

The Influence of Outside Directors on the Adoption of Poison Pills

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This study finds that 85.9 percent of the firms that adopt poison pill defenses have boards dominated by outside directors. This result implies that having an outsider-dominated board does not lower the likelihood of a firm adopting poison pill devices. Further analysis shows that a firm that employs a poison pill defense is 3.23 times more likely to have on its board an outside director who is a member of the top management team of another firm that institutes a similar pill device. Logit regression analysis indicates that there is a higher tendency to have such an outside director in a smaller board with fewer outside directors. The regression also reveals that corporations with larger assets and sales are more likely to have these outside directors.

INTRODUCTION

The recent rash of takeovers has resulted in the proliferation of devices designed by target firm management to thwart hostile takeover attempts. One of the most frequently used devices is the poison pill. When triggered by a change-of-control event, these pills impose a severe financial penalty on an outside party that intends to mount a non-negotiated takeover. Several studies have concluded that the adoption of poison pill defenses is associated with a decline in shareholder wealth.¹

If poison pills are harmful to the shareholders, why do firms adopt them? Malatesta and Walkling (1988) find that low profitability and the threat of takeover are motivating factors that account for the higher incidence of pill adoption. But to date, the association between the board of directors and the likelihood of adopting pill defenses has not been investigated. This line of research is important because board approval is required before poison pill securities can be issued.

One frequently studied aspect of the corporate board is the impact of composition—the respective representation of inside and outside directors on the board—on the monitoring of top management actions. There has been no consensus, however, on the effectiveness of outside directors as an internal control mechanism. Geneen (1984) and Weisbach (1988) argue that directors who are outsiders are likely to be more independent of the CEO than the management directors because, unlike these insiders, their jobs are tied less closely to the CEO. As a result, outsider-dominated boards are more likely to oppose plans that are potentially harmful to shareholders. There are others, however, who do not share this view. For instance, a *Business Week* editorial (1986, p. 96) states that “in practice most boards interpret the job to mean active support of management.”² The current investigation of 178 firms that adopted poison pill defenses between 1984 and

¹ See Malatesta and Walkling (1988), Ryngaert (1988), and Securities and Exchange Commission (1986a and 1986b).

² For a similar view, also see Dobrzynski, Schroeder, Miles, and Weber (1989), Fleischer, Hazard, and Klipper (1988), Loevinger (1981), and Nadel (1989).

1986 reveals that 85.9 percent of these firms have boards dominated by outside directors.³ This finding seems to support the view that outsider-dominated boards are an imperfect internal control mechanism.

One conjecture why outside directors vote with management in the adoption of poison pills is that there may be an outside director who has a positive view of such pills and who is able to persuade fellow outside board members to approve the use of the pill. These outside directors are the senior managers of other companies that adopt the poison pill defense. For brevity, such a director is termed a *PP director*.⁴ The PP director may be the one to suggest using a poison pill as an antitakeover device.⁵ Having gone through or being in the process of going through the adoption of a similar device, he or she has in-depth knowledge about the effect of poison pills. As a result, he or she is likely to be an ally of top management in support of the adoption of the pill defense. These PP directors are probably less likely to oppose the adoption of poison pills, considering that they themselves have deployed or are deploying similar pill devices. Of the sample of 178 firms adopting poison pill devices, 42 firms (23.6 percent) have at least one PP director. This figure is significantly larger than the 7.30 percent for firms in the control sample. In other words, a firm in the poison pill sample is 3.23 times more likely to have a PP director on its board than is a firm that does not issue poison pill securities.

Why do some firms in the poison pill sample have PP directors while others do not? This research proposes that there are some factors within the firm that may enhance the influence exerted by the PP director. The findings from logit regression analysis indicate that the probability of finding a PP director for a sample of firms that adopt poison pill defenses is related inversely to the number of directors on the board and the number of outside directors. It further reveals that a larger company, as measured by total assets and sales, is more likely to have a PP director on its board.

DATA

Two samples of firms are gathered for analysis. The poison pill sample consists of firms that have adopted the poison pill defense. This sample has a total of 178 firms identified by *Corporate Control Alert* to have adopted poison pill defenses between 1983 and 1986. Where possible, this information is checked against the *Wall Street Journal* and the *New York Times* to assemble greater details about the pills.

To test the hypothesis that a firm in the poison pill sample is more likely to have a PP director, a control sample from 1983 to 1986 is formed. It consists of 178 firms com-

³ For the purpose of this study, an outsider-dominated board is made up of more than 60 percent outside directors. An *outside director* is defined as a person who is not employed by the firm in which he or she is a director.

⁴ An example of a PP director is W.P. Stiritz, the chairman, CEO, and president of Ralston Purina, which adopted the poison pill defense on January 16, 1986. Mr. Stiritz also was a director of the May Department Stores which instituted its own pill device on February 20, 1986.

⁵ It is difficult to ascertain whether the PP director has anything to do with his or her firm's adoption of a poison pill device. The present study attempts to provide some statistical data to support this proposition.

parable in terms of size (using total assets as a proxy) and board size.⁶ These restrictions are imposed to ensure a greater degree of comparability between the two samples. For instance, the number of directors and outside directors a firm has may affect the chances of having a PP director.

The *Moody's Manual* and *Standard & Poor's Register of Corporations, Directors, and Executives*, proxy statements, and annual reports are used to determine the size and composition of the boards of firms adopting poison pills. The name and position of the top managers are obtained from the same sources. Board composition is defined as the relative inside-outside director representation. The inside directors are full-time officers of the firm. The outside board members do not work for the firm in any capacity other than as directors.

The *Standard & Poor's Register* is used to examine the boardroom appointment of each of the top managers of firms in the poison pill sample.⁷ A PP director is identified as an outside director who is a senior manager of another firm that has issued or is in the process of issuing poison pill securities. The date of pill adoption for the PP director's own firm either must precede or not exceed three months after the adoption date of the firm in which he or she serves as a director.⁸

EMPIRICAL SPECIFICATION

The statistical methodology used to determine the probability of a firm having a PP director is the logit regression. The dependent variable is dichotomous, having a value of 1 if a firm has a PP director and 0 otherwise. When the dependent variable is dichotomous, the use of linear regression produces unbiased but inefficient estimates. The use of logit regression constrains the predicted probabilities to the meaningful range between 0 and 1. Being asymptotic at the extremes, the logit function prevents a small change in the independent variables from substantially altering the outcome (Walkling, 1985).

The logit model assumes that:

$$\text{Pr (having a PP director)} = F(\chi\beta) = \frac{e^{\chi\beta}}{1 + e^{\chi\beta}}$$

where:

⁶ The control sample is assembled based primarily on total assets. In case there are two or more firms with total assets that are close to that of the candidate firm, board size is used as the next selection criterion. In most cases, total assets are used to locate the control sample candidates.

⁷ The top management team comprises the chair, vice chair, chief executive officer (CEO), and president. This definition is consistent with Furtado and Rozeff (1987). Several works eliminate the position of vice chair from the definition of top management (Bonnier and Bruner, 1989; Klein and Rosenfeld, 1988; Warner, Watts, and Wruck, 1988). The position is included in the current research because the vice chair is familiar with the adoption of poison pills and can be as effective as the other three members of the top management team in influencing the decision to adopt poison pills.

⁸ This three month period is arbitrary, but the author believes that even if the PP director's own firm adopts the pill device several months after the adoption date of the firm in which he or she serves as an outside directors, he or she is sufficiently exposed to the effects of poison pills to be able to influence the decision to adopt the pill device.

χ = Vector of independent variables, including a constant, that may affect the probability of having a PP director; and

β = Parameter vector.

The distribution of F is known as the logistic distribution. The parameters of the model are estimated using the maximum likelihood method.

EMPIRICAL RESULTS

BOARD OF DIRECTOR COMPOSITION

Table 1 contains a breakdown of outside director representation in firms that instituted poison pill defenses between 1983 and 1986. In most cases the boards of these firms are dominated by outside directors. Only five firms (2.8 percent) of the sample of 178 companies have insider-dominated boards—those in which outside directors make up less than 40 percent of the boards. There are 19 firms (10.7 percent) in which the composition of the board is mixed; that is, those in which outside directors form 41 percent to 60 percent of the board. The table further indicates that 85.9 percent of the firms have outside directors forming 60 percent or more of the board of directors.

To provide a benchmark for comparison of the board composition of poison pill firms, a control sample is formed. Table 1 reveals that the control sample contains more firms with insider-dominated boards than does the poison pill sample.

The results contained in Table 1 suggest that outside directors are more prominently represented on the boards of poison pill firms. Because the adoption of poison pills requires the approval of the board of directors, it seems that even with majority representation on the board these outside directors are unwilling to oppose the adoption of pill defenses. A possible explanation is that there is at least one outside director who is familiar with the pill devices and who is able to persuade his fellow outside directors to approve the decision to adopt a pill.

THE INFLUENCE OF PP DIRECTORS ON THE POISON PILL ADOPTION

Malatesta and Walkling (1988) discover that low profitability and threat of takeover are the motivating factors behind the decision to adopt poison pill defenses. The current research proposes that there may be an outside director who plays at least a partial role in influencing the decision to adopt poison pill devices. This outside director, termed the PP director, is a senior manager of another firm that has instituted its own pill defense.

Panel A of Table 2 shows that significantly more firms in the poison pill sample contain PP directors as compared to the control sample of firms. Of the 178 firms that adopted poison pill defenses between 1983 and 1986, 42 firms (23.6 percent) have at least one PP director. Only 13 of the 178 firms in the control sample have outside directors who adopted poison pill devices in their own firms. The results shows that a firm in the poison pill sample is 3.23 times more likely to have a PP director than is a firm in the control sample.

Panel B of Table 2 shows the breakdown of firms according to the number of PP directors each firm has. It reveals that there are 30 firms with one PP director, ten firms with two PP directors, and two firms with three PP directors.

Table 1—Composition of the Board of Directors of the 178 Firms in the Poison Pill Sample and Control Sample, 1983-1986

Board ^a	Number of Firms (Percentage of Total)	
	Poison Pill Sample	Control Sample
Insider-Dominated	5 (2.8)	26 (14.6)
Mixed	19 (10.7)	48 (27.0)
Outsider-Dominated	153 (85.9)	104 (58.4)
Total	178	178

^aAn insider-dominated board is one in which outside directors make up less than 40 percent of the board. A mixed board contains between 41 percent and 60 percent outside directors. An outsider-dominated board has more than 60 percent outside directors

Table 2, Panel A—Number of Firms Having Outside Directors Who are the Top Managers of Firms That Have Adopted or are Adopting Poison Pill Takeover Defenses, 1983-1986

Sample	Number of Firms With PP Directors	Total Number of Firms	Percentage of Total
Poison Pill Sample	42	178	23.6
Control Sample	13	178	7.3

Table 2, Panel B—Breakdown of 178 Firms That Adopted Poison Pill Securities by Number of PP Directors, 1983-1986

Number of PP Directors	Number of Firms	Percentage of Total
0	136	76.4
1	30	16.8
2	10	5.6
3	2	1.1
Total	178	100.0

Table 3 contains the summary statistics on the 56 PP directors from the 42 firms in the poison pill sample. It shows that these directors, on average, serve 5.97 years on the boards of firms before the adoption of poison pills. One common aspect is that these directors own very few shares in the firms in which they serve as directors. Most own a token amount between 100 and 2,500 shares, less than 0.001 percent of outstanding voting securities. Table 3 also reveals that these directors have an average age of 57.5 years and are outside directors of 208 other corporations.

Table 3—Summary Statistics for the 56 PP Directors of Firms That Adopted Poison Pill Securities Between 1983 and 1986*

Variable	Mean	Median	Minimum	Maximum
Number of Years as Director of Firm Adopting Poison Pill	5.97	5	2	18
Stock Ownership in the Firm in Which He or She is a PP Director (%)	0 ^a	0	0	0.001
Age (year)	57.5	58	45	73
Directorship in Other Corporations	2.08	2	1	6
Committee Membership (%)				
Auditing	62.5			
Compensation	60.7			
Nominating	44.6			
Pension	26.8			
Principal Occupation (%)				
Chairman, CEO, and President	12.5			
Chairman and CEO	44.6			
Chairman	16.1			
Vice Chairman	16.1			
President	10.7			

*Data were obtained from the proxy statement in the year of pill adoption

^aAn ownership of 0 mean that the director owns less than 0.001 percent of the outstanding voting securities

Table 3 also reveals that 62.5 percent of the PP directors are on the audit committee, 60.7 percent on the compensation committee, and 44.6 percent on the nominating committee. The table further shows that 12.5 percent of the PP directors hold the top three positions in their firms: chairman of the board, chief executive officer, president. Most of the PP directors, 44.6 percent, hold the combined title of chair and CEO. The positions of chairman and vice chairman are held by 16.1 percent of the PP directors, and 10.7 percent are the presidents of their companies.

PREDICTING THE EXISTENCE OF PP DIRECTORS

This section examines the factors that may affect the likelihood that a firm in the poison pill sample will have a PP director. Logit regression is used to analyze the relationship between the probability that a firm has a PP director and a number of independent variables. The dependent variable is dichotomous, with a value of 1 if a firm has a PP director and 0 otherwise. Various items such as firm size, ownership structure, and board of directors are used as independent variables. Table 4 contains the summary statistics on the two subsamples used in the logit regression analysis.

The results of the logit regression are presented in Table 5. It shows that the probability of having a PP director is related negatively to the size of the board and the number of outside directors sitting on the board. The coefficients for NDIR and NUMOUT are negative, with chi-square statistics that are significant at the 5 percent and 10 percent levels, respectively. This evidence suggests that a PP director is likely to be

Table 4—Summary Statistics for Size, Ownership Structure, and Board of Directors for Firms That Adopted Poison Pill Securities From 1983 to 1986*

	Subsample of Firms With PP Directors (n=42)			Subsample of Firms Without PP Directors (n=136)		
	Median	Mean	Standard Deviation	Median	Mean	Standard Deviation
Size (\$ millions)						
Total Assets	440.0	424.7	440.5	208.0	210.9	215.3
Sales	460.5	476.7	491.4	252.5	248.1	243.8
Ownership Structure (%)						
Inside Directors	0.97	1.15	3.38	1.65	1.71	2.81
Outside Directors	3.18	3.58	5.98	3.20	3.07	4.26
5 Percent Owners ^a	10.25	10.76	9.74	10.85	11.42	14.40
Board of Directors						
Number of Inside Directors	3	3.37	1.31	2	2.47	1.31
Number of Outside Directors	11	11.19	2.88	9	8.61	3.17
Insider Director Representation (%)	21.4	23.5	0.09	18.2	21.8	0.09

*Data were obtained from the proxy, 10-Q, and 10-K statements, annual reports, and *Moody's Manuals* in the year of pill adoption

Table 5—Logit Regression Predicting the Presence of PP Directors on the Boards of 178 Firms Adopting Poison Pill Defenses Between 1983 and 1986

Variable	Coefficient	Chi-Square
Intercept	13.61	2.17
NDIR (Number of directors on the board)	-0.14	3.84*
NUMOUT (Number of outside directors on the board)	-0.16	6.25**
ASSETS (Amount of total assets)	0.01	3.86*
SALES (Annual sales)	0.01	3.08*
INOWN (Inside director ownership)	0.27	1.87
OUTOWN (Outside director ownership)	-0.07	0.40
FIVEOWN(5% blockholder ownership)	-0.05	1.46

Likelihood ratio = 34.71

* Significant at the 0.05 level

** Significant at the 0.01 level

more influential on a board containing fewer outside directors. One interpretation of this result is that as the number of directors decreases, it becomes easier for the PP director to persuade the other outside directors to approve the adoption of poison pill defenses. The alternative interpretation is that a firm with a large number of directors usually adopts the pill device without the influence of a PP director. A large board often is made up of directors with many different and diversified motives and philosophies. As a result, the

existence of a PP director is less likely to be an important factor in the poison pill adoption decision.

Table 5 also indicates that larger corporations, as measured by total assets and sales, are more likely to have at least one PP director on their boards. It also reveals that voting security ownership by inside directors, outside directors, and blockholders does not affect the tendency to have PP directors.

SUMMARY AND CONCLUSION

Available evidence indicates that, on average, the adoption of poison pill takeover defenses is associated with the loss of shareholder wealth. Because pill adoption requires the approval of the board of directors, it raises questions about the effectiveness of the board as an internal control mechanism. This study examines the role played by the outside directors of firms that use poison pill defenses.

The results indicate that 85.9 percent of the firms that adopt poison pill devices have boards dominated by outside directors. This finding shows that an outsider-dominated board is not a perfect monitoring mechanism. One possible explanation may be that an outside director who has a favorable view of the poison pill device is able to persuade fellow outside directors to approve the issuance of pill securities. The PP director is defined as an outside director who is also a member of the top management team of another company that adopts the poison pill defense. It is hypothesized that a firm that adopts the pill device has a greater probability of having a PP director than does a firm without the pill defense. Having been involved with the poison pill adoption process, the PP director is familiar with the effects of pills and has a favorable view of pills. The current findings indicate that a firm in the poison pill sample is 3.23 times more likely to have a PP director than is a firm in the control sample. This finding lends support to the proposition that a PP director may influence a firm's propensity to adopt the poison pill device.

Logit regression shows that the probability of having a PP director increases for a board with fewer total directors and outside directors. It is surmised that as the number of directors decreases, it becomes easier for the PP director to persuade other outside directors to approve adoption of the pill defense. The regression further documents that there is a greater likelihood of finding a PP director in a firm that is larger in size.

Traditional studies of the board of directors have examined its size and composition. One significant contribution of this study is that it takes one step further to examine one particular type of board member who may be able to influence major corporate decisions. The fact that significant numbers of PP directors are found in firms that adopt poison pill securities underscores the importance of investigating the impact of individual board members on major corporate policy questions.

One possible area for further research is the composition of boards of directors of firms employing antitakeover devices that do not require shareholder approval (e.g., targeted stock purchases and standstill amendments). Mace (1971) argues that when outside directors do not agree with the decisions made by the CEO, many choose to leave the firm. An examination of the rate of turnover among outside directors for firms that adopt antitakeover devices may provide further insights that may help resolve the controversy of the effect of these takeover defenses on shareholder wealth. It also may shed light on the

continuing debate of whether outside directors are effective monitoring agents or are merely rubber stamps for management decisions.

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