CEO Appointments and the Loss of Firm-specific Knowledge - Putting Integrity Back into Hiring Decisions

Katja Rost
Sören Salomo
Margit Osterloh

CEO Appointments and the Loss of Firm-specific Knowledge -

Putting Integrity Back into Hiring Decisions

KATJA ROST
University of Zurich, IOU Institute for Organization and Administrative Science, Plattenstrasse 14, CH-8032 Zürich, mail: katja.rost@iou.uzh.ch, tel. +41 (0)44 634 29 17, fax. +41 (0)44 634 49 42

SÖREN SALOMO
Center for Technology, Economics and Management TEM, Danish Technical University DTU, Copenhagen, mail: salomo@tem.dtu.dk, tel. +45.4525.6110

MARGIT OSTERLOH
University of Zurich, University of Zurich, IOU Institute for Organization and Administrative Science, Plattenstrasse 14, CH-8032 Zürich, mail: osterloh@iou.uzh.ch, tel. +41 (0)44 634 29 40, fax. +41 (0)44 634 49 42

ABSTRACT

A rarely studied trend in corporate governance is the increasing tendency to fill CEO openings through external hires rather than through internal promotions: Kevin J. Murphy and Ján Zábojník (2004) show that the proportion of outside hires has doubled and their pay premium almost quadrupled over the last thirty years. Assuming that general managerial skills are becoming more important relative to firm-specific skills, the authors conclude that competition in the managerial labor market establishes optimal contracts. In our model and our empirical analysis we question this explanation by assuming that over the past decades the dishonesty of the predecessor has become relatively more important for the appointment decisions of firms. We conclude that outside hires are a suboptimal trend because external candidates even step up the regression of integrity in firms: As nobody has an incentive to invest in firm-specific knowledge, not only the performance of firms drops, but also the remaining integrity.

Keywords: CEO Appointments, external hires, suboptimal contracts

JEL Classifications: G34, J23, J41, M52

CEOs are increasingly appointed from the outside, leading to a decline in the average job tenure prior to CEO appointment and a rise in the pay premium for external hires. Murphy and Zábojník (2004) propose that this trend is driven by a shift in the relative importance of general managerial skills and firm-specific knowledge. The authors argue that over the past decades, general managerial skills have become relatively more important in the CEO's role, while firm-specific knowledge, such as information about the products, suppliers, clients, and employees of the firm, is now available in computerized form and may therefore be less important for CEO candidates. In their market model, the authors show that an increase in the importance of general skills relative to firm-specific skills leads to fewer promotions, more external hires, and a higher pay premium for external hires.
and an increase in equilibrium average wages for CEOs. Underlying this is the idea that competition for the most talented managers is becoming more intense (Martin and Moldoveanu, 2003), i.e. transferable skills are well priced in the managerial labor market, while firm-specific skills are underpriced, and that competition in the managerial labor market establishes an optimal compensation contract (Anderson, et al., 2007; Gabaix and Landier, Forthcoming).

In the next sections we discuss a second explanation for the increasing tendency to fill CEO openings through external hires. We argue that this trend reflects the underestimation of a firm's profit from firm-specific skills. Our basic assumption is that over the past decades dishonesty, i.e. a negative common past between the old executive and the firm, has become relatively more important in determining CEO appointments. That’s why the promotion decision of firms today relies to a greater extent on markets, i.e. outsiders, than on firm-specific information, i.e. insiders. This trend is suboptimal because in today's economy nobody has an incentive to invest in firm-specific knowledge. As the profit of a firm is a function of firm-specific knowledge, the underinvestment in firm-specific knowledge rapidly decreases the profit of firms. In contrast to the explanation of Murphy and Zábojník (2004), in our view firms are right to concern themselves with effectively preventing declines in integrity (coupled with the trend in external hires and rises in CEO pay). This finding is consistent with the hypothesis that CEOs are paid too much (Bebchuk and Fried, 2003; Bebchuk and Grinstein, 2005; Frey and Osterloh, 2005; Jensen, Murphy and Wruck, 2004; Tosi, et al., 2000).

1 The higher wages of external CEOs are in line with other explanations in the literature. For example it is argued that outsiders face a disproportional risk failure in the CEO job, forsake well established affiliations and known terrain, and often encounter significant personal and family cost in a move (Allen and Panian, 1982; Allen, et al., 1979). For all these risks and costs, externally hired CEOs must be compensated and earn more than internally promoted CEOs (Deckop, 1988).
In the next paragraph we introduce the underlying assumptions of our model and modify the market model of Murphy and Zábojník (2004). In the third and the fourth paragraph we show methods and results of our empirical analysis. It leads to three unambiguous conclusions: (1) The dishonesty of the previous CEO is coupled with the trend in external hires. (2) The decision to choose an outsider instead of promoting an insider is independent from the supposed capabilities of internal or external CEO candidates. (3) Outsiders reduce firm performance. Following this we discuss why new proposals or new explanations of proponents of the optimal-contract approach should be handled with care and why it calls for further research.

A suboptimal contract model for recent trends

Doubts on an “optimal contract”-explanation

First, we briefly consider some indications that optimal contracts may be not the whole story. As shown in table 1, the empirical evidence concerning CEO appointments and firm performance is mixed. Some studies show that outsiders strengthen the future performance of a firm. Some studies show that insiders strengthen the future performance of a firm. Some studies show that neither outsiders nor insiders strengthen the future performance of a firm. Since all studies analyze the effects of CEO appointments and firm performance over the past decades, it seems unlikely that general managerial skills have become relatively more important for the profit of a firm. Nevertheless, it remains unclear which of both appointment strategies is superior. These ambiguous results are consistent with findings on the composition of the board of directors: In a meta-analysis John A. Wagner III et al. (1998) confirm the existence of a curvilinear homogeneity effect in which performance is enhanced by the greater relative presence of either inside or outside directors. A second meta-analysis replicates this finding (Dalton, et al., 1998).
### TABLE 1. Empirical Findings of the effects of Hiring Decisions on Firm Performance

<table>
<thead>
<tr>
<th>Effects</th>
<th>Author (Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nobody is better</td>
<td>R. P. Beatty and E. J. Zajac (1987)</td>
</tr>
<tr>
<td></td>
<td>S. D. Friedman and H. Singh (1989)</td>
</tr>
<tr>
<td></td>
<td>N. Khanna and A. B. Poulsen (1995)</td>
</tr>
<tr>
<td>Outsiders are better</td>
<td>K. A. Borokhovich et al. (1996)</td>
</tr>
<tr>
<td></td>
<td>M. H. Lubatkin et al. (1989)</td>
</tr>
<tr>
<td></td>
<td>M. R. Reinganum (1985)</td>
</tr>
<tr>
<td>Insiders are better</td>
<td>E. J. Zajac (1990)</td>
</tr>
<tr>
<td></td>
<td>E. P. H. Furtado and M. S. Rozef (1987)</td>
</tr>
<tr>
<td></td>
<td>D. L. Worrell and W. N. Davidson (1987)</td>
</tr>
</tbody>
</table>

One reason for the ambiguous results concerning the effects of outsider respectively of insiders on firm performance seems the interrelation of appointment decisions with the past performance of a firm. As shown in table 2, studies unisonous confirm that firms prefer outsiders if the past performance was poor and prefer insiders if the past performance was good. According to that, the shadow of the past with the previous executive governs the appointment decisions of a firm.

### TABLE 2. Empirical Findings of the effects of Firm Performance on Hiring Decisions

<table>
<thead>
<tr>
<th>Effects</th>
<th>Author (Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D. K. Datta and J. P. Guthrie (1994)</td>
</tr>
<tr>
<td></td>
<td>R. Parrino (1997)</td>
</tr>
<tr>
<td></td>
<td>K. B. Schwartz and K. Menon (1985)</td>
</tr>
</tbody>
</table>

The last finding seems plausible since the shadow of the past has lasting effects on behavior (Granovetter, 1985). The shadow of the past with the previous executive should govern the appointment decisions of a firm for the following reasons:

- First, a firm collects information about the behavior of the old executive. First-hand information is cheap, reliable, detailed, and accurate. In fact, first-hand information implies
that the integrity of a person, defined as honoring one's word, becomes predictable (Erhard, et al., 2007).

- Second, a common past often implies that mutual specific investments have been made. Opportunistic behavior leads to a loss in “transaction” (Palay, 1984).

Given that the past with the previous executive was successful, a common past reduces potential problems that may arise because of opportunism and misunderstandings. Given that the past with the previous executive was disappointing, a common past boosts potential problems that may arise because of opportunism and misunderstandings.

That’s why we presume that the underlying reasons for the increasing tendency to fill CEO openings through external hires rather than through internal promotions are the layoff reasons of the previous CEO and not the better capabilities of outsiders: Our model starts from the assumption that firms prefer outsiders because the previous CEO (always an “insider”) has disappointed a firm's expectations, i.e. the past performance was poor. Recent examples for this trend are corporate officers not keeping their word, not enforcing their stated ethical codes, stealing from their companies, engaging in insider trading, lying to shareholders or backdating their options, so that the exercise prices were the lowest for the quarter of the year (Aboody and Kasznik, 2000; Baker, et al., 2003; Chauvin and Shenoy, 2001; Denis, et al., 2005; Efendi, et al., 2006; Erickson, et al., 2006; Johnson, et al., 2006; Marciukaityte, et al., 2006; O’Connor, et al., 2006; Osterloh and Frey, 2004; Yermack, 1997). That’s why the promotion decisions of firms today rely to a greater extent on markets, i.e. outsiders, than on firm-specific information, i.e. insiders. In the following we modify the market model of Murphy and Zábojník (2004) by including this assumption.

A “sub-optimal” contract explanation

In accordance with Murphy and Zábojník (2004) we assume that the profit of a firm with \( k \) workers is a function of the market wage for workers \( r \), the executive's ability \( a \), the
executive's firm-specific knowledge $s$ and his/her market wage $w_M(a)$.

$$
\pi(k, a, s) = f(k)s - rk - w_M(a).
$$

In our model the term $s$ further reflects the common past between the old executive and the firm, i.e. the *perceived* behavior control of a firm. In doing so, we broaden the meaning of firm-specific knowledge in control. Control seems important in establishing optimal contracts (Holmström, 1979; Shavell, 1979), since CEOs are agents of the owners of the firm and there a potential conflict of interest exists (Berle and Means, 1932). In particular, in absence of complete information, such as precise information about the future behavior of the new executive, the most efficient control may be based on observing the old executive's behavior.$^2$

We suppose that the perceived behavior control of a firm establishes the *promotion decision* of firms, i.e. the decision of a firm to hire an outsider instead of promoting an insider. If the previous CEO has met a firm's expectations, the firm will rely more on firm-specific information, i.e. promote an insider. If the previous CEO has disappointed a firm's expectations, the firm will rely more on markets, i.e. hire an outsider.

**Firm's choice in the case of integrity of the previous CEO.** In the case of integrity of the previous CEO, we assume that the *appointment decision* of a firm relies to a greater extent on firm-specific information, i.e. insiders, than on markets, i.e. outsiders ($y < y_{asymmetric}$). Firms overestimate the impact of firm-specific information. Figure 2 graphically summarizes how this consideration change the model of Murphy and Zábojník (2004).

---

$^2$ The literature on executive compensation points out that incentive-based control may be temporarily inefficient (Erhard, Jensen and Zaffron, 2007; Jensen, Murphy and Wruck, 2004; Rose and Wolfram, 2000). In a meta-analysis of CEO studies, Henry L. Tosi, et al. (2000) documented that firm performance accounts for less than 5% of the variance, while firm size still accounts for more than 40% of the variance in total CEO pay. Further, a meta-analysis of financial performance and management equity provides few examples of systematic relationships (Dalton, *et al.*, 2003). The results suggest that the amount of equity-based compensation accounts on average for just 5% of the variance in total financial performance, lending little support to incentive alignment.
The model conveys the following implication and leads us to the following hypothesis.

(Ib) Firms are more willing to promote insiders instead of hiring outsiders.

**Hypothesis 1a.** The integrity of the previous CEO increases the tendency of a firm to promote an insider instead of hiring an outsider.

**FIGURE 2.** Firm choice and firm profit if first-hand information seems more reliable

Furthermore, the model shows that a preference in inside promotions is a good choice but not always the best choice.

(IIa) Inside promotions are a good choice as insiders have high incentives to invest in their firm-specific knowledge since firm-specific knowledge upgrades their promotion prospects. As the profit of a firm is a function of the executive's firm-specific knowledge $s$, firms increase their profit.

(IIIa) Inside promotions are not always the best choice as firms neglect qualified outsiders: Instead of promoting an insider, sometimes an outsider would match the firm's perfect fit, $a^*$, more closely. On to of that, the wages of insiders might be too high since outsiders earn less
money than insiders with equal ability $a$. Outsiders have to accept a wage-cut of 

$$\varphi(a) = \left(f(k) y_a - rk^*\right) - \left(f(k) y_{assumed} a - rk^*\right).$$

**Firm's choices in the case of dishonesty of the previous CEO.** In the case of dishonesty of the previous CEO, we assume that the *appointment decision* of a firm relies to a greater extent on markets, i.e. outsiders, than on firm-specific information, i.e. insiders ($y > y_{assumed}$). Firms underestimate the impact of firm-specific information. Figure 3 graphically summarizes how this consideration change the model of Murphy and Zábojník (2004).

The model conveys the following implication and leads us to the following hypothesis.

(Ib) Firms are more willing to hire outsiders instead of promoting insiders.

**Hypothesis1b.** The dishonesty of the previous CEO increases the tendency of a firm to hire an outsider instead of promoting an insider.

The model shows further, that a preference in outside hires is a suboptimal choice.

(IIb) Insiders have no incentives to invest in their firm-specific knowledge, since firm-specific knowledge downgrades their promotion prospects. As the profit of a firm is a function of the executive's firm-specific knowledge $s$, the underinvestment in firm-specific knowledge decreases the profit of a firm.

(IIIb) Firms persistently neglect qualified insider: Instead of hiring an outsider, often an insider would match the firm's perfect fit, $a^*$, more closely. The wages of outsiders are unreasonably too high since many insiders earn less money than outsiders with equal ability $a$. Insiders have to accept a wage cut of

$$\varphi(a) = \left(f(k) y_{assumed} a - rk^*\right) - \left(f(k) y_a - rk^*\right).$$
Firm's profit in the case of inside or outside successors. An evaluation of the pros and cons of a preference for insiders (IIa and IIIa) or a preference for outsiders (IIb and IIIb) on firm profit comes to the following conclusion:

**Hypothesis 2.** The tendency of a firm to neglect firm-specific knowledge, i.e. qualified insiders, reduces the profit of a firm.

Hypothesis 2 corresponds with the resourced-based view of the firm: Each firm develops its proprietary knowledge, tacit and explicit, about how to serve its markets (Penrose, 1959). The tacit parts of this knowledge are not transferable, but are inherently locked into the firm at hand, thus they are firm-specific. The reasons are in the history of each firm specifically in past management decisions about investment in people, techniques and marketing strategies. Tacit knowledge in particular is a key to coordinating the different functions of the corporation and to seeking, finding and grasping potential opportunities, i.e. firm-specific knowledge increases the profit of a firm.
Thus, in contrast to the market model of Murphy and Zábojník (2004), our model comes to the conclusion that the increasing tendency to fill CEO openings through external hires, reflects a suboptimal trend. Our basic premise is that over the past decades dishonesty, i.e. a negative common past between the old executive and the firm, has become relatively more important in determining CEO appointments.

**Method**

**Database**

Our population is composed of all companies quoted on the Deutsche Börse in the period 1987-1999. We excluded all companies of the banking and the insurance sector. Within the period 1989-1997 we obtained 501 CEO appointments in 301 companies. The data were acquired from sources available to both investors and the public, such as company reports, press reports, Hoppenstedt Aktienführer, Sahling Aktienführer, and by conducting a survey.

**Measurements**

*Integrity vs. dishonesty of the prior CEO.* In order to evaluate the underlying reasons of the departure of the old CEO we differentiate between “forced” and “non-forced” respectively between “disciplinary” and “non-disciplinary” reasons (Friedman and Singh, 1989; Gilson, 1989; Hadlock and Lumer, 1997; Kim, 1996). Following Schrader and Lüthje (1992) we further divide non-forced/non-disciplinary reasons into avoidable and unavoidable reasons. We measure the integrity of the previous CEO by means of unavoidable reasons, i.e. retirement not by his/her choice or death. We measure the dishonesty of the previous CEO by means of forced/disciplinary reasons, i.e. the involuntarily termination of the employment contract because of conflicts about business policy. As a control we check for avoidable reasons, i.e. the voluntary termination of the employment contract because of his/her change
to another CEO-position. Other reasons, e.g. illness, early retirement, mergers and acquisitions, were excluded.

In order to measure these layoff reasons we combine two data sources: (1) press reports and (2) survey. Within both data sources we use the same classification of underlying reasons. (Ad 1) 1258 press reports of 317 CEO-changeovers were coded by three independent persons. The press reports were provided by the HWWA – Institut für Wirtschaftsforschung. In 301 cases the independent persons agreed completely with respect to the underlying layoff reasons. 16 ambiguous cases were excluded. (Ad 2) In February 1998 we contacted 501 CEO-successor by mail and asked them about the layoff reasons of the old CEO. From this sample 211 filled-out questionnaires were returned, yielding a response rate of 42%.

Finally, we combined both data sources. For 388 of the 501 CEO appointments we were able to specify at least one, non-ambiguous layoff reason: 32% of all CEOs exit their job by means of unavoidable reasons, 31.2% by means of forced/disciplinary reasons and 13.4% by means of avoidable reasons. Using the ROA, we looked at whether the selected sample mirrored the population of all 501 CEO appointments. There were no significant differences. Finally we compared our frequency figure of layoff reasons with prior studies: In total, the studies document that 44.8% of all CEOs exit their job by means of unavoidable reasons (some studies include avoidable reasons), 28.6% by means of forced/disciplinary reasons (Cannella and Lubatkin, 1993; Friedman and Singh, 1989; Jahn, 1996; Schrader and Lüthje, 1992; Warner, et al., 1988).

**Inside vs. outside successor.** According to Carlson (1961: 211) an inside successor can be described as follows: “… His career is one ascent up the hierarchy (…). The man who waits can be called an Insider. He has been promoted from within…”. Following prior research we measure the binary variable by means of the affiliation of a person to the executive span of the predecessor (Carlson, 1961; Helmich, 1975a; Helmich, 1975b). “… An inside successor is a
person promoted from within the executive span of the predecessor; an outside succession occurs when the newly appointed CEO was not in the predecessor's span. ...” (Kesner and Dalton, 1985: 9). We classified a new CEO as an insider if he/she has been a top-management team member at least one year before the departure of the old CEO.

Performance. We measure performance using the return on assets (ROA), calculated by dividing a company's annual earnings by its total assets. ROA is displayed as a percentage. The level in ROA may be affected by industry effects. Therefore, we industry-adjust firm performance in each year. The industry-adjusted ROA equals firm cash-flow return on assets minus industry-average cash flow return on assets in that year. Industry-adjusted comparisons allow us to examine firm-specific performance irrespective of any industry-wide factors that may affect ROA. We define the industry comparison group for each firm as all 70,000 firms listed on Deutsche Bundesbank with the same industry code (total: 27 industry sectors). Industry ROA is calculated as the total asset-weighted average ROA of all firms in the industry. Our profit-related analysis is based on a five year change period for each company: The two years before the new CEO was appointed, the year within the change happened, and the two years after the CEO appointment (=1.856 change-firm-years).

In order to control for time-effects we further parallelize our data. We use the remaining 8 years of each company (=15,320 control-firm-years), i.e. the time period not defined as a change period, as a further check. For each change-firm-year we seek for a “suitable” control-firm-year, i.e. a company within the same industry sector and of the same year not directly affected by a CEO appointment. In case of more than one suitable control-firm-year we took a random selection.

Control variables. For each firm-year we ascertain several control variables. In our regressions we control for: (1) firm size using the natural log of the number of employees, (2) top management team (TMT) size using the number of executive directors, (3) firm age using
the year established, (4) the percentage of major shareholders, i.e. shareholders that own 5 percent or more of a firm's stock (Hambrick and Finkelstein, 1995), (5) the percentage of diversified holdings, (6) the percentage of employees in the board of directors (characteristically for German boards, e.g. Osterloh and Frey (2006)), (7) the environment dynamics of a company using the variance of ROA of the industry sector within each year, (8) the change of the former CEO in the board of directors (binary), (9) the percentage of top management team turnover using the sum of directors leaving and newcomers in relation to the total number of executive directors, and (10) the affiliation of a top management team member to the founder family (binary).

Not all the necessary information for some of the companies remained available, so that the initial sample was reduced to a maximum of 254 CEO appointments. Table 1 documents the correlations of the studied variables for the year of the appointment of the new CEO (t=0).

**Table 1 about here**

**Empirical Results**

*Layoff reasons and successor decision.* Table 2 documents the interrelation between layoff reasons and the choice of an inside or an outside successor. Overall 59.4% of all new CEOs were hired from outside the company. The results show that layoff reasons and successor choice are in a highly significant relation (t=11.7097***). In the case of integrity of the previous CEO only 45.4% of all new CEOs were hired from outside the company, while in the case of dishonesty of the previous CEO 68.2% of all new CEOs were hired from outside the company. Thus, the results tentatively confirm the hypotheses 1a and 1b: If the previous CEO has met a firm's expectations, a firm relies more on firm-specific information, i.e. promotes an insider. If the previous CEO has disappointed a firm's expectations, a firm relies more on markets, i.e. hire an outsider.
Table 2. Layoff reasons and choice of an inside or an outside successor

<table>
<thead>
<tr>
<th>Reason</th>
<th>Inside Promotion</th>
<th>Outside Hire</th>
<th>t-value (Chi-Square)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>165 (40.6%)</td>
<td>241 (59.4%)</td>
<td></td>
</tr>
<tr>
<td>Integrity of the previous CEO</td>
<td>59 (54.6%)</td>
<td>49 (45.4%)</td>
<td></td>
</tr>
<tr>
<td>Dishonesty of the previous CEO</td>
<td>34 (31.8%)</td>
<td>73 (68.2%)</td>
<td>11.797***</td>
</tr>
<tr>
<td>Voluntary termination of employment contract</td>
<td>15 (38.5%)</td>
<td>24 (61.5%)</td>
<td></td>
</tr>
</tbody>
</table>

Caption: *p <0.10, **p <0.05, ***p <0.01

Firm profit and layoff reasons. As shown in the beginning, previous research often assumes that insiders or outsiders have different capabilities by analyzing the effects of an inside or an outside successor on future performance. However, the studies unanimous confirm only one effect: Firms prefer outsiders, if the past performance was poor and prefer insiders if the past performance was good. Our study replicates this finding: Outsiders are hired if the past performance was poor (Median ROA(t-1)=0.0274; N=121) and insiders are promoted if the past performance was good (Median ROA(t-1)=0.0404; N=91). A Mann-Withey-Test shows that this difference in past performance is significant (z-value: -1.754*). The relationship between inside or outside successors and past performance permits two interpretations: Outside successors have better capabilities by putting a company back on its feet or outsiders are a “rational” choice because the predecessor (an insider) disappointed a firm's expectations, i.e. destroyed a firm's profit. In order to substantiate the last assumption, the next section examines the relationship between layoff reasons and firm profit in more detail.

As shown in Figure 4, the dishonesty of the previous CEO goes along with a poor past as well as a poor future performance of a firm, while the integrity of the previous CEO has no effects on performance. The performance differences between companies managed in a moral sense and companies on the crook are highly significant ($x^2(t-2)=3.388$, $x^2(t-1)=17.159***$, $x^2(t0)=28.134***$, $x^2(t1)=7.028**$, $x^2(t2)= 9.632***$).
In order to check for unobserved heterogeneity we additionally control for the industry-adjusted firm performance in each year and parallelize the data (check for control-firm-years). As shown in Figure 5, we are able to replicate the former result. Compared with an average company of the same industry and the same year, the dishonesty of the previous CEO goes along with a poor past ($z(t-2)=-3.388^{***}$, $z(t-1)=-4.331^{**}$) and with a poor future performance ($z(t0)=-6.367^{***}$, $z(t1)=-2.486^{**}$, $z(t2)=-1.498$). In the time period before the termination of the contract with the old CEO the poor performance even gets worse (Wilcoxon-Test, $t-2->t-1$: $z=-3.241^{***}$, $t-1->t0$: $z=-2.600^{***}$), while in the time period after the termination the successor is able to improve the poor performance to a medium performance (Wilcoxon-Test, $t0->t1$: $z=3.571^{***}$, $t1->t2$: $z=1.223$).

Figure 6 documents the results in the case of integrity of the previous CEO. Compared with an average company of the same industry and the same year, the integrity of the previous CEO goes along with an average past ($z(t-2)=-0.639$, $z(t-1)=-1.280$) and with a good future performance ($z(t0)=-1.058$, $z(t1)=1.084$, $z(t2)=1.724^{*}$). Further, in the time period before the
termination of the contract with the old CEO the performance is stable (Wilcoxon-Test, t-2->t-1: z=0.870, t-1->t0: z=.247), while in the time period after the termination the successor is slightly able to improve a good performance to a better performance (Wilcoxon-Test, t0->t1: z=3.120***, t1->t2: z=1.108).

**Figure 5.** Dishonesty of the former CEO and firm profit

Note: N(t-2)=221, N(t-1)=228, N(t0)=259, N(t1)=239, N(t2)=205. **Mann-Withey-Test:** z(t-2)=-3.388*** (sig.=0.003), z(t-1)=-4.331*** (sig.=0.000), z(t0)=-6.367*** (sig.=0.000), z(t1)=-2.486** (sig.=0.013), z(t2)=-1.498 (sig.=0.134). N(t-2)=221, N(t-1)=228, N(t0)=259, N(t1)=239, N(t2)=205. **Wilcoxon-Test** (only for performance change of the group “dishonesty of the previous CEO”): t-2->t-1: z=-3.241*** (sig.=0.001), t-1->t0: z=-2.600*** (sig.=0.009), t0->t1: z=3.571*** (sig.=0.000), t1->t2: z=1.223 (sig.=0.221).

Summing up, the findings show a strong relationship between layoff reasons and firm profit: First, the integrity of a predecessor pays off, because the performance of a firm is stable within a leadership change period and even improves after this change (see Figure 6). Second, the dishonesty of a predecessor diminishes the value of a firm before and after a leadership change (see Figure 5). Third, we already have shown that firms promote an insider in the case of the integrity of the previous CEO and hire an outsider in the case of the dishonesty of the previous CEO. Thus, it seems implausible that outside successors are hired because they have better capabilities. More plausible seems the hypothesis that outsiders are a “glimmer of
hope” because the predecessor destroyed a firm's profit. In the next section we test this assumption.

**FIGURE 6.** Integrity of the former CEO and firm profit

![Graph showing the relationship between integrity of the previous CEO and median adjusted ROI](image)

Note: N(t-2)=251, N(t-1)=252, N(t0)=258, N(t1)=248, N(t2)=225. Mann-Withey-Test: z(t-2)=0.639 (sig.=0.524), z(t-1)=1.280 (sig.=0.200), z(t0)=1.058 (sig.=0.290), z(t1)=1.084 (sig.=0.278), z(t2)=1.724* (sig.=0.085). Wilcoxon-Test (only for performance change of the group “integrity of the previous CEO”): t-2->t-1: z=0.870 (sig.=0.387), t-1->t0: z=0.247 (sig.=0.805), t0->t1: z=3.120*** (sig.=0.002), t1->t2: z=1.108 (sig.=0.268).

**Past firm profit, layoff reasons and successor decision.** Table 3 documents the results of a logistic regression using the appointment decisions of a firm as a dependent variable. The results indicate that past performance does not directly influence the successor decision of a firm (Wald=0.0107), i.e. outsiders have not higher capabilities. Corresponding with hypotheses 1a and 1b the results show that layoff reasons do influence the successor decision of a firm: If the previous CEO was integer, firms are more likely to promote an insider (Wald=3.2796*). If the previous CEO was crooked, firms are more likely to hire an outsider (Wald=6.3119**).

Further the results indicate that the following conditions enhance the probability of inside promotions: the percentage of employees in the board (Wald=13.0022***), the change of the
former CEO in the board of directors (Wald=5.7856**), and the affiliation of a top management team member to the founder family (Wald=6.9346***). These results are in line with previous research (Gomez-Mejia and Wiseman, 1997; Gomez-Mejia, et al., 2003; Gomez-Mejia, et al., 1987; Hambrick and Finkelstein, 1995; Osterloh and Frey, 2006).

**TABLE 3.** Conditions of successor decision (Logistic regression)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Outside hire (=0)/ Inside promotion (=1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Est.</td>
</tr>
<tr>
<td>ROA (t=-1)</td>
<td>-.2973</td>
</tr>
<tr>
<td>Integrity of the previous CEO</td>
<td>.4764 *</td>
</tr>
<tr>
<td>Dishonesty of the previous CEO</td>
<td>-.7536 **</td>
</tr>
<tr>
<td>% employees in the board</td>
<td>9.3365 ***</td>
</tr>
<tr>
<td>Change of the former CEO in the board</td>
<td>.9533 **</td>
</tr>
<tr>
<td>TMT-member = member of the founder family</td>
<td>2.2897 ***</td>
</tr>
<tr>
<td>% Major shareholder</td>
<td>.0023</td>
</tr>
<tr>
<td>TMT size</td>
<td>.1107</td>
</tr>
<tr>
<td>%TMT turnover prior to the appointment</td>
<td>-.1748</td>
</tr>
<tr>
<td>Environment dynamics</td>
<td>.0777</td>
</tr>
<tr>
<td>Firm age</td>
<td>.0026</td>
</tr>
<tr>
<td>Pseudo-R-Square</td>
<td>.225</td>
</tr>
<tr>
<td>Nagelkerke-R-Square</td>
<td>.353</td>
</tr>
<tr>
<td>Correct classification of insiders</td>
<td>.628</td>
</tr>
<tr>
<td>Correct classification of outsiders</td>
<td>.786</td>
</tr>
</tbody>
</table>

Note: N=195; * p <0.10,  ** p <0.05, *** p <0.01.

*Future firm profit, layoff reasons and successor decision.* Finally, table 4 documents the results of an OLS-Regression using the future performance of a firm as a dependent variable. Corresponding with Figure 4 and hypotheses 2 the results clearly indicate that firm-specific knowledge, i.e. inside promotions, enhance the future performance of a firm (T(t0)=1.656*, T(t1)=1.759*). Further the results substantiate that layoff reasons trigger the performance level: If the previous CEO was integer, the successor is more likely to make profit in the period after the change (T(t0)=2.557**, T(t1)=2.127**). If the previous CEO was crooked, the successor is less likely to make profit in the period after the change (T(t0)=-4.703***, T(t1)=-3.127***).
Further the results indicate that the change of the former CEO in the board of directors (T(t0)=2.058**, T(t1)=0.400) and the affiliation of a top management team member to the founder family (T(t0)=1.688*, T(t1)=1.503) are positively related with the future profit of a firm. The percentage of employees in the board (T(t0)=-1.875*, T(t1)=-0.835) and the percentage of diversified holding (T(t0)=-2.053**, T(t1)=-0.046) are negatively related with the future profit of a firm.

**TABLE 4.** Effects of successor decision on firm performance (OLS- regression)

<table>
<thead>
<tr>
<th>Model</th>
<th>ROA t=0</th>
<th>ROA t=1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Est.  SD  T-value</td>
<td>Est.  SD  T-value</td>
</tr>
<tr>
<td>Constant</td>
<td>.0461 ** .018  2.563</td>
<td>.0240 .022 1.099</td>
</tr>
<tr>
<td>Insider (=1) vs. Outsider (=0)</td>
<td>.0147 * .009 1.656</td>
<td>.0179 * .011 1.716</td>
</tr>
<tr>
<td>Integrity of the previous CEO</td>
<td>.0170 ** .007 2.557</td>
<td>.0179 ** .008 2.127</td>
</tr>
<tr>
<td>Dishonesty of the previous CEO</td>
<td>-.0307 *** .007 -4.703</td>
<td>-.0265 *** .008 -3.127</td>
</tr>
<tr>
<td>% employees in the board</td>
<td>-.0708 * .038 -1.875</td>
<td>-.0379 .045 -8.35</td>
</tr>
<tr>
<td>Change of the former CEO in the board</td>
<td>.0219 ** .011 2.058</td>
<td>.0054 .013 .400</td>
</tr>
<tr>
<td>TMT-member = member of the founder family</td>
<td>.0347 * .021 1.688</td>
<td>.0405 .027 1.503</td>
</tr>
<tr>
<td>% diversified holding</td>
<td>-.0004 ** .000 -2.052</td>
<td>-.0000 .000 -0.046</td>
</tr>
<tr>
<td>Firm size</td>
<td>.0000 .000 .657</td>
<td>-.0000 .000 -0.954</td>
</tr>
<tr>
<td>% TMT turnover since the appointment</td>
<td>.0029 .005 .620</td>
<td>.0062 .007 .927</td>
</tr>
<tr>
<td>Environment dynamics</td>
<td>-.0018 .002 -.774</td>
<td>.0006 Q .003 .208</td>
</tr>
<tr>
<td>Firm age</td>
<td>-.0000 .000 -.219</td>
<td>.0000 .000 .305</td>
</tr>
<tr>
<td>R-Square</td>
<td>.218</td>
<td>.118</td>
</tr>
<tr>
<td>Adjusted R-Square</td>
<td>.178</td>
<td>.066</td>
</tr>
</tbody>
</table>

Note:  N (t=0)=227, N(t=1)=198;  p <0.10,  * p <0.05,  ** p <0.01.

**Discussion & Implications**

Our research was motivated by the observation of an increasing tendency to fill CEO openings through external hires rather than through internal promotions.

- Proponents of the *optimal-contract* approach explain this trend by assuming that over the past decades general managerial skills have become relatively more important for CEO candidates.
• Proponents of the *suboptimal-contract* approach are in doubt about this explanation: For example it is argued that the enormous upwards trend in CEO’s compensation (going along with the increasing prevalence of outside hires) in the last few years arises not only from market forces (Bebchuk and Fried, 2003; Bebchuk, *et al.*, 2002; Rost and Osterloh, 2007; Tosi, Werner, Katz and Gomez-Mejia, 2000).

In our theoretical model we offered a suboptimal-contract explanation for the increasing tendency to fill CEO openings through external hires by assuming that over the past decades the dishonesty of the predecessor has become relatively more important for the appointment decisions of firms. Supposing that the increasing prevalence of outside hires is an indication for the regression of integrity in firms, outside hires are a suboptimal trend, because external candidates even step up this regression: As nobody has an incentive to invest in firm-specific knowledge, or more general to invest in a firm, not only the performance of firms drop, but also the remaining integrity.

Empirically we were able to show that the dishonesty of the predecessor channels the appointment decision of a firm: Firms are more likely to hire an outsider instead of promoting an insider. This decision seems independent from the supposed capabilities of internal or external CEO candidates: Controlling the layoff reasons of the predecessor, the past performance does not affect the appointment decision of a firm, i.e. to hire an outsider or to promote an insider. However, the appointment decision affects the future performance of a firm, i.e. discloses the real capabilities of CEO candidates: Controlling the layoff reasons of the predecessor the decision of a firm to hire an outsider instead of promoting an insider reduces the future performance of a firm.

Thus, optimal-contract explanations might be not the only rational of the increasing tendency to fill CEO openings through external hires. There are also indications, that the increasing tendency to fill CEO openings through external hires is driven by suboptimal contracts.
Summing up, there are questions left, which can only be answered after further investigation. Further research is important, because both explanations involve different consequences.

- If the optimal-contract explanation is more truthful, in today's economy general knowledge, or markets, is becoming more and more important for the profit of a firm and smart firms recruit their talents through external hires.
- If the suboptimal-contract explanation is more truthful, in today's economy the integrity in firms declines more and more, leading to a decrease in performance. Firms boost this trend through external hires and should pay more attention to their internal “stars” (Groysberg, et al., 2004).

For the time being we can only deliver some preliminary indications why optimal-contracts might be not the whole story and new proposals or new explanations should be handled with care. The wave of corporate scandals, caused by the dishonesty of CEOs (Osterloh and Frey, 2004), and the explosion of management compensation (Bebchuk and Grinstein, 2005) drew attention to flaws in the corporate governance structure (Bebchuk and Fried, 2004; Osterloh and Frey, 2006) and substantiate the suboptimal-optimal contract view. Even proponents of the optimal-contract view now admit that the explosion of executives’ has proven to be ‘managerial and organizational heroin’ (Jensen, Murphy and Wruck, 2004). In order to improve corporate governance, the optimal-contract view mainly discusses two measures which may even worsen the actual situation if the suboptimal-contract view is more truthful:

- First, the board should operate at arm’s length from the executives, i.e. it should become more independent of their CEOs in order to monitor them more efficiently. Boards, too closely linked to executives, hinder market forces, like the markets for capital, corporate control and managerial labor, from imposing stringent constraints on managers. Therefore, the CEO should be the only insider of the firm with board membership (Jensen, Murphy and Wruck, 2004).
The idea of board independence has been widely accepted, but does not seem to contribute much to solving the problem: According to the majority of findings, an independent board, measured by the proportion of outsiders, has no effect (Anderson and Bizjak, 2003; Beatty and Zajac, 1994; Conyon and Peck, 1998; Daily, *et al.*, 1998; Grinstein and Hribar, 2004; Hallock, 1997) or even has a positive effect (Boyd, 1994; Conyon and Peck, 1998; Core, *et al.*, 1999; David, *et al.*, 1998; Lambert, *et al.*, 1993; Main, 1991; Westphal and Zajac, 1994) on executives’ pay. The positive influence of outsiders on compensation is in line with our model and underpins the suboptimal contract view. For these reasons it is most likely that independent boards *push* and not restrain the wave of corporate scandals.

- Second, the board should become more responsible to their shareholders. For instance, board members should stand for annual election by the shareholders (Bebchuk and Fried, 2004). Directors have to act solely in the interests of the shareholders, because it is not possible to maximize more than one objective and the shareholders carry the residual risk and should therefore have residual ownership and control (Jensen, 2001).

The idea of “shareholder value” is widely accepted, but the belief in shareholders’ supremacy is inadequate: Today’s firms gain their competitive advantage through firm-specific knowledge rather than physical investments (Asher, *et al.*, 2005; Grandori, 2005). Our model shows that the neglect of firm-specific knowledge reduces the profit of a firm, i.e. reduces the “shareholder value”. Thus, proposals from an inadequate theory can not lead to successful practical implications.

**References**


Frey, B. S. and Osterloh, M., (2005), "Yes, managers should be paid like bureaucrats", 

Friedman, S. D. and Singh, H., (1989), "Ceo Succession and Stockholder Reaction - the 
Influence of Organizational Context and Event Content", Academy of Management 


Gabaix, X. and Landier, A., (Forthcoming), "Why has CEO Pay increased so much?" 


Gomez-Mejia, L. R., Larraza-Kintana, M. and Makri, M., (2003), "The determinants of 
deepaut compensation in family-controlled public corporations", Academy of 


Grandori, A., (2005), "Neither Stakeholder Nor Shareholder Theories’: How Property Right 
and Contract Theory can Help in Getting Out of the Dilemma", Journal of 
Management and Governance, Vol. 9, pp. 41-46.

Granovetter, M., (1985), "Economic-Action and Social-Structure - the Problem of 

Grinstein, Y. and Hribar, P., (2004), "CEO compensation and incentives: Evidence from 


Jensen, M. C., Murphy, K. J. and Wruck, E. G., (2004), "Remuneration: Where We’ve Been, How We Got to Here, What are the Problems, and How to Fix Them", *Negotiation,*


### TABLE 1. Pairwise correlations for t=0 (N=277)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Insider (=1) vs. Outsider (=0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 % employees in the board</td>
<td>.204</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 TMT size</td>
<td>.245</td>
<td>.513</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Change of the former CEO in the board</td>
<td>.239</td>
<td>.128</td>
<td>.263</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Integrity of the previous CEO</td>
<td>.164</td>
<td>.098</td>
<td>.175</td>
<td>.306</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Dishonesty of the previous CEO</td>
<td>-.111</td>
<td>-.009</td>
<td>-.117</td>
<td>-.265</td>
<td>.197</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 % TMT turnover prior to the appointment of the new CEO</td>
<td>.017</td>
<td>.161</td>
<td>.347</td>
<td>.056</td>
<td>.061</td>
<td>.007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 TMT-member = member of the founder family</td>
<td>-.009</td>
<td>-.072</td>
<td>-.053</td>
<td>-.044</td>
<td>.005</td>
<td>-.021</td>
<td>-.047</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 % Major shareholder</td>
<td>-.100</td>
<td>.075</td>
<td>.007</td>
<td>-.064</td>
<td>-.135</td>
<td>-.055</td>
<td>-.006</td>
<td>-.172</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 % diversified holding</td>
<td>.115</td>
<td>.019</td>
<td>.180</td>
<td>.091</td>
<td>.175</td>
<td>.022</td>
<td>.078</td>
<td>.052</td>
<td>-.109</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Firm size</td>
<td>.131</td>
<td>.249</td>
<td>.656</td>
<td>.119</td>
<td>.170</td>
<td>-.070</td>
<td>.206</td>
<td>-.058</td>
<td>-.113</td>
<td>.329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Firm age</td>
<td>-.007</td>
<td>.103</td>
<td>.109</td>
<td>.104</td>
<td>.111</td>
<td>-.107</td>
<td>-.012</td>
<td>-.133</td>
<td>-.058</td>
<td>-.031</td>
<td>.057</td>
<td></td>
</tr>
<tr>
<td>13 Environment dynamic</td>
<td>.005</td>
<td>-.365</td>
<td>-.202</td>
<td>-.008</td>
<td>-.005</td>
<td>-.098</td>
<td>-.077</td>
<td>-.014</td>
<td>.098</td>
<td>-.026</td>
<td>.027</td>
<td>.105</td>
</tr>
</tbody>
</table>

