

# Information Transfer Effects of Senior Executives' Migrations and Subsequent Write-offs

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Preliminary Draft

12 January 2005

We thank Stephen Ryan, Jenny Tucker, Fabrizio Ferri, David Yermack, William Greene and participants of seminars at New York University and City University of Hong Kong for their helpful comments.

## Abstract

In this study, we consider whether the market conditions its reactions to a senior executive's (SE) move from an origin company (OC) to a destination company (DC) on the SE's past performance and any other information impounded in the market reaction to the SE's emigration from the OC. We also examine whether the market perceives a benefit in the hiring of an SE with an industry-specific background. We find that, with regard to migration events, the performance of the OC—accounting and stock—before the SE's migration is positively associated with the market reaction to the immigration event only when the OC and the DC are members of the same industry. With respect to an OC's contiguously subsequent write-off and restructuring events, we conjecture that subsequent large restructuring events signal hitherto unrecognized shortcomings of the emigrating SE, whereas non-restructuring asset write-offs are more likely to be a manifestation of neutral (with respect to inferences regarding the quality of the emigrating SE) big baths taken by the OC's incoming SE. We hypothesize and find that, *ceteris paribus*, the market reaction to the DC's stock at the time of the OC's announcement of a post-immigration write-off or restructuring is negatively associated with the OC's pre-emigration performance (which is predominantly positive in our sample), and possibly non-negatively associated with an asset write-off (which is not a restructuring event). We also conjecture that these effects are enhanced (become more negative) when the DC imports an SE from a competitor.

# Information Transfer Effects of Senior Executives' Migrations and Subsequent Write-offs

## I. Introduction

Senior executive (SE) turnover is a significant event. It is rich in implications for both the company from which the SE emigrates (the origin company, henceforth OC) and the company into which he immigrates (the destination company, henceforth DC). The event transmits strong, but often ambivalent, signals to the capital markets about both the OC and the DC. First consider the OC. Is the SE's emigration a foreboding of adverse news yet to come or a promise of improved future prospects once the poorly performing SE is replaced? Does it portend trouble if a skillful and able SE has been drawn away by another company—or, worse yet, by a competitor?

For the DC, the implications are no less ambiguous. The hiring of an SE with a past record of inept performance would not sit well with the market, but attracting a proficient SE who previously inhabited the executive suite of a competitor would delight stakeholders, rewarding the DC with a positive stock returns. What, too, of the asset write-offs or other charges that seem disproportionately to accompany SE migrations? Do such charges convey different signals than those taken at other times? Do the signals transmitted by the magnitude of charges carry over to the DC that hired the departing SE?

In this study, we consider whether the market conditions its reactions to the SE's move to the DC on the SE's past performance and any other information impounded in

the market reaction to the SE's emigration from the OC. We also examine whether the market perceives a benefit in the hiring of an SE with an industry-specific background. We investigate whether the market updates its initial perceptions of the SE's quality when the OC announces unusual charges, and whether the charges signal good or bad news for the OC and the DC. That is, we examine whether the market conditions its reaction to the SE's emigration and contiguously subsequent charges on available information, such as the departing SE's past performance as reflected in accounting or market returns.

We focus on the migration of the SE from one firm to another. Although prior research has tracked SEs who emigrate from a given firm, typically viewing such events as raids, the focus was on the market valuation of their quality (Hayes and Schaefer, 1999), the effects of prior performance on the probability of a "jump," and the association between performance and compensation (Fee and Hadlock, 2003). We do replicate some of these findings, but we extend the analysis to investigating the market reaction to write-offs made shortly after a migration. The migration event and contiguously subsequent charge-offs affect both the OC and the DC. Thus, the migration affords a good opportunity to study information transfer within a paired companies setting.

We conduct a set of univariate tests addressing the above questions. We investigate and find the following:

1. Generally consistent with Fee and Hadlock (2003), we find that both OCs and DCs exhibit accounting profitability measures that are superior to (in line with) industry peers (size-matched industry peers) over at least two years preceding the emigration from

OCs and immigration into DCs. Although in negative territory in the year preceding immigration, OCs' stock performance on average exceeds (is in line with) industry peers (size-matched industry peers), whereas DCs' stocks underperform both industry peers and size-matched industry peers.

2. For at least two years after migration, both OCs and DCs outperform peers and size-matched peers in both stock and accounting performance measures, implying that management change is ex post beneficial, on average.

3. The market appears to recognize the loss (gain) of human capital from OCs (DCs) upon emigration (immigration). Consistent with Hayes and Shaefer (1999), but using different methods for extracting abnormal returns, we find that size-adjusted returns of OCs (DCs) are significantly negative (positive) and below (above) those of industry peers and of those observed upon retirement events. The market “remembers.” Moreover, we find that the positive reaction to immigration is more pronounced when SEs emigrate from an industry peer. The market seems to value industry-specific human capital.

4. The market also appears to process the information implied in the reaction to emigration to inform its interpretation of the immigration event. Consistent with Hayes and Shaefer (1999), we find that the correlation between the two reactions is significantly negative.

5. Migration firms report more frequent negative special items (mostly write-offs and restructuring charges), extraordinary items, discontinued operations, and accounting changes than their size-matched peers. This is consistent with restructuring implemented

by new leadership to rectify what they perceive to be unsound business judgment by predecessors, or "big baths" to boost future apparent performance.

6. Write-offs following migrations carry different implications than write-offs by non-migration firms. For both OCs and DCs, the market reaction is strongly negative, and significantly more negative than in the case of size-matched non-migration peers. Thus, history (the prior migration event) shapes interpretations.

7. In general, the market reaction to the DC's stock is negative and significant upon an OC's write-offs when the SE migrates from an OC in a different industry, but positive and marginally significant when the SE migrates from an OC in the same industry. Similarly, the reaction with regard to the OC's stock upon a DC's write-off is significantly positive when the OC and DC are in the same industry, but insignificant when they are not. The market behaves as if it recognizes potential competitive advantages (gains in market share) inuring to the benefit of a DC from the adversity faced by a same-industry OC.

8. In line with prior literature, non-restructuring write-offs trigger a more negative reaction than restructuring write-offs. Interestingly, however, this finding is *reversed* when we focus on cross-firm information transfers: the reaction with regard to the DC's stock upon the OC's non-restructuring write-off is positive. This is consistent with the market appreciating the potential benefits from restructuring in the OC, but adjusting downward its estimate of the value to the DC of the SE implicated by the post-emigration restructuring. Thus, the same accounting events have different implications for different audiences.

In the more nuanced multivariate analysis, we test and largely confirm two main hypotheses. With regard to migration events, the performance of the OC—accounting and stock—before the SE’s migration is positively associated with the market reaction to the event only when the OC and the DC are members of the same industry. With respect to an OC’s contiguously subsequent write-off and restructuring events, we conjecture that subsequent large restructuring events signal hitherto unrecognized shortcomings of the emigrating SE, whereas non-restructuring asset write-offs are more likely to be a manifestation of neutral (with respect to inferences regarding the quality of the emigrating SE) big baths taken by the OC’s incoming SE. We hypothesize that, *ceteris paribus*, the market reaction with regard to the DC’s stock at the time of the OC’s announcement of a post-immigration write-off or restructuring is negatively associated with the OC’s pre-emigration performance (which is predominantly positive in our sample), and possibly non-negatively associated with an asset write-off (which is not a restructuring event). We also conjecture that these effects are enhanced (become more negative) when the DC imports an SE from a competitor.


Senior executives leave firms for several reasons: (a) retirement due to age, where the announcement refers to a succession plan; (b) resignation, where the announcement does not refer to a succession plan—this is typically associated with poor past performance, and some of the SEs revert to the managerial market pool; and (c) voluntary exit of mostly younger, sought-after SEs, who end up being hired by other companies.

When SEs retire, the successor is typically chosen in advance to minimize disruption. In the case of performance-related resignations, with very few exceptions, the

firm’s announcement refrains from blaming the performance. Some of these resigning SEs could re-enter the managerial market pool and thus move to other companies. This circumstance typically applies to SEs whose OCs’ performance was buffeted by adverse events mostly outside their control but who are perceived to be competent SEs by talent-scouting DCs. SEs stigmatized by exceptionally poor performance usually fail to land a similarly ranked job after resignation (Gilson, 1989). Thus, case (b) can be subdivided: (b1) resigning SEs who do not move to similarly ranked jobs, and (b2) resigning SEs who move to similarly ranked jobs. Figure 1 below illustrates these classifications. In case (c), mostly managers voluntarily choose to emigrate from the OC for better compensation or opportunity. Often, the DCs hire key personnel from successful competitors.

**Figure 1. Description of Sample**

<b>Case a</b>	<b>Case b</b>		<b>Case c</b>
Retirements	Resignations		Voluntary Departures
	b1	b2	
	Do not immigrate to similarly ranked jobs	Immigrate to similarly ranked jobs	


  
 Our sample

Our investigation concentrates on cases (b2) and (c). We identify a sample of emigrating SEs who land similar or better ranked jobs,<sup>1</sup> the OCs from which they



emigrated, and the DCs to which they migrated. Although prior work primarily has sought to identify the reasons for the SE's exit (see Brickley, 2003, for a short summary of conclusions), our emphasis, similar to Hayes and Schaefer (1999), is on the market reactions to emigration and immigration events of a given SE and whether these reactions are systematically related, i.e., whether the market conditions its reaction to the immigration of a given SE on the information revealed by the prior emigration event; and (2) the market reaction to the OC's write-off events that contiguously follow the immigration event and the information transfer effect of these events on the stock of the DC that imported the SE.

Prior research has documented the effects of past performance on migration and compensation (Fee and Hadlock 2003) and the market effect of emigration and immigration (Hayes and Schaefer 1999), and we refine these findings, distinguishing between inter-industry and intra-industry migrations, and use them in an extended analysis. We investigate whether migrations seem to trigger a disproportionate number of write-off events, the effects of which vary depending on history or context and on the entity whose stock is being examined. In doing so, we also trace how inferences of the SE's quality as manifested in past performance and the market's reaction to emigration informs and updates the market's assessment of the implication of the write-offs for the prospects of the DC importer. These explorations offer new insights into the effects of SE migration and subsequent events on capital markets.

The rest of the paper features the following sections: Literature review, Development of Hypothesis, Sample and descriptive statistics, Univariate tests, Results, and Conclusion.

## **II. Literature Review**

Prior literature has focused on the determinants of the management change; evidence of earnings management before or after the change using discretionary accruals, divestitures and write-offs, etc.; and the market's reaction to the change.

### ***2.1. Determinants of the management change***

Determinants of management change include poor performance, outside board intervention, and the competitiveness of the management market. Coughlan and Schmidt (1985) and Warner et al. (1988) were among the first to show the link between poor stock performance and management change. Weisbach (1988) found the association between past stock returns and change in EBIT with management change to be more pronounced when BODs were outsider-dominated, but found no support for a management entrenchment effect on turnover (Morck et al. (1988)), although Denis et al. (1997) were able to detect evidence of such an effect.

Parrino (1997) conjectured and found that poorly performing companies can more easily find replacements for their departing managers in competitive industries wherein the management pool is large. Gilson (1989) showed that managers who left financially distressed firms<sup>2</sup> were not able to find equivalent jobs in other companies, surmising that managers of the worst performing firms suffer from damaged reputation.

## ***2.2. Evidence of earnings management around the management change***

Using a sample of 36 top management changes for the period 1966 to 1969, Moore (1973) showed that after experiencing management change companies tend to take more income-decreasing accounting actions, such as write-offs, write-downs, provisions for future losses, and changes in accounting principles. Pourciau (1993), using a sample of 73 non-routine management changes, found that incoming executives employ income-decreasing accruals such as special items or write-offs to boost future profitability. Strong and Meyer (1987) documented higher incidence of internal and external management changes among 120 write-down firms during 1981-1985 than in non-write-down firms, but did not indicate whether departing or incoming managers initiated the write-downs. Murphy and Zimmerman (1993) examined 1,063 CEO departures and, controlling for the endogeneity of CEO turnover, found changes in discretionary financial measures<sup>3</sup> to be associated with poor accounting and stock performance, implying that the outgoing CEO chooses more income-increasing discretionary accounting choices before his departure, even after controlling for the CEO's horizon. Weisbach (1995) found incoming management to be more likely to make divestiture decisions than management in firms with no change, in particular when the investments made by prior management proved to be unsuccessful, ex post.

## ***2.3. Stock reaction to management change and write-offs***

In Warner et al. (1988), the stock reaction to the management change was insignificant, but their sample of 279 firms in the 1963-1978 period included both routine

and non-routine management changes,<sup>4</sup> and cases in which managers were scouted from the outside. In particular, the stock reaction of the manager-importing firms (46) was significantly positive. In Weisbach (1988), the stock reaction at the resignation announcement was mostly positive (-0.09% to 1.25%) but insignificant, regardless of the board type (inside, outside, or mixed). Hayes and Schaefer (1999) showed that top CEOs immigrating into raiding firms trigger a negative (positive) reaction with regard to the raided (raiding) firm.

Without distinguishing between firms with respect to management change, Strong and Meyer (1987) found that the stock reaction is not significant over the two months ending in the write-off announcement. Elliott and Shaw (1988) also found no significant short-window stock reaction to the write-off announcement. Bartov et al. (1998), however, observed a relatively small negative stock reaction (less than 1%) and showed that the market acted as if it had anticipated the write-off, as the returns preceding the write-offs were significantly negative. Upon distinguishing between asset write-offs and restructurings, Bartov et al. (1998) also found the reaction to the former to be significantly negative (-2.14%), and the latter to be an insignificant (0.85%).

#### ***2.4 Studies related to migrations***

Hayes and Schaefer (1999), using a sample of 158 CEO migrations during 1979–1994, investigated whether the market reaction to migration is significant. Theory (Harris and Holmstrom, 1982; Lazear, 1986) suggests that emigrating SEs are likely to possess higher managerial ability.<sup>5</sup> Thus, they hypothesized and confirmed that the reaction to the emigration (immigration) at the OC (DC) is negative (positive).

Fee and Hadlock (2003) found that better pre-emigration stock performance of the OC increases the probability of migration and compensation at the raiding company, and that stock options and restricted stock (golden handcuffs) do not affect the probability of retention. Bertrand and Schoar (2003), in a manager-firm matched panel data set, found that considerable heterogeneity in investment, financial, and managerial practices of firms can be explained by managers' style (manager fixed effects.)

In terms of sample and some of the research questions, Hayes and Schaefer (1999) and Fee and Hadlock (2003) are closely related to our study. Hayes and Schaefer's sample comprised 158 migrations during 1974–1999 (29 CEO-to-CEO and 129 non-CEO-to-CEO migrations identified from Lexis/Nexis Executive Changes and News databases), thus restricting their observations to CEO immigrations. Fee and Hadlock (2003) employed two sample-gathering strategies. In the first, using a fixed sample of large firms in 1990–1998, they identified 214 migrations among 1,200 CEO turnovers. In the second, among the executives listed in EXECOMP whose employer was a constituent of the S&P 500 index, they identified 128 SE migrations. Their second sample was chosen to make it possible to identify the impact of stock options and restricted stock on retention. In our study, we follow Fee and Hadlock's (2003) second strategy, albeit without requiring that the SE be employed by a S&P 500 constituent, or that he occupy the CEO position in the DC. We do however impose the additional requirements that the migrating SE have been employed by the OC for more than 3 years before emigration and by the DC for 1½ years following the immigration. We also exclude migrations in which the SE immigrated into an OC that lost its SE to the DC,

thus avoiding overlapping OCs and DCs. On the other hand, we include OCs that merged or were acquired by another firm within a year before the emigration.

Hayes and Schaefer (1999) found that the stock reaction to the emigration (immigration) is negative (positive) and that the stock reactions to the emigrations and to the immigrations are negatively correlated. Our findings are similar. Fee and Hadlock (2003) found that the pre-emigration performance of OCs is positive. Our results do not show positive pre-emigration performance in terms of 2-year size-adjusted returns, but the 2-year size and industry-adjusted returns are positive.

In addition to these questions, however, we address distinctively different issues: whether the stock reaction to the immigration is explained not only by the stock reaction to the emigration, but also by the pre-emigration stock and accounting performance. We focus as well on the subsequent write-offs taken by the OC, and examine whether market reactions are consistent with investors' revising their beliefs about the SE's quality at the time of immigration, depending on prior performance and on the market reaction to the emigration. Also, with respect to all these issues, we distinguish between same-industry migrations and other-industry migrations.

### **III. Hypotheses and Research Design**

In this section, we develop and provide motivation for the main hypotheses. We then describe the sample, the results of univariate tests, and finally the results of the multiple regression models that test the main hypotheses.

### ***3.1. The migration hypothesis***

The market reaction to an SE's migration is a function of the SE's perceived quality. A DC can glean information about this quality from the OC's pre-emigration accounting performance measures, but it can also infer from the market reaction to emigration whatever private information about the SE's quality was possessed by informed traders. The two sources of information, the OC's past performance (returns and accounting measures) and the OC's market reaction are confounded by distinct sets of events. Past returns and accounting measures also reflect events outside the SE's control, rendering them noisy signals of managerial quality, whereas private information embedded in the market reaction to the emigration may also include an assessment of the quality of the SE's replacement, often announced contemporaneously with the migration. Both sources therefore offer complementary bits of intelligence. If one focuses on OCs and DCs that share industry membership, signals such as accounting and stock performances are likely more relevant than they are in the sample consisting of migrations across firms in different industries. Correspondingly, private signals embedded in the market reaction to the emigration are likely to be less important in the same-industry sample of OCs and DCs. Hence we hypothesize:

**H1:** Ceteris paribus, the DC's market reaction at the migration event is

- (a) positively associated with pre-emigration accounting and stock performance measures and
- (b) negatively associated with the OC's market reaction at the emigration event.

(c) The associations involving past performance measures are predicted to be more pronounced when the SE emigrates from an OC within the DC's own industry.

### ***3.1.1. Discussion***

We use the following notation for stock returns. (Precise measurement is provided in section 3.1.1.3.)

$CAAR_{Emigration(-1,1)}^{OC}$  is the cumulative average abnormal return of the OC around the SE's emigration measured over the (-1,1) window.

$CAAR_{Immigration(-1,1)}^{DC}$  is the cumulative average abnormal return of the DC around the SE's immigration measured over the (-1,1) window.

#### ***3.1.1.1. Past performance as a proxy for the SE's quality***

One may learn about an SE's quality from publicly available information such as stock and accounting performance (both affect the SE's compensation). Yet although a company's stock performance is readily comparable with that of peers (size-matched same-industry firms), it may not be entirely attributable to the actions of the emigrating SE; firm-specific events outside the SE's control affect stock prices, even after we control for market and industry returns. Hence, accounting performance measures may provide incrementally informative signals of managerial quality, as they are likely to more closely reflect events and actions that are within the SE's control. Consequently, we employ both measures as proxies for the SE's quality. H1a states that quality inferred from these measures is expected to be associated with the market's reaction to the DC's hiring the SE. However, we expect the market to find accounting measures more informative about



the quality of SEs that DCs imported from OCs in the same industry, since accounting practices tend to be industry-specific.

### *3.1.1.2. The market reaction to emigration*

At emigration, the market reacts to two events: the departure of the SE and any contemporaneous replacement announcement. The stock reaction  $CAAR_{Emigration(-1,1)}^{OC}$  reflects jointly the quality of the emigrating SE and that of the replacement. The replacement announcement confounds the analysis. Irrespective of the perceived quality of the replacement, if any, a positive (negative) market reaction would reflect a poor (good) quality of the emigrating SE.

Investors also acquire private information about SEs' quality; financial analysts routinely track SEs' performance, actions, strategies, and past careers. Thus prices impound this private information as well. We expect the abnormal reaction to emigration ( $CAAR_{Emigration(-1,1)}^{OC}$ ) to provide an incremental signal on the emigrating SE's quality.<sup>6</sup> We therefore hypothesize that the market learns about the quality of a migrating SE by observing  $CAAR_{Emigration(-1,1)}^{OC}$ . In other words, we expect the abnormal reaction to immigration ( $CAAR_{Immigration(-1,1)}^{DC}$ ) to be negatively associated with  $CAAR_{Emigration(-1,1)}^{OC}$ . In contrast, due to sample construction,  $CAAR_{Immigration(-1,1)}^{DC}$  is not confounded by the perceived quality of the departing SE: the DC position will have been vacant for awhile (at least a year) due to natural causes (such as death), newly created positions, or a normal succession policy under which predecessors continue to serve as active managers in senior positions.

### 3.1.1.3. Competitive relationship—industry-specific knowledge, H1c

An important factor that DCs consider when hiring SEs is industry-specific human capital. An SE in possession of firm-specific experience and knowledge gained while in the employ of a competitor OC contributes a valuable intangible asset to the DC.<sup>7</sup> At the event of immigration, we expect the market properly to perceive the advantage to be gained by importing the SE from an OC within the same industry. Hence we expect the association discussed above to be manifested more strongly when OCs and DCs are members of the same industry, and particularly so when accounting past performance measures are involved for the reasons mentioned above.

We run the following regression:

$$CAAR_{Immigration(-1,1)}^{DC} = \alpha + \beta_1 SameIndustry + \beta_2 AcctPerf^{OC} + \beta_3 SameIndustry \times AcctPerf^{OC} + \beta_4 StockPerf^{OC} + \beta_5 SameIndustry \times StockPerf^{OC} + \beta_6 CAAR_{Emigration(-1,1)}^{OC} + \beta_7 SameIndustry \times CAAR_{Emigration(-1,1)}^{OC}$$

where  $CAAR_{Immigration(-1,1)}^{DC}$ <sup>8</sup> = the DC's size- and industry-adjusted stock returns during the short window (-1,1) around immigration;

$SameIndustry$  = 1 if the two-digit SIC code of the DC and the OC are the same, zero otherwise;

$AcctPerf^{OC}$  = the industry-adjusted two-year ROE,  $ROE = (EBIT1 + EBIT2) / \text{Average}(\text{Equity}_0, \text{Equity}_2)$ ,<sup>9</sup> where the industry-adjusted ROE = ROE – Average of ROE in the same (two-digit SIC) industry;

$StockPerf^{OC}$  = the OC's size- and industry-adjusted stock returns over the two years of the SE's tenure preceding emigration (see Figure 2 for a timeline);

$CAAR_{Emigration(-1,1)}^{OC}$  = the OC's size- and industry-adjusted stock returns during the short window (-1, 1) around emigration.<sup>10</sup>

We expect the following:  $\beta_2 > 0, \beta_4 > 0$  (H1a),  $\beta_6 < 0$  (H1b),  $\beta_3 > 0, \beta_5 > 0, \beta_7 < 0$  and  $\beta_2 + \beta_3 > 0, \beta_4 + \beta_5 > 0, \beta_6 + \beta_7 < 0$  (H1c).

### ***3.2 Hypothesis on the OC's Write-Off***

H2: Ceteris paribus, when the OC and the DC are in the same industry and the write-off is a part of restructuring,

- a. the past performance of the OC is negatively associated with the DC's market reaction upon the OC's write-off, and
- b. the effect of the OC's write-off becomes increasingly negative with the amount of restructuring.

The DC's market reaction to the OC's write-off announcement likely depends on the past performance of the OC from which the SE emigrated, the causes for the write-off, and the amount of charges, as well as on whether the OC is a member of the DC's industry.

We consider two factors—the OC's past performance and the amount of the charges—that likely affect the market's reaction. The predicted associations depend on two conditioning variables—whether the OC and the DC are in the same industry and whether the OC's write-off is part of a restructuring announcement. Unlike the immigration event where the positive past performances of the OC is associated with positive market reaction to the immigration, it is expected to be negatively associated with DC's reaction to the write-off.

### 3.2.1. Discussion

The OC's write-off decision may signal that the apparent good past performance of the emigrating SE was misleading. The judgment that the SE was of high quality, given past good performance measures, may have been premature. Consequently, the market reassesses the SE's quality. We have two measures of past performance, accounting and stock returns, as well as the private signals embedded in the market reaction to emigration. Accounting and stock performance are more easily manipulated by the migrating SE, and hence the investor views them with suspicion. The SE cannot control the private signals embedded in  $CAAR_{Emigration(-1,1)}^{OC}$ . Hence, we expect the market reaction to the DC's stock upon the OC's write-off to have a negative association with past performance measures, and especially accounting-based measures, which are probably more easily manipulable than stock returns.

The write-off-induced revision is likely to be more negative, the more positive the past performance proxies, but this only holds if the DC's investors deem the past accounting performance relevant to the future profitability of the DC. Indeed, the test of H1 confirms this: accounting performance is relevant in same-industry migrations;  $CAAR_{Emigration(-1,1)}^{OC}$  is relevant in different-industry migrations. It is moreover reasonable to assume that doubts on the implications of past performance increase when the OC's write-off is part of a restructuring plan. Restructuring<sup>11</sup> can betray past mismanagement manifested in continuing the operation of losing lines of business. Even so, it is still possible that a non-restructuring write-off has negative implications for the quality of the SE. This effect could be mitigated, however, when a "big bath" is suspected. If the write-

off is seen as a “big bath” that the newly appointed SE takes merely to engender apparent future improvements in accounting performance, the announcement will be devoid of negative information on the quality of the migrating SE. In fact, given the high frequency of write-offs in firms whose SEs emigrate, the market could anticipate a restructuring announcement by the OC. Non-restructuring write-off announcements may bring a sigh of relief to the DC’s investors, possibly resulting in a positive reaction to the DC’s stock.

The above associations may differ if the OC and DC are in the same industry. The write-off could be seen as implying a competitive advantage for the DC, somewhat offsetting the otherwise anticipated negative reaction. Generally, we expect a negative market reaction to the DC to become increasingly negative with the amount of restructuring when the OC and the DC are in the same industry.

An additional factor possibly affecting the DC’s market reaction is whether charges are reported but no amount is specified. This can render the assessment of the SE’s quality more uncertain. In our sample, all of the write-offs with no specified amount were part of restructuring announcements. We predict that such non-quantified write-off announcements will have a negative impact on the DC’s market reaction to the OC’s write-off, and that this negative impact will be larger for a migration within the same industry.

We estimate the following model:<sup>12</sup>

$$\begin{aligned}
CAAR_{OC\ W/O(-1,1)}^{DC} = & \alpha + \beta_1 SameIndustry + \beta_2 Restructuring \times SameIndustry \\
& + \beta_3 AcctPerf^{OC} + \beta_4 AcctPerf^{OC} \times SameIndustry \\
& + \beta_5 AcctPerf^{OC} \times SameIndustry \times Restructuring \\
& + \beta_6 StockPerf^{OC} + \beta_7 StockPerf^{OC} \times SameIndustry \quad , \\
& + \beta_8 CAAR_{Emigration(-1,1)}^{OC} + \beta_9 CAAR_{Emigration(-1,1)}^{OC} \times SameIndustry \\
& + \beta_{10} Amount + \beta_{11} Amount \times Restructuring \\
& + \beta_{12} Amount \times Restructuring \times SameIndustry \\
& + \beta_{13} no - amount + \beta_{14} no - amount \times SameIndustry
\end{aligned}$$

where  $CAAR_{OC\ W/O(-1,1)}^{DC}$  is the DC's size- and industry-adjusted stock returns over the short window (-1,1) around the OC's write-off;

$SameIndustry = 1$  if the two-digit SIC codes of the DC and the OC are the same, zero otherwise;

$AcctPerf^{OC} = (EBIT_1 + EBIT_2) / \text{Average} (Equity_0, Equity_2)$ ;

$StockPerf^{OC}$  is the OC's size- and industry-adjusted stock returns over the preceding two years of the SE's tenure (from two years and two days before emigration to one day before emigration);

$CAAR_{Emigration(-1,1)}^{OC} =$  the OC's size- and industry-adjusted stock returns during the short window (-1, 1) around emigration;

$Restructuring = 1$  if the OC's charge is part of a restructuring plan, zero otherwise; and

$Amount = \text{Charge} / \text{Total assets at the end of the fiscal year}$ .

$No-Amount = 1$  if the announcement of OC's write-off does not specify the amount, 0 otherwise.

Based on our discussion, we expect the following:

$\beta_3 + \beta_4 + \beta_5$	Negative, H2a
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$\beta_{10}+\beta_{11}+\beta_{12}$	Negative. H2b
$\beta_{13}+\beta_{14}$	Negative

## IV. Sample and Descriptive Statistics

### *4.1. Construction of sample*

The SE migration sample is constructed to include all migrations of SEs from CFO or COO positions in OCs to CFO, COO or CEO positions in DCs, and from CEO positions in OCs to CEO positions in DCs. To minimize overlap between OCs and DCs, the latter are confined to firms that hired the SE due to natural causes.<sup>13</sup> This ensures that the market reaction to the immigration event is not confounded by news about an emigrating SE.

Figure 2 presents the timeline underlying the research design.

Generally, OCs announce the resignation simultaneously with the replacement decision, so the reaction to the OC's emigration event is jointly attributable to the perceived quality of the emigrating SE and to the perceived quality of his replacement. In most of the cases in our sample, the vacant position in the OC is filled internally (92%). The frequency of CEOs migrating to CEO positions is low.

We constructed the initial sample from the Standards and Poor's *EXECOMP*, which begins its coverage in 1994. Thus, our sample period spans 1994-2002. CEOs and CFOs shown as occupying their positions at different firms for any two consecutive years were initially assigned to the SE migration sample. For this initial sample, we reviewed all the financial media covered by the *Dow Jones News Service* (now *Factiva*) to confirm

the fact of migration and its exact announcement date. We then imposed the following requirements: (1) The SE position at the DC becomes vacant due to natural causes. (2) The SE was in the employ of the OC for at least 3 years (to ensure that past performance measures are available for the emigrating SE) before emigrating and in the employ of the DC for at least 1½ years (to ensure that the same SE was occupying the new position in the DC when the OC took a write-off). (3) Both the OC and the DC are listed in major stock exchanges (to ensure availability of return data).<sup>14</sup>

The sample includes cases in which the SE sells the OC to another company and then is hired by some DC. (Mergers and acquisitions can provide a good exit opportunity for the emigrating SE.) For this M&A subsample, we use the data for the pre-acquired OC. Table 1 and Figure 3 summarize our sample.

To construct the write-off sample,<sup>15</sup> we reviewed the firms' announcements for at least 1½ years after the immigration into the DC and extracted the date and content of the announcements (including the nature and amount of the write-offs). For both the OC and the DC, we view the first write-off following the migration event as possibly conveying some signal about the quality of the migrating SE. Because we focus on the DC's stock price reaction to an OC's write-off implicating the DC's immigrating SE, we excluded seven write-off announcements that were made before the immigration event.<sup>16</sup>

**Table 1. Sample description**

<b>Sample restrictions (1994-2002)</b>	<b>Size of surviving sample</b>
Initial sample in <i>EXECOMP</i>	286



Migration among affiliates or holding titles in two firms excluded	256
The SE immigrated into the DC more than 1 year after the emigration	219
Restriction on the DC—No confounding announcements at the immigration event	185
Employment requirements (3 years in the OC and 1½ in the DC)	137
Listed in the major stock exchanges, <i>Final sample</i>	116
<b>Breakdown of the migration by position change</b>	
CFO or COO → CEO	52
CFO or COO → CFO or COO	47
CEO → CFO or COO	2
CEO → CEO	15

<Insert Figure 3 Here>

We searched the *Dow Jones News Service* (now *Factiva*) for the keywords “write-off, write-down, or restructuring,” along with “charge.” In most cases, Dow Jones was the first to report the write-off announcement. In a few cases, *Business Wire* or *AP/Reuters/AFP* had pre-empted Dow Jones by one or two days. We ensured that we included in the sample only the first announcement of the write-off and excluded announcements that provided at most more nuanced information about the pre-announced write-offs. Although it is conceivable that the subsequent minor details might have conveyed incremental information to the market, the effect likely would be secondary and not as pronounced as the effect of the first announcement.<sup>17</sup> In the same vein, we

excluded write-offs that were reported in the press a second time, with descriptions of charges pursuant to a restructuring plan that was announced before the migration event. With respect to M&As, we include in the sample announcements by the acquiring firms of write-offs of the acquired (OC) firm's assets. Among the final sample of 116 OC-DC paired migration events during 1994–2002, in 75 (90) cases, the OCs (DCs) took a write-off within 1½ years. Below and in Figures 5 and 6, we report and discuss the relative frequency of write-offs in migration and non-migration firms.

#### ***4.2. Construction of the control samples***

We constructed three sets of control samples for OCs and DCs, based on size and industry peers (see Figure 4). Control 1 comprises firms with the same two-digit historical SIC at the end of the year preceding the year of emigration or immigration. Among the peers (Control 1), firms with the same capitalization deciles as the sample are grouped as Control 2—size-matched, same-industry peers. Deciles of market capitalization are measured at the end of the year preceding the year of emigration or immigration. For some OCs and DCs, the number of firms in Control 2 could be very small. Control 3 comprises firms with a different SIC at the end of the year preceding migration. We construct this control group to provide an overall market (other than firms in the same SIC) benchmark for examining the reaction to the migration events and OCs' write-offs.

#### ***4.3. Description of the sample***

Figure 5 describes the sample. Compared to their industry peers (OC - Control 1), the OCs are larger (3-4 times more highly capitalized) and more profitable throughout 7

years (-3, +3).<sup>18</sup> Compared to similarly sized firms within the same industry (OC - Control 2), OCs are more profitable, except in the emigration year (in terms of ROA, defined as EBIT/Average of Total Assets). In the long run, OCs grew in capitalization at a comparable rate to that of Control 2, but outperformed the control in accounting performance. Thus, generally, OCs are the larger and more profitable firms, and in the long run the OCs maintained their relative (more profitable) position vis-à-vis their peers, suggesting that larger and better performing firms are more frequently associated with management change.

DCs are also larger (3–4 times more capitalized) and more profitable than their same industry peers (DC - Control 1). Earnings before interest and taxes (EBIT) and ROCE (EBIT/Average Common Equity) of DCs are higher than those of DC - Control 1. DCs are smaller and less profitable than OCs. Overall, the immigration event has mixed effects. In the long run, the DCs' accounting performance surpassed that of industry peers. After the immigration events, DCs' ROEs and ROAs exceeded those of their similarly sized industry peers (DC – Control 2), but only because of lower denominators of these ratios (equity and assets, respectively), rather than improved EBIT.

#### ***4.4. Is the incidence of write-offs higher in migration firms?***

We ask whether migration firms are associated with a higher incidence of income-decreasing events such as write-offs, write-downs, and restructuring. *CompuStat data item 17* (special items) potentially captures these events. Unfortunately, the number aggregates discretionary items (such as write-offs) and non-discretionary items (such as interest in tax settlements and Y2k charges). It also includes income-increasing items

(such as gain on extinguishment of debt and non-recurring profits from sale of assets). Hence, we identify discretionary income-decreasing activities by reviewing both the 10-Qs or 10-Ks and the financial press; the financial press provides more timely information, but typically it does not furnish as much detail as the SEC filings. We searched using the same keywords described above in the 10-Qs over 8 quarters following immigration and matched the findings with information gleaned from the financial press. In most cases, the two datasets are virtually identical.

Figure 6 presents the analysis based on *Compustat data #17*. OCs and DCs report income-decreasing special items more frequently than the similarly sized firms (Control 2) within their respective industries (59.5% versus 43.5% for the DCs, 56.9% versus 48.6% for the OCs). These differences are statistically significant under the binomial distribution (1 if *data #17* < 0, 0 otherwise). In terms of below-the-line reported items, migration firms exhibit frequencies similar to those of their similarly sized peers; that is, they appear to refrain from using below-the-line items to decrease reported earnings, possibly because analysts and investors ignore such items. On the other hand, industry peers of OCs record income-decreasing special items and below-the-line items more frequently than OCs.

Because *data #17* may include non-discretionary items and gains as mentioned above, the relatively higher frequency of negative special items in migration firms need not imply more frequent income-decreasing discretionary activities. To focus on discretionary items, we consider the Control 2 sample (similarly sized firms within the same 2-digit industries, 1,896 for OCs and 2,432 for DCs). For each OC and DC, within

one year before and after the migration event, we randomly select a firm out of the similarly sized peers until we identify the first firm for which the press reports a write-off announcement.<sup>19</sup> Results of this analysis are reported in Table 3. A total of 72 of 116 OCs and 90 of 116 DCs wrote off assets after the emigration and immigration respectively. It took 343 random draws from OC – Control 2 and 299 random draws from DC – Control 2 to identify 116 write-off announcements within one year from migration.

The difference in frequency between migration firms and control firms is statistically significant under the binomial distribution, suggesting that migration firms take more numerous write-offs than their similarly sized peers, assuming that the observed frequencies for the random draws are representative of the frequencies for the whole sample. However, OCs do not take income-decreasing special items more frequently than industry peers (not restricted to similar size). This, combined with the observations that the accounting and stock performance of the industry peers is negative, suggests that OCs typically belong to declining industries. This result is generally in line with prior literature. Strong and Meyer (1987) found that the rate of outside management change among write-off firms (120 firms over 1983–1985) is higher than it is among the industry-matched similarly sized non-write-off firms (25% versus 1.6%). In our sample, the number of write-offs in migration and non-migration firms combined over 1994–2002 is 351. Without focusing on management change or migration, Elliott and Shaw (1988) identified 240 write-off announcements over the period 1981–1985. Bartov et al. (1998) documented 340 announcements over 1984 and 1985.<sup>20</sup> The DCs in our sample took write-offs more frequently than their peers (whether or not size-adjusted).

## **V. Event Studies and Results of Univariate Tests**

In this section, we report on the market reactions associated with migration and write-off events of migration firms. Table 4a presents long-term, buy-and-hold, size- and industry-adjusted returns and size-adjusted short-window (-1,1) returns surrounding the announcements of emigration and immigration.

### ***5.1. Long-term pre- and post-migration stock returns***

The size- and industry-adjusted long-term stock returns of OCs over the year preceding SE emigration are positive, but insignificant. Returns over the two years preceding are below those of the size-matched and industry-matched peers, but not by much. After emigration, the size- and industry-adjusted long-term returns are highly positive and significant, at 13.68% over the first year and 13.92% over the second year after emigration.

On the other hand, size- and industry-adjusted stock returns of DCs over the year preceding SE immigration are significantly negative. After immigration, however, DCs enjoy significant gains in the first and second year after the event (7.64% and 9.46% respectively). Overall, the migration of the SE appears to benefit both the OC and the DC significantly.

### ***5.2. Short-term reaction around migration***

Prior research has reported that the market reaction around a management departure is positive but insignificant (Warner et al., 1988; Weisbach, 1988). Hayes and Schaefer (1999) found that the market reaction to emigration (immigration) is -1.51%

(1.73%).<sup>21</sup> We find that the emigration is associated with -0.98% size-adjusted average returns (p-value < 0.1%),<sup>22</sup> implying a high perceived quality of the emigrating SE. Yet the announcement typically includes information about the replacement, thus complicating the effort to isolate the effect of emigration in light of the relative unobservability of the replacement's quality. It is nonetheless unlikely that OCs replace their emigrating SEs with ones who have lesser quality. Hence, the inference that a negative reaction signals a relatively high perceived quality of the departing SE is plausible. The DC's hiring announcement does not refer to the incoming SE's predecessor, so the market reaction at the announcement is more clearly attributable to the SE's immigration event. The short-term reaction to the immigration event is a significant (p-value < 1%) 1.56%.<sup>23</sup>

It is instructive to compare the effects of migration events to those of retirement, i.e., normal succession events, which would not be expected to signal new information on average. We define normal succession events as those that occur when top SEs (CEOs or CFOs) announce retirement while naming a successor or stating an intention to stay until the position is filled. Previous literature (Pourciau, 1993; Vancil, 1987) viewed retirement announcements without named replacements as non-routine retirements. The event study results for our constructed retirement sample<sup>24</sup> matched with OCs and DCs by industry and size reveal, as expected, that the market's reaction at retirement is both economically and statistically insignificant (-0.31%, p-value = 0.61%) (See Table 4c).

### ***5.3. The information transfer effect at the migration event***

Does the market reaction to the SE's emigration inform the market's interpretation and assessment of his immigration into the DC? Under the information transfer hypothesis, the market can learn about the quality of the immigrating SE in this way, suggesting that a high (low) quality of the emigrating SE should be associated with a positive (negative) reaction to the SE's immigration. That is, we expect a negative correlation between  $CAAR_{Emigration(-1,1)}^{OC}$  and  $CAAR_{Immigration(-1,1)}^{DC}$ .

We have shown above a negative stock reaction at emigration ( $CAAR_{Emigration(-1,1)}^{OC} < 0$ ) and a positive reaction at immigration ( $CAAR_{Immigration(-1,1)}^{DC} > 0$ ). As explained earlier, we expect a negative correlation between  $CAAR_{Emigration(-1,1)}^{OC}$  and  $CAAR_{Immigration(-1,1)}^{DC}$ . Table 5 confirms this hypothesized negative correlation. The result is robust to using size-adjusted returns, returns adjusted for similarly sized peers, and Fama and French 3-factor model adjusted returns (Fama and French, 1992).

### ***5.4. Reaction to the write-off announcement***

In the prior, more general literature, the market reaction to write-offs was found to be either insignificant (Strong and Meyer, 1987; Elliott and Shaw, 1988) or negative (Bartov et al., 1998). Bartov et al (1998) found an average short-window reaction (using beta adjusted returns) to his sample of 373 write-offs of -0.75% (p-value = 9%). Focusing on the sample of migration firms, we show that, on average, the short-term market reaction to announced write-offs is -2.75% for OCs and DCs combined, -2.81% for OCs, and -2.71% for DCs (p-value < 0.1%, See Table 6a).<sup>25</sup> Compared to migration firms, when similarly sized industry peers<sup>26</sup> under stable management announce a write-off



during a similar period (within a year of migration), the stock reaction is -1.34% and marginally significant. The reaction to the combined OCs and DCs' write-off is different from the reaction to write-offs by their combined controls. (p-value = 5%) We suggest that the market may be skeptical regarding the success of a post-emigration restructuring plan announced by an OC in the absence of the qualified SE who emigrated, when there is uncertainty regarding the quality of his replacement. Similar uncertainties about the successful implementation of restructuring may cause the negative reaction to restructuring charges announced by DCs.

### ***5.5. The information transfer effect of the write-off***

Consider the following sets (see Figure 7):

- (A) DCs that hired OCs' emigrants and that are industry peers of the OCs.
- (B) Industry peers of the DCs included in (A) above. These are also the industry peers of the OCs.
- (C) DCs that hired OCs' emigrants and that are not industry peers of the OCs.
- (D) Industry peers of the DCs included in (C) above.
- (E) Industry peers of the OCs whose SEs immigrated into set (C).

An OC's write-off should carry no implications for firms in different industries and hence is expected to trigger no significant market reactions. If the write-off portends negative prospects for the industry to which the OC belongs, sets (B) and (E) should exhibit a negative reaction. However, we expect that the negative reaction could be attenuated, or even turn positive, to the extent that the market perceives some benefits inuring to the non-write-off peers from the adversity faced by the OC, such as gaining

market share at the OC's expense. Another factor that likely influences the reaction of peers, set (B), is the destination of the emigrating SE. If the SE moved to an industry peer, the DC could be the primary or sole beneficiary of competitive gains. In this case, the competitive gains for set (B) will be minimal, if any.

Relative to set (B), the market reaction to set (A) should reflect the SE migration effect. The net effect could be either negative or positive, depending on whether the market draws negative inferences from the OC's write-off regarding the quality of the SE who moved to the DC, or positive inferences, if it perceived that a high-quality SE would enhance the competitive gains the DC may enjoy vis-à-vis the OC. These differing market perceptions will, in turn, depend on whether the write-off is part of a restructuring plan that reveals prior mismanagement by the emigrating SE or part of a "big bath" designed to boost the incoming SE's future performance measures.

Comparing set (C) with set (D) isolates the implication of the write-off for the perceived quality of the migrating SE. Since set (D) firms do not belong to the OC's industry, no positive enhanced competitive advantage effect would be expected. Hence, the only effect potentially manifested in the difference between the two sets' reactions would be attributable to the inference the market draws regarding the implications of the OC's write-off for the SE's quality. Separately, set (D) might have positive gains if the market assesses the quality of the SE negatively in light of the write-off.

In Table 6b, we present the data on the information content of write-offs. Overall, the OCs' write-offs have no significant effect on the DCs. However, DCs included in set (A) of 25 industry peers of the OCs gain positive and weakly significant abnormal returns of

2.40%. The reaction of set (B) is a negative -0.27% (p-value < 0.1%), possibly because the write-off portends trouble for the industry when whatever competitive advantage could have resulted is appropriated by the DC. The t-test of the difference in the means of the two sets' reactions is significant (p-value < 0.1%). The sample of 50 DCs included in set (C) has a negative reaction of -1.74% (p-value < 5%), highlighting, in the absence of competitive gains, the potentially negative implications of the write-off concerning the SE's quality. Set (D) gains 0.26% abnormal returns (p-value < 0.1%), perhaps because of the DC's own competitive disadvantage. The t-test of the difference in the means of the reactions of sets (C) and (D) is significant (p-value < 0.1%). Set (E), receives 0.38% abnormal returns (p-value < 0.1%), reflecting the benefits inuring to the non-write-off peers.

Table 6c reports the stock reaction to DCs' write-offs. Overall, OCs gain a positive abnormal return (0.81%, p-value < 10%), and the gain is larger (1.53%, p-value < 5%) when the OC sample is restricted to those that are industry peers of the DCs.

## VI. Results on the Main Hypotheses

### 6.1. Results on H1

We present OLS regression results using the Huber-White variance estimators in Table 7.  $\alpha$  and  $\beta_1$  represent the mean  $CAAR_{Immigration(-1,1)}^{DC}$  of different and same-industry migration, respectively. Assuming levels of accounting and stock performance that equal those of industry peers and assuming  $CAAR_{Emigration(-1,1)}^{OC}$  to be zero,  $\alpha$  and  $\beta_1$  are insignificant (p-value > 13% and 64% respectively), and the null test of  $\alpha = \beta_1$  cannot be rejected. That is, when past performance and  $CAAR_{Emigration(-1,1)}^{OC}$  do not divulge anything

about the SE's quality (do not differ for corresponding industry peers' measures), the market does not react to the immigration event and to whether the OCs and DCs are members of the same industry.

The remainder of Column 3 confirms the following: For SEs immigrating into DCs in different industries, neither the pre-emigration OCs' accounting performance ( $-0.007$ ,  $p\text{-value} = 0.45$ ) nor the OCs' past stock performance ( $0.000$ ,  $p\text{-value} = 0.71$ ) are associated with  $CAAR_{Immigration(-1,1)}^{DC}$ . As hypothesized in H1b, however,  $CAAR_{Emigration(-1,1)}^{OC}$  is negatively associated with  $CAAR_{Immigration(-1,1)}^{DC}$  ( $-0.418$ ,  $p\text{-value} = 0.06$ ). Thus it appears that when SEs move to non-industry DCs, the market focuses on the private information embedded in  $CAAR_{Emigration(-1,1)}^{OC}$  alone.

On the other hand, for SEs moving to same-industry DCs, the market seems to rely more heavily on the OCs' accounting performance ( $\beta_2 + \beta_3 = 0.4249$  vs.  $\beta_2 = -0.007$ ,  $p\text{-value} = 0.09$ ) and past stock performance ( $\beta_4 + \beta_5 = 0.198$ , vs.  $\beta_4 = 0.000$ ,  $p\text{-value} = 0.08$ ). As to  $CAAR_{Emigration(-1,1)}^{OC}$ , even though its impact on DCs' stock reaction at immigration is more negative ( $\beta_6 + \beta_7 = -0.848$  vs.  $\beta_6 = -0.417$ ), it is insignificant ( $p\text{-value} = 0.12$ ), possibly because past performance becomes relatively more informative (on SEs' quality) in this circumstance.

In summary, the market seems to discount the public signals and rely on the private signals in the case of migrations to different industries. On the other hand, in same-industry migrations, the public signals are more informative than the private signals embedded in the reaction to emigration and hence trigger significant market reactions.

### **6.1.1. Robustness checks**

To check whether outliers and high-leverage observations drive the results, we employed several procedures. First, using a two-dimensional graph of outliers and leverage, we identified five points with high influence. Regression excluding these points yielded similar results. The residuals of the regression in H1 appear to follow a student t distribution rather than a normal distribution. Hence, we ran the tests using transformed dependent variable observations and confirmed qualitatively similar results. Second, we used alternate regression models: quantile regression-median least square regression, robust regression, and bootstrapping. In the robust regression, we ran an OLS regression and identified influential points, if any, with Cook's distance. Then, excluding those points, we repeated the same procedure until no influential points were identified. The procedure also checked for heteroskedasticity in the residuals; if such were detected, we used the White estimator for variance to calculate the t-values. The results were consistent with our OLS model.

Theoretically, one suspects that because  $CAAR_{Emigration(-1,1)}^{OC}$  impounds two public signals, past accounting and stock performance, multicollinearity might be a concern. However, a separate regression (not reported) of  $CAAR_{Emigration(-1,1)}^{OC}$  on the two public signals reveals insignificant  $R^2$  and coefficients. Nonetheless, we tested for multicollinearity with respect to each independent variable by computing VIF and condition number (Belsley et al., 1980). All VIFs are under the common threshold of 10 (all less than 3), and all condition numbers are less than 20.

## 6.2. Results of H2 tests (Table 8)

The coefficient on the same industry membership indicator variable,  $\alpha+\beta_1$ , is -0.029% (p-value = 3.2%), implying that OC write-offs have a negative implication for same-industry DCs. However,  $\alpha+\beta_1+\beta_2$  (0.105 and p-value = 2.3%), which represents the mean effect of the occurrence of an OC's write-off that is part of restructuring plan when the OC and the DC are in the same industry, is both positive and significant. That is, for past performance measures and  $CAAR_{Emigration(-1,1)}^{OC}$  that do not deviate from those of peers, even abstracting from the amount of the write-off, the market assesses favorably implications of an OC's write-off that is part of restructuring. (This is consistent with the univariate results in Table 6b, where we observe a positive market reaction to the DC's stock upon the OC's write-off.)

Turning to past performance, accounting performance alone (different-industry migration, whether or not the write-off is part of a restructuring) has a negative but insignificant coefficient ( $\beta_3 = -0.006$ , p-value = 50.5%). For same-industry migrations and non-restructuring write-off announcements by OCs, the past accounting performance alone is still negative and insignificant. In the case of same-industry migration and restructuring, however, past accounting performance is significantly negative ( $\beta_3+\beta_4+\beta_5 = -0.145$ , p-value = 1.11%). Thus, the results support our hypothesis that past accounting performance has a negative association when the OC and the DC are in the same industry, and restructuring casts doubt on the quality of the SE. The past stock performance is not significantly associated with the DC's market reaction irrespective of industry membership. On the other hand, the coefficient on  $CAAR_{Emigration(-1,1)}^{OC}$  is positively

associated with the DC's market reaction for different-industry migration, and more positive but insignificant for same-industry migration. This suggests that the DC investors who rely on the private signals embedded in  $CAAR_{Emigration(-1,1)}^{OC}$  for the SE who migrates to a different industry reverse their beliefs about the SE's quality. For a same-industry migration, the association of  $CAAR_{Emigration(-1,1)}^{OC}$  is insignificant.

The DC's market reaction is significantly increasing in the amount of the write-off (0.281, p-value = 0.0%), possibly implying that the DC's investors are pleasantly surprised that no restructuring took place, or that they perceive some competitive advantages to accrue to the benefit of the DC when both firms are in the same industry. In Column 4, we show the results of a regression that includes this variable. We are able to verify that the positive coefficient on amount is only significant in same-industry migrations. This latter regression, however, suffers from high multicollinearity. We discuss this issue further below.

“Amount” has a negative but insignificant association ( $\beta_{11} + \beta_{13} = 0.08$ , p-value = 77.1%) with the DC's market reaction for different-industry migrations and write-offs that are part of restructuring. This could be because restructuring was expected or because no competitive gain or loss is expected across OCs and DCs in different industries. The DC's market reaction is increasingly more negative ( $\beta_{11} + \beta_{13} + \beta_{14} = -1.482$ , p-value = 1.9%) in “amount” upon a restructuring in an OC in the same industry. In this case, the negative implication of a large restructuring for the SE's quality seems to outweigh whatever competitive advantage might inure to the benefit of the DC. Additionally, although “unspecified amount” is insignificantly associated with the DC's

market reaction in different-industry migrations, it has a negative, significant association in same-industry migrations ( $\beta_{15} + \beta_{16} = -0.134$ , p-value = 0.00%).<sup>27</sup>

### **6.2.1. Robustness checks**

Multicollinearity presents some problems in the test of H2. We check whether the multicollinearity affects the variance by calculating the variance inflation factor and condition number. In our main regression, Column 3 of Table 8, the VIF and “condition number” are not high in conventional terms.<sup>28</sup> But those cut-offs are arbitrary. A priori, we would have expected that there was no impact from stock performance and  $CAAR_{Emigration(-1,1)}^{OC}$ , as the emigrating SE wields relatively less control over these measures. Thus we run regression (2) excluding those variables. The results are reported in Column 2 of Table 8. Comparison of Columns 3 and 4 reveals that overall the coefficients remains similar.

We also estimate a model that includes an interactive variable (Amount  $\times$  Same Industry) in order to investigate the positive association of “amount” in the case of non-restructuring announcements. The results show that the amount is only significantly positive when the OC and the DC are in the same industry. In different-industry migrations, the coefficient on “amount” is still positive, but insignificant. It should be noted that the VIF of this regression is over 35. Thus the variance of error terms of the regression could be too high. On the other hand, the “condition number” is lower than the cut-off.

The significance and pattern of the short-term returns do not change with the choice of models. We estimated the same regression for Hypotheses 1 and 2 using the



Fama and French 3-factor model (1992),<sup>29</sup> with similar results for accounting performance, which in same-industry migrations is negatively associated with both restructuring and non-restructuring announcements (H2 reported in Table 8, Panel b). We also performed tests using size-adjusted returns and market models, yielding identical patterns of results.

Another concern is how we define membership in the same industry. We assumed that two companies are in a competing relationship if the two-digit SIC is identical. Although this approach is popular, new standards such as NAICS (North American Industrial Classification System) are replacing SIC. We tested the same hypotheses (H1 and H2) identifying “same-industry” OCs and DCs with the four-digit NAICS<sup>30</sup> and obtained similar results.

The dependent variables in H1 and H2 and  $CAAR_{Emigration(-1,1)}^{OC}$  are measured over 3 days surrounding an event (emigration, immigration, and the OC’s write-off). We tested the same hypothesis using a different window around the event, CAAR over 4 days (-1,2). The results are qualitatively the same.

## **VII. Conclusion**

Our study focuses on SEs’ migration. Migration involves both emigration from the origin company (OC) and immigration into the destination company (DC). We examine whether the past accounting and stock performance of the OC are relevant to the market’s evaluation of the SE’s immigration event. The market’s reaction to emigration is presumed to reflect the private information of informed traders on the SE’s quality. Whether or not the SE immigrates into a DC that shares the same industry membership as

the OC seems to determine the value relevance of the two past performance measures. We confirm that the two measures are value relevant when the OCs and DCs are in the same industry. When the SE moves to a different industry, the market seems to rely solely on the private signals embedded in the market reaction to the emigration.

Write-offs by the OC closely following the SE's departure can potentially inform the market about the SE's quality. We find that the past accounting performance and "amount" of the write-off are negatively associated with the market reaction to the DC's stock upon the OC's write-off when the OC and DC are in the same industry and the write-off is part of a restructuring plan. Our results suggest that the market actively monitors a migrating SE's past track record in reckoning the prospects of the DC. In the long run, however, both OCs and DCs appears to favorably maintain their accounting and stock performance relative to peers after the migration.

Two areas for future research come to mind. First, it would be useful to explore further the hiring of SEs by pre-IPO firms. These firms are highly motivated to signal high potential to the IPO market. The ability to acquire an SE with an established record is a potent signal. An IPO's success could well depend on the quality of an immigrating SE.

Second, we found a higher frequency of write-offs in recent years,<sup>31</sup> and some write-off announcements have had a much higher impact on the capital market than others. In our study, we observed that write-offs of migration firms had a larger negative impact than those of non-migration firms. This implies that the market sees higher risk

associated with write-offs in migration firms. Does ex post performance validate the market's singling out of these write-offs?

**Reference:**

BARTOV, E., LINDAHL, F., W. AND RICKS, W., E. (1998): “Stock Price Behavior Around Announcements of Write-Offs,” *Review of Accounting Studies*, 3, 327–46.

BERTRAND, M. AND SCHOAR, A. (2003): “Managing With Style: the Effect of Managers on Firm Policies,” *The Quarterly Journal of Economics*, 118, N. 4, 1169–1208.

BELSLEY, D.A., KUH, E. and WELSCH, R.E. (1980): *Regression Diagnostics : Identifying Influential Data and Sources of Collinearity (Wiley Series in Probability and Statistics)*, Wiley-Interscience.

BRICKLEY, J., A. (2003): “Empirical Research on CEO Turnover and Firm-Performance: a Discussion,” *Journal of Accounting and Economics*, 36, 227–33.

COUGHLAN, A., T. AND SCHMIDT, R., M. (1985): “Executive Compensation, Management Turnover, and Firm Performance : an Empirical Investigation,” *Journal of Accounting and Economics*, 7, 43–66.

DENIS, D., J., DENIS, D., K. AND SARIN, A. (1997): “Ownership Structure and Top Executive Turnover,” *Journal of Financial Economics*, 45, 193–221.

ELLIOTT, J.A., SHAW, WAYNE H. (1988): “Write-Offs as Accounting Procedures to Manage Perceptions,” *Journal of Accounting Research*, 26, 91–119.

FAMA, E.F., FRENCH, KENNETH R. (1992): “The Cross-Section of Expected Stock Returns,” *Journal of Finance*, 47, 427–65.

FEE, C.E. AND HADLOCK, C.J. (2003): “Raids, Rewards, and Reputations in the Market for Managerial Talent,” *Review of Financial Studies*, vol. 16, no. 4, pp. 1315–57(43).

- GILSON, S., C. (1989): "Management Turnover and Financial Distress," *Journal of Financial Economics*, 25, 241–62.
- HARRIS, M., HOLMSTROM, BENGT (1982): "A Theory of Wage Dynamics," *The Review of Economic Studies*, 49, 315–33.
- HAYES, R., M. AND SCHAEFER, S. (1999): "How Much Are Differences in Managerial Ability Worth," *Journal of Accounting and Economics*, 27, 125–48.
- LAZEAR, E.P. (1986): "Raids and Offer Matching," *Research in Labor Economics*, 8, 141–65.
- MOORE, M.L. (1973): "Management Changes and Discretionary Accounting Decisions," *Journal of Accounting Research*, 11, 100–7.
- MORCK, R., SHLEIFER, A. AND VISHNY, R., W. (1988): "Management Ownership and Market Valuation : an Empirical Analysis," *Journal of Financial Economics*, 20, 293–315.
- MURPHY, K., J. AND ZIMMERMAN, J., L. (1993): "Financial Performance Surrounding CEO Turnover," *Journal of Accounting and Economics*, 16, 273–315.
- PARRINO, R. (1997): "CEO Turnover and Outside Succession a Cross-Sectional Analysis," *Journal of Financial Economics*, 46, 165–97.
- PATELL, J.M. (1976): "Corporate Forecasts of Earnings Per Share and Stock Price Behavior: Empirical Test," *Journal of Accounting Research*, 14, 246–76.
- POURCIAU, S. (1993): "Earnings Management and Nonroutine Executive Changes," *Journal of Accounting and Economics*, 16, 317–36.
- STRONG, J.S., MEYER, JOHN R. (1987): "Asset Writedowns: Managerial Incentives and Security Returns," *Journal of Finance*, 42, 643–61.

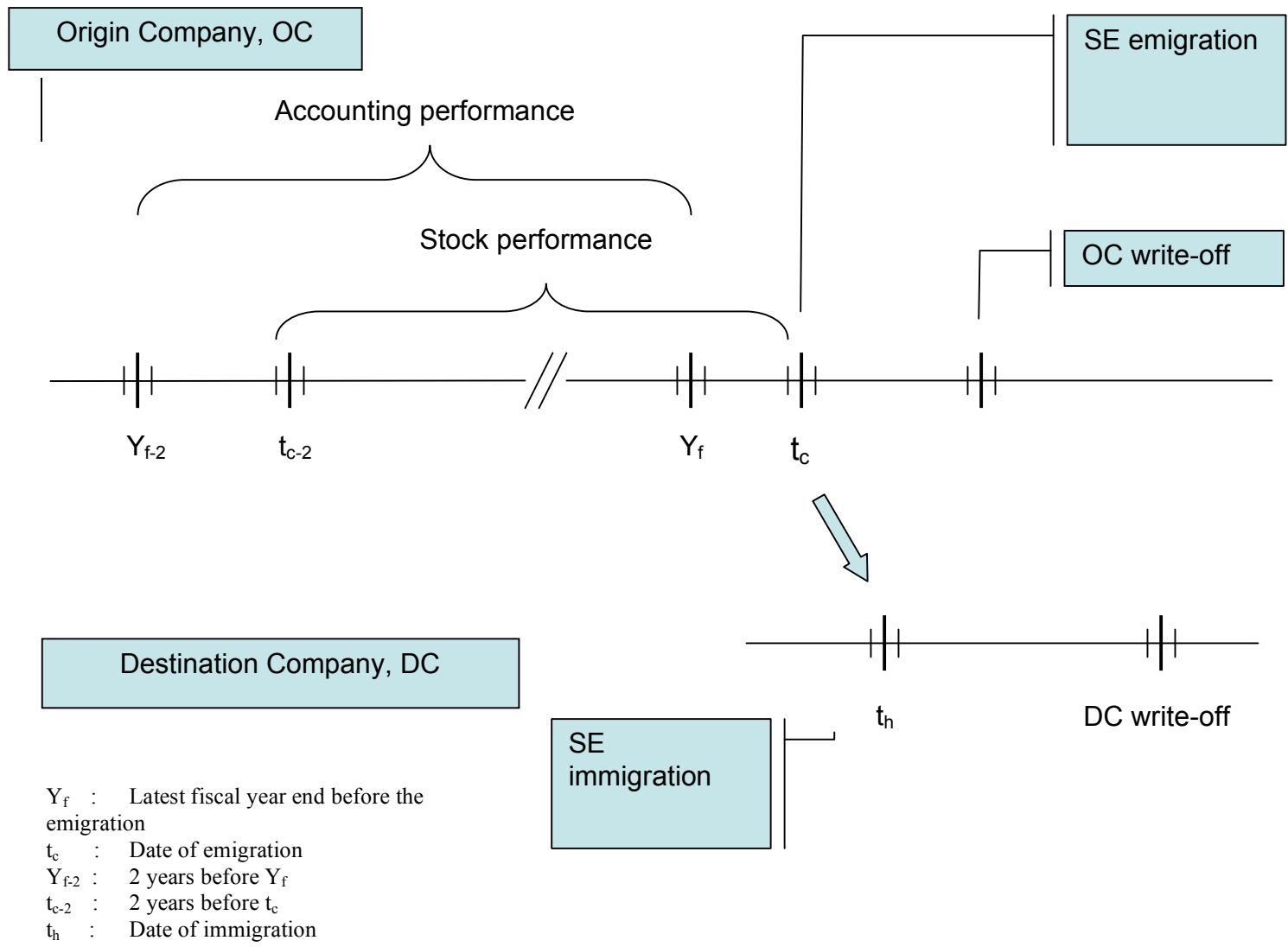
VANCIL, R.F. and PRESS, H.B.S. (1987): *Passing the Baton: Managing Process of CEO Succession*, McGraw-Hill.

WARNER, J., B., WATTS, R., L. AND WRUCK, K., H. (1988): "Stock Prices and Top Management Changes," *Journal of Financial Economics*, 20, 461–92.

WEISBACH, M., S. (1988): "Outside Directors and CEO Turnover," *Journal of Financial Economics*, 20, 431–60.

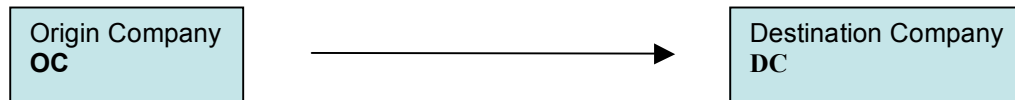
WEISBACH, M., S. (1995): "CEO Turnover and the Firm's Investment Decisions," *Journal of Financial Economics*, 37, 159–88.

**Figure 2. Timeline of management migration and subsequent write-offs**



**Figure 3. Summary of the data-gathering process**

Migration of Senior Executives  
CEO or CFO



Type of reasons (Cases b2 and c)

- Resignation
- Scout
- M&A

Requirements

- Reason for Vacancy in DC
  - Natural cause
  - Predecessor is promoted to a higher-ranked position (typically, CEO-> chairman)
  - Position has been vacant for more than two years
- Accounting and market data availability
  - CRSP and Compustat

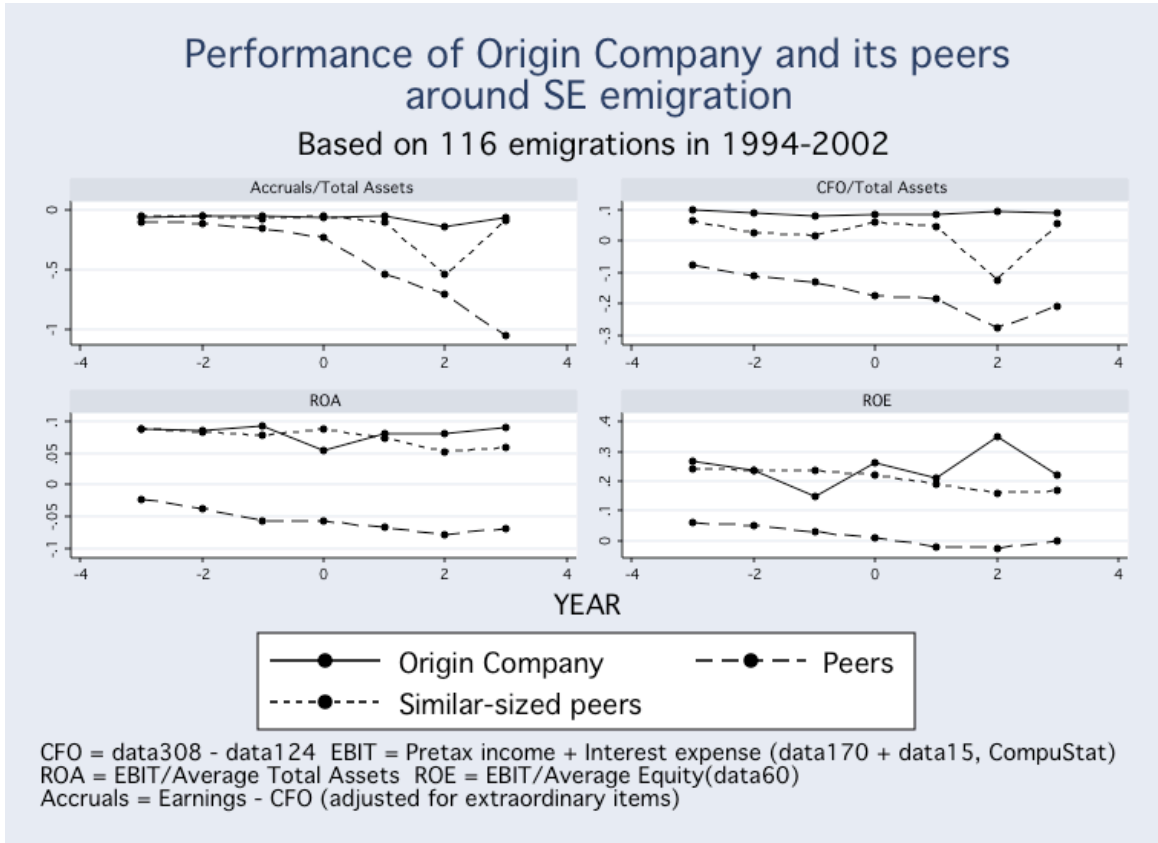


*Figure 4. Description of controls*

		<u>Industry</u>	
		Same	Different
<u>Size</u>	Same	Control 2	Control 3
	Different	Control 1	

**Control 1 includes Control 2**

*Figure 5. Descriptive statistics—Accounting and market performance measures for the origination company, its controls, the destination company, and its controls*



The year 0 is the fiscal year during which the top SE emigrates.

Diluted EPS is CompuStat Data #57, EBIT = Pretax income (DATA #170) + Interest expense (DATA #15) – Interest income (DATA #62).

ROE = EBIT/ Average Common equity (DATA #60)

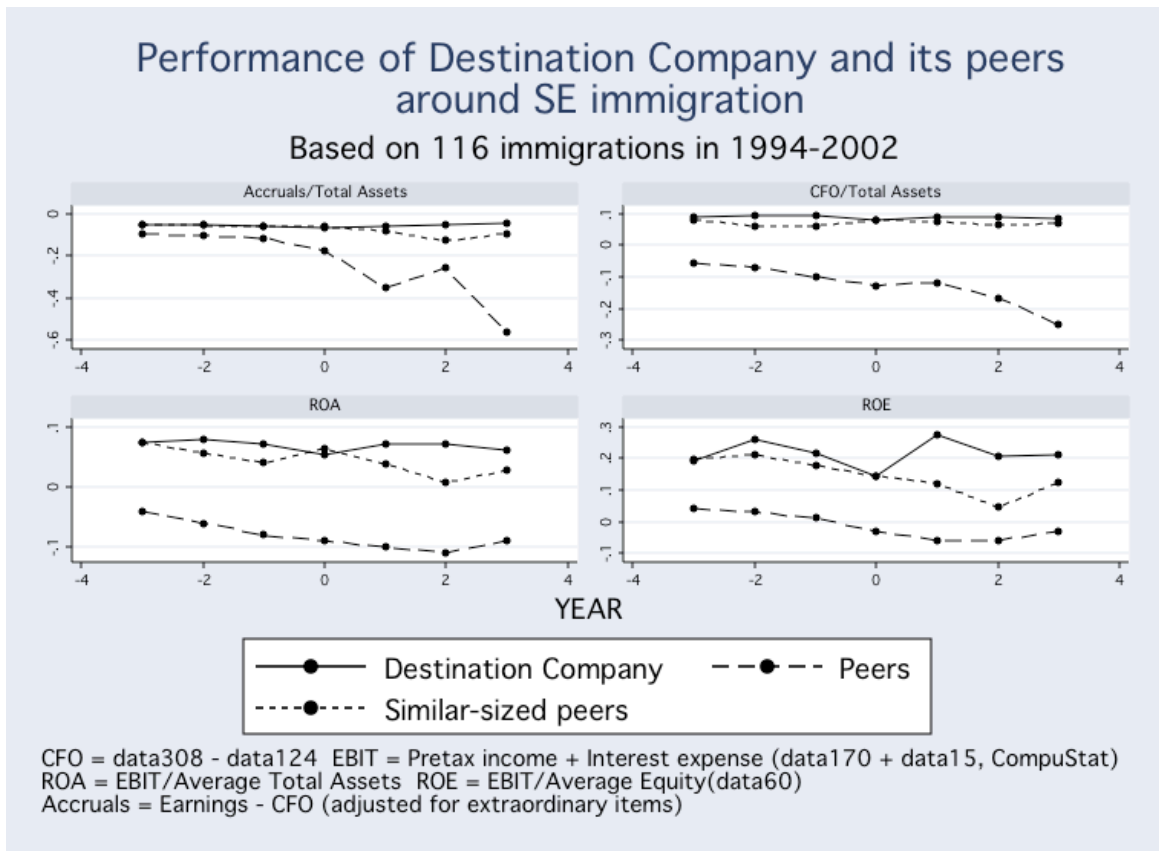
ROA = EBIT/ Average Total assets (DATA #6).

Cash from operations is DATA #308 – DATA #124.

Control 2 is the set of similar-sized industry peers (2-digit SIC). The size is calculated as the market capitalization as of the calendar year-end before the management migration.

Control 1 is set of the industry peers (2-digit SIC).

Figure 5. Descriptive statistics (continued)



For DC, the year 0 is the fiscal year during which the top SE immigrates.

Diluted EPS is CompuStat data #57, EBIT = Pretax income (DATA #170) + Interest expense (DATA #15) – Interest income (DATA #62).

ROE = EBIT/ Average Common equity (DATA #60).

ROA = EBIT/ Average Total assets (DATA #6).

Cash from operations is DATA #308 – DATA #124.

Control 2 is the set of similar-sized industry peers (2-digit SIC). The size is calculated as the market capitalization as of the calendar year-end before the management migration.

Control 1 is the set of industry peers (2-digit SIC).

**Figure 6. Comparison of special items and below-the-line items in the management migration year**

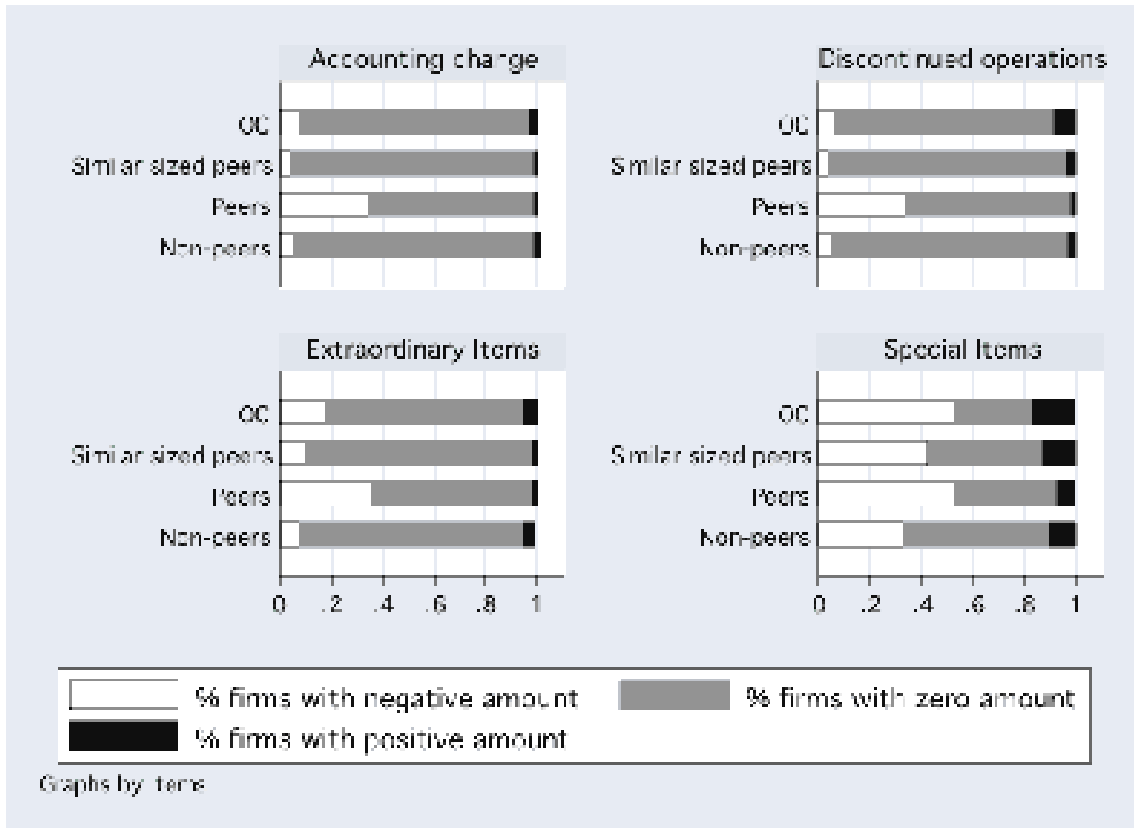
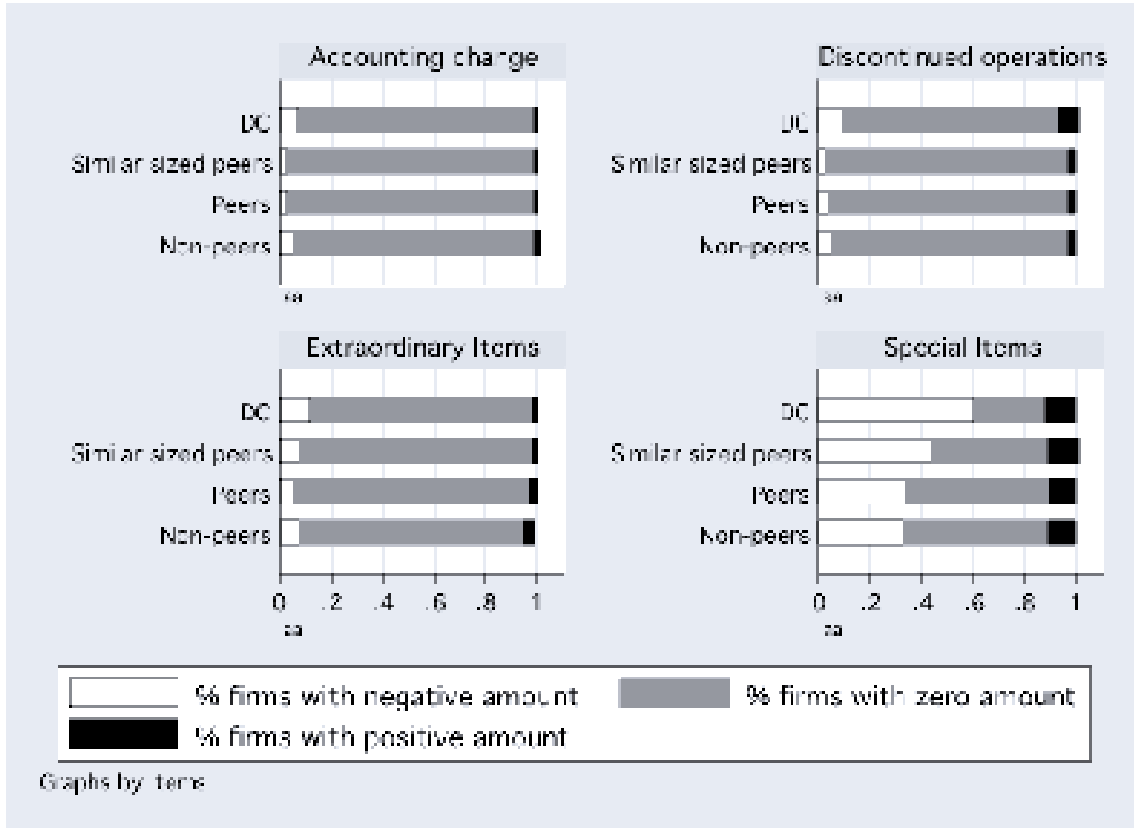


Figure 6. (Continued)

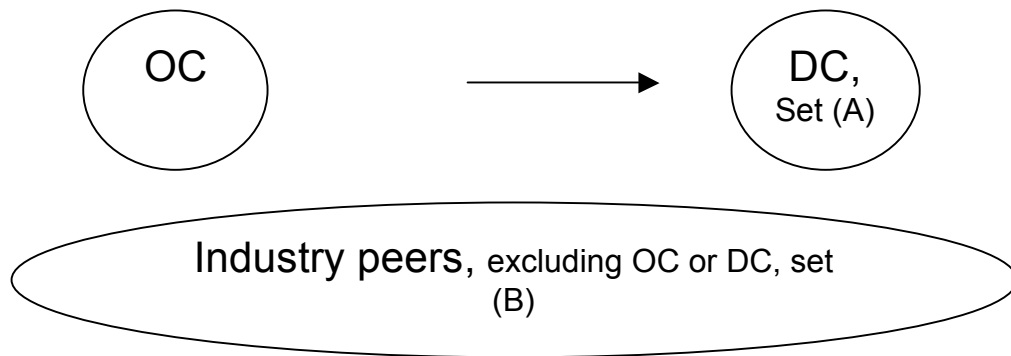


Our sample size is N=116. The set of similar-sized industry peers (Control 2) has a sample size of 2,532 for the OC and 3,726 for the DC. The set of industry peers (Control 1) has a sample size of 37,303 for the OC and 27,818 for DC. The set of non-peers (Control 3) has a sample size of 82,436 for the OC and 82,446 for the DC.

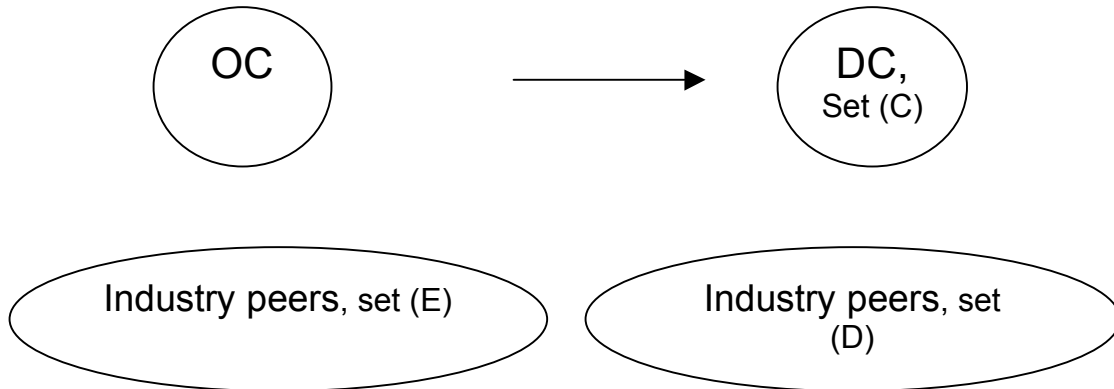
In CompuStat, Special items — DATA #17  
 Discontinued operation— DATA #66  
 Extraordinary items—DATA #192  
 Accounting change—DATA #183

*Figure 7. Description of sets at OCs' write-off—Information transfer*

Migration within the same industry



Migration to a different industry



*Table 3. Frequencies of write-off announcements in the financial press*

	<b>Sample</b>	<b>Similar-sized peers, Control 2</b>
<b>OC</b>	72/116 (62%)	116/343 (34%)
<b>DC</b>	90/116 (78%)	116/299 (39%)

There are 1,896 (for OC) and 2,432 (for DC) size-matched peers. We randomly selected a firm from these control samples until we found a firm with a write-off announcement within a year (before and after) of the write-off date of the corresponding OC or DC.

Binomial T-test reveals that the mean percentage is significantly different between the sample and the control ( $t = -3.99$ ,  $p < .001$  for OC,  $t = -4.32$ ,  $p < .001$  for DC).

**Table 4a. Size-adjusted return around the management migration**

Portfolio	Size-adjusted return over days (-1,1) around SE emigration
OC	-0.98%***
Control 1 (N=17,944)	0.02%
Control 3 (N=667,232)	-0.06%***

Portfolio	Size-adjusted return over days (-1,1) around SE immigration
DC	1.56%***
Control 1 (N=24,896)	-0.07%***
Control 3 (N=837,786)	-0.08%***

Size-adjusted return = raw return – same-size portfolio return.

**Table 4b. Size- and industry-adjusted mean compounded abnormal return**

	Time	OC	DC
Relative year from SE migration	(-2, -1)	-4.07%	4.62%
	(-1, 0)	1.78%	-7.55%*
	(0, 1)	13.68%*	7.64%*
	(1, 2)	13.92%*	9.46%*
Relative day from SE migration	(-30, -2)	-0.64%	-0.55%
	(-1, 1)	-1.00%**	1.63%**
	(2, 30)	2.40%	-3.36%

Emigration date for the OC is the date of the announcement of the departure; for the DC; it is the date of the hiring announcement.

Control 1 comprises industry peers (2-digit SIC) and the same event date (immigration for the OC and emigration for the DC).

Control 3 comprises different-industry firms and the same event date (immigration for the OC and emigration for the DC).

Size- and industry-adjusted return = size-adjusted return<sub>ij</sub> -  $\frac{1}{n_j} \sum_{k=1}^{n_j}$  size-adjusted return<sub>k</sub> where size

adjusted return = raw return – same-size portfolio return,  $k \neq i$ , and  $n_j$  is the number of firms in industry  $j$ .

- \*\*\* 0.1% significance
- \*\* 1% significance
- \* 5% significance
- \$ 10% significance

In Table 4a, Patell's (1976) standardized abnormal return test (Z-statistic) is used.

In Table 4b, the t-test is used.



**Table 4c. Comparison with retirement firms**

		Size adjusted returns		
	Period	Retirement (N=146)	OC (N=116)	DC (N=116)
Relative year from SE change	(-2, -1)	-1.56%	-12.35%***	-11.80%\$
	(-1, 0)	-1.37%	-17.03%***	-25.61%**
	(0, 1)	-11.29%**	-6.51%	-7.42%
	(1, 2)	14.55%**	-7.49%	-7.77%
Relative day from SE change	(-30, -2)	-0.92%	-1.79%\$	-0.63%
	(-1, 1)	-0.31%	-0.98%***	1.56%***
	(2, 30)	-0.74%\$	1.44%	-3.12%*

Emigration date for the OC is the date of the announcement of the departure; for the DC; it is the date of the hiring announcement.

Control 1 comprises industry peers (2-digit SIC).

Control 3 comprises different-industry firms.

Size-adjusted return = raw return – same-size portfolio return.

\*\*\* 0.1% significance

\*\* 1% significance

\* 5% significance

\$ 10% significance

Patell's (1976) standardized abnormal return test (Z-statistic) is used for statistical significance.

**Table 5. Correlation table**

<b>Correlation - Migration</b>					
	<b>CAAR<sup>DC</sup><sub>Immigration(-1,1)</sub></b>	<b>SameIndustry</b>	<b>Acctperf<sup>OC</sup></b>	<b>Stockperf<sup>OC</sup></b>	<b>CAAR<sup>OC</sup><sub>Emigration(-1,1)</sub></b>
<b>CAAR<sup>DC</sup><sub>Immigration(-1,1)</sub></b>	1				
<b>SameIndustry</b>	0.09	1			
<b>Acctperf<sup>OC</sup></b>	0.10	-0.09	1		
<b>Stockperf<sup>OC</sup></b>	0.02	0.08	-0.01	1	
<b>CAAR<sup>OC</sup><sub>Emigration(-1,1)</sub></b>	-0.30	-0.09	-0.09	-0.12	1

<b>Correlation - OCs' Write-off Event</b>							
	<b>CAAR<sup>DC</sup><sub>OC W/O(-1,1)</sub></b>	<b>SameIndustry</b>	<b>Acctperf<sup>OC</sup></b>	<b>Amount</b>	<b>Restructuring</b>	<b>Stockperf<sup>OC</sup></b>	<b>NoAmount</b>
<b>CAAR<sup>DC</sup><sub>OC W/O(-1,1)</sub></b>	1						
<b>SameIndustry</b>	0.30	1					
<b>Acctperf<sup>OC</sup></b>	-0.47	-0.05	1				
<b>Amount</b>	0.21	0.19	-0.01	1			
<b>Restructuring</b>	-0.07	0.16	-0.07	-0.22	1		
<b>Stockperf<sup>OC</sup></b>	-0.03	0.05	0.00	-0.05	0.09	1	
<b>NoAmount</b>	-0.38	-0.24	0.14	-0.19	0.26	-0.05	1

**Table 6a. The reaction to the write-off announcement by firm type**

<b>Panel A. Stock reaction to the write-off announcement</b>				
<b>Size-adjusted return</b>				
<b>Day</b>	<b>OC+DC (N=165)</b>	<b>OC</b>	<b>DC</b>	<b>Size-matched peers without SE migration (N=186)</b>
(-30,-2)	-0.61%	-0.63%	-1.05%	-1.88%*
(-1,1)	-2.75%***	-2.81%***	-2.71%***	-1.34%\$
(2,30)	2.94%*	5.05%\$	1.52%\$	0.05%

<b>Panel B. Stock reaction to the write-off announcement</b>				
<b>Residual of Fama and French 3-factor model</b>				
<b>Day</b>	<b>OC+DC (N=165)</b>	<b>OC</b>	<b>DC</b>	<b>Size-matched peers without SE migration (N=186)</b>
(-30,-2)	-0.84%	-0.51%	-0.93%	-1.91%
(-1,1)	-2.60%***	-2.99%***	-2.21%***	-1.17%\$
(2,30)	3.36%\$	5.18%\$	1.92%	0.40%

The write-off date for an OC or DC is the date of the first write-off after the SE's immigration into the DC. The write-off date of the similarly sized industry peers (2-digit SIC) without SE migration occurs within the year that the OC or DC took a write-off.  
Size-adjusted return = raw return – same-size portfolio return.

In B, the residuals from Fama and French 3-factor models are used to measure stock reaction.

$$R_i - R_f = a_i + b_i [R_m - R_f] + s_i \text{ SML} + h_i \text{ HML} + \varepsilon_i$$

SML is a size factor—small minus large firm returns; HML is book-to-market factor—high minus low book-to-market firms returns.

These are available on Prof. French's website:

<http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/>.

The statistics are based on Patell's (1976) standardized abnormal return test (Z-statistic).

\*\*\*: 0.1% significance    \*\*: 1% significance    \*: 5% significance    \$ : 10% significance

$CAAR_{Write-off(-1,1)}$	<b>Difference</b>	<b>H0: Difference is zero, p - value</b>
<b>OC+DC vs. Control</b>	-1.41%	4%
<b>OC vs. Control</b>	-1.46%	2%
<b>DC vs. Control</b>	-1.37%	6%

**Table 6b. Reactions to the write-off announcement by the OC**

*Panel A. Write-offs announced by OCs (N=75), pooled across migration within the same industry and to a different industry (see Figure 7)*

Portfolio	Size-adjusted return (-1,1)	Portfolio	Size-adjusted return (-1,1)
OC	-2.94%***	DC	-0.33%
Control 1 (N=18,242)	0.13%	Control 1 (N=22,265)	0.00%
Control 3 (N=657,222)	0.01%	Control 1 (N=653,970)	0.02%

*Panel B. Write-offs announced by OCs that share industry memberships with the DCs (N=25)*

Portfolio	Size-adjusted return (-1,1)	Portfolio	Size-adjusted return (-1,1)
OC	-2.40%*	DC – set (A)	2.39%\$
Control 1 (N=7,138) – set (B)	-0.27%***	Control 1 (N=7,138) – set (B)	-0.27%***

*Panel C. Write-offs announced by OCs that do not share industry memberships with the DCs (N=50)*

Portfolio	Size-adjusted return (-1,1)	Portfolio	Size-adjusted return (-1,1)
OC	-3.34%***	DC – set (C)	-1.74%*
Control 1 (N=11,104) – set (E)	0.38%***	Control 1 (N=15,127) – set (D)	0.26%***

Day 0 is the date of the first write-off by the OC after the SE migrated to the DC.  
 Control 1 comprises industry peers (2-digit SIC).  
 Control 3 comprises different-industry firms.  
 Size-adjusted return = raw return – same-size portfolio return.

For the description of sets (1)–(6), see Figure 7 and page 31.

The statistics are based on Patell’s (1976) standardized abnormal return test (Z-statistic):  
 \*\*\* : 0.1% significance    \*\* : 1% significance    \* : 5% significance    \$ : 10% significance

**Table 6c. Reactions to the write-off announcement by the DC**

*Panel A. Write-offs announced by DCs (N=90), pooled across migration within the same industry and to a different industry*

Portfolio	Size-adjusted return (-1,1)	Portfolio	Size-adjusted return (-1,1)
DC	-1.92%**	OC	0.81%\$
Control 1 (N=25,844)	-0.08%	Control 1 (N=22,664)	0.21%
Control 3 (N=841,877)	-0.07%***	Control 3 (N=836,442)	-0.06%***

*Panel B. Write-offs announced by DCs that share industry memberships with the OCs (N=34)*

Portfolio	Size-adjusted return (-1,1)	Portfolio	Size-adjusted return (-1,1)
DC	-3.81%***	OC	1.53%*
Control 1 (N=10,225)	0.28%**	Control 1 (N=10,225)	0.28%**

*Panel C. Write-offs announced by DCs that do not share industry memberships with the OCs (N=56)*

Portfolio	Size-adjusted return (-1,1)	Portfolio	Size-adjusted return (-1,1)
DC	-0.83%	OC	0.33%
Control 1 (N=15,619)	-0.22%	Control 1 (N=12,439)	0.15%

Day 0 is the date of the first write-off by the DC after the SE immigrated into the DC.  
 Control 1 comprises industry peers (2-digit SIC).  
 Control 3 comprises different-industry firms.  
 Size-adjusted return = raw return – same-size portfolio return.

The statistics are based on Patell's (1976) standardized abnormal return test (Z-statistic):  
 \*\*\* : 0.1% significance    \*\* : 1% significance    \* : 5% significance    \$ : 10% significance

**Table 7. Test of Hypothesis 1, N=116, where the abnormal returns are the size- and industry-adjusted returns**

$$CAAR_{Immigration(-1,1)}^{DC} = \alpha + \beta_1 SameIndustry + \beta_2 AcctPerf^{OC} + \beta_3 SameIndustry \times AcctPerf^{OC} + \beta_4 StockPerf^{OC} + \beta_5 SameIndustry \times StockPerf^{OC} + \beta_6 CAAR_{Emigration(-1,1)}^{OC} + \beta_7 SameIndustry \times CAAR_{Emigration(-1,1)}^{OC}$$

Variable		Coefficients		
Intercept	$\alpha$	0.0132 (1.41)	0.004 (0.62)	0.0136 (1.53)
<i>SameIndustry</i>	$\beta_1$	0.0076 (0.43)	0.0239 (1.36)	-0.0060 (-0.46)
<i>AcctPerf</i> <sup>OC</sup>	$\beta_2$	-0.0023 (-0.03)		-0.0077 (-0.75)
<i>SameIndustry</i> × <i>AcctPerf</i> <sup>OC</sup>	$\beta_3$	0.1665 (0.71)		0.4319\$ (1.78)
<i>StockPerf</i> <sup>OC</sup>	$\beta_4$	0.000 (3.47)***		0.000 (0.38)
<i>StockPerf</i> <sup>OC</sup> × <i>SameIndustry</i>	$\beta_5$	0.02634 (1.49)		0.198\$ (1.74)
<i>CAAR</i> <sub>Emigration(-1,1)</sub> <sup>OC</sup>	$\beta_6$		-0.2766 (-1.51)	-0.4175\$ (-1.91)
<i>CAAR</i> <sub>Emigration(-1,1)</sub> <sup>OC</sup> × <i>SameIndustry</i>	$\beta_7$		-0.3721 (-0.55)	-0.4311 (-0.73)
<b>R<sup>2</sup></b>		9.83%	8.52%	26.35%

The t-statistic is based on White's (1980) heteroskedasticity-adjusted variance.

**Variables**

$CAAR_{Immigration(-1,1)}^{DC}$ <sup>1</sup> = The DC's size- and industry-adjusted stock returns during the short window (-1,1) around immigration.

*SameIndustry* is an indicator variable that equals 1 when the 2-digit SIC codes of the DC and the OC are the same, zero otherwise.

*AcctPerf*<sup>OC</sup> = Industry-adjusted 2-year ROE, ROE = (EBIT1 + EBIT2)/ Average (Equity0, Equity2), where industry-adjusted ROE = ROE – Average of ROE in the same (2-digit SIC) industry.

*StockPerf*<sup>OC</sup> = The OC's size and industry adjusted stock returns over the two years of the SE's tenure preceding emigration.

$CAAR_{Emigration(-1,1)}^{OC}$  = The OC's size- and industry-adjusted stock returns during the short window (-1,1) around emigration.

\*\*\* : 0.1% significance      \*\* : 1% significance      \* : 5% significance      \$ : 10% significance

<sup>1</sup> CAAR for firm i in 2 digit SIC digits j is the size- and industry-adjusted return, as follows.

size-adjusted return<sub>ij</sub> -  $\frac{1}{n_j} \sum_{k=1}^{n_j}$  size-adjusted return<sub>k</sub> where size adjusted return = raw return – same-size portfolio return, k ≠ i, and n<sub>j</sub> is the number of firms in industry j.

**Table 8. Test of Hypothesis 2, N=75, where the abnormal returns are the size- and industry-adjusted returns**

$$\begin{aligned}
 CAAR_{OCW/O(-1,1)}^{DC} = & \alpha + \beta_1 SameIndustry + \beta_2 Restructuring \times SameIndustry \\
 & + \beta_3 AcctPerf^{OC} + \beta_4 AcctPerf^{OC} \times SameIndustry \\
 & + \beta_5 AcctPerf^{OC} \times SameIndustry \times Restructuring \\
 & + \beta_6 StockPerf^{OC} + \beta_7 StockPerf^{OC} \times SameIndustry \\
 & + \beta_8 CAAR_{Emigration(-1,1)}^{OC} + \beta_9 CAAR_{Emigration(-1,1)}^{OC} \times SameIndustry \\
 & + \beta_{10} Amount + \beta_{11} Amount \times Restructuring \\
 & + \beta_{12} Amount \times Restructuring \times SameIndustry \\
 & + \beta_{13} No - amount + \beta_{14} No - amount \times SameIndustry
 \end{aligned}$$

The t-statistic is based on White's (1980) heteroskedasticity-adjusted variance.

Variables

$CAAR_{OCW/O(-1,1)}^{DC}$  = The DC's size- and industry-adjusted stock returns over the short windows (-1,1) around OC's write-off.

*SameIndustry* is an indicator variable that equals 1 when the 2-digit SIC codes of the DC and the OC are the same, 0 otherwise.

$AcctPerf^{OC}$  = Industry-adjusted 2-year ROE,  $ROE = (EBIT1 + EBIT2) / \text{Average (Equity0, Equity2)}$ , where industry-adjusted ROE = ROE – Average of ROE in the same (2-digit SIC) industry.

$StockPerf^{OC}$  = The OC's size and industry adjusted stock returns over the two years of the SE's tenure preceding emigration.

*Restructuring* = 1 if the OC's charge is part of a restructuring plan, 0 otherwise.

*Amount* = Charge/Total assets at the end of the fiscal year.

*No-Amount* = 1 if OC's write-off does not specify the amount, 0 otherwise.

In Panel A, stock returns  $CAAR_{OCW/O(-1,1)}^{DC}$ ,  $Stock\ perf^{OC}$ , and  $CAAR_{Emigration(-1,1)}^{OC}$  – are measured in the following way.

CAAR for firm i in 2 digit SIC digits j is the size- and industry-adjusted return, as follows.

$$\text{size-adjusted return}_{ij} = \frac{1}{n_j} \sum_{k=1}^{n_j} \text{size-adjusted return}_k \text{ where size adjusted return} = \text{raw return} - \text{same-size portfolio}$$

return,  $k \neq i$ , and  $n_j$  is the number of firms in industry j.

In Panel B, the residuals from Fama and French 3-factor models are used to measure  $CAAR_{OCW/O(-1,1)}^{DC}$ ,  $Stock\ perf^{OC}$ , and

$$CAAR_{Emigration(-1,1)}^{OC} :$$

$$R_i - R_f = a_i + b_i [R_m - R_f] + s_i SML + h_i HML + \epsilon_i$$

SML is a size factor—small minus large firm returns; HML is book-to-market factor—high minus low book-to-market firms returns.

These are available on Prof. French's website:

<http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/>.

**Panel A. Regression (Model 3 is the main model)**

$CAAR_{OC\ W/O(-1,1)}^{DC}$		<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
<i>Intercept</i>	$\alpha$	-0.002	-0.002	0.000	-0.002	0.001
<i>SameIndustry</i>	$\beta_1$	0.043	-0.003	-0.029*	-0.025	-0.027*
<i>SameIndustry</i> $\times$ <i>Restructuring</i>	$\beta_2$		0.092*	0.134**	0.132*	0.127
<i>AcctPerf</i> <sup>OC</sup>	$\beta_3$	-0.006	-0.008	-0.006	-0.007	-0.006
<i>AcctPerf</i> <sup>OC</sup> $\times$ <i>SameIndustry</i>	$\beta_4$	-0.076\$	0.001	0.001	0.003	-0.006
<i>AcctPerf</i> <sup>OC</sup> $\times$ <i>SameIndustry</i> $\times$ <i>Restructuring</i>	$\beta_5$		-0.113*	-0.140*	-0.143\$	-0.127*
<i>StockPerf</i> <sup>OC</sup>	$\beta_6$	0.001		0.002	0.003	0.003
<i>StockPerf</i> <sup>OC</sup> $\times$ <i>SameIndustry</i>	$\beta_7$	-0.006		0.024	0.023	0.019
<i>CAAR</i> <sup>OC</sup> <sub>Emigration(-1,1)</sub>	$\beta_8$	0.161		0.180\$	0.201	0.204\$
<i>CAAR</i> <sup>OC</sup> <sub>Emigration(-1,1)</sub> $\times$ <i>SameIndustry</i>	$\beta_9$	-0.327		0.218	0.205	
<i>CAAR</i> <sup>OC</sup> <sub>Emigration(-1,1)</sub> $\times$ <i>Restructuring</i>	$\beta_{10}$					0.060
<i>Amount</i>	$\beta_{11}$	0.133	0.271**	0.281**	0.598	0.307**
<i>Amount</i> $\times$ <i>SameIndustry</i>	$\beta_{12}$	0.012			-0.334	
<i>Amount</i> $\times$ <i>Restructuring</i>	$\beta_{13}$		-0.328	-0.369	-0.630	-0.405
<i>Amount</i> $\times$ <i>SameIndustry</i> $\times$ <i>Restructuring</i>	$\beta_{14}$		-0.979	-1.396*	-1.121	-1.342\$
<i>No-Amount</i>	$\beta_{15}$	-0.008	-0.010	-0.010	-0.007	-0.011
<i>No-Amount</i> $\times$ <i>SameIndustry</i>	$\beta_{16}$	-0.116**	-0.138**	-0.124**	-0.126\$	-0.124**
<b>Adjusted R<sup>2</sup></b>		<b>13.62%</b>	<b>31.66%</b>	<b>29.95%</b>	<b>29.87%</b>	<b>29.69%</b>
<b>Mean VIF</b>		<b>4.08</b>	<b>3.55</b>	<b>4.14</b>	<b>8.8</b>	<b>10.56</b>
<b>Maximum VIF</b>		<b>14.91</b>	<b>6.81</b>	<b>9.95</b>	<b>35.6</b>	<b>45.43</b>
<b>Conditional number</b>		<b>10.12</b>	<b>13.32</b>	<b>10.95</b>	<b>19.75</b>	<b>26.64</b>



**Panel A (continued). F- and t-tests (Model 3 is the main model)**

Test	Group	Detail	Model 1	Model 2	Model 3	Model 4	Model 5
Mean effect	Different-industry migration	$\alpha$	0	0	0	0	0
	Same-industry migration & Non-restructuring	$\alpha+\beta_1$	0	0	-0.029*	-0.027*	-0.027**
	Same-industry migration & Restructuring	$\alpha+\beta_1+\beta_2$		0.087*	0.105*	0.105*	0.101*
Accounting performance - $Acctperf^{OC}$	Different-industry migration	$\beta_3$	0	0	0	0	0
	Same-industry migration & Non-restructuring	$\beta_3+\beta_4$	-0.082\$	0	0	0	0
	Same-industry migration & Restructuring	$\beta_3+\beta_4+\beta_5$		-0.120*	-0.146*	-0.146*	-0.139*
Stock performance - $StockPerf^{OC}$	Different-industry migration	$\beta_6$	0		0	0	0
	Same-industry migration	$\beta_6+\beta_7$	0		0	0	0
$CAAR^{OC}_{Emigration(-1,1)}$	Different-industry migration	$\beta_8$	0		0.180\$	0.201\$	0.204\$
	Same-industry migration	$\beta_8+\beta_9$	0		0.398	0	
	Restructuring	$\beta_8+\beta_{10}$					0
Amount	Non-restructuring	$\beta_{11}$	0.133*	0.271*	0.281*	0	0.307*
	Same-industry migration & Non-restructuring	$\beta_{11}+\beta_{12}$	0			0.265*	
	Restructuring	$\beta_{11}+\beta_{13}$		0	0	0	0
	Same-industry migration & Restructuring	$\beta_{11}+\beta_{13}+\beta_{14}$		0	-1.484**		-1.439**
	Same-industry migration & Restructuring	$\beta_{11}+\beta_{12}+\beta_{13}+\beta_{14}$				-1.486**	
No-Amount	Different-industry migration	$\beta_{15}$	0	0	0	0	0
	Same-industry migration	$\beta_{15}+\beta_{16}$	-0.123***	-0.148***	-0.134***	-0.134***	-0.134***
Amount vs. No-Amount	Same-industry migration & Restructuring	$\beta_{15}+\beta_{16}=\beta_{11}+\beta_{13}+\beta_{14}$		Not Different	Different	Different	Different

The results of the tests are tabulated such that if the f or the t-test is not significant, “0” is recorded in the cell. For example, in the first row,  $\alpha = 0$  is tested, and the t-test statistic is not significant, so all the cells have zero. On the other hand, if the test statistics are significant (at 10%, 5%, 1% or 0.1%), then the actual coefficients (or the sums of the coefficients) are recorded. The significance is represented as follows:

\*\*\* 0.1% significance

\*\* 1% significance

\*5% significance

\$10% significance

**Panel B. Comparison of the results of Model 3 using size- and industry-adjusted returns and the Fama & French 3-factor model**

Dependent variable : $CAAR_{OCW/O(-1,1)}^{DC}$	A. Stock returns variables are Size and Industry adjusted returns			B. Stock returns variables are abnormal returns from Fama and French's 3 factors Model	
		Coefficient	t	Coefficient	t
<i>Intercept</i>	$\alpha$	0.000	0.02	0.000	0.05
<i>Same Industry</i>	$\beta_1$	-0.029*	-2.22*	-0.014	-1.12
<i>SameIndustry</i> $\times$ <i>Restructuring</i>	$\beta_2$	0.134**	2.87**	0.115***	2.65*
<i>AcctPerf</i> <sup>OC</sup>	$\beta_3$	-0.006	-0.67	-0.004	-0.33
<i>AcctPerf</i> <sup>OC</sup> $\times$ <i>SameIndustry</i>	$\beta_4$	0.001	0.04	-0.057*	-2.21*
<i>AcctPerf</i> <sup>OC</sup> $\times$ <i>SameIndustry</i> $\times$ <i>Restructuring</i>	$\beta_5$	-0.140*	-2.23*	-0.051	-1.20
<i>StockPerf</i> <sup>OC</sup>	$\beta_6$	0.002	0.23	0.006	0.57
<i>StockPerf</i> <sup>OC</sup> $\times$ <i>SameIndustry</i>	$\beta_7$	0.024	1.02	-0.021	-0.98
<i>CAAR</i> <sup>OC</sup> <sub>Emigration(-1,1)</sub>	$\beta_8$	0.180\$	1.78\$	0.253	1.38
<i>CAAR</i> <sup>OC</sup> <sub>Emigration(-1,1)</sub> $\times$ <i>SameIndustry</i>	$\beta_9$	0.218	0.45	-1.225\$	-1.91\$
<i>Amount</i>	$\beta_{10}$	0.281***	3.78***	0.485***	3.39
<i>Amount</i> $\times$ <i>Restructuring</i>	$\beta_{11}$	-0.369	-1.2	-0.612	-1.84\$
<i>Amount</i> $\times$ <i>SameIndustry</i> $\times$ <i>Restructuring</i>	$\beta_{12}$	-1.396*	-2.04*	-1.415\$	-1.41
<i>No-Amount</i>	$\beta_{13}$	-0.010	-0.65	-0.017	-0.93
<i>No-Amount</i> $\times$ <i>SameIndustry</i>	$\beta_{14}$	-0.124***	-4.01***	-0.132***	-4.31***
<b>Adjusted R<sup>2</sup></b>		<b>29.95%</b>		<b>35.45%</b>	

**Panel B (Continued)**

Test	Group	Detail	A	B
Mean effect	Different-industry migration	$\alpha$	0	0
	Same-industry migration & Non-restructuring	$\alpha+\beta_1$	-0.029*	-0.014\$
	Same-industry migration & Restructuring	$\alpha+\beta_1+\beta_2$	0.105*	0.101*
Accounting performance – <i>AcctPerf</i> <sup>OC</sup>	Different-industry migration	$\beta_3$	0	0
	Same-industry migration & Non-restructuring	$\beta_3+\beta_4$	0	-0.060*
	Same-industry migration & Restructuring	$\beta_3+\beta_4+\beta_5$	-0.146***	-0.111*
Stock performance – <i>StockPerf</i> <sup>OC</sup>	Different-industry migration	$\beta_6$	0	0
	Same-industry migration	$\beta_6+\beta_7$	0	0
<i>CAAR</i> <sup>OC</sup> <sub>Emigration(-1,1)</sub>	Different-industry migration	$\beta_8$	0.180\$	0.253
	Same-industry migration	$\beta_8+\beta_9$	0	0
Amount	Non-restructuring	$\beta_{11}$	0.281***	0.485***
	Same-industry migration & Non-restructuring	$\beta_{11}+\beta_{12}$	0	0
	Same-industry migration & Restructuring	$\beta_{11}+\beta_{13}+\beta_{14}$	-1.484*	-1.542\$
No-Amount	Different-industry migration	$\beta_{15}$	0	0
	Same-industry migration	$\beta_{15}+\beta_{16}$	-0.134***	-0.148***
Amount vs. No-Amount	Same-industry migration & Restructuring	$\beta_{15}+\beta_{16}=\beta_{11}+\beta_{13}+\beta_{14}$	Different	Not different

The results of the tests are tabulated such that if the F or the t-test is not significant, “0” is recorded in the cell. For example, in the first row,  $\alpha = 0$  is tested, and the t-test statistic is not significant, so all the cells have zero. On the other hand, if the test statistics are significant (at 10%, 5%, 1% or 0.1%), then the actual coefficients (or the sums of the coefficients) are recorded. The significance is represented as follows:

\*\*\* 0.1% significance      \*\* 1% significance      \*5% significance      \$10% significance

## Endnotes

<sup>1</sup> For the period we examine, all SEs migrated to DCs of similar size as the OCs they emigrated from.

<sup>2</sup> The study defined distressed firms as those with default on debt, bankrupt firms, or firms privately restructuring debt to avoid bankruptcy.

<sup>3</sup> They include R&D, advertising expenses, capital expenditures, and accruals.

<sup>4</sup> Routine management change occurs when the CEO or CFO announce retirements and name a successor.

<sup>5</sup> These studies frequently discuss the migration event as a “raid.”

<sup>6</sup> In fact, unreported analysis indicates that  $CAAR_{Emigration(-1,1)}^{OC}$  is not significantly correlated with past performance measures (stock and/or accounting).

<sup>7</sup> Since a non-competing clause between the DC and the OC can dissipate such intangibles, four announcements referring to non-competing clause have been excluded from the DC sample.

<sup>8</sup> CAAR is measured as the size- and industry-adjusted return of firm  $i$ , size-adjusted return $_i - \frac{1}{n} \sum_{k=1}^n$  size-adjusted return $_k$  (where the group consists of firms in the same 2-digit SIC excluding firm  $i$ , and  $n$  = the total number of firms in the group).

<sup>9</sup> Results are qualitatively unchanged when using the ROE of the year preceding the emigration and the previous two years’ ROEs.

<sup>10</sup> For the M&A observations, the benchmark date is the month before the date on which the first rumor becomes available in the financial press. That is, Stock perf<sup>OC</sup> is measured over the period from two years and 33 days before the benchmark date to 32 days before the M&A announcement date. Motivating this measurement is the need to exclude from the calculated returns any potential market reaction to the M&A event.

<sup>11</sup> Restructuring announcements are those in which a firm mentions “restructuring,” “realignment,” or “reorganization,” and in which the write-off is presented as a direct consequence of such plans.

<sup>12</sup> We also included announcements that did not specify an estimate of the charge, but (as suggested above) the loading of this variable could absorb the loading on the restructuring dummy,  $\beta_6$ .

<sup>13</sup> By natural causes, we mean previously scheduled succession (with the predecessor remaining in the same company after the SE’s immigration, often as the chairman of the board), creation of a new position, and filling of a position empty for more than 2 years, and death.

<sup>14</sup> We lost observations when an emigrating SE moved to a pre-IPO firm.

<sup>15</sup> Write-offs encompass both complete write-offs and write-downs, including those that form part of restructuring charges.

<sup>16</sup> Although these write-offs may have affected the reaction to the DCs’ stock upon immigration, the small number of these occurrences (7) should not affect the result materially. The results are qualitatively unchanged when these observations are included

<sup>17</sup> For example, on a specific date, Company A could announce a restructuring plan that spans 3 quarters, detailing future charges at the time. Then, in the subsequent 3 quarterly earnings announcements, the financial press would report the charges pursuant to the

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previously announced restructuring plan. Only the first announcement would be informative; the three subsequent announcements would be devoid of content, unless the company happened to announce a change (such as an increase in the charges).

<sup>18</sup> Capitalization is measured as of the end of the year before migration.

<sup>19</sup> For example, suppose that there exist 100 similarly sized industry peers for an OC firm:

- i. Using the pseudo-random generator, we take one firm out of 100.
- ii. Then we search the news database to learn whether the randomly selected firm had a write-off announcement within a year (-1, +1) of the migration date,
- iii. If it took a write-off, the search is complete for the OC firm; otherwise, steps 1 and 2 are repeated until we find a firm with a write-off announcement.

<sup>20</sup> Since both studies searched the whole universe in the news databases, a direct comparison with our sample is not meaningful.

<sup>21</sup> The authors separated the migration samples into CEO-to-CEO and non-CEO-to-CEO; DCs' reaction to the former (latter) is 3.63%, N= 24 (1.06%, N=129). However, they did not report the DC's reaction for the pooled sample of CEO-to-CEO and non-CEO-to-CEO.

<sup>22</sup> We use Patell's (1976) z-statistics for testing the significance of short windows' stock reactions.

<sup>23</sup> The overall pattern of the short-term returns results is unchanged when we use different abnormal return measures, such as Fama and French's (1992) 3- and 4-factor models and a market model.

<sup>24</sup> This sample comprises size-, industry- and time-matched firms that announce routine management change, and whose CEO or CFO announced retirement along with a named successor:

- i. In EXECOMP an initial sample with either CEO or CFO retirement status was gathered for 1994–2002 (n = 985).
- ii. In the initial sample, we matched the firms with the OC or DC's three characteristics—capitalization decile, two-digit SIC code, and migration year (n=156).
- iii. Finally, we verified whether the retirement process of each firm was routine. The final sample contains observations.

<sup>25</sup> This reaction is robust to the choice of the model generating abnormal returns, so we simply present size-adjusted returns.

<sup>26</sup> We use the sample of non-migration similarly sized industry peers from Table 3 to compare the market reaction to the write-off. The number (N=186) that is included in measuring the stock reaction is slightly smaller because some of the size- and industry-matched non-migration firms were the same for some OCs and DCs. Such firms were separately considered for the purpose of comparing the incidence of write-offs, but included only once for the purpose of comparing the market reactions to the write-off.

<sup>27</sup> Again, the VIF measure and condition number for the multicollinearity were not high, all less than conventional cut-off points, even though the variables related to the content of the write-off by the OC are correlated.

<sup>28</sup> It is often suggested that a maximum VIF over 10, a mean VIF over 6, and a condition number over 20 are an indication of high variance due to multicollinearity.

<sup>29</sup> We ran this model with a calendar time regression of buy-and-hold returns.

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<sup>30</sup> According to the WRDS (Wharton research database) definition, NAICS is a hierarchical structure and can consist of up to six digits/levels. The first two digits of the structure designate the NAICS sectors, which represent general categories of economic activity. The third digit designates the subsector, the fourth digit designates the industry group, the fifth digit designates the NAICS industry, and the sixth digit designates the national industry.

<sup>31</sup> Elliott and Shaw (1988) identified 240 write-off announcements over the period 1981–1985. Bartov et al. (1998) noted 340 announcements over 1984 and 1985. Within much smaller subsets, we have found 232 write-off announcements.