AGENCY COSTS AND THE DIVIDEND DECISION[****]

Kelly Brunarski[*], *Yvette Harman*[**], *James B. Kehr*[***]

Abstract

We examine the relation between the firm's agency costs and the decision to distribute cash to shareholders by declaring a nonrecurring special dividend or by significantly increasing the firm's regular dividend. The independence of the board of directors, the voting rights of outside blockholders and the presence of antitakeover charter amendments all proxy for the level of agency costs within the firm. We find firms that significantly increase their regular dividend are more likely to have a greater proportion of independent directors on their boards and greater outside blockholdings, and are less likely to adopt antitakeover charter amendments than firms that declare a special dividend. The evidence supports the notion that firms with greater agency costs are more likely to pay a special dividend, whereas firms with lower agency costs are more likely to increase their regular dividend.

Keywords*:* agency costs, dividend policy, corporate governance, firm ownership

1. Introduction

Two methods firms use to distribute cash to shareholders are regular dividends and specially designated dividends (special dividends). Unlike special dividends, the intervals between payments of regular dividends are relatively fixed over time and firms seldom decrease the level of their regular dividends (Lintner (1956), Fama and Babiak (1968) and Asquith and Mullins (1983). It is therefore not surprising that an increase in the level of regular dividends is viewed by shareholders as a more positive signal of a change in firm value than a like increase in the level of special dividends [e.g., Brickley (1983)].

Because of the relatively fixed nature of regular dividends, Ravid and Sarig (1991) argue that regular dividends may help reduce agency costs in a manner similar to interest on debt. As with interest payments, regular dividends commit management to the regular distribution of cash flows (Jensen and Meckling (1976), Grossman and Hart (1982), Harris and Raviv (1990) and Stulz (1988) discuss debt as a tool to reduce agency costs and align manager and shareholder interests). Managers who increase regular dividends are expected to produce sufficient cash flows to cover both their interest and dividend obligations. Unlike interest on debt, regular dividends are not a legal obligation of the firm. However, dividend cuts and dividend omissions are associated with negative stock price reactions, and may result in a reputation loss for management (See Aharony and Swary (1980), and Ofer and Siegel (1987) for evidence that dividend cuts and omissions are met with negative stock price reactions, on average. DeAngelo and DeAngelo (1990) suggest that management may suffer a loss in reputation from dividend cuts or omissions). Therefore, managers have incentives to choose lower levels of both debt and regular dividends. As an alternative, managers who have excess cash to distribute may prefer to do so through special dividends.

Studies that examine factors affecting the regular and special dividend decisions generally assume managers will choose the optimal dividend policy for the shareholders of their firm. However, the same assumption does not hold for a firm's capital structure. In other words, managers are not expected to always select the optimal level of debt for their firms. Jensen and Mecking (1976) suggest that entrenched managers may seek relatively low levels of

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[*] Miami University, Department of Finance, 120 Upham Hall, Oxford, Ohio 45056, 513-529-1564, brunarkr@muohio.edu

[**] Miami University, Department of Finance, 120 Upham Hall, Oxford, Ohio 45056, 513-529-5986, harmanys@muohio.edu

[***] Miami University, Department of Finance, 120 Upham Hall, Oxford, Ohio 45056, 513-529-1571, kehrjb@muohio.edu

debt to avoid the obligation of producing cash flows sufficient to cover their interest payments. Berger, Ofek and Yermack (1997) find empirical evidence consistent with Jensen and Meckling's theory. Using the independence of the board of directors as a proxy for agency costs, they report a significant positive relation between the proportion of independent (or outside) directors on a firm's board and the relative level of debt in the firm's capital structure.

No study has yet examined the relation between the firm's agency costs and the decision to either increase regular dividends or declare a nonrecurring special dividend. By examining an event of this nature, we avoid some of the endogeneity issues inherent in studies that focus on the relations between dividend yields, firm ownership and capital structure [e.g., Crutchley, Jensen, Jahera and Raymond (1999)].

Our study provides evidence on the relation between agency costs and the dividend decision using the independence of the board of directors, outside blockholdings and the presence of antitakeover charter amendments as proxies for agency costs. We obtain a sample of firms that announce a significant increase in their regular dividend and a sample of firms that announce a nonrecurring special dividend from 1992 through 1999. To ensure that the increase in the dividend payout is significant, we limit our observations to dividend increases of at least three cents and dividends that exceed the previous quarter's dividend by at least ten-percent. We restrict the sample to firms with a dividend increase of 50% or greater than any increase reported in the previous four quarters. This restriction eliminates observations of firms that pay recurring special dividends and also eliminates observations of firms that pay a higher regular dividend in one quarter of each year, as such dividends increases would be anticipated by shareholders. The final sample consists of 200 observations, fifty-two of which are nonrecurring special dividends and 148 that denote a significant regular dividend increase. For simplicity, we refer to these dividend announcements collectively as dividend surprises. Using logistic regressions, we find a negative relation between the proportion of outside directors on the firm's board of directors and the likelihood of distributing cash using a special dividend. Further, we find a positive relation between the presence of antitakeover amendments (ATAs) in the firm's charter and the likelihood of paying a special dividend. Finally, we find a negative relation between the holdings of blockholders and the likelihood of paying a special dividend. Our results are robust to controls for firm size, capital structure, inside ownership, cash holdings, growth opportunities and regular dividend yields. In general, our findings support the contention that firms with greater agency costs are more likely to distribute cash by declaring a special dividend than by committing to higher levels of regular dividends.

The paper proceeds as follows. In Section 2, we review the literature on the motivation for special and regular dividend distributions, as well as the literature on measures of agency costs and we motivate our study. Section 3 describes the data. In Section 4, we describe the methodology and results, and Section 5 concludes.

2. Review of Literature and Research Motivation

The fact that some firms pay dividends continues to puzzle researchers. Several theories have emerged to explain why firms pay dividends. These include agency cost reduction, clientele preference for dividend income, and signaling of current or future cash flows. Most of these theories relate to the payment of regular, or recurring, dividends. Some firms, however, choose to pay a nonrecurring special dividend in addition to their regular dividend.

Fama and French (2001) examine the characteristics of dividend paying companies. They find that three characteristics affect the decision to pay dividends: firm size, profitability, and investment opportunities. They note that larger firms and more profitable firms are more likely to pay dividends, whereas firms with more investment opportunities are less likely to pay dividends. If a firm has excess cash flow to distribute, managers may be unwilling to increase the level of regular dividends if there is a possibility that they cannot maintain the new level (Barclay and Smith, 1988). As such, managers may choose to distribute cash through special dividends instead.

Chhachhi and Davidson (1997) find that firms issuing special dividends generally have large dividend yields and significant inside ownership. Jagannathan, Stephens and Weisbach (2000) look at the choice between dividends and another method of distributing excess cash, stock repurchases. They find that firms paying dividends have more stable operating cash flows, while firms opting to repurchase stock have higher temporary non-operating cash flows and more volatile cash flows.

Lie (2000) documents differences in cash flow characteristics and growth options for firms increasing their regular dividends, firms paying special dividends and firms with self-tender offers. He finds that firms that increase their regular dividends are more likely to have recurring cash flows. Further, Lie shows that the stock price to the special dividend declaration is positively related to the firm's level of cash.

2.1. Dividends and agency costs

Numerous studies focus on the role of dividends in reducing agency costs. Rozeff (1982) and Jensen (1986) theorize that dividends can serve as a means of reducing agency costs within the firm by reducing the firm's free cash flow. They suggest that paying dividends makes it less likely that managers will use

the firm's free cash flow to invest in low-return projects or to waste on organizational inefficiencies at shareholder expense. Easterbrook (1984) suggests that dividends serve as tool to reduce agency costs by forcing the firm to rely on the primary capital markets to fund investment opportunities. The reliance on the outside capital markets subjects the firm to added monitoring, thereby ensuring that managers are investing in projects that maximize shareholder wealth. Howe, He and Kao (1992) investigate whether Jensen's free cash flow hypothesis explains the market's reaction to infrequent or one-time cash distributions, such as specially designated dividends. They find no significant difference in the two-day abnormal returns between overinvesting and value-optimizing firms announcing specially designated dividends.

A number of studies examining the agency cost motivation for dividends have focused on monitoring mechanisms and the dividend payout ratio. For example, Dempsey and Laber (1992) find that the dividend yield is negatively related to the proportion of stock held by insiders and positively related to the number of the firm's common shareholders. Noronha, Shome, and Morgan (1996) examine the relation between agency cost variables and dividend payout ratios, segmented by the firm's growth opportunities. They find that firms with low growth opportunities exhibit a positive relation between the dividend payout ratio, the presence of outside blockholders, and the level of executive incentive compensation.

2.1.1. Corporate monitoring mechanisms

The role of the firm's board of directors as a mechanism to monitor management is well documented.[1] Although the board of directors is charged with monitoring management on behalf of shareholders, Fama and Jensen (1983) argue that boards of directors may not be homogeneous in their incentives to monitor management. Directors who are also managers of the firm have incentives to make corporate decisions that maximize their own utility, whereas directors who are not members of management (outside directors) have incentives to make decisions that signal their abilities as efficient decision-makers to the labor markets.

The literature examining the efficiency of the board of directors provides strong evidence that the capital markets view outside directors as efficient monitors of management. For example, Weisbach (1988) reports that CEOs are more likely to be dismissed for disciplinary reasons in firms with a higher proportion of outside directors on their boards. In their study of tender offers, Byrd and Hickman (1992) find that the stock price reaction to takeover bids is positively related to the proportion of outsiders on the board. Borokhovich, Parrino, and Trapani (1996) show that the probability of an outsider being named as a replacement for top management increases with the proportion of outside directors on the board, and report that the stock price reacts positively to the naming of outside replacements.

In addition to boards of directors, owners of large blocks of stock who are not members of management (outside blockholders) may reduce agency costs within the firm through added monitoring of management. Shleifer and Vishny (1988) suggest that blockholders have greater incentives to monitor management than small, atomistic shareholders, because the benefits of their monitoring are more likely to exceed their monitoring costs. Although the studies examining the monitoring effectiveness of outside blockholders are less numerous than the studies on board of director efficiency, some studies report evidence consistent with efficient monitoring of managers by outside blockholders. In a study of antitakeover amendments, Brickley, Lease and Smith (1988) find evidence that outside blockholders who have no current or potential business ties to the firm are more likely to vote against proposals that decrease shareholder wealth. Agarawal and Mendelker (1990, 1992) find evidence consistent with monitoring by large outside shareholders in their studies of the adoption of takeover deterrents. Denis and Serrano (1996) find that firms with more outside blockholdings exhibit superior performance relative to firms with fewer outside blockholdings. Lie (2000), however, finds no significant relation between the stock price reaction to special dividend announcements and the quality of the corporate monitoring mechanisms.

2.1.2. Antitakeover Charter Amendments

Antitakeover amendments are designed to make the takeover of a firm more costly. They can benefit shareholders or put them at a disadvantage, depending on how management uses the measures. For example, target shareholders benefit if the antitakeover amendment provides them with a greater proportion of the total takeover gains. However, these amendments can prove detrimental to shareholder wealth if they reduce the likelihood of takeover, thus entrenching management.

Antitakeover charter amendments include such provisions as staggered terms for directors, supermajority requirements and fair price requirements. Supermajority provisions subject bidding firms to approval by more than 50% of the target firm shareholders for a successful tender offer. Fair price amendments give bidding firms the option of paying the same price to all tendering shareholders or subjecting the firm to supermajority tender offer approval.

Agency theory suggests that managers support antitakeover amendments because they reduce the likelihood external discipline from the market for

[1] See, for example, Weisbach (1988), and Borokhovich, Parrino, and Trapani (1996)

corporate control, enabling them to entrench (Jensen, 1986; Mahoney and Mahoney, 1993). Borokhovich, Brunarski and Parrino (1997) find evidence to support this notion. Using excess compensation as a proxy for entrenchment, they find that executives of firms adopting antitakeover amendments receive higher salaries and more valuable option grants than executives of firms that do not adopt these measures. Research also suggests that the stock price reaction to antitakeover amendments is due, in part, to the quality of the firm's corporate monitoring mechanisms.

For instance, McWilliams and Sen (1997) find a more negative stock price reaction to the announcement of antitakeover amendments for firms with boards dominated by insiders and other non-independent directors. Correspondingly, they find that the stock price reaction is negatively related to the ownership and board representation of manager directors and those directors affiliated with the firm.

2.2. Research Motivation

Previous studies find a significant relation between agency costs and the dividend yield. Our study adds to the literature on the dividends and agency costs by examining the relation between agency costs and the type of dividend managers elect to declare when they wish to disburse cash to shareholders. Specifically, we examine the relation between agency costs and the decision to either increase the regular dividend or pay a nonrecurring special dividend. We employ three proxies for agency costs: board independence, outside blockholdings, and the presence of antitakeover charter amendments. We expect firms with greater agency costs will choose to pay a special dividend instead of increasing their regular dividends because special dividends carry no expectation of continuity. Thus, the manager is less susceptible to loss of position or reputation should he or she be forced to reduce or omit the regular dividend payment.

3. Data Selection

We obtain data on quarterly dividend payouts and declaration dates, the type of dividend declaration, stock price, and stock returns from the Center for Research in Security Prices (CRSP). All of the firms in our sample pay regular quarterly dividends. To ensure that the dividend decision is significant, we classify dividend surprises as special dividend declarations or regular dividend increases that meet two conditions: a) the absolute quarter-to-quarter change in dividends must be at least three cents and b) the quarterly percent change in dividends relative to the previous quarterly dividend must be at least ten-percent.[2] Further, to be included in our sample as a dividend surprise, the firm announcing the special or regular dividend must all of the following conditions:

- The quarterly dividend surprise cannot result from a dividend initiation or follow a dividend omission.
- The firm must not report a stock split or a stock dividend within the quarter of the dividend declaration.
- The dividend must not precede a successful takeover or liquidation. Firms that are acquired by other firms or are removed from the Compustat database during the two-year period subsequent to the dividend announcements are excluded from the sample.
- The change in cash disbursement as a result of the special dividend or regular dividend increase must be at least 50% greater than any quarterly change in cash disbursement observed for the previous four quarters. This eliminates observations of firms that pay annual recurring special dividends, or firms that pay a higher regular dividend in one quarter of each year.
- The firms must all have data available on Compustat, as well as proxy data available in the year preceding the dividend surprise announcement.

We obtain accounting data from the Compustat database. Compustat reports financial data for firms listed on the NYSE, AMEX and NASDAQ. We obtain data from the fiscal year end financial statements that precede the dividend surprise announcements. We use the *Wall Street Journal Index* to document acquisition activity, stock repurchases and spin-offs. Additionally, we use Rosenbaum's *Corporate Takeover Defenses* (2002) to obtain data on antitakeover charter amendments and other takeover deterrents. Finally, we use the proxy statement filed in the year preceding the dividend surprise to obtain data on firm ownership, the voting rights of different classes of stock, and principle occupations of members of the board of directors. Proxy statements are also used to identify the top-paid firm manager, defined as the manager holding the title(s) of either CEO, Chairman of the board, and/or president receiving the highest level of direct compensation. We obtain the proxy statements from either the SEC's Edgar database or the Q-File database. We obtain a sample of 200 observations of firms that report a dividend surprise from 1992 through 1999. In our sample, 148 observations are firms reporting a regular dividend increase and fifty-two observations involve firms declaring large nonrecurring special dividends (All of the special dividend observations in our sample have a CRSP distribution code of 1272. All of the regular dividend distributions on CRPS have a distribution code of 1232). None of the firms that increase their regular dividend also declare a special dividend dur-

[2] DeAngelo, DeAngelo and Skinner (2000) suggest that only large special dividends provide significant information to the market, and that small special dividends are close substitutes for regular dividends.

ing that same quarter. Not surprisingly, the mean change in the total quarterly dividend disbursement is greater for the sample of firms declaring special dividends. The mean and median dividend increases for the firms increasing regular dividends are respectively, $0.083 and $0.050. The mean and median changes in dividends for firms declaring special dividends are, respectively, $0.387 and $0.145.

In Table 1, we report the distribution of firms with regular dividend increases and firms with special dividends, by industry.

Table 1. Dividend increases and special dividends by industry

The number of firms reporting regular dividend increases and special dividends are classified by industry, where the industry is classified by the first two digits of the firm's SIC code at the time of the dividend surprise announcement.

Sic Code	Industry Description	# firms	Percentage
	Panel A: Regular Dividend Increases		
0-999	Agricultural	0	0.0
1000-1999	Mining and Construction	4	2.7
2000-2999	Food, Apparel and Petroleum	28	18.9
3000-3999	Manufacturing	28	18.9
4000-4999	Transportation	6	4.1
5000-5999	Wholesale and Retail	2	1.4
6000-6999	Financial Services Industry	80	54.1
7000-7999	Travel and Entertainment	0	0.0
Total		148	100.0
	Panel B: Special Dividends		
0-999	Agricultural	0	0.0
1000-1999	Mining and Construction	7	13.5
2000-2999	Food, Apparel and Petroleum	7	13.5
3000-3999	Manufacturing	14	26.9
4000-4999	Transportation	2	3.9
5000-5999	Wholesale and Retail	0	0.0
6000-6999	Financial Services Industry	21	40.4
7000-7999	Travel and Entertainment	1	1.9
Total		52	100.0

For both types of dividend, firms in the financial services industry comprise the greatest proportion of the sample. Fifty-four percent of the firms that increase their regular dividend are in the financial services industry, whereas 40.1% of the firms declaring a special dividend are in the financial services industry. For the regular dividend sample, firms in the transportation industry and manufacturing industry follow financial services firms in relative frequency, each comprising 18.9% of the sample. For firms that pay a special dividend, firms in the manufacturing industry are next in frequency, comprising 26.9% of the sample, followed by mining and construction (13.5%) and food, apparel and petroleum (13.5%).

In Table 2, we report the number of dividend surprises, by year. Binominal Z-statistics are computed to test the null hypothesis that the relative frequency of special dividends and regular dividend increases does not differ for the given year relative to that of the overall sample.

Table 2. Dividend increases and special dividends by year

The number of firms reporting positive regular dividend increases or special dividends is reported by year. The z-statistics and p-values provide a two-tailed binomial test of the null hypothesis that the relative frequency of regular and special dividend surprises does not differ from the expected frequency for the given year.

Type of Dividend	1992	1993	1994	1995	1996	1997	1998	1999	Total
Regular dividend increase	9	22	31	28	15	15	17	11	148
Special dividend	8	9	7	8	6	6	3	5	52
Total	17	31	38	36	21	21	20	16	200
Z-statistic (p-value)	2.069 (.039)	0.746 (.456)	1.183 (.237)	0.571 (.568)	0.284 (.776)	0.284 (.776)	11.324 (.000)	4.366 (.000)	

We find that the relative frequency of regular dividend increases and special dividends in the years 1992, 1998 and 1999 all differ from that of the overall sample. The year 1992 has a significantly greater relative frequency of special dividends, and the years 1998 and 1999 show a significantly lower relative frequency of special dividends. The results suggest a decrease in the relative popularity of large special dividends over time.

4. Methodology and Results

4.1. Significant Events in the year preceding the Dividend Surprise Announcements

The decision to pay special dividends or to increase the regular dividend may be influenced by events that produce significant one-time cash inflows or events that affect the likelihood of takeover. For instance, Jensen (1986) argues that takeover activity may result from a conflict between managers and shareholders over the distribution of free cash flows. Further, the sale of assets can create a one-time large cash inflow, which results in the decision to pay a nonrecurring special dividend. To examine differences in the frequency of corporate control contests and/or events that signal the occurrence of a significant cash inflow, we survey the *Wall Street Journal Index* for the twelve-month period prior to the dividend announcement. Table 3 shows the number of firms in our sample that report an event of this nature.

Table 3. Events in the year preceding the regular dividend increase or special dividend

The number of firms with events related to corporate control contests or events signaling significant cash inflows or outflows are reported for firms announcing regular dividend increases or special dividends for the year preceding the dividend announcements. The percentage of firms is listed in parentheses. By sample construction observations of stock repurchases are limited to the first three quarters of the year preceding the dividend surprise. Also, by sample construction, observations do no include firms subject to successful takeover bids. The hostile tender offer listed below subsequently failed.

Type of dividend	Bidder in a takeover contest # firms, (%)	Acquire a division of another firm # firms, (%)	Spin-off or sell-off of a division # firms, (%)	Target of a hostile takeover # firms, (%)	Stock repurchase # firms, (%)	Other corporate control events # firms, (%)
Regular dividend increase	33 (22.3)	16 (10.8)	21 (14.2)	1 (0.7)	13 (8.8)	3 (2.0)
Special dividend	5 (9.6)	0 (0.0)	3 (5.8)	0 (0.0)	1 (1.9)	0 (0.0)
Total	38 (19.0)	16 (8.0)	24 (12.0)	1 (0.5)	14 (7.0)	3 (1.5)

In Table 3, we report the number of spin-offs or sell-offs of firm divisions for firms with regular dividend increases and for firms declaring special dividends. Interestingly, spin-offs and sell-offs are more common among firms with regular dividend increases than for firms paying special dividends. Because such events may provide a source of significant one-time cash inflows, we would expect these types of events to be more prevalent among firms that pay large special dividends. The data reported in Table 3 also shows firms that significantly increase their regular dividend are more likely to be a bidder in a contest to acquire another firm.

Denis (1990) reports that, in the event of a hostile takeover contest, dividends may provide a means to maintain the target firm's independence. He notes that managers who hold stock in their firms often receive additional shares of stock in lieu of cash for special dividend declarations. By increasing their holdings in their firm, these managers are better able to deter tender offers. Further, dividend distributions may make a firm a less attractive target for bidders seeking cash-rich targets. On the other hand, dividends reduce a firm's cash balances thus reducing the manager's ability to deter takeovers through targeted share repurchases. Surprisingly, no firm declaring a special dividend and only one firm with a regular dividend increase is the target of a hostile takeover contest for the twelve months preceding the dividend surprise.[3]

Other corporate control contests reported in Table 3 include one firm that was involved in a proxy contest and one firm that reported a shareholder-initiated proposal to eliminate a poison pill. Both of these firms announced regular dividend increases within a year of these events. It is worth noting that the data reported in Table 3 may reflect a bias toward larger firms, as the *Wall Street Journal* tends to provide more in-depth news coverage of larger firms. Thus, it is not possible to draw any strong conclusions from this data

[3] By sample construction, we may underestimate the number of firms with surprise dividends that are subject to a hostile takeover bid as we exclude observations of firms that are removed from the Compustat database within two-years of the dividend surprise to eliminate observations of dividends paid in anticipation of liquidation.

4.2. Stock Price Reactions to Dividend Surprises

To examine shareholder perceptions of dividend surprise announcements, we compute abnormal returns using the one-factor market model and the methodology described in Brown and Warner (1985). The market model parameters are estimated using the value-weighted market index over a window of 220 days [day -250 to day -30], where day 0 is defined as the dividend declaration date as reported by CRSP. In Table 4, we report abnormal returns for the full sample of firms with dividend surprises. Further, we examine the abnormal returns for firms that increase regular dividends and for firms that pay a special dividend. Abnormal returns are computed for the dividend declaration date, and a two-day window prior to and following the dividend declaration date. Panel A of Table 4 shows abnormal returns around the dividend surprise announcements for the full sample of firms. There is no evidence of a mean or median stock price reaction that differs significantly from zero for the two days preceding or the two days following the dividend declaration date. However, we observe significantly positive mean and median abnormal returns on day 0 of 0.75% and 0.30% respectively. Panel B of Table 4 shows abnormal returns for those firms announcing a regular dividend increase, whereas Panel C of Table 4 shows abnormal returns for firms declaring a special dividend. Both the firms increasing their regular dividend and the firms declaring a special dividend exhibit a significant positive abnormal return, on average, on the dividend declaration date. The mean (median) abnormal return on the declaration date is 0.71% (0.25%) and 0.87% (0.34%), respectively, for the firms that increase their regular dividend and the firms that pay a special dividend. Interestingly, the special dividend firms also show a significant positive mean abnormal return on the day preceding the dividend declaration date, whereas firms that increase their regular dividend show no significant stock price reaction on the day prior to the dividend announcement. This is consistent with the notion that, for some of the firms, news of the special dividend is revealed to the market on the day preceding the dividend declaration date. The mean two-day cumulative abnormal return for the sample of special dividend firms is 1.64%.

Table 4. Antitakeover measures for firms with regular dividend increases or a special dividend

For firms announcing regular dividend increases or a special dividend, we report the number of firms adopting measures than may affect the likelihood of takeover. The percentage of firms is listed in parentheses. Supermajority amendments require that, for a takeover to be successful, the takeover bid must be approved by a supermajority of target firm shareholders (66%-80%). Fair price amendments require the bidder to pay a specified fair price to all tendering shareholders, or to receive supermajority approval. Classified board amendments stagger the terms of the board members. Blank check preferred provides directors with broad discretion to issue new stock and to establish its voting rights.

Type of Charter Provision	Regular Dividend Increase		Special Dividend	
	Before surprise # firms (%)	No date reported # firms (%)	Before surprise # firms (%)	No date reported # firms (%)
Panel A: Antitakeover Amendments				
At least one antitakeover amendment	27 (18.24)	16 (10.81)	7 (13.46)	5 (9.62)
Super majority	1 (0.68)	12 (8.11)	1 (1.92)	4 (7.69)
Fair price	13 (8.78)	5 (3.38)	2 (3.85)	1 (1.92)
Classified board	23 (15.54)	9 (6.08)	5 (9.62)	4 (7.69)
Blank check preferred	3 (2.03)	49 (33.11)	3 (5.77)	7 (13.46)
Panel B: Other Takeover Deterrents				
Limited shareholder action by written consent	15 (10.14)	9 (6.08)	3 (5.77)	1 (1.92)
Limited ability to call a special meeting	9 (6.08)	23 (15.54)	0 (0)	4 (7.69)
Eliminated cumulative voting	6 (4.05)	0 (0)	0 (0)	0 (0)
Dual class common stock	0 (0)	3 (2.03)	3 (5.77)	0 (0)
Unequal voting rights	1 (0.68)	0 (0)	0 (0)	0 (0)
Anti-greenmail	3 (2.03)	0 (0)	0 (0)	0 (0)

The more favorable market reaction to the special dividend announcements may be due to differences in the change in dividend yield for the two sets of firms rather than to a shareholder preference for special dividends. The mean change in the quarterly yield for the firms that increase their regular dividend is 0.22%, compared to a mean change in yield for the special dividend firms of 1.43% (The difference in dividend yield is defined as the dividend paid in quarter of the dividend surprise less the dividend paid in the previous quarter divided by the stock price ten-days prior to the dividend surprise).

On the other hand, it is worth noting that the regular dividend increase is more likely to signal a permanent increase in dividend distributions than the special dividend (This is a reasonable assumption for the firms in our sample. In fact, of the 148 firms that increase their regular dividend, only six decrease their regular dividend in the subsequent quarter. Three of the firms with regular dividend increases further increase their regular dividend in the following quarter, and the remainder of the firms maintain their dividend level).

4.3. Agency Cost Proxies and Other Variables that Influence the Dividend Decision

In this section, we describe the variables that we use to proxy for agency costs, as well of other factors that may affect the decision either to increase the regular dividend or to pay a nonrecurring special dividend. We also report to the results of tests for differences in the variables that affect the manager's dividend choice. We expect firms with greater agency costs will be more likely to disburse cash through the payment of a nonrecurring special dividend than through a regular dividend increase.

In Table 5, we report the frequency of antitakeover charter amendments and other types of takeover deterrents adopted by firms that increase their regular dividend as well as firms that pay a special dividend. None of the firms in our sample report the adoption of an antitakeover charter amendment subsequent to 1991, although in some instances, no date of amendment adoption is given in Rosenbaum's Corporate Takeover Defenses (2002) (In the late 1980s, many states adopted legislation equivalent to antitakeover amendments for firms incorporated in that state. Antitakeover amendment proposals became less common in the 1990s).

Table 5. Abnormal returns around the announcement of regular dividend increases or special dividends

Abnormal returns are reported for the sample of 200 firms that announce a regular dividend increase or a special dividend. Z-statistics are computed using the standard event study methodology described in Brown and Warner (1985). The announcement date (day 0) is defined as the dividend declaration date as reported on CRSP. Market model parameters are estimated using the value-weighted market portfolio over a window of day -250 to day -30.

Day (declaration date = 0)	# firms AR>= 0	# firms AR< 0	Minimum (%)	Median (%)	Maximum (%)	Mean Abnormal Return (%)	Z-statistic (p-value)
Panel A: All firms N = 200							
-2	96	104	-12.39	0.05	6.53	0.06	0.833 (.405)
-1	100	100	-6.19	0.02	9.57	0.22	0.767 (.443)
0	116	84	-9.57	0.30	11.37	0.75	6.696 (.000)
1	99	101	-6.52	-0.01	17.61	0.17	1.608 (.108)
2	100	100	-7.78	0.00	6.46	0.11	0.912 (.367)
Panel B: Regular Dividend Increase N=148							
-2	74	74	-5.92	0.04	6.53	0.14	0.604 (.546)
-1	74	74	-6.19	0.02	5.72	0.03	-0.171 (.864)
0	86	62	-5.49	0.25	11.37	0.71	3.612 (.000)
1	74	74	-6.52	0.00	17.61	0.24	1.02 (.308)
2	75	73	-5.74	-0.01	6.46	0.17	0.821 (.412)

Table 5 continued

Panel C: Special Dividend N=52							
-2	22	30	-12.39	-0.12	5.15	-0.17	-0.071 (.943)
-1	26	26	-4.18	0.03	9.57	0.77	1.810 (.070)
0	31	22	-9.57	0.34	10.31	0.87	2.978 (.003)
1	25	27	-6.25	-0.06	12.79	-0.02	0.282 (.778)
2	27	25	-7.78	0.05	3.84	-0.05	-0.550 (.582)

In Panel A of Table 5, we show that 29.05% of the firms that increase regular dividends have at least one antitakeover amendment in their firm's charter, whereas 23.08% of the firms declaring special dividends adopt at least one antitakeover charter amendment. Of the other types of proposals that may affect takeover likelihood, the most common is the limited ability for shareholders to call a special meeting. Over fifteen percent of the firms that increase their regular dividend adopt this provision, whereas 7.69% of the firms declaring a special dividend adopt this measure.

In Table 6, we define the variables that proxy for agency costs used in Tables 7 and 8. In addition, we define other characteristics used in this study that affect the decision to pay regular or special dividends (control variables). The source of the data is listed in parentheses.

Table 6. Definition of variables

We define the variables that are listed in abbreviated form in Tables 7 and 8. The proxy statement data is obtained from the fiscal year end data preceding the dividend declaration. COMPUSTAT data are obtained for the fiscal year end preceding the dividend declaration date.

Variables	Definition (Source)
Panel A: Management, Board and Firm Characteristics	
Board size	Total number of members on the firm's board of directors. (Proxy statement)
Out director	All directors who are not affiliated with the firm, either as members of management or other employees, former employees, or family members of employees. Calculated as a % of total board of directors. (Proxy statement)
Strict out director	Strict outside directors: All directors not affiliated with the firm through business ties, or potential business ties. These directors exclude bank executives, insurance company executives, consultants in the same line of business as the firm, and attorneys. Calculated as a % of total board of directors. (Proxy statement)
Strict out directors less inside directors	Proportion of strict outside directors less the proportion of inside directors. Strict inside directors are defined as directors affiliated with the firm, either as members of management or other employees, former employees, or family members of employees (Proxy statement)
Antitakeover	Dummy variable equal to one if an antitakeover charter amendment was adopted by the firm and zero otherwise. (Corporate Takeover Defenses, 2002)
Panel B: Ownership	
CEO ownership	Total votes possessed by the CEO expressed as a percentage of the total voting rights in the firm. The CEO is defined as the individual with the title of CEO, Chairman of the board of directors and/or President with the highest level of direct compensation. (Proxy statement)
Ins ownership	Total votes of the beneficial inside owners and their relatives expressed as a percentage of the total voting rights in the firm. This includes the votes of firm executives, directors and individuals related to them. (Proxy statement)
Ins ownership less CEO ownership	Total votes of firm executives, directors and their relatives, less that of the CEO, expressed as a percentage of the total voting rights in the firm. (Proxy statement)

Table 6 continued

Total blockholdings	Total votes of outside shareholders with common stock ownership of 5% or more (blockholders) expressed as a percentage of the total voting rights in the firm. Outside shareholders are defined as shareholders who are not firm executives, directors or their relatives. (Proxy statement)
Unaffiliated blockholdings	The percentage of voting rights held by blockholders that are firms, individuals, and asset management companies. (Proxy statement)
Affiliated blockholdings	The percentage of voting rights held by blockholders that are banks, insurance companies, and Employee Stock Ownership Plans (ESOPs). (Proxy statement)
Corp Blockholdings	The percentage of voting rights held by blockholders that are corporations, expressed as a percentage of the total voting rights of the firm. Excludes ownership by bank trusts, asset management companies, Employee Stock Ownership Plans (ESOPs) and individuals. (Proxy statement)
Panel C: Performance and Capital Structure	
Cash/assets	Cash and cash equivalents divided by the book value of total assets. (COMPUSTAT)
Debt/assets	Long-term debt divided by the book value of assets. (COMPUSTAT)
IA debt/assets	Long-term debt/book value of assets less the 2-digit SIC code industry median debt/book Asset. (COMPUSTAT)
Debt residual	Extent to which actual industry-adjusted debt/assets differs from the expected industry-adjusted debt/assets as estimated in the regression. (COMPUSTAT)
Mkt assets/book assets	The sum of the market value of equity, the liquidating value of preferred stock and the book value of debt divided by the book value of assets. (COMPUSTAT)
Reg div yld	Regular dividends for the year preceding the dividend surprise divided by the stock price ten days prior to the dividend surprise. (CRSP)

We measure the independence of the board of directors three ways. First, we define *Out directors* as the proportion of outside directors on a firm's board. Outside directors exclude directors who are managers, former members of management and their relatives (inside directors). Second, *Strict Out Director* is the proportion of directors on the board who have no current or potential business ties to the firm and are not inside directors. Consistent with Weisbach (1988), we define strict outside directors to exclude current or former include bank executives, insurance company executives, business consultants, accountants, and attorneys. Third, we proxy for board independence as the difference in the proportion of strict outside directors and the proportion of inside directors on a firm's board. This measures the extent to which outside directors with no current or potential ties to the firm control the board of directors.

Outside blockholders are defined as shareholders who hold at least 5% of the voting rights in the firm and who are not members of management, the board of directors or relatives of either a manager or a director.[4] Although outside blockholders have incentives to monitor management to protect their investment in the firm, the incentives of blockholders to monitor managers may vary by blockholder type. For instance, Brickley, Lease and Smith (1988) report that large shareholders who have current or potential business ties to the firm (*affiliated blockholders*) tend to follow "street rules." Street rules dictate that such shareholders either vote with management or sell their shares to protect their business ties if management's proposal is expected to decrease shareholder wealth. Thus, we classify outside blockholdings as either affiliated or unaffiliated, where affiliated blockholdings include blocks of stock held by insurance companies and banks as well as shares in Employee Stock Ownership Plans (ESOPs). Unaffiliated blockholdings are defined the blockholdings of firms, asset management companies and individuals not affiliated with managers or directors.

For the time period of our study, corporations in the United States pay tax on only 30% of dividends received as income. Thus, we consider the blockholdings of corporations (*Corp Blockholdings*) as a final category of blockholding. Due to the corporate tax advantage of dividends, these shareholders have incentives to prefer dividend income over capital gain income and may choose investments in high-yielding equities. Corporate blockholdings are defined as the blockholdings of firms and insurance companies. Banks are excluded from this category because banks vote shares held in trusts on behalf of other shareholders. As with all of the ownership data in our study, blockholdings are adjusted for firms with different classes of voting stocks to reflect the proportion of total voting rights in the firm.

[4] Blockholdings are reported in the proxy statement preceding the dividend announcement. For firms with more than one class of voting stock, blockholdings are adjusted to reflect the proportion of total voting rights in the firm

In Table 7, we report the means and medians for variables related to firm ownership and board composition, as well as other firm characteristics that may affect the manager's decision to either pay a special dividend or to significantly increase the firm's regular dividend. T-statistics and non-parametric Wilcoxon Z-statistics are reported to provide a test of the null hypothesis that there is no difference in the characteristics of the firms that significantly increase their regular dividend and firms that pay a special dividend.

Table 7. Univariate tests for differences in firm characteristics for firms with regular dividend increases and special dividends

Descriptive statistics and univariate test statistics are reported for the firms with regular and special dividends. T-statistics are reported to provide a two-tailed test of the null hypothesis that the mean of the variables for the firms with regular dividend increases and those with special dividends do not differ. The Wilcoxon Z-statistic provides a non-parametric two-tailed test of the null hypothesis that the median value of the variables does not differ for the subsamples with regular and special dividends

Characteristic	N All Firms	N Reg Div	N Spec Div	All firms Mean [Median]	Regular Dividend Firms Mean [Median]	Special Dividend Firms Mean [Median]	T-statistic (p-value)	Wilcoxon Z-statistic (p-value)
Panel A: Board of Director Characteristics								
Board size	200	148	52	11.390 [10.500]	12.264 [11.000]	8.904 [9.000]	6.49 (.000)	4.96 (.000)
Out director	200	148	52	0.690 [0.750]	0.718 [0.774]	0.611 [0.586]	3.73 (.000)	3.64 (.000)
Strict out director	200	148	52	0.542 [0.567]	0.574 [0.600]	0.452 [0.449]	3.92 (.000)	3.88 (.000)
Strict out dir less ins dir	200	148	52	0.232 [0.286]	0.292 [0.360]	0.062 [0.000]	4.18 (.000)	4.18 (.000)
Panel B: Ownership								
CEO ownership	200	148	52	0.045 [0.009]	0.024 [0.006]	0.105 [0.057]	-4.20 (.000)	-5.87 (.000)
Ins ownership	200	148	52	0.117 [0.061]	0.079 [0.047]	0.225 [0.153]	-5.45 (.000)	-6.04 (.000)
Total blockholdings	200	148	52	0.162 [0.120]	0.172 [0.120]	0.136 [0.115]	1.19 (.236)	0.86 (.389)
Unaffiliated blockholdings	200	148	52	0.124 [0.065]	0.133 [.070]	0.097 [0]	1.32 (.189)	1.25 (.212)
Affiliated blockholdings	200	148	52	0.039 [0]	0.039 [0]	0.039 [0]	0.03 (.978)	0.87 (.384)
Corp blockholdings	200	148	52	0.037 [0]	0.046 [0]	0.019 [0]	1.62 (.106)	1.41 (.161)
Panel C: Performance, Dividend Yield and Capital Structure								
Sales ($ millions)	200	148	52	5,482 [687]	7,158 [1,962]	713 [139]	2.37 (.019)	5.75 (.000)
Reg div yld	200	148	52	0.027 [0.024]	0.028 [0.025]	0.024 [0.023]	1.43 (.153)	1.10 (.275)
Cash/assets	197	146	51	0.113 [0.065]	0.108 [0.064]	0.125 [0.072]	-0.72 (.474)	-0.64 (.525)
Debt/assets	200	148	52	0.711 [0.771]	0.746 [0.850]	0.611 [0.649]	3.28 (.002)	3.73 (.000)
IA debt/ assets	200	148	52	0.020 [0.005]	0.042 [0.009]	-0.043 [0.014]	2.99 (.004)	-3.26 (.001)
Mkt assets/ book assets	200	148	52	2.109 [1.126]	2.321 [1.119]	1.506 [1.143]	1.57 (.118)	-0.07 (.941)

In Panel A of Table 7, we examine variables related to the independence and efficiency of the board of directors. Interestingly, firms that pay a special dividend have smaller boards, on average, than firms that increase their regular dividend. Although smaller boards have been shown to be more efficient [e.g., Yermack (1996)], our result may be an artifact of the significantly smaller firm size of the special dividend-paying firms noted in Panel C of Table 7. In Panel A of Table 7, we also show that, on average, firms that increase their regular dividend have greater proportions of both outside directors and strict outside directors on their boards. The differences are significant at the 1% level in both parametric and non-parametric tests. These results are consistent with the idea that firms with greater agency costs prefer special dividends.

In Panel B of Table 7, we examine characteristics of firm ownership. The evidence shows that firms that pay a special dividend have significantly higher levels of ownership, on average, by the top-paid executive who holds the title of either CEO, Chairman of the Board and/or President.[5]

Similarly, we find mean and median beneficial inside ownership is greater for firms that pay a special dividend. On the other hand, we find firms that increase their special dividend have fewer holdings, on average, by affiliated, unaffiliated and corporate outside blockholders, however, the difference is not significant at conventional significance levels. These findings are loosely consistent with the results of DeAngelo, DeAngelo and Skinner (2000) who report a negative relation between the level of institutional ownership and the probability of paying a special dividend.

In Panel C of Table 7, we examine variables related to firm performance, capital structure and dividend yield. We find firms increasing their regular dividend are larger, on average. This may be due to the fact that larger firms have better access to the capital markets, and are thus better able to sustain higher levels of regular dividends. Surprisingly, we find no significant difference in the mean or median annual regular dividend yield for the two sets of firms.

Similarly, we find no significant difference in the ratio of cash to assets for these firms. However, Panel C of Table 7 shows firms that increase their regular dividend have significantly higher levels of debt/assets and industry-adjusted debt/assets. This is consistent with lower agency costs for these firms, as higher interest payments reduce managers' ability to invest in non-optimal projects or to waste corporate resources.

It is also interesting to note that higher levels of interest payments and higher regular dividends are not substitutes for each other. Rather, managers with higher interest payments are also willing to commit to higher regular dividend payments.

Finally, we find no significant difference in the growth options of the two sets of firms. However, it is interesting to note that both the firms that increase their regular dividend and the firms that pay a special dividend tend to have positive growth options, with mean and median ratios of market assets to book assets that exceed one. [6]

4.4. Multivariate Tests of the Determinants of the Dividend Decision

Next, we examine the determinants of the decision to increase regular dividends or to pay a special dividend in a multivariate framework. To do so, we estimate logistic regressions wherein the dependent variable takes the value of zero if the firm increases its regular dividend and one if the firm declares a special dividend. In the logistic regressions, we control for firm size using the natural log of sales, excess cash using the ratio of cash to assets, and the annual regular dividend yield. Selvili and Starks (2001) suggest that inside shareholder control and preferences may motivate the payment of special dividends.

Therefore, we control for inside ownership in two ways.

First, we include the percentage of voting rights held by the CEO.

Second, we include a variable defined as the difference between total beneficial inside ownership and the holdings of the CEO. Finally, we include the ratio of the market value of assets to the book value of assets to control for the firm's growth options.

Additionally, we control for the firm's capital structure three ways.

First, we include the ratio of total debt to total book assets. Second, we include the industry-adjusted ratio of debt to assets.

Finally, we examine the extent to which the actual level of industry-adjusted debt differs from the expected level. To do so, we estimate the expected level of industry-adjusted debt using an OLS regression model similar to that employed in Borokhovich, Brunarski, Crutchley and Simkins (2003). Data to estimate the OLS regression parameters are available for 145 dividend surprise firms.

Below, we report the results of OLS regression to explain the level of industry adjusted debt to assets. (P-values for the coefficient estimates are given in parentheses.)

[5] For simplicity, we refer to this individual hereafter as the CEO.

[6] We define the market value of the assets as the sum of the market value of the common equity, the liquidating value of the preferred stock and the book value of debt.

$$Y = \underset{(.100)}{-.363} + \underset{(.000)}{.042\,[\ln(\text{sales})]} + \underset{(.371)}{.146\,[\text{SGA/sales}]} + \underset{(.607)}{.091\,[\text{tang assets/ total assets}]}$$

$$\underset{(.283)}{-1.348\,[\text{reg div yld}]} + \underset{(.161)}{4.130\,[\text{spec div yld}]} - \underset{(.272)}{0.022\,[\text{IA mkt assets/ book assets}]} \quad R^2 = .203 \quad (1)$$

In Equation (1), ln(sales) is the natural log of sales, with sales expressed in millions. SGA/sales is the ratio of selling, general, and administrative expenses to sales. This ratio proxies for the level of fixed operating costs of the firm. Tang assets/total assets is the ratio of tangible assets to total book assets, were tangible assets is defined as the difference between total book assets and intangible assets. To account for the possibility that the capital structure decision and the dividend yield decision are endogenous, we include as explanatory variables both the regular dividend yield (Reg div yld) and the special dividend yield (Spec div yld) for the year preceding the dividend surprise. IA mkt assets/book assets is the ratio of the market value of the assets to the book value of the assets less the median of two-digit SIC code matched firms. This measures the level of the firms' relative growth options within their respective industries. The unexplained level of debt (debt residual) is defined as the difference between the actual level of industry-adjusted debt and the expected level of industry-adjusted debt estimated for each observation using the coefficient estimates reported in Equation (1).

To examine the relation between the dividend decision and agency costs, we include the proportion of outside directors on the firm's board as a proxy for board independence and an independent variable in our logistic regressions. We use a dummy variable to proxy for the presence of an antitakeover charter amendment. This variable takes a value of one if at least one antitakeover amendment is adopted, and zero otherwise.[7] Finally, we include three different measures of outside ownership: total outside blockholdings, blockholdings of corporations and a variable defined as the difference between unaffiliated and affiliated blockholdings. Affiliated blockholders have an incentive to vote with management to preserve their business ties to the firm, even at the expense of their holdings. Thus, the difference between unaffiliated and affiliated blockholdings measures the extent to which blockholders with no business ties to the firm dominate those who have incentives to vote with management.

We report the results of four different logistic regression specifications in Table 8. Interestingly, we find no evidence that the decision to substantially increase regular dividends or to pay a large special dividend is significantly related to the ratio of cash/assets, the ratio of market assets/book assets, the regular dividend yield, or any of our three proxies for capital structure. On the other hand, we find that firm size, as measured by the natural log of sales, is negatively related to the likelihood that firms disburse cash using a large special dividend. This is consistent with the univariate findings on firm size reported in Table 7.

Selvili and Starks (2001) suggest that inside shareholder preferences may motivate the payment of special dividends. Managers may use special dividends to increase their ownership as many firms distribute additional shares of stock in lieu of cash special dividends for inside holdings. We control for the level of inside holdings in our logistic regressions in two ways. First, we include the proportion of votes held by the CEO in Regressions 1 through 4 in Table 8. In Regressions 2 and 4, we additionally include the proportion of votes held by all other beneficial insiders. This variable includes the holdings of executives other than the CEO, as well as the holdings of directors. We find that the coefficient estimates for CEO ownership are positive and differ significantly from zero at the 1% level in Regressions 1 and 3 in Table 8. This is consistent with the univariate results reported in Table 7, and also consistent with Selvili and Stark's contention that managers with large inside holdings have a preference for special dividends. On the other hand, we find no significant relation between the level of all other beneficial holdings and the dividend decision. Interestingly, the coefficients for CEO ownership do not differ significantly from zero when we include the proportion of votes held by all other beneficial owners as an explanatory variable in the same regression.

Outside blockholders have incentives to monitor managers on behalf of shareholders. However, shareholders who have a tax preference for dividend income over capital gain income may prefer and select stocks that pay high levels of regular dividends. Hence, in the case of dividends, it is difficult to interpret the motivations of blockholders; some blockholders may prefer regular dividends over special dividends as a means to reduce agency costs, whereas others may prefer stocks with high regular dividend yields to provide more stable income and/or to reduce the tax liability on their equity holdings. Of the three measures of blockholdings included in Table 8, only the coefficients for total blockholdings differ significantly from zero. Specifically, the coef-

[7] Antitakeover charter amendments became much less common subsequent to 1988 due, in part, to the proliferation of state antitakeover legislation. Because none of the firms in our sample is reported to have adopted an antitakeover amendment subsequent to 1991, we include antitakeover amendments listed in Table 5 where the adoption date is unknown, as it is like that the majority of these measures are adopted prior to the dividend surprise announcements.

ficient estimates for total blockholdings reported in Regressions 2 and 4 are negative, and both coefficients differ from zero at the 5% significance level. While consistent with the agency cost argument that blockholders prefer regular dividend increases to special dividends, the results are also consistent with a preference by outside blockholders for stocks in firms with high regular dividend yields.

Finally, the coefficient estimates for our ATA dummy variable and our board composition variable provide strong support for the contention that firms with greater agency costs prefer special dividends to regular dividend increases. We find that the coefficient estimate for the proportion of outside directors is significant and negative in all four regression specifications reported in Table (8). The coefficient estimates range from -5.113 to -2.735, and differ significantly from zero at the 5% level in Regressions 1through 3 and at the 1% level in Regression 4. The coefficient estimate for the dummy variable that proxies for the presence of an ATA is positive and significant at the 5% level in Regressions 1 through 3 and positive and significant at the 10% level in Regression 4. This suggests that firms with ATAs are more likely to choose a special dividend when they wish to disburse cash to shareholders. While the coefficient estimates for the proportion of outside directors is consistent with the univariate results reported in Table 7, the coefficient estimates for the ATA dummy are somewhat surprising. Results reported in Table 5 show that antitakeover amendments are more common among firms that increase their regular dividend than in firms that pay a special dividend.

4.5. Robustness Tests

To help ensure that the results of our logistic regressions are not an artifact of spurious correlations with omitted variables, we consider the inclusion of additional explanatory variables to the regression models reported in Table 8. Because a relatively large number of firms in our sample consist of regulated financial services firms, we include a dummy variable equal to one if the firm has a two-digit SIC code designation of 60 and 61, and zero otherwise. This designation indicates either a depository institution or a non-depository credit institution. We include a variable defined as the ratio of the firm's free cash flow to book assets as an additional measure of manager's ability and incentives to increase dividends. Free cash flows are defined consistent with Howe, He and Kao (1992) as operating income before depreciation less interest expense, taxes, preferred dividends and common dividends. For the sake of brevity, the results are not reported here. However, in all four regression specifications, we fail to find that either of these variables is significant in explaining the dividend decision. Further, the inclusion of these variables has no significant impact on the sign or significance of our variables of interest.

Table 8. Logistic regressions on determinants of the decision to increase regular dividends or pay a special dividend

Logistic regressions are estimated where the dependent variable is defined as equal to one if the firm announces a special dividend, and zero if the firm increases their regular dividend. P-values for the chi-square test-statistics provide a two-tailed test of the null hypothesis that the coefficient estimates are equal to zero. P-values are reported in parentheses. The percentage of ownership and board composition are included in the regressions as decimal numbers (i.e., 5% CEO ownership would be included in the regression model as 0.05).

Independent variables	Dependent variable: 0 if regular dividend increase, 1 if a special dividend			
	Regression Number			
	(1)	(2)	(3)	(4)
intercept	2.795 (.022)	3.222 (.016)	2.915 (.017)	2.824 (.029)
Ln(sales)	-0.767 (.000)	-0.823 (.000)	-0.814 (.000)	-1.023 (.000)
Reg div yld	-29.291 (.109)	-25.077 (.178)	-26.403 (.153)	
Debt/ assets	0.994 (.402)		1.587 (.221)	
IA debt/ assets		-0.006 (.997)		
Debt residual				0.275 (.893)
Cash/ assets	-0.119 (.958)	0.163 (.946)	0.893 (.692)	-3.246 (.039)
Mkt/book assets	-0.196 (.412)	-0.247 (.360)	-0.218 (.332)	0.074 (.808)

Table 8 continued

Out director	-2.788 (.032)	-2.735 (.041)	-2.645 (.039)	-5.113 (.004)
Antitakeover	1.362 (.022)	1.553 (.012)	1.451 (.016)	1.406 (.080)
CEO ownership	7.263 (.004)	3.748 (.194)	7.266 (.005)	3.888 (.249)
Ins ownership less CEO ownership		-1.893 (.455)		-4.509 (.128)
Total blockholdings		-4.219 (.022)		-5.349 (.010)
Corp blockholdings	-2.371 (.417)			
Unaffiliated blockholdings less Affilitated blockholdings			-1.971 (.114)	
Likelihood ratio Chi-Square (p-value)	74.80 (.000)	78.30 (.000)	76.61 (.000)	71.24 (.000)
Log likelihood	75.26	73.51	74.35	49.78
N special div observations	51	51	51	40
N regular div observations	146	146	146	105
Total observations	197	197	197	145

Finally, we include one additional variable to proxy for board independence. Specifically, we include the difference between the proportions of strict outside directors and inside directors on the firm's board as an explanatory variable in the logistic regressions in place of the outside director variable. We then re-estimate the logistic regressions in Table 8. We find that the coefficient estimates for the difference between the proportions of strict outside directors and inside directors are all negative and significant at the 10% level in all four regression specifications. Once again, this is consistent with the notion that firms with more efficient boards are more likely to increase regular dividends than to pay a special dividend.

5. Conclusion

In this study, we examine the relation between agency costs and the firm's decision to distribute excess cash using either a significant increase in regular dividends or a large nonrecurring special dividend. Regular dividends commit management to distribute cash at fixed intervals, whereas special dividends carry no assumption of continuity. Managers who increase regular dividends are expected to produce sufficient cash flows to cover these obligations. When managers cut or omit regular dividends, they face a loss of reputation and a decrease in firm value on average. Therefore, managers who have excess cash to distribute may prefer to do so through the payments of nonrecurring special dividends.

Our proxies for agency costs within the firm include the proportion of outside directors on the board, outside blockholdings, and the presence of antitakeover charter amendments. We obtain a sample of firms that significantly increase their regular dividend or declare a large nonrecurring special dividend. We find a negative relation between the proportion of outside directors and the likelihood that the firm pays a special dividend. Further, when we control for capital structure, inside ownership, growth options and firm size, we find a positive relation between the presence of antitakeover charter amendments and the likelihood that a firm pays a special dividend. Both of these results are consistent with the notion that firms with greater agency costs prefer special dividends to regular dividend increases. We also find evidence to suggest that the proportion of outside blockholdings is negatively related to the payment of special dividends. While this finding is consistent with the idea that blockholders reduce agency costs by committing managers to the payment of regular dividends, it is also consistent with the idea that certain clientele prefer large regular dividends.

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