drawn in this study.

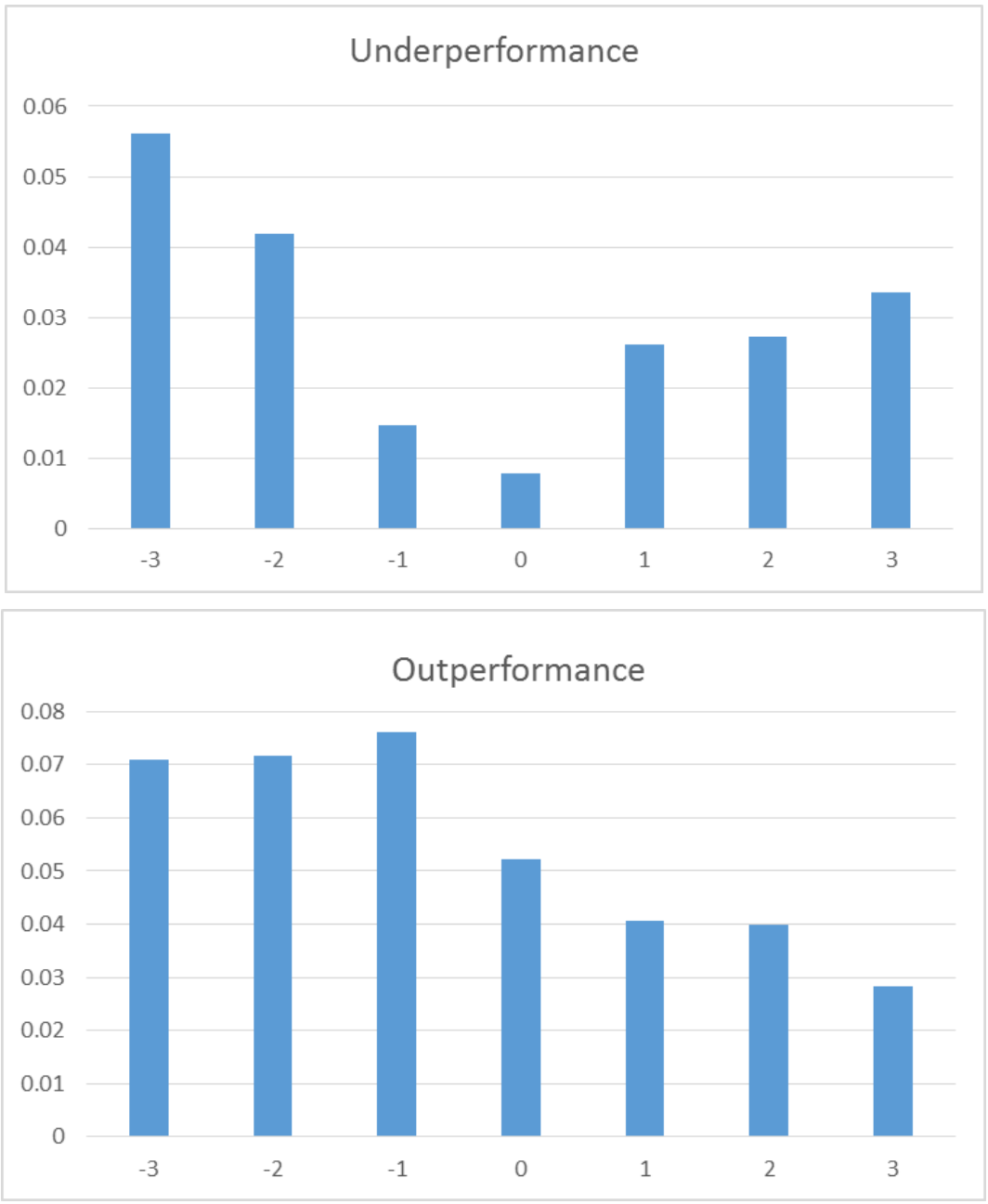


Figure 1. Industry-adjusted OROA surrounding forced CEO turnovers. This figure plots the industry-adjusted OROA for the out- and underperformance samples for the 7 years surrounding the management change, with Year 0 being the year of management transition. Underperformance (outperformance) sample includes firms with three-year preturnover CARs lower (higher) than that of the industry. OROA is adjusted by subtracting the median industry OROA using the 2-sic digit codes for matching.

6. Conclusions

Since the main objective of the BOD is to perform actions that result in the creation of shareholder value, the decision to fire a CEO should be seen as a positive step towards the achievement of good performance. However, this study finds that, on average, the market is indifferent towards the critical decision the BOD has taken. Further investigations show that the unusual finding of no positive abnormal returns around the announcement of CEO dismissals is found to have other explanations; this study finds that firing a CEO does not, per se, give a positive signal to the market, as there are other variables that the shareholders take into consideration when reacting to the announcement of CEO turnover.

Past firm performance, either outperformance or underperformance, plays an important role in determining market reactions to announcements of CEO dismissals. The literature has nearly established that CEO dismissal resulting from underperformance leads to a positive market reaction towards the announcement. This study sheds light on those outperforming CEOs that were fired, which has altered the whole equation. If performance is a proxy for managerial qualities and a high-calibre CEO is replaced by a lower calibre one, performance cannot be the reason behind replacing the leader in these particular turnovers. Although not clearly stated, other nonperformance reasons, such as internal conflict, are more suitable to explain the behaviour in these particular cases. Moreover, this study proves that the lack of transparency of CEO turnover announcements has a major negative effect on the market perception of why a leader is fired.

In any crucial situation, a rational decision maker will weigh the costs and benefits associated with his decision. Assuming that the BOD is a rational agent acting on behalf of the shareholders, with an objective to maximise shareholder wealth, the puzzling effect of the value-decreasing act of outperforming CEO dismissal does not fit within this objective.

Our findings suggest that outperforming CEO dismissals are least likely performance related, but further research can explore this anomaly resulting from a rational decision maker by exploring any unobserved benefits of firing an outperforming CEO and exploring changes in CEO compensation around the turnover. Future research can examine the benefits of assigning more weight to nonperformance factors when making a decision to replace managers, such as employees' satisfaction, corporate culture, and innovation. Moreover, this study focuses on the immediate consequences of the transparency of CEO dismissal announcements; future research can examine the motivation behind this practice, such as a CEO's power and connection with board members.

Author Contributions: Conceptualization, H.L. and P.F.; methodology, P.F. And H.L.; software, P.F.; formal analysis, P.F.; writing—original draft preparation, P.F.; writing—review and editing, H.L.; supervision, H.L.; All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A. Variable Definition

Variable Name	Description
CEO characteristics	
Age	A dummy variable that takes the value of 1 if the CEO age is higher than 60 and 0 otherwise.
Tenure	The logarithm of the tenure of the departed CEO measured in years.
Outside succession	A dummy variable equal 1 if the successor CEO is from outside the company or has been with the firm for less than a year.
Duality	A dummy variable equal one if the departed CEO held the title of the chairman prior to the announcement.
Announcements characteristics	
Nontransparent	A dummy variable equal 1 if the firm official statement accompanied with the announcement of turnover does not state a clear reason for firing the CEO.
Perf as reason	A dummy variable equal 1 if the firm official statement accompanied with the announcement of turnover indicates that the CEO is fired for performance-related reasons.
Other reasons	Announcements that provide reasons other than performance for the dismissal of the CEO, mainly business misconduct and conflict with the board.
Performance variables	
CAR[-t,t]	Cumulative abnormal returns calculated over [−t, t] event window using the market model with day 0 being the announcement day. The parameters of the market model are estimated over 250 days, ending 20 days before the announcement of the management change.
BHR (1)	The buy and hold abnormal returns computed from the end of the turnover month till 36 months postevent and adjusted against the CRSP value-weighted index.
BHR (2)	The buy and hold abnormal returns computed from the end of the turnover month till 36 months postevent and adjusted for industry returns, with industry classification based on Fama–French's 48 industries.
Outperformance	A dummy variable equal 1 if the preannouncement 3-year monthly CARs are higher than that of a benchmark, and 0 otherwise. Benchmark expected returns are one of two returns: (1) the CRSP index and (2) Fama–French's 48 portfolios constructed based on industry classification. Refer to the tables' captions for information about the benchmark employed.
Underperformance	A dummy variable equal to 1 if the preannouncement 3-year monthly abnormal CARs are lower than that of a benchmark, and 0 otherwise. Benchmark expected returns are one of two returns: (1) the CRSP index and (2) Fama–French's 48 portfolios constructed based on industry classification. Refer to the tables' captions for information about the benchmark employed.
OROA	Earnings before interest and tax divided by total assets.
Firm characteristics	
Size	The logarithm of the market equity of the firm computed at the end of the quarter prior to the announcement of management change.
ME/BE	The market equity to book equity ratio computed at the end of the quarter prior to the announcement of management change.

Notes

1 Many studies examine the effect of such factors on the sensitivity of the likelihood of CEO dismissal owing to poor performance.

2 In case no permanent appointment is available.

3 Stating that a voluntary turnover is mostly expected does not necessarily mean that a firm's performance is not expected to improve under the new CEO's tenure; as in any succession process, the firm's value depends on the skills and expertise of the new CEO. In addition, new CEOs tend to execute some changes in the business strategy according to their perception of the ideal way to manage a firm, which is more likely to happen when performance was poor under the old CEO's tenure (Murphy and Zimmerman 1993).

4 For example, the former CEO of Time, mentioned in the Introduction.

5 Referred to as the improved management hypothesis.

6 As conflict involves two parties.

7 Through clearly stating it or dropping hints about it. Rachel Feintzeig, author of the *Wall Street Journal* article 'You're fired! Additionally, we really mean it!' points out that sometimes the BOD tries to be 'nice' in stating the reason for CEO departures and other times drop hints in its statements regarding the reason for the departures.

[8] We should note that 'pursue other interests' turnovers are the less dominant part of the 'nontransparent' sample, and our results are robust whether we include those turnovers in the 'nontransparent' sample or in the other sample. In addition, investors would speculate that the retirement of a young CEO is less likely to be the real reason for turnover; our results do not materially change if we include CEO early retirements in the 'nontransparent' sample.

[9] Consistent with Warner et al. (1988).

[10] The post-turnover BHAR is 60% less than the preturnover BHAR for the outperforming sample, an observation that we have not reported owing to space constraints.

[11] For example, a turnover associated with accounting manipulation might cause the restatement of earnings following a change in management, thereby putting downward pressure on future cash flows.

References

Adams, John C., and Sattar A. Mansi. 2009. CEO turnover and bondholder wealth. *Journal of Banking & Finance* 33: 522–33.

Adams, Renee, Heitor Almeida, and Daniel Ferreira. 2005. Powerful CEOs and their impact on corporate performance. *Review of Financial Studies* 18: 1403–32. [CrossRef]

Agrawal, Anup, and Mark A. Chen. 2017. Boardroom brawls: An empirical analysis of disputes involving directors. *The Quarterly Journal of Finance* 7: 1–58. [CrossRef]

Bacidore, Jeffrey M., John A. Boquist, Todd T. Milbourn, and Anjan V. Thakor. 1997. The search for the best financial performance measure. *Financial Analysts Journal* 53: 11–20. [CrossRef]

Barber, Brad M., and John D. Lyon. 1997. Detecting long-run abnormal stock returns: The empirical power and specification of test statistics. *Journal of Financial Economics* 43: 341–72. [CrossRef]

Barry, Christopher B., and Stephen Brown. 1984. Differential information and the small firm effect. *Journal of Financial Economics* 13: 283–94. [CrossRef]

Barry, Christopher B., and Stephen J. Brown. 1985. Differential information and security market equilibrium. *Journal of Financial and Quantitative Analysis* 20: 407–22. [CrossRef]

Barry, Christopher B., and Stephen J. Brown. 1986. Limited information as a source of risk. *The Journal of Portfolio Management* 12: 66–72. [CrossRef]

Bawa, Vijay S., Stephen J. Brown, and Roger W. Klein. 1979. *Estimation Risk and Optimal Portfolio Choice*. New York: North-Holland Publ, 190p.

Cerasi, Vittoria, Sebastian M. Deininger, Leonardo Gambacorta, and Tommaso Oliviero. 2020. How post-crisis regulation has affected bank CEO compensation. *Journal of International Money and Finance* 104: 102–53. [CrossRef]

Coughlan, Anne T., and Ronald M. Schmidt. 1985. Executive compensation, management turnover, and firm performance: An empirical investigation. *Journal of Accounting and Economics* 7: 43–66. [CrossRef]

Dedmana, Elisabeth, and Stephen W. J. Lin. 2002. Shareholder wealth effects of CEO departures: Evidence from the UK. *Journal of Corporate Finance* 8: 81–104. [CrossRef]

Denis, David J., and Diane K. Denis. 1995. Performance changes following top management dismissals. *The Journal of Finance* 50: 1029–57. [CrossRef]

Dikolli, Shane S., William J. Mayew, and Dhananjay Nanda. 2014. CEO tenure and the performance-turnover relation. *Review of Accounting Studies* 19: 281–327. [CrossRef]

Ertugrul, Mine, and Karthik Krishnan. 2011. Can CEO dismissals be proactive? *Journal of Corporate Finance* 17: 134–51. [CrossRef]

Fama, Eugene F. 1980. Agency Problems and the Theory of the Firm. *The Journal of Political Economy* 88: 288–307. [CrossRef]

Fama, Eugene F., and Kenneth R. French. 1993. Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics* 33: 3–56. [CrossRef]

Furtado, Eugene P. H., and Michael S. Rozeff. 1987. The wealth effects of company initiated management changes. *Journal of Financial Economics* 18: 147–60. [CrossRef]

Gamache, Daniel L., and Gerry McNamara. 2019. Responding to bad press: How CEO temporal focus influences the sensitivity to negative media coverage of acquisitions. *Academy of Management Journal* 62: 918–43. [CrossRef]

Gilson, Stuart C. 1989. Management turnover and financial distress. *Journal of financial Economics* 25: 241–62. [CrossRef]

Goyal, Vidhan, and Chul W. Park. 2002. Board leadership structure and CEO turnover. *Journal of Corporate Finance* 8: 49–66. [CrossRef]

Hambrick, Donald C., and Phyllis A. Mason. 1984. Upper Echelons: The Organization as a Reflection of Its Top Managers. *The Academy of Management Review* 9: 193–206. [CrossRef]

Healy, Paul M., and Krishna G. Palepu. 2001. Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics* 31: 405–40. [CrossRef]

Hermalin, Benjamin E., and Michael S. Weisbach. 1998. Endogenously chosen boards of directors and their monitoring of the CEO. *American Economic Review* 88: 96–118.

Huson, Mark R., Robert Parrino, and Laura T. Starks. 2001. Internal monitoring mechanisms and CEO turnover: A long-term perspective. *The Journal of Finance* 56: 2265–97. [CrossRef]

Huson, Mark R., Paul Malatesta, and Robert Parrino. 2004. Managerial succession and firm performance. *Journal of Financial Economics* 74: 237–75. [CrossRef]

Jenter, Dirk, and Fadi Kanaan. 2006. CEO turnover and relative performance evaluation. *National Bureau of Economic Research* 70: 2155–84.
Khanna, Naveen, and Annette B. Poulsen. 1995. Managers of financially distressed firms: Villains or scapegoats? *The Journal of Finance* 50: 919–40. [CrossRef]
Kim, Yungsan. 1996. Long-term firm performance and chief executive turnover: An empirical study of the dynamics. *Journal of Law, Economics, and Organization* 12: 480–96. [CrossRef]
Kind, Axel, and Yves Schläpfer. 2010. *Is a CEO Turnover Good or Bad News*. Working papers 2010/13. Basel: Faculty of Business and Economics—University of Basel.
Klein, Roger, and Vijay S. Bawa. 1977. The effect of limited information and estimation risk on optimal portfolio diversification. *Journal of Financial Economics* 5: 89–111. [CrossRef]
Leftwich, Richard. 1980. Market failure fallacies and accounting information. *Journal of Accounting and Economics* 2: 193–211. [CrossRef]
Lim, Weng Marc. 2021. Conditional Recipes for Predicting Impacts and Prescribing Solutions for Externalities: The Case of COVID-19 and Tourism. Tourism Recreation Research. *Tourism Recreation Research* 46: 314–18. [CrossRef]
Loughran, Tim, and Jay R. Ritter. 2000. Uniformly least powerful tests of market efficiency. *Journal of Financial Economics* 55: 361–89. [CrossRef]
Lyon, John D., Brad M. Barber, and Chih-Ling Tsai. 1999. Improved methods for tests of long-run abnormal stock returns. *The Journal of Finance* 54: 165–201. [CrossRef]
Mobbs, Shawn. 2013. CEOs under fire: The effects of competition from inside directors on forced CEO turnover and CEO compensation. *Journal of Financial and Quantitative Analysis* 48: 669–98. [CrossRef]
Murphy, Kevin, and Jerold Zimmerman. 1993. Financial performance surrounding CEO turnover. *Journal of Accounting and Economics* 16: 273–315. [CrossRef]
Parrino, Robert. 1997. CEO turnover and outside succession a cross-sectional analysis. *Journal of Financial Economics* 46: 165–97. [CrossRef]
Reinganum, Marc R. 1985. The effect of executive succession on stockholder wealth. *Administrative Science Quarterly* 30: 46–60. [CrossRef]
Schneider, Benjamin. 1987. The people make the place. *Personnel Psychology* 40: 437–53. [CrossRef]
Shen, Wei, and Albert A. Cannella. 2003. Will succession planning increase shareholder wealth? Evidence from investor reactions to relay CEO successions. *Strategic Management Journal* 24: 191–98. [CrossRef]
Turner, John C., Michael A. Hogg, Penelope J. Oakes, Stephen D. Reicher, and Margaret S. Wetherell. 1987. *Rediscovering the Social Group: A Self-Categorization Theory*. Oxford: Blackwell Pub.
Warner, Jerold B., Ross Watts, and Karen H. Wruck. 1988. Stock prices and top management changes. *Journal of Financial Economics* 20: 461–92. [CrossRef]
Watts, Ross L., and Jerold L. Zimmerman. 1983. Agency problems, auditing, and the theory of the firm: Some evidence. *The Journal of Law & Economics* 26: 613–33.
Weisbach, Michael S. 1988. Outside directors and CEO turnover. *Journal of financial Economics* 20: 431–60. [CrossRef]
Worrell, Dan L., Wallace N. Davidson III, and John L. Glascock. 1993. Stockholder reactions to departures and appointments of key executives attributable to firings. *Academy of Management Journal* 36: 387–401.