# BOARD DIVERSITY IN THE PERSPECTIVE OF FINANCIAL DISTRESS: EMPIRICAL EVIDENCE FROM THE NETHERLANDS

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**Abstract**

This paper analyses the relationship between board diversity (in gender and in nationality) and financial distress. A summary of the theory behind board diversity precedes an overview of the empirical evidence on the relationship between diversity and company performance. The paper presents empirical research on the relationship between a negative performance measure, financial distress, and diversity on the board. The results show a positive relationship between the presence of foreign non-executive directors and financial distress. It is suggested that this is caused by negative communication and misunderstandings. No relationship is found between the gender of a director and financial distress. On a micro-level, the data do not show evidence for the glass cliff hypothesis.

**Keywords:** financial distress, board diversity, board performance

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> *Diversity appears to be a double-edged sword, increasing the opportunity for creativity as well as the likelihood that group members will be dissatisfied and fail to identify with the group. (Milliken and Martins, 1996)*

## Introduction

This paper was triggered by a press release on a study carried out by Catalyst[i], a non-profit research organization founded to promote women in the business world. The study found that companies with more women board directors experience higher financial performance. Catalyst (2007a) reported that *Fortune*-500 companies with the highest percentage of women board directors (WBD) outperformed those with the least number of WBDs on *return on equity* (by 53%), *return on sales* (by 42%) and *return on invested capital* (by 66%). This coincides with previous Catalyst (2004) research and findings of Carter, Simkins and Simpson (2003, p. 50). Although Catalyst (2007a, p. 1) explicitly warns that correlation does not prove or imply causation, a growing presence of women in boardroom positions after the publication of such research would seem logical. This has not occurred, however. The Catalyst (2007) census shows that women held 14.8% of all *Fortune*-500 board seats in 2007 (compared to 14.6% in 2006), while this was 16.4% in 2005 and 15.7% in 2002. There seems to be some kind of standstill or even a decline in the female representation on the board. Farrell and Hersch (2005, p. 104) speculate that once the external (or internal) pressure to create greater diversity is (minimally) met, firms no longer actively seek greater diversity.

The presence of female non-executive directors (NEDs) on the board is only one aspect of the broader issue of board diversity. Pelled (1996, p. 617) developed a typology of demographic diversity variables along two dimensions: job-relatedness and visibility. Diversity in experience, network and dependence lacks visibility, but may be highly job-related. This paper is about two visible diversity variables, gender and nationality. Visible diversity is of a relations-oriented nature (Ruigrok, Peck and Tacheva, 2007, p. 546). On the relevancy of this diversity as a resource for the company, a host of recent literature has been published (Carter, Simkins and Simpson (2003), Catalyst (2004), Ruigrok, Peck and Tacheva (2007), Francoeur, Labelle and Sinclair-Desgagné (2007). This in itself shows that gender and nationality have become an important dimension of board diversity. The *aim* of this paper is to clarify the

relationship between these highly visible and relations-oriented diversity variables and financial distress. The subject of this paper is as yet an unexplored domain. In attempting to discover whether gender- or nationality diversity is a resource for a company in times of financial distress, this paper adds to the literature, as it is the first to examine the relationship between (gender- and nationality-) diversity and financial distress.

Female representation on boards in the Netherlands is lower than in the US. The US features a one-tier system (where the executive and the non-executive directors (NEDs) are united in one board); in the Netherlands, the management board and the supervisory board are two separate corporate bodies. In 2007, only seven out of the 100 most powerful NEDs of Dutch companies were women (Hezewijk and van Zanten, 2008). Within the 250 largest Dutch companies, 7.1% of NEDs and 5.8% of the executive directors in 2006 was female (SCP, 2006, p. 213). In our cross-section analysis for the period 1993-2003, a mere 1.03% of all executive directors and 3.19% of all NEDs for *listed* companies in the Netherlands was female (a similar percentage is reported by Ruigrok, Peck and Tacheva (2007, p 551) for Switzerland in 2003). Internationalization of the Dutch board is more profound. The nationality variable in our cross-section analysis shows that 17.3% of all NEDs (compared to Switzerland, 2003: 22.10%) and 12.5% of all executive directors were of non-Dutch nationality.

This paper proceeds as follows. The next section reviews the theory and evidence on the relationship between diversity and company performance. Section three describes the data of this study, section four the method, and section five presents and discusses the results. Section six concludes.

## Theory and empirical evidence

Diversity could be defined as broad as Pelled (1996, p. 616) as diversity with respect to demographic attributes, or as narrow as Carter, Simkins and Simpson (2003, p. 36) as the percentage of women or minorities on the board of directors. In this paper diversity is restricted to gender- and nationality diversity as in Ruigrok, Peck and Tacheva (2007).

The agency theory favors board diversity as it believes that a greater diversity of opinions and interests on the board should keep managerial discretion within proper bounds (Francoeur, Labelle and Sinclair-Desgagné, 2007). For Pfeffer and Salancik (1978, p. 2), the key to organizational survival is the ability to acquire and maintain resources. Hillman and Dalziel (2003) reconcile Pfeffer and Salancik's resource-dependency theory and the agency theory by pointing out that while it is important to have external, independent NEDs on the board (which follows from the agency theory), these NEDs can be effective only if they are resourceful for the company. The same argument goes for diversity. Burgess and Tharenou (2002, p. 40) and Carter, Simkins and Simpson (2003, p. 36) give a number of reasons as to why women are needed on company boards. They mention (a) increased diversity of opinions in the boardroom, (b) additional strategic input, (c) influence on decision making and leadership styles, (d) supply of female role models and mentors, (e) improvement of company image, (f) women's capabilities and availability, (g) insufficient competent male directors, and (h) ensuring "better" boardroom behavior. All of these reasons presuppose that the female or foreign NED offers adequate resources. Left alone the resources, a female or a foreigner may bring *additionally* different perspectives, values, norms and understanding to the board (Ruigrok, Peck and Tacheva, 2007, p. 547). Therefore, a greater diversity is generally believed to be good for the company (Carter, Simkins and Simpson, 2003, p. 36).

*Company performance* can be measured in a number of ways. Catalyst (2007) uses three measures: return on equity, return on sales and return on invested capital. Francoeur, Labelle and Sinclair-Desgagné (2007), examining the relationship between gender diversity in corporate boards and firm performance, take the level of risk into consideration. Other approaches are conceivable, however. Porter (1991, p. 95) suggests that the central question in strategy concerns not only the reasons why firms succeed but also the reasons why they fail. The incidence of bankruptcy may therefore be used as an alternative corporate performance measure (Finegold, Benson and Hecht, 2007, p. 865, 868). Corporate bankruptcy is a unique context in which the contribution of board composition to corporate performance can be effectively examined (Daily and Dalton, 1994, p. 1606). It is therefore important to expand our knowledge of the role that boards of directors play in failed firms, due to the influence that directors may exert over firm processes and outcomes (Daily, 1995, p. 1042). In a way, bankruptcy can be seen as the ultimate performance test, as every director has a strong reputational incentive to avoid it. This paper explores whether gender- and nationality diversity form an extra resource for this incentive.

Based on the findings of Carter, Simkins and Simpson (2003) and Catalyst (2007a), who report a positive relationship between female presence on the board and firm performance, one might expect a negative relationship between female presence and financial distress.

*Hypothesis 1:*

*there is a negative relationship between gender diversity on the board and financial distress of a company.*

This hypothesis will be tested for the absolute number of diverse NEDS (Catalyst, 2007a) as well as for the percentage of diverse NEDs (Carter, Simkins and Simpson, 2003).

As for the nationality diversity component, literature is less unequivocal. Ruigrok, Peck and Tacheva (2007, p. 551) report that foreign NEDs are likely to be more independent, which from the viewpoint of the agency theory relates to better monitoring and presumably to a lower chance on financial distress. But Milliken and Martins (1996, p. 415) describe negative effects of diversity on identification with the group and job satisfaction, as well as less frequent and more formal communication between the group members (p. 417). Would the negative or the positive effect of diversity dominate? The formulation of a neutral hypothesis seems to be the best solution.

*Hypothesis 2:*

*there is no relationship between nationality diversity on the board and financial distress of a company.*

Whilst the previous hypotheses are on the diversity of company boards, a diversity analysis of NEDs may be useful as well. Questions as: what type of NEDs has a seat in a financially distressed company, and how do 'diverse NEDs' differ in other characteristics than gender and nationality, are to be answered. Finally, the specific position of women in distressed companies will be explored through the Ryan and Haslam (2005) *glass cliff* hypothesis. They found that women are particularly likely to be placed in positions of leadership in circumstances of general financial downturn and downturn in company performance. In their view, these women seem, effectively, to have been placed on the top of a 'glass cliff', in the sense that their leadership appointments are made in problematic organizational circumstances and hence are more precarious. This glass cliff hypothesis was tested by Adams, Gupta and Leeth (2007), who found that corporate performance preceding CEO appointments tends to favor females. Their conclusion: there does not seem to be a glass cliff facing female CEOs at US firms. However, Francoeur, Labelle and Sinclair-Desgagné (2007, p. 11) speculate that this glass cliff hypothesis might be relevant for their work on Canadian data (1990-2004). While they find that having more women on the board does not seem to generate significant excess returns, they conclude that, given the glass cliff hypothesis, this might even mean that female directors outperform their male counterparts because, compared to men, women are given less promising positions from which to start. The third hypothesis to be tested in this paper is in fact formulated by Ryan and Haslam (2005, p. 83 and 87), and reads as follows:

*Hypothesis 3:*

*women are over-represented in precarious leadership positions.*

The hypotheses 1 and 2 are formulated on a board level. Hypothesis 3 studies the relationship between female directors and financial distress on an individual level.

## Data

The period 1993-2003 offered a great opportunity to test the first and second hypothesis, as it showed a remarkable upswing and downturn of the economy. After the millennium change and the burst of the internet bubble, a number of Dutch listed companies went bankrupt. It is this unique relatively high number of bankruptcies, that made this research on characteristics of bankrupt listed companies and its comparison with control companies possible.

Of all companies listed on the Amsterdam Stock Exchange during three or more years in the period 1993-2003, 58 became financially distressed. Of these, 34 were cases of bankruptcy, suspension of payments or (qualified for) suspension of listing. As it was impossible to retrieve data for four of them, thirty bankrupt companies remained in the distressed sample. In 24 other cases, an unintended[ii] period (at least three sequential years) of losses was found. In accordance with Hill, Perry and Andes (1996), a company with such a record is considered for the purposes of this study also to be in financial distress. Of these 24 cases, two companies were excluded as they did not meet the additional requirement of having been listed at least three years before getting into distress. This requirement was formulated in order to have adequately functioning start-ups in the sample. Consequently, the sample consists of 30 bankrupt and 22 otherwise-distressed companies. The control sample consists of 167 companies that were listed during five or more years during the period 1993-2003. As one of these companies did not have a supervisory board (which is not legally required for listed companies as such), all results related to supervisory boards count 166 observations. Companies from the control sample were randomly and proportionally assigned to the years wherein companies from the financially distressed sample became

financially distressed. Data were retrieved for t = -2 through t = -3 (t = 0 is the year wherein the financial distress actually occurs). Integration of this delay is intended to ban, or at least diminish, the effect of reversed causation. D'Aveni (1990) for example found that, if results decline, firms lose prestigious board members in the two years prior to filing. Moreover, for t = -1 bankrupt companies have seldom disclosed their annual accounts. Financial data is taken from Thomson Worldscope, data on NEDs and on industry is (in order of preference) retrieved from the annual reports, the publication *Bestuurders en commissarissen*, the Trade register, newspapers and (in the last resort) from reliable internet sources.

As for the third hypothesis, the appointment dates of female executive directors appointed in the (arbitrarily – and on availability of data - chosen) period 1999-2007 were found in annual reports. The stock prices of the listed companies concerned were retrieved from Thomson Worldscope.

## Method

As the dependent variable, financial distress, is of a binary nature, logit analysis is applied in this study. It requires less preconditions (e.g. normality of variables) than other methods, for example multiple discriminant analysis (Ohlson, 1980).

To test the first and second hypothesis it is necessary to tie in with previous bankruptcy prediction literature as the present study can be considered as an extension based on the diversity issue. Daily (1995, p. 1047) argues that effectively controlling for financial considerations may be particularly relevant for bankruptcy research. Ohlson (1980, p. 123) uses a ratio-based logit analysis on bankruptcy to show that four factors are statistically significant— those related to size, leverage, performance and liquidity. Sixteen years later, Hill, Perry and Andes (1996, p. 63) still use identical variables, generally called *financial control variables*. This study measures the size of the company by LNSIZE (the logarithm of total assets), the leverage by DEBTTA (total debt divided by total assets), the performance by NICE (net income divided by common equity) and the cash flow by CASHTA (cash flow divided by total assets). *Industry differences* are accounted for as well, in order to correct for systematically higher financial distress in certain industries. The only classification that turned out to be statistically significant, is a classification into old- and new-economy companies (ONECON). The applied dummy variable is assigned 0 for old-economy companies and 1 for new-economy companies, the latter defined as companies with more than 50% of turnover in t = -2 in trade, production or service-delivery of ICT-related hardware and software (communication-technology thus included).The significance of ONECON is no surprise, as the burst of the internet bubble was one of the commonly presented causes for a number of these bankruptcies.

*Gender* is specified in three ways. The variable GENED# specifies the number of female executive directors, GENND# the number of female NEDs on the board and GENTD# the number of female directors in management and supervisory board taken together. *Nationality* is measured by the variables FORED# (number of foreign executive directors), FORND# (number of foreign NEDs) and FORTD# (total number of foreign directors). *Diversity*, defined as the presence of women and/or foreigners is accounted for in the variables DIVED# (number of diverse executive directors), DIVND# (number of diverse NEDs) and DIVTD# (total number of foreign and/or female directors of the company). In the latter variables double counts are avoided; a female and foreign director is only once diverse as it is the different view they carry with them, that matters in this paper.

As for the third hypothesis, the period 1999-2007 showed six appointments of female executive directors of listed companies for which data is available. The movements of the stock prices of these companies around the appointment date are compared with the movements around the appointment of six randomly chosen appointments of men. This study chooses to consider appointments of executive directors and not of NEDs, as in the Dutch context the appointment of an executive director is generally felt of more importance for the stock prices that that of a NED.

## Results

## The performance hypotheses

With respect to the financial control and industry variables, the analysis of the data given in table 1 shows that financially distressed companies are generally smaller (lower LNSIZE), and report a lower standardized income (NICE) and a lower standardized cashflow (CASHTA) than control companies. Financially distressed companies are higher leveraged (higher DEBTTA), and are often new-economy companies (ONECON). The mean and median of all of these variables differ significantly between the samples on a 1% level of reliability. As the number of foreign and female executive directors and NEDs

is not distributed normally, only the z-score for these variables is reported. The number of foreigners on the supervisory board differs statistically significant on a 5% level of reliability, whilst the total number of foreign directors, the diversity on the supervisory board and the diversity on the management board appears statistically significantly different on a 10% level of reliability. The other variables do not show statistically significant differences.

**Table 1.** An analysis of the financial control variables, the industry classification, the board size, the gender-, nationality- and total diversity (in numbers), for the control sample and the financially distressed sample of listed Dutch companies, 1993-2003, based on panel data for t = -2 and t = -3 before the financial distress event occurred.

| | control sample | | | financially distressed sample | | | | |
|---|---|---|---|---|---|---|---|---|
| independent variables t = -2,-3 | number of companies | min (max) [total] | mean (median) | number of companies | min (max) [total] | mean (median) | difference of mean (median) | absolute t-value (absolute z-value) |
| LNSIZE | 334 | 1.03 | 5.76 | 104 | 0.32 | 4.60 | 1.16 | 4.79*** |
| | | (13.20) | (5.57) | | (9.38) | (4.31) | (1.26) | (4.83)*** |
| DEBTTA | 334 | 0.00 | 0.23 | 104 | 0.00 | 0.30 | -0.07 | 3.14*** |
| | | (0.76) | (0.22) | | (0.85) | (0.30) | (-0.08) | (3.02)*** |
| NICE | 334 | -1.53 | 0.21 | 104 | -16.48 | -0.68 | 0.89 | 3.69*** |
| | | (1.88) | (0.16) | | (0.88) | (-0.07) | (0.23) | (9.63)*** |
| CASHTA | 310 | -0.16 | 0.12 | 104 | -2.95 | -0.05 | 0.17 | 4.27*** |
| | | 0.36 | (0.11) | | 0.30 | (0.03) | (0.08) | (8.88)*** |
| ONECON | 334 | 0 | 0.10 | 104 | 0 | 0.42 | -0.32 | 6.25*** |
| | | 1 | (0) | | 1 | (0) | (0) | (7.47)*** |
| *size of the board* | | | | | | | | |
| ED# | 334 | [1055] | 3.158 | 104 | [300] | 2.884 | 0.274 | 1.41 |
| NED# | 334 | [1718] | 5.175 | 104 | [443] | 4.260 | 0.915 | 4.09*** |
| *gender* | | | | | | | | |
| GENED# | 334 | [12] | 0.036 | 104 | [2] | 0.019 | 0.017 | (0.84) |
| GENND# | 332 | [55] | 0.166 | 104 | [14] | 0.135 | 0.031 | (0.74) |
| GENTD# | 334 | [67] | 0.201 | 104 | [16] | 0.154 | 0.047 | (0.94) |
| *nationality* | | | | | | | | |
| FORED# | 334 | [123] | 0.368 | 104 | [57] | 0.548 | -0.180 | (1.54) |
| FORND# | 332 | [264] | 0.795 | 104 | [106] | 1.019 | -0.224 | (2.08)** |
| FORTD# | 334 | [387] | 1.159 | 104 | [163] | 1.567 | -0.408 | (1.85)* |
| *diversity* | | | | | | | | |
| DIVED# | 334 | [133] | 0.398 | 104 | [59] | 0.567 | -0.169 | (1.29) |
| DIVND# | 332 | [305] | 0.919 | 104 | [114] | 1.096 | -0.177 | (1.79)* |
| DIVTD# | 334 | [438] | 1.311 | 104 | [173] | 1.663 | -0.352 | (1.64)* |

***, ** and * indicate statistical significance at a 1%, 5% and 10% level, respectively. Two tails tested.
Means for the board size and the diversity variables are given on a three digit level in order to avoid the loss of relevant information.

| | |
|---|---|
| LNSIZE | the natural logarithm of total assets in million Euros |
| DEBTTA | total debt divided by total assets |
| NICE | net income divided by common equity |
| CASHTA | cashflow from operations divided by total assets |
| ONECON | dummy, 1 for new-economy (ICT related) companies (>50% of turnover in hardware or software related ICT-products) |
| ED# | number of executive directors (= size of the management board) |
| NED# | number of non-executive directors (= size of the supervisory board) |
| GENED# | the number of female executive directors |
| GENND# | the number of female NEDs |
| GENTD# | the total number of female directors |
| FORED# | the number of foreign executive directors |
| FORND# | the number of foreign NEDs |
| FORTD# | the total number of foreign directors |
| DIVED# | the number of female and/or foreign directors |
| DIVND# | the number of female and/or foreign NEDs |
| DIVTD# | the total number of female and/or foreign directors. |

As the supervisory board (NED#) of the control group is significantly larger by one person than the supervisory board of a financially distressed company (table 1), one might expect that a percentage approach (as applied in Carter, Simkins and Simpson (2003) would show significant differences as well. Table 2 shows that the diversity *percentages* do indeed differ significantly, FORND% (percentage of foreign NEDs in the board) and DIVND% (percentage of female and/or foreign NEDs in the board) on a 1% level of reliability, and FORTD% (percentage of foreign executives and NEDs in the management and supervisory board) and DIVTD% (percentage of female and/or foreign executive directors and NEDs on the management and supervisory board) on a 5% level of reliability.

**Table 2.** An analysis of the gender-, nationality- and total diversity (in percentages of the management board, of the supervisory board and of all directors) for the control sample and the financially distressed sample of listed Dutch companies, 1993-2003, based on panel data for t = -2 and t = -3 before the financial distress event occurred.

| independent variables t = -2,-3 | control sample | | | financially distressed sample | | | difference of mean (median) | absolute t-value (absolute z-value) |
|---|---|---|---|---|---|---|---|---|
| | number of companies | min (max) | mean (median) | number of companies | min (max) | mean (median) | | |
| *gender* | | | | | | | | |
| GENED% | 334 | 0.00 | 1.59 | 104 | 0.00 | 0.35 | 1.24 | 2.11** |
| | | (100.00) | (0.00) | | (20.00) | (0.00) | (0.00) | (0.88) |
| GENND% | 332 | 0.00 | 2.52 | 104 | 0.00 | 3.49 | -0.97 | 0.88 |
| | | (50.00) | (0.00) | | (50.00) | (0.00) | (0.00) | (0.46) |
| GENTD% | 334 | 00.0 | 2.25 | 104 | 0.00 | 1.90 | 0.35 | 0.57 |
| | | (33.33) | (0.00) | | (18.18) | (0.00) | (0.00) | (0.76) |
| *nationality* | | | | | | | | |
| FORED% | 334 | 0.00 | 7.96 | 104 | 0.00 | 15.34 | -7.38 | 2.34** |
| | | (100.00) | (0.00) | | (100.00) | (0.00) | (0.00) | (1.81)* |
| FORND% | 332 | 0.00 | 12.48 | 104 | 0.00 | 20.33 | -7.85 | 2.75*** |
| | | (100.00) | (0.00) | | (100.00) | (0.00) | (0.00) | (2.76)*** |
| FORTD% | 334 | 0.00 | 11.19 | 104 | 0.00 | 17.99 | -6.80 | 2.59** |
| | | (100.00) | (0.00) | | (88.89) | (0.00) | (0.00) | (2.36)** |
| *diversity* | | | | | | | | |
| DIVED% | 334 | 0.00 | 9.40 | 104 | 0.00 | 15.69 | -6.29 | 1.98** |
| | | (100.00) | (0.00) | | (100.00) | (0.00) | (0.00) | (1.46) |
| DIVND% | 332 | 0.00 | 14.37 | 104 | 0.00 | 22.51 | -8.14 | 2.87*** |
| | | (100.00) | (0.00) | | (100.00) | (12.50) | (0.00) | (2.85)*** |
| DIVTD% | 334 | 0.00 | 12.92 | 104 | 0.00 | 19.33 | -6.41 | 2.49** |
| | | (100.00) | (0.00) | | (88.89) | (10.56) | (0.00) | (2.31)** |

***, ** and * indicate statistical significance at a 1%, 5% and 10% level, respectively. Two tailed tested.
The variables are the percentages of the variables defined below table 1.

The statistics in table 2 on the executive director related variables (GENED%, FORED% and DIVED%) should be interpreted with caution, as, due to non-normality of their distribution, only the z-values are of importance. Even so, FORED% differs statistically significant on a 10% level, indicating a higher percentage of foreign executive directors on boards of financially distressed firms. Interestingly, the correlation table (table 3) shows a statistically significant positive correlation at the 1% level between the size of the company (LNSIZE) and all diversity variables in numbers. The correlation table for the diversity variables in percentages shows similar results (not included in this paper). Larger companies have larger boards and larger boards are more diverse. Carter, Simkins and Simpson (2003) report similar findings for the US.

**Table 3.** Correlation table (Pearson) of the financial control variables, the industry classification, and the gender- nationality and diversity related variables (in numbers) of listed Dutch companies, 1993-2003, based on panel data for t = -2 and t = -3 before the financial distress event occurred.

| | LNSIZE | DEBTTA | NICE | CASHTA | ONECON | ED# | NED# | GENED# | GENND# | GENTD# | FORED# | FORND# | FORTD# | DIVED# | DIVND# |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LNSIZE | 1 | | | | | | | | | | | | | | |
| DEBTTA | 0.18** | 1 | | | | | | | | | | | | | |
| NICE | 0.06 | -0.26** | 1 | | | | | | | | | | | | |
| CASHTA | 0.14** | -0.18** | 0.55** | 1 | | | | | | | | | | | |
| ONECON | -0.16** | -0.06 | -0.23** | -0.21** | 1 | | | | | | | | | | |
| ED# | 0.58** | 0.05 | -0.04 | 0.03 | 0.06 | 1 | | | | | | | | | |
| NED# | 0.74** | 0.08 | 0.05 | 0.07 | -0.20** | 0.52** | 1 | | | | | | | | |
| GENED# | -0.09 | -0.11* | 0.03 | 0.04 | 0.05 | 0.027615 | -0.10* | 1 | | | | | | | |
| GENND# | 0.31** | 0.00 | -0.10* | 0.01 | -0.03 | 0.23** | 0.39** | -0.01 | 1 | | | | | | |
| GENTD# | 0.26** | -0.04 | -0.09 | 0.03 | -0.01 | 0.23** | 0.32** | 0.38** | 0.92** | 1 | | | | | |
| FORED# | 0.33** | 0.07 | -0.19** | -0.11* | 0.13** | 0.46** | 0.21** | 0.00 | 0.05 | 0.05 | 1 | | | | |
| FORND# | 0.45** | 0.03 | -0.11* | -0.04 | 0.03 | 0.40** | 0.47** | -0.07 | 0.19** | 0.15** | 0.53** | 1 | | | |
| FORTD# | 0.46** | 0.05 | -0.16** | -0.08 | 0.08 | 0.48** | 0.41** | -0.04* | 0.15** | 0.12** | 0.83** | 0.91** | 1 | | |
| DIVED# | 0.32** | 0.05 | -0.19** | -0.11* | 0.13** | 0.46** | 0.19** | 0.15** | 0.06 | 0.11* | 0.99** | 0.51** | 0.81** | 1 | |
| DIVND# | 0.50** | 0.03 | -0.10* | -0.04 | 0.01 | 0.44** | 0.55** | -0.07 | 0.39** | 0.34** | 0.50** | 0.97** | 0.88** | 0.49** | 1 |
| DIVTD# | 0.49** | 0.05 | -0.16** | -0.08 | 0.07 | 0.52** | 0.46** | 0.03 | 0.29** | 0.28** | 0.82** | 0.90** | 0.98** | 0.81** | 0.91** |

** and * indicate statistical significance at a 1% and 5% level, respectively. Two tailed tested.

Table 4 presents the results of the logit analysis on the diversity *numbers* and table 5 those on the diversity *percentages*. The dependent variable, DISTRESS, is 0 for the control group and 1 for the distressed group. From the literature, it could well be expected that the financial control and industry variables are statistically significant in the standard model (model 1). However, due to a rather high correlation (reported in table 3) of r = 0.55 between NICE and CASHTA, the income related variable NICE is not statistically significant. If this variable would be left out of the models, the results for all variables, and certainly the diversity-related ones, are more significant. An advantage of this decision would have been that 13 skipped financial institutions (due to the lack of cash related data for banking and insurance companies) could be included in the model. This paper includes both variables in the model, for reasons of comparability with earlier financial distressed related studies.

**Table 4.** Logit analyses based on panel data for t = -3 to t = -2, relating financial distress to financial control variables, industry classification, gender, nationality and diversity (in numbers). Data for listed Dutch companies, 1993-2003.

*Model 1: DISTRESS* $= \alpha + \beta_1 LNSIZE + \beta_2 DEBTTA + \beta_3 NICE + \beta_4 ONECON + \beta_5 CASHTA + \varepsilon$
*Model 2: DISTRESS* $= \alpha + \beta_1 LNSIZE + \beta_2 DEBTTA + \beta_3 NICE + \beta_4 ONECON + \beta_5 CASHTA + \beta_5 GENND\# + \varepsilon$
*Model 3: DISTRESS* $= \alpha + \beta_1 LNSIZE + \beta_2 DEBTTA + \beta_3 NICE + \beta_4 ONECON + \beta_5 CASHTA + \beta_6 FORND\# + \varepsilon$
*Model 4: DISTRESS* $= \alpha + \beta_1 LNSIZE + \beta_2 DEBTTA + \beta_3 NICE + \beta_4 ONECON + \beta_5 CASHTA + \beta_7 DIVED\# + \varepsilon$
*Model 5: DISTRESS* $= \alpha + \beta_1 LNSIZE + \beta_2 DEBTTA + \beta_3 NICE + \beta_4 ONECON + \beta_5 CASHTA + \beta_8 DIVND\# + \varepsilon$
*Model 6: DISTRESS* $= \alpha + \beta_1 LNSIZE + \beta_2 DEBTTA + \beta_3 NICE + \beta_4 ONECON + \beta_5 CASHTA + \beta_9 DIVTD\# + \varepsilon$

| variable | expected sign | model 1 | model 2 | model 3 | model 4 | model 5 | model 6 |
|---|---|---|---|---|---|---|---|
| LNSIZE | - | -0.28*** | -0.30*** | -0.36*** | -0.30*** | -0.37*** | -0.35*** |
| | | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| DEBTTA | + | 1.53* | 1.47 | 1.54* | 1.53* | 1.60* | -1.62* |
| | | (0.08) | (0.101) | (0.09) | (0.09) | (0.08) | (0.07) |
| NICE | - | -1.19 | -1.16 | -1.08 | -1.16 | -1.06 | -1.09 |
| | | (0.13) | (0.13) | (0.17) | (0.13) | (0.17) | (0.16) |
| CASHTA | - | -10.80*** | -11.04*** | -10.67*** | -10.73*** | -10.67*** | -10.49*** |
| | | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| ONECON | - | 2.01*** | 2.00*** | 1.97*** | 1.98*** | 1.98*** | 1.97*** |
| | | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| GENND# | - | | 0.13 | | | | |
| | | | (0.75) | | | | |
| FORND# | | | | 0.21* | | | |
| | | | | (0.08) | | | |
| DIVED# | | | | | 0.10 | | |
| | | | | | (0.52) | | |
| DIVND# | | | | | | 0.24** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | (0.05) | |
| DIVTD# | | | | | | | 0.13 |
| | | | | | | | (0.101) |
| Intercept | | 0.47 | 0.60 | 0.72 | 0.54 | 0.71 | 0.61 |
| | | (0.36) | (0.25) | (0.18) | (0.30) | (0.18) | (0.24) |
| number of observations | | 412 | 410 | 410 | 410 | 410 | 410 |
| LR statistics ($\chi^2$) | | 153.98*** | 154.90*** | 157.77*** | 154.38*** | 158.53*** | 156.55*** |
| Nagelkerke $R^2$ | | 0.46 | 0.46 | 0.47 | 0.46 | 0.47 | 0.47 |
| percentage correct | | 85.2 | 85.1 | 85.6 | 85.4 | 85.6 | 86.2 |

***, ** and * indicate statistical significance at a 1%, 5% and 10% level, respectively. *P-values* in parentheses; two tailed tested. The variables used are defined below table 1.

In both the number and the percentage specification, none of the gender related models show significant results. For reasons of comparability with the results on other diversity specifications, only the GENND (female NEDs) related specifications are reported. Concerning nationality, FORED and FORTD variables are not significant (not shown). FORND (foreign NEDs) is a statistically significant variable on a 10% level of reliability in model 3 in the number- as well as in the percentage specification (see table 4 and 5). Remarkably is its sign, that is positive. This would imply that foreign diversity in the supervisory board is positively related with financial distress. This will be discussed in the next section. A similar result is found for diversity: a statistically significant result on DIVND (diverse NEDs) in the percentage *and* the number specification, and a positive sign for both coefficients. Given the overweight of the nationality diversity (see table 1) in the (total) diversity component, these results seem logic after the nationality results.

**Table 5.** Logit analyses based on panel data for t = -3 to t = -2, relating financial distress to financial control variables, industry classification, gender, nationality and diversity (in percentages). Data for listed Dutch companies, 1993-2003.

*Model 1: DISTRESS = $\alpha + \beta_1$ LNSIZE + $\beta_2$ DEBTTA + $\beta_3$ NICE + $\beta_4$ONECON + $\beta_5$CASHTA + $\varepsilon$*
*Model 2: DISTRESS = $\alpha + \beta_1$ LNSIZE + $\beta_2$ DEBTTA + $\beta_3$ NICE + $\beta_4$ONECON + $\beta_5$CASHTA + $\beta_5$GENND% + $\varepsilon$*
*Model 3: DISTRESS = $\alpha + \beta_1$ LNSIZE + $\beta_2$ DEBTTA + $\beta_3$ NICE + $\beta_4$ONECON + $\beta_5$CASHTA + $\beta_6$FORND% + $\varepsilon$*
*Model 4: DISTRESS = $\alpha + \beta_1$ LNSIZE + $\beta_2$ DEBTTA + $\beta_3$ NICE + $\beta_4$ONECON + $\beta_5$CASHTA + $\beta_7$DIVED% + $\varepsilon$*
*Model 5: DISTRESS = $\alpha + \beta_1$ LNSIZE + $\beta_2$ DEBTTA + $\beta_3$ NICE + $\beta_4$ONECON + $\beta_5$CASHTA + $\beta_8$DIVND% + $\varepsilon$*
*Model 6: DISTRESS = $\alpha + \beta_1$ LNSIZE + $\beta_2$ DEBTTA + $\beta_3$ NICE + $\beta_4$ONECON + $\beta_5$CASHTA + $\beta_9$DIVTD% + $\varepsilon$*

| variable | expected sign | model 1 | model 2 | model 3 | model 4 | model 5 | model 6 |
|---|---|---|---|---|---|---|---|
| LNSIZE | - | -0.28*** | -0.30*** | -0.33*** | -0.29*** | -0.34*** | -0.32*** |
| | | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| DEBTTA | + | 1.53* | 1.47 | 1.57* | 1.48* | 1.63* | -1.61* |
| | | (0.08) | (0.101) | (0.08) | (0.10) | (0.07) | (0.07) |
| NICE | - | -1.19 | -1.16 | -1.10 | -1.16 | -1.09 | -1.11 |
| | | (0.13) | (0.13) | (0.16) | (0.14) | (0.16) | (0.15) |
| CASHTA | - | -10.80*** | -11.04*** | -10.66*** | -10.80*** | -10.61*** | -10.62*** |
| | | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| ONECON | - | 2.01*** | 2.00*** | 1.95*** | 1.97*** | 1.93*** | 1.95*** |
| | | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| GENND% | - | | 0.13 | | | | |
| | | | (0.75) | | | | |
| FORND% | | | | 1.09* | | | |
| | | | | (0.10) | | | |
| DIVED% | | | | | 0.45 | | |
| | | | | | (0.49) | | |
| DIVND% | | | | | | 1.29** | |
| | | | | | | (0.05) | |
| DIVTD% | | | | | | | 1.10 |
| | | | | | | | (0.14) |
| Intercept | | 0.47 | 0.60 | 0.58 | 0.51 | 0.54 | 0.48 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | (0.36) | (0.25) | (0.27) | (0.31) | (0.30) | (0.35) |
| number of observations | | 412 | 410 | 410 | 410 | 410 | 410 |
| LR statistics ($\chi^2$) | | 153.98*** | 154.90*** | 157.50*** | 154.45*** | 158.66*** | 156.05*** |
| Nagelkerke $R^2$ | | 0.46 | 0.46 | 0.47 | 0.46 | 0.47 | 0.47 |
| percentage correct | | 85.2 | 85.1 | 86.1 | 85.7 | 85.9 | 86.2 |

***, ** and * indicate statistical significance at a 1%, 5% and 10% level, respectively. *P-values* in parentheses; two tailed tested. The variables used defined below table 1 and 2.

The first hypothesis on the relationship between gender diversity of NEDs and financial distress should therefore be rejected. Female representation on the board and financial distress do not have a statistically significant relationship. The second hypothesis, hypothesizing *no* relationship between nationality and financial distress, should be rejected as well. The foreign component *does* make a difference. The results show (specifically) a positive relationship between foreign NEDs on the board and financial distress.

From the bottom line of both tables one can see that adding diversity variables results in a slight improvement of the prediction power of the model by at best 1 percent-point, compared to the results for model 1, that consist of control variables only.

## Discussion on the first and second hypothesis

First of all, one may argue that the female presence in both groups is not sufficient to expect relevant results. In fact, only 3.19% of all NEDs and 1.03% of all executive directors are female. As there are 60 companies (out of 436 with NEDs; thus, 13.8%) with women on the board, and (for example) 78 cases with an ONECON variable of 1 (17.8%) (which is highly significant), the low number of female NEDs does not coercively explain the results on gender. Another explanation could be that, according to Catalyst (2007a), above-average performance prevails at companies where at least three women serve. The idea is that these women (as a minority) could strengthen each other (Konrad, Kramer and Erkut, 2008). This could not be tested for gender, as there was only one listed company in the Netherlands (during t= -1) where three women served. As for nationality, were the same idea could be valid, the average number of companies with three or more foreigners on the board is over 5 percent-point higher for the financially distressed sample (17.3%) than for the control group (11.68%). Higher numbers of diverse NEDs seemingly relate to financial distress. By testing the third hypothesis, the gender issue will be studied in more detail (below).

The prediction power of the models improves only slightly compared with basic model 1. However, the pregnant issue is the positive sign, found for the FORND and DIVND variables in both specifications. How can this be? The explanation might be found in Ruigrok, Peck and Tacheva (2007, p. 546) who conclude that relations-oriented diversity (of which gender and nationality are examples) "can lead to negative communication and affective consequences such as lower decision speed, misunderstandings and conflict". From the results, one should conclude that in times of financial distress foreign NEDs do not exercise a positive influence on the company.

One could wonder whether these results have been influenced by a change in corporate governance regime during the research period, but as the present Dutch corporate governance code (the code Tabaksblat) originates from December 2003, at the end of the research period, they have not. The previous code (code Peters) was less influential. Are the results relevant for today's practice? As diversity is presently a topic and the presence of foreigners on the board grows unquestioned, it probably is. The results show at least, that foreigners on the board are by no means a guarantee against financial distress; and even on the contrary, they may be distress prone.

## Individual NED characteristics and the glass cliff hypothesis

While the previous hypotheses are on the diversity of company *boards*, this section presents a diversity analysis of *NEDs*. The characteristics of NEDs of a financially distressed company and the difference between female and foreign NEDs will be reviewed. Finally, the glass cliff hypothesis on the appointment of female NEDs will be tested.

The *characteristics* of NEDs of financially distressed companies and control companies, as well as from female and non-Dutch NEDs can be read from table 6.

**Table 6.** An analysis of characteristics of NEDs of listed Dutch companies, 1993-2003, by nationality, gender and by financial situation of the company, based on panel data for t = -2 and t = -3 before the financial distress event occurred.

| NED-characteristics | average | financial distress | | | nationality | | | gender | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | control | distress | difference of mean (absolute z-value) | Dutch | foreign | difference of mean (absolute z-value) | male | female | difference of mean (absolute z-value) |
| number | 2161 | 1718 | 443 | | 1788 | 373 | | 2092 | 69 | |
| *average value* | | | | | | | | | | |
| AGE | 58.96 | 59.75 | 55.95 | 3.80*** | 59.69 | 55.48 | 4.21*** | 59.13 | 54.20 | 4.93*** |
| | | | | (8.59) | | | (8.61) | | | (4.93) |
| NETWORK | 4.35 | 4.49 | 3.83 | 0.66*** | 4.73 | 2.52 | 2.21*** | 4.41 | 2.67 | 1.74*** |
| | | | | (5.48) | | | (12.05) | | | (4.29) |
| EDUCATION | 1.05 | 1.08 | 0.93 | 0.15*** | 1.15 | 0.57 | 0.58*** | 1.06 | 0.81 | 0.25** |
| | | | | (3.06) | | | (14.74) | | | (2.08) |
| WORKLOAD (FTE) | 0.90 | 0.88 | 0.97 | -0.09** | 0.89 | 0.97 | -0.08* | 0.90 | 0.84 | 0.06 |
| | | | | (2.51) | | | (1.76) | | | (1.06) |
| *percentages* | | | | | | | | | | |
| DEPENDENCY | 0.19 | 0.19 | 0.20 | -0.01 | 0.14 | 0.42 | -0.28*** | 0.19 | 0.29 | -0.10** |
| | | | | (0.56) | | | (12.49) | | | (2.12) |
| NATIONALITY (foreign) | 0.17 | 0.16 | 0.24 | -0.08*** | | | | 0.17 | 0.29 | -0.12*** |
| | | | | (4.23) | | | | | | (2.65) |
| GENDER (female) | 0.03 | 0.03 | 0.03 | 0.00 | 0.03 | 0.05 | -0.02*** | | | |
| | | | | -(0.04) | | | (2.65) | | | |

***, ** and * indicate statistical significance at a 1%, 5% and 10% level, respectively. Two tailed tested.

AGE age of the NED at the end of the panel year
NETWORK number of NED positions in public or private companies
EDUCATION level defined as 1 for one masters degree; 2 for two masters degrees; 3 for PhD or professorship
WORKLOAD (FTE) workload as percentage of full time equivalent (1800 hrs/y). A NED position in a public company takes 200 hours, in a private company 100 hrs (both doubled for the chairman);
a regular job takes 1800 hrs
DEPENDENCY dummy, 1 in case the NED is dependent according to the code Tabaksblat principle III.2
NATIONALITY dummy, 1 in case the NED is of non-Dutch nationality
GENDER dummy, 1 in case the NED is a woman.

Below table 6 are seven NED characteristics specified: age, network, education, workload, dependency, nationality and gender. The relevance of these characteristics is described in the literature, for instance: Pfeffer and Salancik (1978), Zahra and Pearce (1989), Williams and O'Reilly (1998), Harris and Shimizu (2004) and Ruigrok, Peck and Tacheva (2007). This paper does not go in detail into these characteristics; it just analyses the differences therein between groups of NEDs.

The average NED of a Dutch company can be characterized as male, Dutch, 59 years old, holding a masters degree and four NED positions. His workload is 90% of a full time job and in more than 80% of the cases he is independent. This profile differs significantly from that of NEDs of distressed companies, of foreign NEDs and of female NEDs. As table 6 shows, NEDs of financially distressed companies, foreign NEDs and female NEDs differ statistically significant in age (by four to five years the younger than the average), in network (by one or two positions smaller), in university education (on average no masters degree) and in dependence (they are more often dependent). Female NEDs score better than foreign NEDs on their network and their education, and remarkably, their workload is less than the average by two hours/week and less than five hours/week than foreign NEDs. They are less dependent (29%) than foreign NEDs (42%). Based on this profile, one would prefer gender diversity above nationality diversity. Related to financial distress, the nationality score is not positive too: financially distressed companies have statistically significant more often foreign NEDs. In contradiction to this finding, female NEDs are statistically significant more often foreigners, which might be due to a relatively large number of (mostly foreign) female NEDs representing large shareholders. Either those women work for their (foreign) holding company, and do not have other Dutch directorships, or they (only) fulfill non-executive directorships. The multiple directorship position men sometimes have (*in extremis* 11 NED positions), is unheard of for women. However, it would be wrong to conclude from the analysis that female or foreign NEDs are generally less resourceful for companies than male, Dutch NEDs. As Klein (1998) shows, dependent directors (for example, those who represent large shareholdings) in the investment committee have a positive performance effect. Numerous other arguments for the recruitment of female NEDs have been proposed in the literature (Burgess and Tharenou, 2002, p. 40; Ruigrok, Peck and Tacheva, 2007, p. 548).

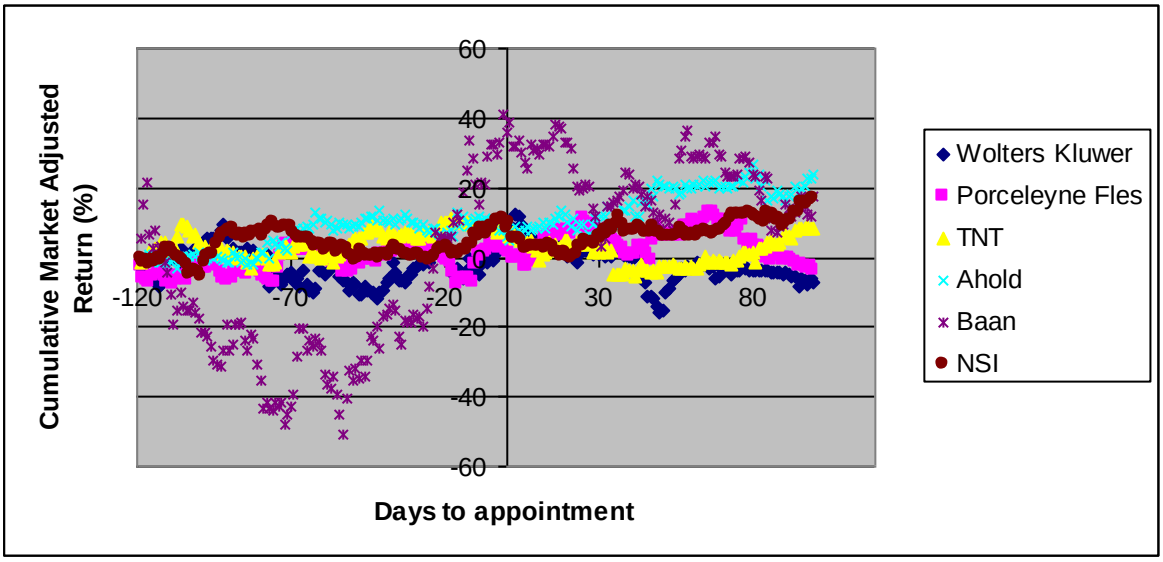
Are the female NEDs indeed appointed in precarious leadership positions? Table 1 shows that the frequency of a female NED on the board is higher (17%) in the control group than in the financially distressed group (14%), although this difference is not statistically significant. On average, 3% of NEDs is female, in the control as well as in the distressed sample (table 6). An overrepresentation in difficult

positions as hypothesized (more female NEDs on boards of financially distressed companies) is apparently not the case. The picture does not change when taking executive directors into consideration. The control group counts twelve (3.6%) executive directors and the distressed group two (1.7%). There were no female CEOs of financially distressed companies. Out of the two female executive directors of a financially distressed company found, one was appointed shortly before the financial distress occurred. It should be noted here, as anecdotal evidence, that UPC N.V. (a cable company) with *three* female NEDs during t= -1, is one out of a handful of listed companies that have ever survived after a Court declared suspension of payments.

The better way to test the glass cliff hypothesis, is to study the *female appointments*. This is what Ryan and Haslam (2005) and Adams, Gupta and Leeth (2007) did. From the data on financially distressed listed companies in the Netherlands (which were extended to this end from t= -4 to t= -1), there is no evidence at all that female NEDs are appointed in precarious times. Apart from the positions mentioned in table 1 and 6, there was only one (new) female NED appointed one year prior to financial distress (t= -1). During t= -2, two female NEDs resigned, and no new female NEDs were appointed. For executive directors of financially distressed companies this was identical: only one female appointment during t= -1, none during t= -2. These findings can never be conclusive, of course, as the number of appointments is too small, but they do not indicate the existence of a glass cliff.

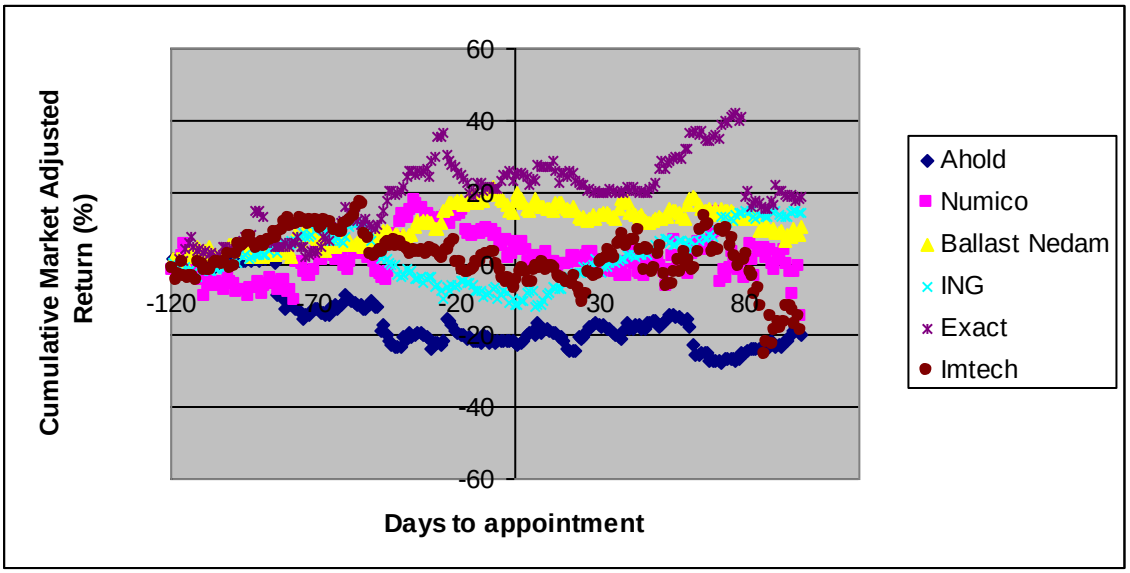
Would it be possible then, to find any significant pattern or significant difference in the reaction of the Dutch stock market to the appointment of female or male executive directors? The results of a small event study on six female appointments during the period 1999-2007, as shown in figure 1, also fail to support the glass cliff hypothesis.

**Figure 1.** Cumulative market adjusted return over 120 days preceding, and 100 days following, the appointment of a female executive director (1999-2007).




The female appointments between 1999 and 2007 for which stock data are available are included. As in Adams, Gupta and Leeth (2007), the cumulative stock returns over 120 trading days prior to the appointment day (defined as the day the directorship is actually assumed) up to 100 days thereafter are adjusted for the changes in the stock index. As can be seen from figure 1, all stocks show a (mostly small) positive stock return on the appointment day. At the end of the research period, three stocks have a small (less than 7%) loss, while three show a profit (up to 24%). There is no sign of a dramatic fall of the stock price before or after the appointment of a woman (the volatility of the Baan stock had to do with the problems of the company). Figure 1 does not show the evidence one would expect (either a negative stock return before the appointment, or thereafter, or both), when talking about a glass cliff. This (preliminary) conclusion is reinforced by the results from Figure 2.

**Figure 2.** Cumulative market adjusted return over 120 days preceding, and 100 days following, the appointment of a male executive director (1999-2007).




The cumulative market-adjusted returns before and after the appointment of six randomly chosen male executive directors show a much wider spread in stock returns. Three stocks show a negative, and three a positive cumulative market-adjusted return on the appointment day. After 100 days, the situation is identical (one stock changed category). If a glass cliff were in existence, one would expect figure 1 to indicate a more negative pattern than figure 2. Instead, figure 2 shows more volatile reactions of the stock market than figure 1. Given the nature of this event study, no firm conclusions can be drawn. As it is, none of the previous approaches show any evidence at all for the existence of a glass cliff for Dutch listed companies.

## Discussion on the third hypothesis

Female representation on corporate boards in the Netherlands is lagging far behind. Whilst Ryan and Haslam (2005, p. 81) conclude for the UK that women are beginning to break through the *glass ceiling*— which unavoidably is accompanied by the possibility of obtaining precarious positions— this certainly is not the case in the Netherlands. Ryan and Haslam study 19 appointments of female directors in 2003, and Adams, Gupta and Leeth (2007) 48 CEO appointments over the years 1992-2004. Those numbers are unheard of in the Netherlands. The *glass cliff* hypothesis should perhaps be tested again, once the glass ceiling really has started to erode.

Remarkably, Ryan and Haslam (2005) do not differentiate between the appointment of an *executive* director and a NED. This seems not correct. At least in the Netherlands, the appointment of a NED is considered as an event of minor importance. Research on appointments should control for this difference. A clear definition of the appointment date is essential as well. In the Netherlands, a director is generally appointed by the AGM/EGM. As long as there is no formal appointment, a director might be 'acting'. The proposed appointment will be made public in a press release. What date should be taken into account when studying stock returns: this announcement date, the 'acting' date, or the appointment date? Nor Ryan and Haslam (2005), nor Adams, Gupta and Leeth (2007) acknowledge this problem.

## Conclusion

The results of this study indicate that the remarks of Daily, Certo and Dalton (1999, p. 96) still hold: a primary rationale for being invited for board service is having the appropriate business experience. Or, to put it in more general terms: diverse directors are valued not for *what* they are, but for *who* they are, human beings with their specific skills and resources for the company. From this paper, the possible disadvantages associated with foreign directors (e.g. negative communication, misunderstandings and conflict) appear to have the upper hand. Foreign NEDs are positively associated with financial distress. No evidence can be gleaned from the above presented research on Dutch data for a relationship between

female presence or absence on the board and financial distress of the company. There are, moreover, no indications for the existence of a glass cliff. Whether these results hold once the glass ceiling in the Netherlands has been opened and more women are appointed on the boards, remains to be tested in due course.

## References


1. Adams, S.M., A. Gupta, and J.D. Leeth, 2007, Are female executives over-represented in precarious leadership positions?, *British Journal of Management*.
2. Burgess, Z., and P. Tharenou, 2002, Women board directors: characteristics of the few, *Journal of Business Ethics* 37, 39-49.
3. Carter, D.A., B.J. Simkins, and W.G. Simpson, 2003, Corporate governance, board diversity, and firm value, *Financial Review* 38, 33-53.
4. Catalyst, 2004, The bottom line: connecting corporate performance and gender diversity, (New York).
5. Catalyst, 2007, 2007 Catalyst census of women board directors, corporate officers and top earners, (New York).
6. Catalyst, 2007a, The bottom line: corporate performance and women's representation on boards, (New York).
7. D'Aveni, R.A., 1990, Top managerial prestige and organizational bankruptcy, *Organization Science* 1, 121-142.
8. Daily, C.M., 1995, The relationship between board composition and leadership structure and bankruptcy reorganization outcomes, *Journal of Management* 21, 1041-1056.
9. Daily, C.M., S.T. Certo, and D.R. Dalton, 1999, A decade of corporate women: some progress in the boardroom, none in the executive suite, *Strategic Management Journal* 20, 93-99.
10. Daily, C.M., and D.R. Dalton, 1994, Bankruptcy and corporate governance: the impact of board composition and structure, *Academy of Management Journal* 37, 1603-1617.
11. Farrell, K.A., and P.L. Hersch, 2005, Additions to corporate boards: the effect of gender, *Jourmal of Corporate Finance* 11, 85-106.
12. Finegold, D., G.S. Benson, and D. Hecht, 2007, Corporate boards and company performance: review of research in light of recent reforms, *Corporate Governance* 15, 865-878.
13. Francoeur, C., R. Labelle, and B. Sinclair-Desgagné, 2007, Gender diversity in corporate governance and top management, *Journal of Business Ethics*.
14. Harris, I.C., and K. Shimizu, 2004, Too busy to serve? An examination of the influence of overboarded directors, *Journal of Management Studies* 41, 775-798.
15. Hezewijk, J., and M. Van Zanten, 2008, 50x machtigste commissarissen, *Management Scope*, January.
16. Hill, N.T., S.E. Perry, and S. Andes, 1996, Evaluating firms in financial distress: an event history analysis, *Journal of Applied Business Research* 12, 60-71.
17. Hillman, A.J., and T. Dalziel, 2003, Boards of directors and firm performance: integrating agency and resource dependence perspectives, *Academy of Management Review* 28, 383-396.
18. Klein, A., 1998, Firm performance and board committee structure, *Journal of Law and Economics* XLI.
19. Konrad, A.M., V. Kramer, and S. Erkut, 2008, Critical mass: the impact of three or more women on corporate boards *Organizational Dynamics* 37, 145-164.
20. Milliken, F.J., and L.L. Martins, 1996, Searching for common threads: understanding the multiple effects of diversity in organizational groups, *Academy of Management Review* 21, 402-433.
21. Ohlson, J.A., 1980, Financial ratios and the probabilistic prediction of bankruptcy, *Journal of Accounting Research* 18, 109-131.
22. Pfeffer, J., and G.R. Salancik, 1978, *The external control of organizations: a resource dependency perspective* (Harper & Row, New York).
23. Porter, M.E., 1991, Towards a dynamic theory of strategy, *Strategic Management Journal* 12, 95-117.
24. Ruigrok, W., S. Peck, and S. Tacheva, 2007, Nationality and gender diversity on Swiss Corporate Boards, *Corporate Governance* 15, 546-557.
25. Ryan, M.K., and S.A. Haslam, 2005, The glass cliff: evidence that women are over-represented in precarious leadership positions, *British Journal of Management* 16, 81-90.
26. SCP, 2006, Emancipatiemonitor, (SCP).
27. Williams, K.Y., and C.A. O'Reilly, 1998, Demography and diversity in organizations: a review of 40 years of research, *Research on Organizational Behavior* 20, 77-140.
28. Zahra, S.A., and J.A. Pearce, 1989, Boards of directors and corporate financial performance: a review and integrative model, *Journal of Management* 15, 291-334.