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The Value Relevance of Top Executive Departures

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The value relevance of top executive departures: Evidence from the Netherlands

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ABSTRACT

On theoretical grounds, internal monitoring of top executives by the supervisory board is expected to result in positive abnormal returns subsequent to the announcement of their unanticipated forced departures. The empirical evidence is ambiguous and we analyze three non-competing explanations for this ambiguity: (i) The positive effect on firm value of internal monitoring is hidden in stock price effects due to the simultaneous occurrence of the positive real effect of monitoring and the opposing information effect. (ii) The interrelation between external and internal control prevents assessing the value relevance of internal monitoring in isolation. Moreover, the active role of shareholders prevents assessing the relevance of the board's role in the internal monitoring process. (iii) The confounding effect of a simultaneous successor appointment typically generates an upward biased estimate. Based on an analysis of price effects and trading volumes at announcement, we conclude that monitoring by the supervisory board is valued by investors: forced departures of executive directors, also without a successor appointment, are value relevant in the Netherlands where external control mechanisms and shareholder control are virtually absent. A general implication of our analysis is that the value relevance of a certain event can often not properly be refuted without analyzing trading volumes.

JEL-Codes: J32, J33, M12, M51, G3

Keywords: top management departure, dismissal, corporate governance, internal monitoring, value relevance

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1. Introduction

This paper reconsiders the value relevance of the monitoring by supervisory board members of top executives. If monitoring were serving shareholders' interests, the market would value unanticipated forced management departures resulting in positive abnormal returns subsequent to the announcement of an executive's dismissal. However, previous (event) studies have collectively found little evidence that unanticipated forced management departures are indeed value relevant. The theoretical value creating effect of monitoring by board members in contrast to the inconclusive empirical results is puzzling. We contribute to the understanding of this puzzle by addressing and testing three possible non-competing explanations.

Warner et al. (1988) provide the first possible explanation: The measured effect of unanticipated forced management departures on stock returns at announcement is ambiguous since it is the sum of two opposing effects. One is a *real* effect that is positive if the unanticipated change is in the shareholders' interests. The second is an *information* effect that is negative if the change signals worse (management) performance than anticipated.

If this 'Warner explanation' were valid, the established price effects should be re-interpreted accordingly. A negative price effect would suggest that the aggregate investor society reacts more strongly to the information signal than to the real signal. A zero effect would suggest that the investor society reacts equally strongly to both signals, whereas a positive effect would imply the first signal to outweigh the effect of the second (see Kang and Shivdasani, 1996).

In models that study the effects of differences of opinion amongst investors, trading volume typically proxies for the intensity of disagreement (e.g. Kim and Verrecchia, 1991; Harris and Raviv, 1993; Kandel and Pearson, 1995, Chen et al., 2001, and Hong and Stein, 2003). In addition to the effect on stock prices, we analyze the effects on *trading volumes* of the announcement of an executive's dismissal. This analysis enables a test of the explanation provided by Warner et al. and is a novel application in studies of (forced) management turnover effects.

Our results from the quasi-experimental Dutch setting support the validity of Warner's explanation: We find economically small and insignificant abnormal aggregate returns at the unanticipated announcement of forced departures, that are associated with highly significant abnormal trading volumes. This combination of effects implies that monitoring is value relevant, i.e. the real effect is positive, but a negative information effect hides the value relevance of monitoring from aggregate price effects.

Secondly, we address the explanation for the variety of empirical results by Denis and Denis (1995). They state that all stock price effects of forced departures measured to date are the joint result of the activities of the external and internal control markets and do therefore overestimate

the effect of internal monitoring. They conclude that it is not clear whether the internal control market would function effectively in isolation. We primarily address this issue by analyzing the effect of forced departures in a country in which the external control market is minimal and shareholders have little control rights. The Netherlands provide a quasi-experimental setting in which the effect of monitoring by the supervisory board can be measured almost in isolation.

A third factor that we analyze that might explain the lack of consistent empirical results is the additional effect of successor announcements. It is quite common, especially for CEO's, that departures are announced simultaneously with a successor appointment. Furtado and Rozeff (1987) therefore conclude that the evidence for dismissals is highly tentative and overestimated. The appointment of a successor tends to generate a positive price effect, as was shown by Dedman and Lin (2002). They are the only ones to provide evidence that the sub-set consisting of pure dismissal announcements only, i.e. where firms release no other news and do not announce the name of the successor, is subject to significant (more) negative abnormal returns. We distinguish between unanticipated announcements of forced departures that simultaneously announce the appointment of a successor and pure announcements of forced departures. The results show that simultaneous announcements of forced departures and (outsider or insider) successor appointments do generate a positive stock price effect of almost 5%. This result, in combination with the absence of price effects subsequent to the announcement of a dismissal without simultaneously announcing the appointment of a successor renders support for the explanation provided by Furtado and Rozeff for the mixed results so far.

In addition to these three explanations mentioned, there is a measurement problem that might contribute to the lack of consistent empirical results (Denis and Denis, 1995): the definition of *forced* executive departures. The imprecise definitions often used lead to underestimating the effect of forced departures on stock prices. We try to address this problem by using inputs about exit motives from the popular business press, financial analysts and boardroom consultants, along with the usual press releases.

Our analyses are based on a sample that includes all (forced) top executive departures from the 100 largest companies listed on the Amsterdam Stock Exchange over the period 1991-2000. We have identified 227 top executive departures for which there was no confounding announcement, and for which we have successfully traced the exact event date, the executive's board function (CEO or executive board member), as well as the exit motive, i.e. forced or not. The sample includes 41 forced top executive departures.

Based on an analysis of both stock prices and trading volumes we conclude that forced executive departures are value relevant in the Dutch case: monitoring by the supervisory board generates a positive (real) value effect that is normally concealed from price effects by the

negative information effect and that is often overstated by the positive confounding effects of external monitoring and of successor announcements. If volume effects were taken into account, a reconsideration of the mixed empirical results that have been established so far would most likely lead to a more positive conclusion about the value relevance of (internal) monitoring mechanisms, also in the US.

The remainder of the paper is divided into six sections. The next section positions our research effort in the empirical literature. Section 3 discusses how we isolate the effect of monitoring by the supervisory board. Section 4 details on our approach of analyzing trading volume effects. Section five discusses the data and the applied methodology of event studies. In section 6 we discuss the empirical results. Section 7 concludes.

2. Review of the literature

We distinguish three categories of studies that analyze the relationship between firm performance and executive departures. The objective of all three categories is to assess the relevance of monitoring and control mechanisms.

One group of studies investigates whether management departure is preceded by declines in operating or stock performance. If monitoring were effective, a greater incidence of top management departures in poorly performing firms would be observed. Coughlan and Schmidt (1985), Warner et al. (1988), Weisbach (1988), Jensen and Murphy (1990), Kaplan (1994a,b), Denis and Denis (1995), Fee and Hadlock (2000, 2004), Renneboog (2000), Franks and Mayer (2001), Franks et al. (2001), Dahya et al. (2002), Lausten (2002), and Volpin (2002) find for various countries that the rate of top executive departures is inversely related to prior stock or operating performance. Danisevska et al. (2004) document this for the Dutch case. These findings are consistent with effective monitoring and control of poorly performing executives.

The second category of studies examines the effect of executive departures on long-term firm performance (e.g. Murphy and Zimmerman, 1993 and Denis and Denis, 1995). The evidence is mixed. Several studies, like Köke (2004), have found insignificant effects, supporting the hypothesis that managers have little influence on long term firm performance: dismissals occur since scapegoats are needed in times of bad performance.[2] For the Netherlands, Olie et al. (2004) have found that CEO and non-CEO executive changes do not affect long term accounting performance, whereas simultaneous exits and entries of CEO's do have a positive

[2] Early applications pertain to sporting team performance after its coaches' resignations in particular (for instance, Brown, 1982; and Boeker, 1992). Pfeffer (1977), alternatively, explains the small effect on performance of top executives in large and complex organizations by the many restrictions imposed on the firm by its environment. Lieberson and O'Connor (1972) indeed find that approximately 90% of total variance in turnover and profit can be attributed to macroeconomic variables, the industry and the organization as a whole. Only 6% of the variation in firm performance can be attributed to management.

relationship with long term firm performance. Other studies support the hypothesis that unanticipated management turnover would affect long-term firm performance negatively, due to a period of tension and insecurity resulting from the change (Allen et. al, 1979). This is consistent with Weisbach (1995) who finds that the probability of divesting poorly performing assets increases after a management departure.

The third category examines stock market reactions associated with the announcement of (forced) management departures by means of event study methodology. This study falls within that category, though existing studies focus on stock price effects only. The evidence from this category of studies is mixed, both for forced and non-forced departures. Table 1 shows an overview of empirical results that have been obtained in studies that analyze the stock price effect subsequent to the announcement of *forced* executive departures (in many cases exclusively CEO's).

-Insert Table 1-

These events studies have produced mixed results for forced management departures in various countries and periods of time. Furtado and Rozeff (1987) and Denis and Denis (1995) document a significantly positive price reaction to the announcement of a forced executive departure in the US. Weisbach (1988) and Huson et al. (2001) find the same effect in support of value relevant monitoring in the US for the exclusive case of CEO's. Kang and Shivdasani (1996) report positive announcement effects for the dismissals of Japanese CEO's.

However, as Table 1 shows, the other studies do not support the value relevance of monitoring of top management. Warner et al. (1988) find that the announcement of dismissing a top executive in the US does not generate any significant stock price effect and Mahajan and Lummer (1993) even document a significantly negative effect. Furthermore, the three studies that we know of that pertain to European CEO's do not report any evidence in support of the value relevance of monitoring. Dedman and Lin (2002) document negative stock price effects resulting from the announcement that a British CEO is forced to depart. Dherment-Ferere and Renneboog (2002), who study the stock price effect of French CEO turnover, find an insignificant effect during the relevant event window. Last but not least, Danisevska et al. (2004) report insignificant stock price effects for CEO's as well as for other executive board members in the Netherlands.[3]

Several explanations have been put forth to better understand the variety of results within each of these categories and its inconsistency with effective or value relevant internal monitoring of executives:

2.1 Internal versus external control mechanism

Franks et al. (2001) document that economic theory suggests five principal competing parties disciplining management of poorly performing companies:

"First shareholders, and in particular large shareholders, may intervene directly and replace management when performance is poor. Second, management replacement may follow the acquisition of a large block of shares. Third, bidders may discipline the management of the acquired company. Fourth, non-executive directors, i.e. outside directors, may act on behalf of shareholders and replace management when they are thought to perform poorly. Finally, financial crises may trigger interventions by shareholders when new equity is issued." (Franks et al., 2001, p210)

The monitoring activity by current (blocks of) shareholders and by non-executive directors (or members of the supervisory board in a two tier system of corporate governance) is generally considered as "internal" monitoring, whereas monitoring activities by acquiring shareholders (of blocks or all outstanding shares as in a hostile takeover), i.e. the market for control, are considered "external", cf. Brickley et al., 2003.[4] Their relative roles have recently been examined extensively and differ across countries (cf. Renneboog, 2000; Franks et al., 2001; Franks and Mayer, 2001; Dahya et al., 2002; Crespi-Cladera and Gispert, 2002; Volpin, 2002; Köke, 2004). A basic distinction across national corporate governance systems is between "insider" systems and "outsider" systems (Franks and Mayer, 2001). In "outsider" systems, prevalent in Anglo-Saxon countries, executive performance is maintained by the complementary intervention of both internal and external control mechanisms and shareholders are relatively well protected by the legal system[5]. "Insider" systems, such as in Continental Europe, mainly rely on internal monitoring (cf. Shleifer and Vishny, 1997). A small number of listed firms, concentrated share ownership, and comparatively low levels of takeover activities are the main characteristics of "insider" systems (Franks and Mayer, 2001).

Typically, systems of corporate governance, and therefore the relative role of external control, vary not only across countries, but also across firms within a country. With respect to internal monitoring, the concentration of shareholdings, i.e. the presence of block-holders, varies over firms and so does the identity of the most important block-holders. Moreover, the proportion of non-executive directors within a one-tier system varies across firms too and is usually considered as influencing control.

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[3] This other Dutch study was conceived simultaneously with ours.

[4] Product market competition is often seen as an additional source of external monitoring (Brickley, Smith and Zimmermann, 2003, Fee and Hadlock, 2000). Fee and Hadlock show that monopolistic markets are associated with lower management turnover.

External monitoring is specified by the dynamic relationship between ownership and control. These dynamics may vary across firms within a country: (the likelihood of) large ownership transfers, either partial or complete take-over, may affect control (Franks and Mayer, 2001). The possibility that blocks of shares are transferred and the likely consequences of such a (partial) control change for the incumbent executives may give rise to the installment of various sorts of more or less permanent anti-takeover defenses. The use of such anti-takeover defenses varies across firms, too.

Denis and Denis (1995) state that there is surprisingly little evidence on the value relevance of *internal* control devices in generating improvements in corporate performance. They state that: "forced resignations are rare and are due more often to external factors than to normal board monitoring." Examination of their dataset reveals that 68% of the dismissals is preceded by active monitoring by parties other than the supervisory board, e.g. creditors, shareholders, or potential acquirers. Moreover, 56% of the firms with a forced departure are targets of some form of corporate control activity. Collectively, these findings provide little support for the hypothesis that supervisory boards would function effectively in isolation. Denis and Denis conclude that: "Further work is necessary in order to understand the precise nature of the interaction between the internal and external control markets in improving firm performance".

Franks et al. (2001) fill this gap partially by examining the relative roles of the five parties that would play a role in disciplining poorly performing management. Their results point at a protective (or advisory) rather than monitoring role for non-executive directors in the UK: the higher the proportion of non-executive directors, the lower is the likelihood that management is replaced.[6] Moreover, they examine how ownership patterns affect the relationship between board turnover and past corporate performance. Consistent with Kaplan (1994b), they find no such relationship. They conclude that "outsider systems" of corporate control (such as in the United States and in the United Kingdom) and "insider systems" (such as in Continental Europe) result in the same sort of (lack of) relationship between ownership and control.

Franks et al. further document important relative roles for external monitoring mechanisms in both the UK and the US. Volpin (2002), who compares to what extent internal and external monitoring mechanisms affect the relationship between performance and executive turnover

[5] Within Anglo-Saxon countries shareholders typically have the legal right to vote on important corporate matters, such as mergers and liquidations, as well as electing and discharging the board of directors (cf. Shleifer and Vishny, 1997)

[6] This result stands in contrast to results from US studies about the monitoring role of non-executive directors (c.f. Weisbach, 1988; Gilson, 1990; and Kaplan and Reishus, 1990), from a Japanese study (Kang and Shivdasani, 1996) and from another UK study (Dahya et al., 2002) who all find a positive relationship between the proportion of outside directors and the strength of the link between firm performance and executive turnover.

also concludes that external monitoring, i.e. an effective market for corporate control, is more important than is internal control.

Köke (2004) examines for the German case, i.e. an "insider system", whether (partial) changes in firm ownership (control) play a disciplinary role. He finds that poor performance makes a change in control/ownership indeed more likely and that such a control change increases the likelihood of management turnover. However, this does not happen as a consequence of poor performance and subsequent performance does not increase. He therefore concludes that the market for corporate control plays virtually no disciplinary role within the German "bank-based system".

Huson et al. (2001) is unique in addressing the *interrelationship* between internal and external monitoring. They conclude that the variation of the effectiveness of monitoring over time is independent from (variations in) the intensity of the takeover market. However, this does not provide any information about the effectiveness of internal control mechanisms as such.

2.2 Simultaneous occurrence of real and information effect

Warner et al. (1988) explain the insignificant price effects subsequent to the announcement of forced management turnover by the simultaneous occurrence of a positive *real* effect and a negative *information* effect. They support their argument empirically by demonstrating that there is a significant shift in the *variance* of excess returns during the event windows considered. These shifts might indicate that a stock price effect exists, regardless of its sign. They argue that, since the aggregate net price effect does not differ significantly from zero, for some events the positive real effect outweighs the negative information effect, and for some events the opposite is the case. Events that do not evoke a significant stock price effect at all, which will turn out to be true for the majority of events, won't show significant shifts in the variances.

Denis and Denis (1995) also state that the small price reaction to the forced departures of top executives is against expectation. They identify several possible causes, where the occurrence of a negative information effect is one of them.[7] In order to distinguish between alternative causes, they examine whether real changes in managerial actions (such as selling assets and divestitures) and profitability occur following management changes. Their regressions show that firm performance indeed increases in the several years after the change, also for companies who do not sell poorly performing assets. They demonstrate that this is not due to mean reversion or to earnings management by new managers. They conclude that the unexpectedly small stock

[7] The other possible causes are (i) Partial expectation of the management change or (ii) The change itself is perceived as economically unimportant.

price effects for fired top managers are due to confounding negative information about (future) firm performance that is revealed by the fact that the departing manager is fired.

Kang and Shivdasani (1996) also analyze the occurrence of a negative information effect. Their results indeed suggest that executive turnover announcements are accompanied by the revelation of adverse information. They conclude that the observed stock-price reaction is likely to be a conservative estimate of the improvement in underlying firm value caused by the dismissal of inefficient management.

2.3 Effect of successor announcement

It is quite common, especially for CEO's, that departures are announced simultaneously with new appointments. Furtado and Rozeff (1987) therefore conclude that the evidence for pure dismissals is highly tentative. They find that the announcement of appointments tends to generate a positive effect, in particular for internal promotions.

Several studies document that the price effect of the announcement of a forced departure is higher in cases where a simultaneous announcement of an *external* as opposed to an internal successor is made (e.g. Warner et al., 1988; Kang and Shivdasani, 1996; Huson et al. 2001; Dherment-Ferere and Renneboog, 2002). Dedman and Lin (2002) are the only ones to provide evidence that the sub-set consisting of pure dismissal announcements, i.e. where firms release no other news and do not announce a successor, generate lower abnormal returns than combined announcements of dismissals and successors.

2.4 Definition of forced departures

A complicating factor in measuring announcement effects of forced departures is that bad performance or differences of opinion amongst board members are seldom mentioned in press releases as a reason for executive departure. For instance, Weisbach (1988) documents that the WSJ only reports 9 out of 286 CEO-resignations to be performance related, where several of those nine were not allocated by the firm as such but by the WSJ citing rumors. Weisbach therefore concludes that companies do not announce the real reason behind their CEO resignation in case the resignation is forced due to poor performance. More recent studies also complain about the (continuing) lack of transparency on whether a departure is forced or not (Huson et al., 2001; Dedman and Lin, 2002; Dherment-Ferere and Renneboog, 2002). Table 1 shows the variety of classification mechanisms that have been used to identify forced departures in event studies.

Denis and Denis (1995) have documented that various classification mechanisms allude to different measured stock price effects of forced departures. They document a positive effect for their own definition, whereas when adopting the definition used by Warner et al. they find no

such effect. A frequently used classification system, to label all external appointments as forced, leads to insignificant results too. They conclude that their classification scheme (see Table 1) identifies forced resignations more precisely than the classification schemes used in prior studies and that the classification scheme used is relevant since it affects the outcome of the analysis.

In what follows, we discuss our approach to assessing the validity of these three explanations for the ambiguity of the results from previous studies. We shall also discuss how we deal with the fourth issue, the measurement of *forced* departures. In the next section, we consider the distinction between internal and external monitoring in general, and the possibilities for isolating supervisory board monitoring in particular.

3 Isolating the effect of monitoring by the supervisory board

Our approach is two-dimensional. First, we select the Netherlands as the country for which we analyze the announcement effect of unanticipated forced departures by executives. As we will set out in the remainder of this section, the Netherlands has a very insider oriented corporate governance system in which shareholders exert relatively little influence, whereas the supervisory board is very influential. Hence, the value effects that we find can largely be attributed to monitoring by the supervisory board. Second, we will analyze the effect of several governance-related firm characteristics that are heterogeneous within the Netherlands and that potentially influence control and therefore the relationship between forced departures on the one hand, and stock prices and trading volumes on the other hand. The results from these analyses will give insight in the impact of no or a slightly more externally oriented focus on the value relevance of monitoring.

3.1 Legal structure

Contrary to the U.S. regime, the focal point of the current Dutch regime of corporate governance is the two-tier board structure consisting of a management or executive board in charge of the firm's operations and a supervisory board. A Dutch company's Supervisory Board consists exclusively of non-executive directors and is responsible for supervising the activities of the management board. In performing their duties, the supervisory board members are required by Dutch company law to act as a delegated monitor of *all* stakeholders. (De Jong et al., 2004b)

The scope of influence of the supervisory board depends on the legal regime the firm adopts. There are three such forms. The first form is the so-called "structuur regime" that companies are forced to adopt if they: (1) are a limited liability company, (2) have a subscribed capital

exceeding US $12 million, (3) employ more than 100 employees within the Netherlands and there is a legally installed work council (Van Ees et al., 2003). The adoption of the "structuur regime" implies the obligation of installing a supervisory board that selects its members by co-optation. Virtually all tasks and responsibilities allocated to shareholders in Anglo-Saxon countries reside under the Dutch "structuur regime" with the supervisory board, in particular the appointment and firing of the members of the management board including the CEO.[8]

The second legal regime, the "weaker form" of the structuur regime, can be used on a voluntary basis by Dutch multinational companies that meet the criteria for the "structuur regime", but have more than 50% of their employees working outside the Netherlands. The responsibility for the appointment of members of the management board and the construction of the annual report has been transferred back from the supervisory board to the annual meeting of shareholders within this legal form. "However, the supervisory board still has most of the legal powers and shareholders usually have a limited say. This could be one of the reasons why a relatively large number of the Dutch publicly listed multinationals apply the "structuur regime" on a voluntary basis" (De Jong et al., 2004a, p9).

Companies that do not meet the above criteria may adopt the third legal option, i.e. the common legal regime, where a supervisory board is optional, but commonly in place[9] (Van Oijen, 2000). Its members are appointed at the annual shareholders meeting, and its main responsibility is ratifying major management decisions. All other important decisions, especially the appointment of the management board, are made at the annual meeting of shareholders. However, even companies entitled to adopt this legal form have the right to and often do adopt the "structuurregime" voluntarily (cf. Honée et al., 2000).

Approximately 60% of the Dutch firms listed on the Amsterdam stock exchange have adopted the "structuur regime", either mandatory or voluntarily in 1999 (Van Oijen, 2000, Honée et al., 2000). 65% of the firms with an international character - that exempts firms from the legal obligation to adopt the "structuur regime" - have voluntarily adopted this legal option in 1999 (Honée et al., 2000).

3.2 An "Insider" system

The Dutch corporate governance system meets all conditions expressed by Franks and Mayer (2001) to qualify for an "insider system": A small number of quoted firms, concentrated share ownership, and comparatively low levels of takeover activities:

[8] The 's role and responsibility also includes the determination of the compensation packages of executives, the approval of significant corporate actions (e.g. mergers and acquisitions, issuing shares, large reorganizations) and to approve the annual financial statements and appointment of the auditor.

At the end of 1997 shares of only 248 Dutch companies were listed on the Amsterdam stock exchange. A characteristic feature of the Dutch market is the concentration of market capitalization at a few large companies. Only 15 companies, including Royal Dutch, Unilever, Philips, Elsevier, and ING, represent 75% of total market capitalization (De Jong et al., 2001).

The ownership structure of Dutch listed firms is rather concentrated: the mean (median) size of the largest block-holder is 27% (18%), and that of the largest three block-holders is 41% (35%). Ownership stakes vary considerably across firms: The standard deviation of the largest ownership stake is 22% and that of the three largest block-holders is 28% (De Jong et al., 2001 who provide more details)[10].

The third requirement as expressed by Franks and Mayer to qualify for an insider system is a low level of hostile takeover activities. The Netherlands certainly meets this requirement:

> "Hostile takeover bids are rare in the Netherlands, and were successful, at most, on a few occasions. The reason is that stock exchange listed companies are protected by multiple takeover defenses." (Kabir et al., 1997)
>
> "Hostile takeovers are hardly attempted in the Netherlands so that in general the threat of a hostile takeover does not act as a disciplinary device for Dutch firms." (Van Oijen, 2000)
>
> "Even in spite of (more) concentrated ownership, Dutch anti-investor protection (including the institutional features of the structural regime) generally precludes that management is seriously disciplined by the stock market." (Van Ees et al., 2003)

The rarity of hostile takeover bids is due to the installment of (multiple) anti-takeover defenses by most of the listed firms in the Netherlands. Dutch law offers companies numerous possibilities of defense mechanisms, many of which do not exist in the U.S (Kabir et al., 1997). Each of these defense measures limits the number of votes that the regular shareholder has. The "structuur regime" is viewed as one of the most important anti-takeover defenses (Kabir et al., 1997; Van Oijen, 2000; Van Ees et al., 2003; De Jong et al., 2004a), since the supervisory board is granted the rights previously held by shareholders (see above).

All in all, 90% of the Dutch listed firms have installed one or more additional anti-takeover measures. The most commonly used additional defense mechanisms in the Netherlands are depository receipts of shares or so-called "certificates" (34%), protective preferred shares (59%), and priority shares (45%), (Kabir et al., 1997):

One commonly used device for denying voting rights to common shareholders is to set up an administrative office that holds original shares and issues depository certificates instead. The administrative office is usually a friendly trust that is managed by members of the supervisory and/or management board and one or two outsiders to the firm. Certificate holders retain the

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[9] There were four exceptions at the Amsterdam stock exchange in 1999.

[10] Numbers are based on a sample of 137 Dutch industrial companies listed on the Amsterdam stock exchange in May 1996.

right to attend and speak at shareholders' meetings and they do receive dividends just like any other shareholder. However, they have no voting rights since these are transferred to the friendly trust. In most firms that use this defense mechanism, more than two-thirds of the share capital is certificated (De Jong et al., 2001).

A second commonly used takeover defense is the management board's right, with the prior permission by the shareholders meeting, to issue protective preferred shares to a friendly trust office with an obligation for that friendly trust to pay only 25% of the nominal capital. Preferred shares have voting rights and are restricted to a maximum of 50% or 100% of the current outstanding nominal capital. If a hostile takeover bid is lurking, the firm can use this right to issue (preferred) shares and obtain control over votes. Hence, the option to issue preferred shares leaves the allocation of control rights unaffected unless a hostile takeover bid takes place. Since the latter rarely occurs in the Netherlands, the right to issue preferred shares has practically no effect on the allocation of control rights (Van Oijen, 2000). As was mentioned above 59% of Dutch listed firms use this device, and quite drastically so: 26% of the firms have granted potential voting stakes of more than 25% of their nominal capital, whereas 19% have even granted more than 98% to the trust office (De Jong et al., 2001).

Special voting privileges are also granted through "priority shares" that give their holders special rights in specific situations such as approving mergers or proposing or preventing the appointment of particular new members of the management and supervisory boards. Priority shares are usually granted to a friendly foundation (Kabir et al, 1997).[11]

All in all, these takeover barriers prevent shareholders from obtaining any voting shares, or at least from obtaining more than 50% of the voting shares. In addition, proxy fights, for board seats or any other purpose, are non-existent. A market for corporate control is therefore virtually absent. Hence, most effects on stock prices and/or trading volumes that are generated by (forced) management turnover can be attributed to *internal* monitoring.

3.3 Shareholders passivism

Dutch shareholders do not only have virtually no voting rights, their presence and participation at the annual shareholders meeting is also weak. This is the conclusion from an analysis of the minutes of 245 general shareholders' meetings in the Netherlands in the period 1998-2002 by De Jong et al. (2004b). The analysis reveals that about 30% of the shareholders are present at the meeting. This is low in comparison to shareholder turnout in Anglo-Saxon countries, which is about 82% in the United States.

[11] The provisions of the Euronext Amsterdam stock exchange in 1997 allow a company to have two of the three takeover defenses (certificates, protective preferred shares and, priority shares) (De Jong et al., 2004a).

Typically, all proposals at the general meeting pass by a simple majority of votes (>50%), unless Dutch corporate law or the company's articles of association require a larger majority. According to the articles of association of most Dutch companies, shareholders that own more than 1% of the controlling shares can also submit proposals at the general meeting.[12] The analyses by De Jong et al. show that shareholders, whether regular or bundled in a trust office, don't use the right to submit proposals at all: Shareholders didn't sponsor any of the 1,583 proposals in their sample: They were all sponsored by the management. Moreover, only 9 out of the 1,583 proposals, i.e. less than one percent, are rejected due to shareholders voting against. Overall, their findings suggest that shareholders in the Netherlands have hardly any influence on management. Therefore, the by far most important ingredient of internal monitoring in the Netherlands is supervisory board monitoring.

4. Analysis of trading volumes

To define the contribution of an analysis of trading volumes for the assessment of the value relevance of events that generate both a real and an opposing information effect, we first require a definition of value relevance: Information disclosed by an event is value relevant if it updates investors' beliefs about the value of the firm. This definition is consistent with earlier studies (e.g. Shevlin, 1996; Heflin and Shaw, 2000)[13]:

The most commonly used statistic of value relevance of an event is the abnormal stock return at the unanticipated announcement of that event (e.g. Kallapur and Kwan, 2004; Espahbodi et al., 2002; Holthausen and Watts, 2001; Skinner, 1996; Amir and Lev, 1996). Most events, e.g. earnings announcements, profit warnings or share repurchases have only *one* effect on investors' beliefs. In such cases the analysis of stock returns is necessary and sufficient to evaluate value relevance.

However, if the information contained by an event is ambiguous and in particular if it simultaneously contains a real effect and an opposing information effect on investors' beliefs, the analysis of aggregate or average stock price effects is necessary but might not be sufficient to determine the value relevance of each effect separately. The analysis of trading volumes, in addition to stock price effects, is then useful since stock price effects do not capture aggregate movements of opposite signs.

[12] However, certain proposals can only be adopted upon a proposal of the management or the supervisory board. Examples are proposals to amend the articles of association, to dissolve the company, to issue shares or to grant rights to subscribe for shares, to limit or exclude any pre-emptive rights and to approve or authorize the management board to sell all or substantially all of the company's assets.

[13] Shevlin (1996) defines value relevance as usefulness or information content of (newly disclosed) data. Havlin and Shaw (2000) state that value-relevant information is information that is relevant for firm value.

There is a strand of literature showing that trading volumes indicate the intensity of disagreement amongst investors. These differences-of-opinion theories go back to Beaver (1968), who pointed out that price changes reflect the average change in traders' beliefs due to the announcement, whereas trading volume reflect traders' idiosyncratic reactions. Building on that basic idea, Kim and Verrecchia (1991) developed a model showing that "Trading volume reflects the sum of differences in traders' reactions; the change in price measures only the average reaction. As a result, volume is proportional both to price change and to the degree of differential precision." Hence, in the absence of aggregate abnormal returns, abnormal trading volume reflects the existence of disagreement amongst investors[14].

Therefore, not only the presence of positive abnormal returns but also a combination of *in*significant abnormal returns and positive abnormal trading volumes indicate that the real effect on investors' beliefs is positive. Hence, an analysis of trading volumes will show us whether the announcement of forced management departures is value relevant, even in the absence of aggregate abnormal returns: It indicates the positive real effect of monitoring by supervisory boards, albeit in combination with a negative information effect. In this manner, we can test the validity of Warner's explanation and assess the value relevance of the monitoring of top executives.

5. Data collection, definitions and methodology

Our sample consists of the 100 largest firms listed on the Amsterdam Stock Exchange (AEX) at yearend 1999. The sample represents more than 80% of the market value of the population of Dutch listed firms. All firms in the sample have been listed at least one year prior to yearend 1999 (to have sufficient stock market data). A number of firms merged, changed name, or was acquired or split up in the period of analysis. For these firms data were gathered for the original firms, too. Our final sample thus consists of more than 100 firms.

The events considered took place in the period January 1, 1991 until January 1, 2000. The search through annual reports of the 100 sample firms resulted in 86 firms that experienced at least one departure. The total number of executive departures within these 86 firms amounts to 343. The average annual departure rate is 34 percent.

5.1 Definitions

[14] Other studies that have shown in various ways and under various conditions that trading volumes is an indicator of the intensity of disagreement amongst investors include Harris and Raviv (1993), Kim and Verrecchia (1994), Kandel and Pearson (1995), Chen et al. (2001) and Hong and Stein (2003).

We define (top) *management* or *executives* as the set of individuals being (executive) member of the management board, including the CEO, excluding the supervisory board. [15] We identify executive departures by comparing the names of member of the management board in consecutive annual reports.

The *announcement date*, *d=0*, is defined as the trading day at which the departure is announced by the company, if the announcement, i.e. the press release, is disclosed before the closing of the stock market. Otherwise, the next trading day is labeled *d=0*. To identify the exact announcement date of each event, we searched *Het Financieele Dagblad*, the Dutch equivalent of the *Wall Street Journal*. To obtain the announcement date as exactly as possible, we searched in the relevant journal articles for exact descriptions of notification, such as "*yesterday was announced that …*", or "*a press release that appeared Monday after closure of the stock exchange*". We were able to identify exact announcement dates for 256 (75 percent) of the 343 management changes.[16]

Our definition of announcement date differs from the one that is often used in event studies. The usual definition is the day the announcement is published in the newspapers. Most studies do not verify the exact timing of the press release, in particular before or after the closing of the stock market. They therefore prudently have to use the two day window *d=[-1,0]* (in their definition) as the main event window.

Besides *d=0*, we shall utilize three alternative *event windows* over short time intervals:

- **Event window I** [*d = 0*]: Market efficiency and transparency would suggest this to be the relevant event window.
- **Event window II** [*d = -10, d = -1*]: This event window traces the possibility of information leakage to financial markets before press announcement.
- **Event window III** [*d = -1*]: By means of this event window we check the possibility of an information leakage of one day.
- **Event window IV** [*d = 0, d = 1*]: This event window considers the possibility of an indirect or a belated announcement effect on *d=1*, besides the direct effect on *d = 0*. Furthermore, if the information is released shortly before closure of the stock market, not all information might be fully incorporated in the stock price.

[15] Previous research indicates that non-CEOs are forced from office at a rate that is at least as large as that for CEOs and that non-CEO turnover is sensitive to a firm's stock return performance. However, the magnitude of this sensitivity is substantially smaller for non-CEOs than it is for CEOs (Fee and Hadlock, 2004).

[16] The 75 percent is similar to the 70 percent management changes for which Denis and Denis (1995) were able to identify announcement dates.

The *estimation window* covers the period of 200 transaction days prior to the start of the event window.

All kinds of *contaminating* information announced during any of the event windows were reason to eliminate an observation from the sample. Amongst them are earnings and dividend announcements, information releases on capital expenditure, security offerings, acquisition activity and various forecasts. Simultaneous announcement of successor appointments are not excluded from the sample at this stage. 29 out of the 256 departure events were mixed with another event at the same company during the event window. The remaining sample consists of 227 'clean' management departures.[17]

One of the potential flaws in existing studies is a truthful assessment of the real reason of a management departure (see Denis and Denis). Very often, especially in the case of *forced* departures, the real exit motive is not disclosed by the company, whereas the investor society probably also reacts to undisclosed but speculated motives.

We define departures as forced whenever the Financieele Dagblad states a departure to be due to: (i) conflicts with other members of the management board, for instance on strategic or management issues, (ii) conflicts with the supervisory board, that cause the supervisory board to initiate the executive's departure, (iii) bad performance or inadequate management, and (iv) a scandal, i.e. externally (often press) initiated "disgraceful" events (e.g. illegitimate insider trading).

We have moreover identified departures of which the business press and/or analyst reports speculated that they were forced, though the officially published motive was either "personal" or "not published". We were in a position to verify all such "rumors" through a well-informed corporate network of a top management consultancy firm. The resulting number of forced management departures is 41. This number includes a subcategory of eleven "allegedly" forced departures that will be earmarked accordingly. Table 2 documents the number of events per exit motive. The first column shows published exit motives, the second column the collective result of an extensive press and analyst reports search that has been "double checked" through our network. Similar to other studies retirement is the most commonly reported reason (38%).

-Insert Table 2 about here-

[17] Stock return data are available from Datastream for all management departures in the sample. Data on trading volumes are missing for 22 events.

Table 3 shows the relevant *sub-samples* for which we will calculate abnormal price effects and abnormal trading volumes effects during each of the event windows that we have defined. As benchmarks, we consider the samples of all (unanticipated) departures and departures due to health and death that are obviously not due to monitoring in any way. We further consider the sub-sample of 30 forced departures according to the published exit motive and we compare the results for this sample to the results for the larger sample of 41 forced departures, including those that were not officially published as such. Table 1 shows that the size of this sub-sample, though not large, is within the usual range.

The sub-sample of forced departures is further split according to two characteristics of the event: (i) whether the forced departure is announced simultaneously with the appointment of a successor and (ii) the function of the top executive (CEO or not). The first split is relevant for the identification of the contaminating effect of successor appointments (usually generating a positive announcement effect), the second for a comparison to the many studies that consider CEO's exclusively.

-Insert Table 3 -

The *abnormal return* ($AR_{i,t}$) on company stock of share *i* at day *t*, measuring the stock price effect of the event, is calculated as the realized ex post return ($R_{i,t}$) over the event window minus the expected return $E(R_{i,t})$ as defined by the estimated result without event: $AR_{i,t} = R_{i,t} - E(R_{i,t})$. We calculate $E(R_{i,t})$ by using two alternative approaches: the Constant Mean Returns model (CMR), and the OLS Market model (OLM). The CMR model assumes a constant expected return to share i, K_i, where $K_i = \frac{1}{N}\sum_{d=-N}^{-1} R_{i,t}$, and where the estimation window is measured over the interval [-*N*,……,-1]. The OLM model relates the returns of any given security (*i*) to the returns of the market portfolio (*m*) at time *t*. $E(R_{i,t}) = R_{m,t}$ where *m* defines the market portfolio considered.[18] Alpha's and beta's for each security *i* were obtained by estimating the following relation by means of OLS with daily returns over a period of 200 to 10 days prior to the announcement day 0: $R_{it} = \alpha_I + \beta_i R_{mt} + \varepsilon_{it}$ with $\varepsilon_{it} \sim N(0, \sigma_{\varepsilon t}^2)$

We obtain the following expressions for abnormal returns:

- CMR-model: $AR_{i,t} = R_{i,t} \; K_i$, where $K_i = \frac{1}{N}\sum_{d=-N}^{-1} R_{i,t}$ (1)

[18] Brown & Warner (1985) conclude that these models are effective ways to determine expected return when using daily data. MacKinlay (1997) concludes from a comparison of these one-factor models to multi-factor models that additional factors do not lead to significantly better estimation results.

- OLM-model: $AR_{i,t} = R_{i,t} - \hat{\alpha}_i - \hat{\beta}_i R_{mt}$ (2)

The design of the analysis of *abnormal turnover* effects is the same as for abnormal returns. However, the expected value of turnover can be directly compared to the average turnover over the estimation window. We formulate the Constant Mean Trading (CMT) volume model in analogy to the CMR model: $AV_{i,t} = V_{i,t} - \overline{V}_i$, where $V_{i,t}$ = the realized trading volume of company *i* during the event window, $\overline{V}_i$ = the average trading volume of company *i* during the estimation window, and AVi,t = the abnormal trading volume of company *i* explained by the event.

A rank test can be applied after AVi,t has been calculated for all *i* [1, …, N]. The t-test is omitted because the normality assumption of the distribution of daily trading volumes of an individual security is clearly violated: Volumes are non-negative by definition, with only a small downside deviation, coupled with the possibility of an infinite upside deviation given the null hypothesis of zero abnormal trading volumes.

The rank values solely enable the calculation of the significance of aggregate abnormal trading volumes, not of their values. To this end, standardized rank values (*Ts*) are calculated for all observations within each estimation window. This allows us to test the null hypothesis Ts = 0.5.

5.2 Governance related determinants of returns and trading volume effects of forced departures

As announced in section 3, we will analyze the effect on the relationship between forced departures and stock price and trading volume effects of several governance-related firm characteristics that are heterogeneous across Dutch firms and that potentially influence control. The characteristics considered for this sample of 41 firms are (i) Whether a firm had adopted at the time of the departure to (a) the mandatory structuur regime, (b) the voluntary structuur regime, or (c) no structuur regime; (ii) The number of priority shares issued; (iii) Whether the firm had certificated shares, and (iv) The ownership structure of the firm, characterized by the concentration of shareholders. We document the effect of the percentages held by the one and three largest shareholders. Since these percentages are highly correlated, we shall include only the latter one of those in the regression equations.[19] Note that we will not estimate the effect of preferred shares, the third commonly used takeover defense, since this defense measure does not change control in any way in the absence of a hostile takeover threat.

[19] We did also consider whether a major restructuring (M&A, divestiture, filing for bankruptcy etc.) took place within 3 months prior to the departure. However, this was the case for only two of the 41 forced departures, so we did not pursue including this variable in the regression equations.

Three quarter of the 41 firms had adopted the structuur regime at the time the executive was forced to leave office. For 13 firms this was obligatory, for the other 18 firms the structuur regime had been adopted voluntarily.[20] Moreover, 30% of the firms had issued one or more priority shares, whereas 40% traded certificates of shares (source: annual reports). Furthermore, there is also some variation in the dispersion of ownership across these firms: thirty percent of the firms had no block holders at all, where blocks are ownership stakes of at least five percent. For twenty percent of the firms the largest three shareholders held between five and ten percent of the shares, and for 30% the largest three shareholders own stakes between eleven and forty percent. The three largest stakeholders held a stake larger than 40% in twenty percent of the firms (source: annual reports).

6 Results and discussion

We first discuss the empirical results pertaining to price effects, both average and individual. This will allow a comparison of our results to previous studies. We will subsequently discuss trading volume effects to get a better and more profound understanding of the value relevance of internal monitoring. The final part in this section discusses the event- and governance-related determinants of cross-sectional heterogeneity in abnormal returns and trading volumes.

6.1.1 Average stock return effects

Table 4 shows that the average abnormal return pertaining to the announcement of an executive's departure is insignificant for most categories of departures in all event windows. The first columns of results are derived from the Constant Mean Returns (CMR) model, the second set from the OLS Market (OLM) model. The differences over estimation models are insignificant. Almost none of the sub-samples show estimates that are consistently (over estimation methods) significant. In general, forced executive departures show no significant average price effect. This is consistent with the general mixed findings of previous studies, in particular with Warner et. al (1988), Dherment-Ferere and Renneboog (2002), and Danisevska et al. (2004) and does not support value relevant internal monitoring.

One sub-sample, however, does show a significant average effect in the most relevant event window *d=0* (and also for *d=[0,1]*). When a dismissal is announced simultaneously with a successor appointment, a highly significant positive abnormal return of 5% is observed. This finding is consistent with several previous studies (cf. Warner et al., 1988; Kang and Shivdasani, 1996; Huson et al. 2001; Dherment-Ferere and Renneboog, 2002). It supports the notion by Furtado and Rozeff (1987) that most effects of dismissals that were established

[20] The information about legal form is not publicly available and was passed through for the relevant

previously are biased upwards due to the simultaneous and positively received announcement of a successor appointment. The sub-sample of CEO dismissals echoes this effect since CEO departures in particular are announced simultaneously with successor appointments (11 out of 15 cases): it shows a (marginally) significant positive price effect of almost 4% on average.

All average abnormal returns are insignificant during event windows *d=-1* and in the ten day period previous to announcement. This indicates that there is little leakage of top executive dismissal decisions. In addition, extending the *d=0* window with one extra day to capture possible lagged effects does not influence the effect at announcement, as can be expected in an efficient capital market.

- Insert Table 4 about here -

6.1.2. Individual stock price effects

Table 5 shows the percentages of events per sub-sample that generate significant abnormal returns, both positive and negative. It shows similar results for the market (MAR) and the constant mean returns (CMR) models. Again, each of the four panels refers to a specific event window, where the insignificant effects in all event windows, except for *d=0*, are consistent with an efficient capital market hypothesis as well as with the results in Table 4.

At the day of announcement, percentages in the range of 12 to 14 (depending on the definition of forced) of the number of forced turnovers generate significant positive and negative price effects. The fact that the number of individual positive and negative price effects is equal is consistent with, though not necessary for, the finding that average price effects are not significantly different from zero. In the first case, the real effect dominates, whereas in the second case the information effect dominates. Together, we classify these events with a significant individual price effect of any sign as "dominated events". Approximately a quarter (two times 12% to 14%) of the forced turnovers belong to the class of dominated events. This implies that the vast majority, around three quarter, of the dismissals does not show any significant price effect. Whether these events are value-relevant and fall in the category of, what we call, "disagreement events" cannot be concluded from the mere analysis of price effects. The analysis of the mean standardized squared prediction errors of the stock price movement during the event window, as performed by Warner et al. (1988) would not shed any light on the issue either. Our next step therefore will be a trading volumes analysis.

- Insert Table 5 about here -

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firm-year observations by Deminor, The Netherlands, a leading corporate governance consultancy.

6.2. Trading volume effects

We have not yet established, based on the analysis of average and individual price effects, if the majority of dismissals, i.e. 75%, that show insignificant individual price effects, are value-relevant and fall in the category of disagreement events. The analysis of trading volumes positions us to assess the value relevance of internal monitoring for this group: If internal monitoring were value relevant, that group should mainly consist of disagreement events where trading volumes are abnormally high at announcement, but where the real and information effect on stock prices ''cancel out''.

Table 6 shows the estimation results pertaining to the announcement effects of ranked trading volumes. The numbers show how highly the trading volume at announcement is ranked in comparison to the daily trading volumes of the same firm within the estimation window (200 trading days). The estimation window is partitioned into sub-periods of equal length, all equal to the length of the event window. In the case of $d=0$ this comes down to a ranking over 200 sub-periods of one day, whereas in the case of $d=-10, -1$ this comes down to 20 intervals of ten days. As twenty is a fairly small number, this event window is omitted from Table 6. The lower the rank, the higher is the trading volume during the event window in comparison to the intervals preceding the announcement. Trading volumes are defined to be abnormally high whenever the rank, Ts, is significantly smaller than 0.50.

All sub-samples show significant results at announcement (see Panel 1 $d=0$, but also Panel 2 $d=0,1$). The sub-sample of events that are unrelated to monitoring, i.e. death and health related turnover, forms the exception: these events do not generate significant abnormal trading volumes. Panels I and II in Table 6 show furthermore that trading volume effects are greater for forced departures ($Ts=0.29$) than for all unanticipated departures taken together ($Ts=0.41$). In the sub-samples for which we found (marginally) significant price effects, these volume effects are even larger: $T_S = 0.25$ for forced CEO dismissals and $Ts=0.19$ for simultaneous announcements of a dismissal and a successor appointment.

A ninth sub-sample is shown in Table 6: events that do not generate any significant individual price effect in the event window studied, i.e. the potential set of disagreement event. This sub-sample also shows significantly higher trading volumes in the event windows $d=0$ and $d=0,1$: Ts=0.38 and 0.33 respectively. We can therefore conclude that these events are value relevant indeed and are classified as disagreement events. Clearly, the lack of significant abnormal average stock prices is not caused by a lack of interest from investors in forced executive departures. The abnormally high trading volumes show that investors react strongly, but in different ways given the absence of average price effects. This finding supports the Warner hypothesis: dismissals generate a positive real effect and an opposing negative

information effect. Hence, the reaction of the Dutch stock market to forced executive departures reflects value relevant internal monitoring of top executives.

-Insert Table 6 about here-

6.3. Analysis of variance of stock price and trading volume effects

In the remainder of this section we will analyze whether particular event and governance-related firm characteristics of the firms involved do influence the stock price and trading volume effects. The combined results of average and individual price effects in the event window *d=0* for the (small) sub-samples 4 to 8 in Tables 4 and 5 already give insight into the effect of some event characteristics: The sub-sample of dismissals with simultaneous successor announcements shows the highest total percentage of significant individual price effects, 38.5% for the CMR model (for the OLM model the results are almost equal). The large majority of those are positive price effects (30.8%). This result is echoed by the analysis of the sub-sample of CEO dismissals, as was the case for average price effects: 27 percent of the events show a positive significant price effect, whereas only 7% show a negative effect. Conversely, for the sub-sample of forced departures without successor announcements, negative price effects dominate. In the next subsection we evaluate these tentative effects by means of regression analyses. We do also include the governance-related firm characteristics from subsection 5.2 into these analyses.

-Insert Table 7-

Table 7 shows the results from regression analyses of the price (measured in both the OLM and the CMR models) and volume effects in event window *d=0*. Panel *A* includes the event-related characteristics only, whereas Panel *B* shows the results from analyses that include the governance-related characteristics only. Panel *C* combines these.

Panel *A* confirms that the only event-related characteristic that significantly determines the extent of abnormal returns subsequent to the announcement of a forced departure is a simultaneous successor appointment: This increases the abnormal return on average by five percent points. This finding is supportive of our general conclusion based on the analyses of trading volumes that internal monitoring is value relevant. Obviously, monitoring by the supervisory board is more value relevant if the announcement of a dismissal is accompanied by a simultaneous successor announcement. Apparently, it signals that the supervisory board is 'in control': the dismissal is no surprise and there is no uncertainty about the person and timing of the succession.

Whether the dismissed board member is the CEO or not does not matter. An external successor announcement does not have a significantly different price effect from the

announcement of an internal successor. Dismissals that have been announced officially do not generate price effects that are significantly different from the price effects of departures that are allegedly forced. The third column of Panel A shows that none of the event-related characteristics affect trading volumes significantly.

Panel *B* shows the effect of governance-related characteristics (measured in the year of the executive dismissal) on abnormal stock returns and trading volume ranks. We evaluate the effect of the legal form adopted by the firm, i.e. structuur regime or not and, if so, whether that was mandatory or voluntary. The effects of these characterizations of the legal firm structure are insignificant. Furthermore, we evaluate the effect of two anti-takeover defenses[21]: (1) Whether certificates are traded and, (2) The issuing of priority shares. Panel B shows that the second takeover defense mechanism has a small but significantly negative effect on the abnormal returns subsequent to the dismissal of an executive: Apparently, the issuance of control rights to a friendly trust decreases the abnormal stock returns significantly which is consistent with less effective control. The final governance-related characteristic whose effect on abnormal stock returns and trading volumes we analyze is the concentration of share ownership. The table shows that share ownership concentration does not affect abnormal stock returns. The last column shows though that ownership concentration is the only significant determinant of trading volumes: The more concentrated ownership is, the higher the trading volume is (in accordance with a lower numbered ranking). If the ownership of shares by the three most prominent shareholders increases by one percent, the relative ranking of trading volumes increases by 0.58 percent. This suggests that larger shareholders react more actively (but not more uniformly!) to an executive dismissal than do smaller shareholders.

Panel *C* combines Panels *A* and *B* and shows the effect of the regressors from the above panels that were (marginally) significant in at least one case. The panel reinforces the separate effects shown in the other panels.

7 Conclusion

The theoretical value creating effect of internal monitoring in contrast to the inconclusive empirical results is puzzling. We have contributed to the understanding of this puzzle by addressing and testing three possible explanations and one empirical measurement issue.

We test the validity of Warner's (1988) explanation for the ambiguous effect of forced management departures on stock returns at announcement. Warner's explanation would imply that price effects underestimate the value relevance of internal monitoring. To test whether the often insignificant average abnormal stock returns indeed occur due to these two opposing and

value relevant signals, we analyze the effects on *trading volumes* of the announcement of an executive's dismissal, in addition to the effect on stock prices. Our finding supports Warner's explanation: insignificant average abnormal returns go along with abnormal and highly significant trading volumes. The combination of insignificant price effects and positive trading volume effects indicates that forced management departures are value relevant. However, investors disagree on whether the positive signal of monitoring by the news about the dismissal is most value relevant or, whether the signal of negative information revealed by the dismissal is more value relevant. We conclude that internal monitoring is more important than the usual price effects do suggest.

Secondly, we address an explanation for the variety of empirical results that was provided by Denis and Denis: All the stock price effects of forced departures that have been measured are the joint result of the activities of external and internal control markets. They conclude that it is not yet clear whether the internal control market would function effectively in isolation. We employ a dual approach for addressing this issue: First, we analyze the effect of forced departures in a country, i.e. the Netherlands, in which the external control market is very passive and in which the effect of internal monitoring can be measured almost in isolation. Second, we evaluate whether cross-sectional variations in abnormal stock returns and trading volumes can be explained by cross-sectional variations in firm-specific governance characteristics. We find that internal monitoring is value relevant and that the more the firm is shielded from outside interference by means of takeover defenses or dispersed ownership, the less value relevant control is. This would mean that most studies that include the interrelated effects of both internal and external monitoring tend to overestimate the effect of internal monitoring when attributing the entire effect to internal monitoring.

A third factor that we analyze that might explain the lack of consistent empirical results is the contaminating effect of successor announcements. Furtado and Rozeff suggested that the evidence for dismissals is highly tentative since the departure of a CEO and the appointment of his successor are often announced simultaneously. The latter tends to generate a positive effect. We distinguish between announcements of forced departures that simultaneously announce the appointment of a successor and forced departures without such a successor announcement. Our results show that the simultaneous announcement of a successor appointment indeed generates a significantly positive price effect of 5% on average, in contrast to all other announcements of forced departures. This finding reinforces our conclusion that internal monitoring is value relevant.

[21] The third commonly used takeover defense, preferred shares, has no effect on the division of control rights in the absence of the threat of a hostile takeover.

We moreover address a measurement issue: The empirical identification of forced executive turnover. This is relevant because the real exit motive, if it is forced, is often not truly disclosed and Denis and Denis have shown that the resulting stock price effects are highly sensitive to the definition of a forced departure. Besides studying the official press releases, we have also acknowledged the opinions and speculations of the popular business press, financial analysts and a group of strategy consultants that have worked personally with most of these boards (often before and after the dismissal). This enabled us to identify true exit motives in most cases.

Based on our results we can only draw conclusions with respect to the value relevance of the internal monitoring of top executives, not with respect to the effectiveness of monitoring by supervisory boards. We do observe that the disciplinary actions taken by supervisory boards are consistent with shareholder wealth maximization: The removal of a badly performing executive affects firm value positively. However, we have not analyzed the timeliness of such disciplinary actions and therefore we cannot judge whether the manager could or should have been removed earlier. Consequently, based on our analyses it is not possible to assess the ultimate *effectiveness* of internal monitoring.

We conclude that forced management departures are value relevant in the Dutch case, even in the absence of the simultaneous announcement of the appointment of a successor. Internal monitoring mechanisms are value relevant. This can be induced since an external market for corporate control and shareholder pressure are virtually absent. If volume effects were taken into account, a reconsideration of the mixed empirical results that have been established so far in most US studies would probably lead to a more positive conclusion about the value relevance of monitoring mechanisms in the US. However, whether this value relevance would then be due to internal or also to external monitoring would remain inconclusive. Probably a combination of both since our analysis of variance indicates that, if anything, internal and (weak forms of) external monitoring do reinforce each other.

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Table 1

Overview of empirical findings in studies that explicitly distinguish forced turnover

Study	I 1987	II 1988	III 1988	IV 1993	V 1995	VI 1996	VII 2001	VIII 2002	IX 2002	X 2004
Country studied	US	US	US	US	US	Japan	US	UK	France	Netherl.
Period studied (19..)	75-82	74-83	62-78	72-83	85-88	85-90	71-94[8]	90-95	88-92	93-99
Exec function's studied[1]	TOP	CEO	TOP	TOP	TOP	CEO	CEO	CEO	CEO	CEO
Price effect % -total sample- (t-value)	n.a.	0.35 (1.77)	0.31 (1.36)	0.24 (1.26)	0.63 (2.18)	0.52 (>1.96)	0.50 (>1.96)	-0.76 (>1.96)	n.a.	insign
Number of departures	n.a.	259	279	218	328	416	854	138	n.a.	80
Price effect (%) forced departures (t-value)	1.03[2] (2.18)	0.54 (2.29)	0.14 (<1.96)	-0.73 (1.96)	2.50 (2.88)	1.02 (>1.96)	2.49 (>1.96	-3.98 (2.93)	0.004 (0.46)	-0.54 (0.10)
Number of forced departures	63	153	56	39	69	81	127	24	37	32
Definition of forced departures	Dismissals	CEO's younger than 64	See [5]	Fired/ Involuntary loss of power	See [7]	CEO doesn't remain on the Board	See [9]	Press sugg. forced	Non-renewal of contract or conflict	See[5]
Event window[4]	[-20,3]	[-1,1][3]	[-1,0][6]	[-1,0]	[-1,0]	[-1,0]	[-1,0]	[0]	[-1,0][10]	[-1,1]

I Furtado and Rozeff, 1987; II Weisbach, 1988; III Warner et al, 1988 ; IV Mahajan and Lummer, 1993; V Denis and Denis, 1995; VI Kang and Shivdasani, 1996; VII Huson et al., 2001; VIII Dedman and Lin, 2002; IX Dherment-Ferere and Renneboog, 2002; X Danisevska et al., 2004.

[1]In general, the studies pertain either to CEO's only, or to all top executives, i.e. the President, Vice-president, CEO, and Chairman of the Board. The first case is denoted as "CEO", the second as "TOP"

[2]The effect is an insignificant percentage of 0.70 when they look at a clean sample (n=23).

[3]Table 8 in Weisbach shows effects in alternative event windows too. This one is selected because the effects are the largest and the most significant.

[4]Event windows are defined around the announcement day in the Wall Street Journal (WSJ) or any comparative outlet.

[5]A forced departure is defined as any departure for which the reason given by the WSJ is "Poor performance", "Pursue other interests", "Take a position outside the firm", "Policy interests", "Fired" or "No reason".

[6]Table 8 in their paper shows the results for various (also pre- and post-) announcement windows. There is some evidence of a stock price drop of 1.75% (t=2.69) for days 5 through 30.

[7]If WSJ reason is "Forced", "Conflict" or "Poor performance" or if the departing manager is younger than 64 and he has an external successor.

[8]The sample period is stratified in several sub-periods: 71-76; 77-82; 83-88; 89-94. It is interesting to note that the average effect over the total period as tabulated is the result of an increasing effect over time. The estimated price effects for the last period, 89-94, amount to 0.94% (n=229) for the total sample of departures in that period and to 4.00% (n=40) for the sample of forced departures in that period.

[9]Departures are classified as forced if (i) WSJ reports that the CEO was forced to leave or (2) The departing CEO is younger than 60 and does not leave for another employment or for health reasons.

[10]Various alternative (and less common) event windows are studied. One of them, [-10,10], generates a positive and significant stock price effect of 0.50% for forced departures.

Table 2

Sample frequencies of exit motives of departing executives (numbers of CEO's between brackets)

	Exit Motive	**Explanation**	**Official motive**	**Official/"alleged" motive**
	Sample		227 (86)	227 (86)
1	Pension	Natural unforced anticipated contract terminations	86 (47)	86 (47)
2	Health-related	Executive exit due to bad health conditions	12 (3)	12 (3)
3	Death	Unexpected death of executive	3 (0)	3 (0)
4	Internal change of function	Executive moves to comparable function in company	12 (2)	12 (2)
5	External change of function	Executive changes to (comparable) position in another company	30 (8)	30 (8)
6	Personal	For instance family, (r)emigration	36 (8)	30 (7)
7	Difference of opinion within management. board	Difference of opinion on strategic, policy or management issues	10 (0)	13 (1)
8	Difference of opinion with supervisory. board	Supervisory board initiates executive's exit	6 (5)	9 (6)
9	Bad performance	Executive is fired due to his accountability for bad performance or inadequate management.	11 (6)	16 (6)
10	Scandal	An externally (press) initiated event	3 (1)	3 (1)
11	Not published	No communication at all	18 (6)	13 (5)

Table 3

Sub-samples and their sizes

Sub-sample	**Exit motives***	**Number of executives**
1. Total sample		227
2. All unanticipated departures	Sample-1,11 (left)	123
3. Death or health related departures (benchmark)	2,3	15
4. Forced departures, published	7,8,9,10 (left)	30
5. Forced departures, published plus speculated	7,8,9,10 (right)	41
6. Forced departures, successor not announced	Part of 7,8,9,10 (right)	28
7. Forced departures, successor announced	Part of 7,8,9,10 (right)	13

*Numbers correspond to numbers in the first column of Table 2.

Table 4

Average stock price effects

Panel 1 Event window I: *[d =0]*		CMR- model		OLM-model	
Sample	N	AR (%)	t-value	AR (%)	t-value
1.Total sample	227	0.29	1.1	0.21	0.9
2. All unanticipated departures	123	0.43	1.1	0.23	0.6
3. Death or health related departures	15	1.31*	1.7	1.24	1.4
4. Forced departures, published plus speculated	41	1.07	1.1	0.87	1.0
5. Forced departures, published	30	1.69	1.2	1.00	0.8
6. Forced departures, successor not announced	28	-0.73	0.8	-0.89	1.1
7. Forced departures, successor announced	13	4.93**	2.3	4.67**	2.3
8. Forced CEO departures	14	3.93*	1.9	3.78*	1.9
Panel 2 Event window II: *[d=-10, d=-1]*		CMR- model		OLM-model	
Sample	N	AR (%)	t-value	AR (%)	t-value
1.Total sample	227	-0.65	1.5	-0.56	1.4
2. All unanticipated departures	123	-0.67	1.0	-0.65	1.1
3. Death or health related departures	15	-0.38*	1.7	-0.25	1.2
4. Forced departures, published plus speculated	41	-0.38	0.3	-0.89	0.9
5. Forced departures, published	30	-0.92	0.6	-0.89	0.8
6. Forced departures, successor not announced	28	-1.02	0.9	-1.27	1.4
7. Forced departures, successor announced	13	1.01	0.4	-0.06	0.2
8. Forced CEO departures	14	-0.14	0.1	-0.91	0.5
Panel 3 Event window III: *[d =-1]*		CMR- model		OLM-model	
Sample	N	AR (%)	t-value	AR (%)	t-value
1.Total sample	227	-0.03	0.3	0.01	0.1
2. All unanticipated departures	123	-0.03	0.2	-0.02	0.4
3. Death or health related departures	15	-0.55	0.9	-0.12	0.3
4. Forced departures, published plus speculated	41	0.30	1.3	0.14	0.8
5. Forced departures, published	30	0.53	1.5	0.35	1.2
6. Forced departures, successor not announced	28	0.58	1.6	0.13	0.5
7. Forced departures, successor announced	13	0.49	1.3	0.17	0.5
8. Forced CEO departures	14	0.44	1.5	0.51	1.4
Panel 4 Event window IV: *[d =0 to 1]*		CMR- model		OLM-model	
Sample	N	AR (%)	t-value	AR (%)	t-value
1.Total sample	227	0.40	1.3	0.26	1.0
2. All unanticipated departures	123	0.46	1.0	0.17	0.7
3. Death or health related departures	15	0.20	1.0	0.14	1.0
4. Forced departures, published plus speculated	41	0.97	0.9	0.75	0.9
5. Forced departures, published	30	1.40	1.0	0.66	0.6
6. Forced departures, successor not announced	28	-1.06	1.1	-1.31	1.5
7. Forced departures, successor announced	13	5.36***	2.5	5.17***	2.5
8. Forced CEO departures	14	3.93*	1.8	3.89*	1.9

The table shows the abnormal return (AR) within each sub-sample, and t-values. The first set of results has been achieved using the Constant Mean Returns (CMR) model, the second set using the OLS Market (OLM) model. * = significance level of 90%; ** = significance level of 95%; ***= significance level of 99%.

Table 5

Percentage of Events with Individual Abnormal Stock Returns

Panel 1 Event window I: *[d =0]*		CMR- model		OLM-model	
Sample	N	AR +	AR -	AR +	AR -
1.Total sample	227	10.6%	8.4%	11.9%	10.1%
2. All unanticipated departures	123	11.4%	10.6%	14.6%	12.2%
3. Death or health related departures	15	13.3%	0.0%	20.0%	0.0%
4. Forced departures, published plus speculated	41	12.2%	12.2%	12.2%	12.2%
5. Forced departures, published	30	14.3%	14.3%	14.3%	14.3%
6. Forced departures, successor not announced	28	3.6%	14.3%	7.1%	14.3%
7. Forced departures, successor announced	13	30.8%	7.7%	30.8%	7.7%
8. Forced CEO departures	14	26.7%	6.7%	26.7%	6.7%
Panel 2 Event window II: *[d =-10, -1]*		CMR- model		OLM-model	
Sample	N	AR +	AR -	AR +	AR -
1.Total sample	227	3.5%	7.0%	2.6%	4.4%
2. All unanticipated departures	123	4.9%	8.9%	4.1%	8.1%
3. Death or health related departures	15	6.7%	13.3%	0.0%	13.3%
4. Forced departures, published plus speculated	41	4.9%	7.3%	2.4%	7.3%
5. Forced departures, published	30	3.6%	0.0%	3.6%	0.0%
6. Forced departures, successor not announced	28	7.1%	7.1%	3.6%	7.1%
7. Forced departures, successor announced	13	0.0%	7.7%	0.0%	7.7%
8. Forced CEO departures	14	0.0%	6.7%	0.0%	6.7%
Panel 3 Event window III: *[d =-1]*		CMR- model		OLM-model	
Sample	N	AR +	AR -	AR +	AR -
1.Total sample	227	3.1%	3.1%	4.8%	2.2%
2. All unanticipated departures	123	2.4%	3.3%	4.9%	2.4%
3. Death or health related departures	15	6.7%	6.7%	6.7%	6.7%
4. Forced departures, published plus speculated	41	2.4%	0.0%	4.9%	0.0%
5. Forced departures, published	30	0.0%	0.0%	3.6%	0.0%
6. Forced departures, successor not announced	28	3.6%	0.0%	7.7%	0.0%
7. Forced departures, successor announced	13	0.0%	0.0%	7.7%	0.0%
8. Forced CEO departures	14	0.0%	0.0%	6.7%	0.0%
Panel 4 Event window IV: *[d =0,1]*		CMR- model		OLM-model	
Sample	N	AR +	AR -	AR +	AR -
1.Total sample	227	7.0%	6.2%	7.9%	6.2%
2. All unanticipated departures	123	9.8%	8.1%	9.8%	8.9%
3. Death or health related departures	15	6.7%	0.0%	6.7%	0.0%
4. Forced departures, published plus speculated	41	9.8%	9.8%	12.2%	12.2%
5. Forced departures, published	30	14.3%	14.3%	17.9%	14.3%
6. Forced departures, successor not announced	28	3.6%	14.3%	3.6%	17.9%
7. Forced departures, successor announced	13	23.1%	0.0%	30.8%	7.7%
8. Forced CEO departures	14	20.0%	6.7%	26.7%	6.7%

The table shows the percentage of abnormal returns (AR) within each sub-sample that are individually significantly positive and negative at the 5% level. The first set of results has been achieved using the Constant Mean Returns (CMR) model, the second set using the OLS Market model.

Table 6

Aggregate trading volume effects

Panel 1 Event window I: *[d=0]*	N	Ts	t-value
1.Total sample	205	0.38***	6.1
2. All unanticipated departures	109	0.41***	3.4
3. Death or health related departures	14	0.43	1.0
4. Forced departures, published plus speculated	36	0.29***	4.4
5. Forced departures, published	25	0.28**	2.3
6. Forced departures, successor not announced	25	0.33***	2.8
7. Forced departures, successor announced	11	0.19***	6.7
8. Forced CEO departures	13	0.25***	3.5
9. Forced departures where price effect is insignificant	26	0.39**	2.1
Panel 2 Event window I: *[d=-1]*	N	Ts	t-value
1.Total sample	205	0.48	1.2
2. All unanticipated departures	109	0.51	0.2
3. Death or health related departures	14	0.42	1.3
4. Forced departures, published plus speculated	36	0.49	0.2
5. Forced departures, published	25	0.55	0.8
6. Forced departures, successor not announced	25	0.48	0.3
7. Forced departures, successor announced	11	0.52	0.3
8. Forced CEO departures	13	0.56	0.9
9. Forced departures where price effect is insignificant	35	0.51	0.2
Panel 3 Event window IV: *[d=0 to d=1]*	N	Ts	t-value
1.Total sample	205	0.40***	4.6
2. All unanticipated departures	109	0.42***	2.8
3. Death or health related departures	14	0.47	0.4
4. Forced departures, published plus speculated	36	0.27***	4.9
5. Forced departures, published	25	0.26***	4.3
6. Forced departures, successor not announced	25	0.31***	3.2
7. Forced departures, successor announced	11	0.18***	4.9
8. Forced CEO departures	13	0.22***	4.1
9. Forced departures where price effect is insignificant.	28	0.33***	3.0

The table shows the average of the standardized values of abnormal turnover within each sub-sample. The lower Ts-values, below 0.5, the higher the standardized abnormal turnover ranks. The t-test tests whether the standardized rank is significantly different from 0.5. The number of observations per sub-sample is slightly lower than in Table 4 and 5 because, out of the total sample, 22 turnover values are unavailable. Event window d=-10 to d=-1 is omitted because this relatively long window didn't allow an accurate calculation of ranks. *= significance level of 90%; **= significance level of 95%; ***= significance level of 99%.

Table 7

Determinants of stock returns (MAR, CMR) and of trading volumes (CMT) at d=0 for the sample of dismissals OLS-results

Panel A: event-characteristics	**Coefficient (absolute t-value)**		
Determinant	**OLM[(a)]**	**CMR[(b)]**	**CMT[(c)]**
Dummy: successor announced simultaneously	.0526** (2.04)	.0564** (2.00)	-.1996 (1.46)
Dummy: CEO dismissal	.0178 (0.70)	.0142 (0.52)	.0266 (0.20)
Dummy: external successor announced simultaneously	-.0197 (0.43)	-.0223 (0.44)	.0102 (0.13)
Dummy: exit motive "forced" speculated	-.0055 (0.28)	-.0134 (0.63)	-.0037 (0.03)
Constant	-.0089 (0.66)	-.0045 (0.31)	.3291*** (4.49)
Sample size[(1)]	41	41	36
Adjusted R-squared	0.14	0.12	0.01

Panel B: governance-characteristics	**Coefficient (absolute t-value)**		
Determinant	**OLM[(a)]**	**CMR[(b)]**	**CMT[(c)]**
Dummy: Structuur regime	0.0152 (0.54)	0.0160 (0.54)	0.2179* (1.90)
Dummy: Structuur regime mandatory	-.0195 (0.78)	-.0166 (0.63)	-.1310 (1.17)
Dummy: Certificates traded	-.0263 (1.22)	-0.0214 (0.94)	0.0417 (0.42)
Priority shares issued	-.0002** (2.38)	-.0002** (2.41)	-.0006 (1.53)
Proportion of shares held by top 3 shareholders	0.0192 (0.45)	0.0190 (0.42)	-.5732*** (2.90)
Constant	0.0220 (1.02)	0.0184 (0.81)	0.2437** (2.70)
Sample size[(1)]	36	36	31
Adjusted R-squared	0.05	0.04	0.21

Panel C Characteristics combined[(2)]	**Coefficient (absolute t-value)**		
Determinant	**OLM[(a)]**	**CMR[(b)]**	**CMT[(c)]**
Dummy: successor announced simultaneously	0.0514** (2.68)	0.0533** (2.58)	-.089 (0.90)
Dummy: Structuur regime	0.0123 (0.57)	0.0181 (0.78)	0.159 (1.63)
Priority shares issued	-.0002* (1.96)	-.0002** (2.18)	-.0006 (1.66)
Proportion of shares held by top 3 shareholders	0.0073 (0.19)	0.0049 (0.12)	-.581*** (3.10)
Constant	-.0133 (0.68)	-.0157 (0.74)	.306*** (3.45)
Sample size[(1)]	39	39	34
Adjusted R-squared	0.20	0.20	0.22

(a) OLM=OLS Market model. Coefficients*100 indicate the effect of the regressors on the percentage change of the stock price (relative to what would be expected based on the stock market development) subsequent to the announcement of the executive dismissal.
(b) CMR=Constant Market Returns model. Coefficients*100 indicate the effect of the regressors on the percentage change of the stock price (relative to what would be expected based on the recent history of the specific stock) subsequent to the announcement of the executive dismissal.
(c) CMT=Constant Market Trading Volumes Model. Coefficients indicate the effect of the regressors on the change in the standardized ranking of the stock volume (relative to the trading volumes in recent history, i.e. last 200 days of the specific stock) subsequent to the announcement of the executive dismissal. A coefficient of 0.01 indicates that a change of 1 unit in the regressor leads to a one percent lower ranking of the trading volume, ceteris paribus.
* significance level of 90%; ** = significance level of 95%; ***= significance level of 99%.
[(1)] For 5 out of the 41 firms data about trading volumes are unavailable. For two firms, data about legal structure are unavailable. For three firms it is unknown whether certificates are traded.
[(2)]Significant characteristics in any of the regression equations in Panel A or B are included in Panel C.