Revisiting Managerial Perspectives on Dividend Policy

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Abstract

We survey managers of Nasdaq firms that consistently pay cash dividends to determine their views about dividend policy, the relationship between dividend policy and value, and four common explanations for paying dividends. The evidence shows that managers stress the importance of maintaining dividend continuity and widely agree that changes in dividends affect firm value. Managers give the strongest support to a signaling explanation for paying dividends, weak to little support for the tax-preference and agency cost explanations, and no support to the bird-in-the-hand explanation. The study provides new evidence about how managers view dividend life cycles and residual dividend policy. (*JEL* D40, L11, L95)

Introduction

One of the more puzzling issues in corporate finance involves dividends. Miller and Modigliani (1961) provide a compelling and widely accepted argument for dividend irrelevance in a world with perfect capital markets. Many years later, Miller (1986) recognized that the observed preference for cash dividends is one of the "soft spots in the current body of theory." So why do corporations pay dividends, and why do investors care? Black (1976) once described this issue as a dividend "puzzle" with "pieces that just don't seem to fit."

To help explain this puzzle, financial economists developed various theories—signaling, tax-preference, agency costs, and bird-in-the-hand explanations. The profusion of theories led Ang (1987, p. 55) to observe, "Thus, we have moved from a position of not enough good reasons to explain why dividends are paid to one of too many." Advocates of behavioral finance, such as Shefrin and Statman (1984), introduced concepts such as prospect theory and mental accounting to explain why investors like dividends. Statman (1997) contends that solving the dividend puzzle is impossible while ignoring the patterns of normal investor behavior. Today, corporate managers are

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left with a vast and often conflicting body of research about dividends.

One way to enhance our understanding of why corporations pay dividends is to examine the views of managers who are responsible for making such decisions. Past fieldwork and surveys have provided important insights into how managers determine their firm's dividend payouts and their views about various dividend policy issues. For example, Lintner (1956) conducted the seminal field study about the determination of dividend policy. Other researchers including Baker, Farrelly, and Edelman (1985) and Baker and Powell (1999) surveyed managers to obtain their views about dividend policy. Such studies complement other types of empirical research on dividend policy.

Our study examines how managers view dividend policy but uses a different data set to extend and refine the scope of previous survey research. Specifically, we survey corporate managers of Nasdaq firms that consistently pay cash dividends to determine their views about dividend policy, the relationship between dividend policy and value, and four common explanations for paying dividends—signaling, tax-preference, agency costs, and bird-in-the-hand arguments. Our motivation for conducting this study is to determine whether the evidence simply reaffirms what we already know or provides new insights about dividend policy. The study is timely given evidence by Fama and French (2001) of the declining incidence of dividend payers, which not only reflects the changing characteristics of dividend payers but also their lower propensity to pay dividends.

In this study, we do not focus on the views about dividend policy of managers from the "typical" Nasdaq firm because most Nasdaq firms either pay no dividends or pay dividends on an irregular basis. Instead, we investigate the views of a subset of Nasdaq firms, namely, those that consistently pay cash dividends. The fact that most Nasdaq firms do not pay dividends is not surprising given their characteristics. As Damodaran (1999) notes, a firm's dividend policy tends to follow the firm's life cycle. During the introduction and rapid expansion stages, firms typically pay no or very low dividends. Such firms characterize a large portion of firms trading on Nasdaq.

Our study differs from previous research on dividend policy in several ways. First, unlike prior fieldwork and surveys that focus only on NYSE-listed firms from a few industries, we study managers from dividend-paying Nasdaq firms from numerous industries. Michel (1979) and Baker (1988) present evidence that dividend policies vary across industries. Our rationale for examining Nasdaq firms rests on the belief that the views of Nasdaq managers may differ from those of NYSE-listed firms because of different firm characteristics such as size. Second, we investigate several areas not examined in previous surveys such as views about historical patterns of dividends, dividend life cycle, and residual dividend policy. Finally, unlike most research that focuses on a single explanation of why companies pay dividends, we examine multiple explanations. By taking this approach, we can assess the relative importance of different reasons for paying dividends based on the level of agreement or disagreement with various statements involving each explanation.

The remainder of the paper is organized as follows. The next section provides a brief review of the relevant dividend literature. The third section presents our research questions and empirical predictions followed by a discussion of the methodology and limitations in the fourth section. The fifth section presents our survey results, and the final section provides a summary and conclusions.

¹ Using data obtained from Compustat, we conducted t-tests to determine whether differences exist in the size (logarithm of total assets and sales), dividend payout, dividend yield, and price-to-book ratio for the total sample of dividend-paying Nasdaq (n = 561) and NYSE (n = 905) firms in 1996. This was the first of two years that firms had to pay quarterly dividends to be in our sample. Dividend-paying Nasdaq firms are significantly smaller at the 0.01 level than their NYSE counterparts in terms of size, but they do not differ significantly at the 0.05 level based on the other three variables. We did not conduct industry-matched comparisons of the financial characteristics, but instead chose to examine typical dividend-paying Nasdaq and NYSE firms. These results are available from the authors upon request.

Previous Research

In this section, we present three basic areas of dividend research. First, we discuss Lintner's (1956) classic study that investigates how corporate managers determine their firms' dividend policies. We also review some of the subsequent research related to Lintner's findings. Second, we review studies that examine whether dividend policy affects firm value. Third, we present major research findings related to four common explanations for paying dividends—signaling, tax-preference, agency costs, and bird-in-the-hand arguments. Because the amount of research conducted in these areas is voluminous, we confine our review to a few key research findings in each area.³

Determining a Firm's Dividend Policy

In his classic study, Lintner (1956) reports that firms have long-run target dividend payout ratios and place their attention more on dividend changes than on absolute dividend levels. He also finds that dividend changes follow shifts in long-run sustainable earnings (managers smooth earnings) and managers are hesitant to make dividend changes that may later need to be reversed. Managers also try to stabilize dividends and avoid dividend cuts. Lintner developed a partial-adjustment model to describe the dividend decision process that explained 85 percent of year-to-year dividend changes. Several studies including Fama and Babiak (1968), Baker, Farrelly, and Edelman (1985), and Baker and Powell (1999) support Lintner's behavioral model. Benartzi, Michaely, and Thaler (1997, p. 1032) conclude that "...Lintner's model of dividends remains the best description of the dividend setting process available."

Dividend Policy and Value

Much empirical research exists investigating whether dividend policy affects firm value. Graham and Dodd (1951) and Gordon (1959) argue that an increase in the dividend payout increases stock price (value) and lowers the cost of equity, but empirical support for this position is weak. Others such as Litzenberger and Ramaswamy (1979, 1982), Blume (1980), and Ang and Peterson (1985) take the opposite position. Their studies report that stocks with high dividend payout ratios have higher required returns and therefore lower prices. Still others such as Black and Scholes (1974), Miller and Scholes (1978, 1982), Miller (1986), and Bernstein (1996) maintain that dividend policy makes no difference because it has no effect on either stock prices or the cost of equity. Researchers have tested these alternative theories of dividend policy but have not obtained conclusive results. Thus, the issue of which explanation of dividend policy is most correct remains unresolved.

Explanations for Paying Dividends

The finance literature contains four standard explanations for paying dividends—signaling, tax-preference, agency costs, and bird-in-the-hand. The signaling, or asymmetric information, models for paying dividends, developed by Bhattacharya (1979), John and Williams (1985), and Miller and Rock (1985), suggest that managers as insiders choose dividend payment levels and dividend increases to signal private information to investors. Managers have an incentive to signal this private information to the investment public when they believe that the current market value

³ See Ang (1987) and Lease et al. (1999) for a comprehensive review of the dividend policy literature and Frankfurter and Wood (1997) for a discussion of the evolution of corporate dividend policy.

of their firm's stock is below its intrinsic value. The increased dividend payment serves as a credible signal when other firms that do not have favorable inside information cannot mimic the dividend increase without unduly increasing the chance of later incurring a dividend cut. Strong support exists for the signaling explanation including research by Aharony and Swary (1980), Asquith and Mullins (1983), Kalay and Lowenstein (1986), Healey and Palepu (1988), and Nissim and Ziv (2001).

A second explanation for paying dividends is tax-preference theory. Favorable tax treatment on capital gains (lower capital gains tax rate and deferral of capital gains tax) should cause investors to prefer nondividend-paying stocks. Tests of this tax-preference explanation for paying or not paying dividends take two forms. According to Brennan's (1970) version of the capital asset pricing model, dividend-paying stocks must offer higher pre-tax returns than nondividend-paying stocks, all else equal. Brennan's empirical tests, however, are mixed. Also, Black and Scholes (1974) find no evidence of this tax effect, while Litzenberger and Ramaswamy (1979) and Kalay and Michaely (1993) find evidence that pre-tax returns are related to dividend yield.

Other studies examine the ex-dividend date price drop. Favorable capital gains tax treatment could cause the price drop to be less than the dividend payment and cause investors to prefer nondividend-paying stocks. Empirical evidence on this matter is also inconclusive. For example, Elton and Gruber (1970) find an ex-dividend date price drop that is less than the dividend amount, but Michaely (1991) finds an ex-dividend date price drop equal to the dividend payment.

Another explanation for why firms might pay dividends is based on agency relationships between various claimholders of the firm. Easterbrook (1984) argues that firms pay dividends to help reduce the agency costs associated with the separation of ownership and control. By paying dividends, managers must raise funds more frequently in the capital markets where they are subjected to scrutiny and the disciplining effects of investment professionals. Jensen (1986) makes a similar agency-theory argument where managers pay dividends to reduce the firm's discretionary free cash flow that could be used to fund suboptimal investments that benefit managers but diminish shareholder wealth. Rozeff (1982), Lang and Litzenberger (1989), Agrawal and Jayaraman (1994), and Jensen, Solberg, and Zorn (1992) provide empirical support for these agency explanations for paying dividends.

Finally, the bird-in-the-hand explanation asserts that paying higher dividends increases firm value because dividends represent a "sure thing" while future share price appreciation is uncertain. Miller and Modigliani (1961) refer to this as the bird-in-the-hand fallacy. Bhattacharya (1979) correctly argues that the riskiness of a project's cash flows determines a firm's risk and an increase in dividend payout today will simply result in an equivalent drop in the stock's ex-dividend price. Thus, increasing the dividend today will not increase a firm's value by reducing the riskiness of future cash flows. Although virtually no empirical support exists for the bird-in-the-hand explanation for paying dividends, we want to determine if managers' views are consistent with previous theoretical and empirical research.

Research Questions and Empirical Predictions

We address three major research questions in this study. First, what views do Nasdaq managers from dividend-paying firms have on the dividend-setting process? We expect that our survey respondents strongly agree with statements involving Lintner's (1956) model on dividend policy. Lintner's famous investigation of dividend policy stresses that firms only increase dividends when management believes that earnings have permanently increased. As previously discussed, much support exists for Lintner's description of how firms set their dividend payments. We expect the Nasdaq firms studied, all of which have established patterns of paying dividends, to hold similar views.

Second, do corporate managers of dividend-paying Nasdaq firms believe a firm's dividend payout can affect firm value? Based on a set of highly restrictive assumptions, Miller and Modigliani (1961) contend that dividend policy has no effect on either the price of a firm's stock or its cost of capital. We expect that managers generally believe that dividend policy matters because they operate in a world in which market imperfections can make dividend policy relevant. Therefore, we expect to observe general agreement by managers of Nasdaq firms participating in our study with statements relating to the relationship between dividend policy and value. Studies by Lintner (1956), Baker, Farrelly, and Edelman (1985), and others report that managers believe dividend stability is desirable. If this position is correct, investors should prefer stocks that pay more predictable dividends to those that pay the same amount of dividends in the long run but in a more erratic manner.

We do not expect the majority of respondents to agree with statements involving the residual dividend model, which implies that dividends are paid out of "leftover" earnings. Although using the residual policy may help a firm set its long-run target payout ratio, we believe that managers typically do not use this approach to guide the payout in any one year because this would lead to erratic dividends.

Third, what explanations for paying dividends do Nasdaq managers tend to favor? As previously discussed, researchers have conducted many studies involving various explanations of why companies pay dividends. The empirical evidence is generally consistent with several hypotheses generated by the dividend-signaling and agency-cost models, and inconsistent with tax preference theory. As indicated earlier, there is virtually no empirical evidence supporting the bird-in-the-hand theory. Because our dataset consists of firms with established patterns of paying cash dividends, we expect that managers of such firms are sensitive to the signals they may convey to the market by altering this pattern. Therefore, we expect to find that managers of Nasdaq firms agree more strongly with statements about the asymmetric information explanation for paying dividends than with statements about other explanations.

Methodology and Limitations

Population Studied

Frankfurter and Wood (1997, p. 3) note that dividend policy "...cannot be modeled mathematically and uniformly for all firms at all times." Therefore, we confine our investigation to Nasdaq firms with an established pattern of paying cash dividends and exclude Nasdaq firms that pay cash dividends sporadically or not at all. Because the firms studied are generally in the maturity stage of their lifecycle, we expect the views of senior financial managers to resemble those of NYSE-listed firms with a similar dividend pattern. Our initial group of firms consists of all 651 firms whose stocks are traded on Nasdaq that paid eight consecutive quarterly cash dividends during 1996 and 1997. We use Standard & Poor's Compustat to identify these firms. After searching the 1999 Edition of Standard & Poor's Register of Corporations and Hoover's Online for the names and addresses of a top financial officer of each firm, we obtain a final group of 630 firms.

Survey Design

We pre-tested preliminary versions of the survey instrument in two ways. First, we had three business professors, who were knowledgeable about survey research, and five graduating MBA students review the survey and provide feedback. Based on this feedback, we revised the survey. Second, we held a focus group to examine such issues as the clarity of the questions, general

format including question order, and the coverage of all relevant topics in the survey. Again, we made changes to the survey instrument based on this feedback.

We sent a mailing to 630 financial managers of Nasdaq firms to get information about how they view various dividend policy issues. The survey asked respondents to indicate their general opinion about each of 27 closed-end statements, which we refer to later as S1 through S27 to indicate their location in the survey. The responses follow a five-point, equal interval scale: -2 = strongly disagree, -1 = disagree, 0 = no opinion, +1 = agree, and +2 = strongly agree. We analyzed their responses to learn their views about setting a firm's dividend policy and whether dividends affect firm value. Next, we examine their views about four different explanations for paying dividends. Finally, we obtained a profile of the respondents and their firms.

We mailed a cover letter requesting participation in this study along with a stamped, self-addressed return envelope and the survey instrument to the top financial officer of each of 630 firms in mid-June 1999. The cover letter requested that if recipients were not actively involved in determining their firm's dividend policy that they give the survey to someone in their company who was involved. The survey contained a code number to avoid potentially including duplicate responses in the analysis. The cover letter informed potential respondents that we would report the results in summary form and would not disclose any information involving individual companies. Although including a code number may have reduced the response rate and/or introduced a response bias, we believe that having the ability to identify duplicate responses outweighs this potential limitation. We mailed a second copy of the survey to non-respondents in mid-July 1999 to increase the response rate and to reduce potential non-response bias. As an inducement to increase the response rate, we offered all interested parties an executive summary of the results.

By the end of August 1999, we had received 188 usable responses, giving a 29.8 percent response rate. This response rate is substantially higher than some recent academic surveys that targeted senior financial officers including Trahan and Gitman (1995), who obtain a 12 percent response rate, and Graham and Harvey (2001), who obtain less than 9 percent response rate for a survey containing more than 100 questions. We obtained 162 and 26 responses from the first and second mailing, respectively. The 188 responses to our survey were from managers from firms in the following industries: finance, insurance, and real estate (financial) (64.4 percent); manufacturing (14.9 percent); transportation, communication, electricity, gas, and sanitary (9.6 percent); services (6.9 percent); wholesale and retail (3.2 percent); and agriculture, forestry, and fishing (1.1 percent). Because of the large portion of firms in the first group, we partitioned all firms into financial and non-financial firms to test for industry effects due to different characteristics.

Virtually all survey respondents held senior managerial positions. The most common position or title of the respondents was chief financial officer (53.7 percent), vice president of finance (23.4 percent), chief operating officer/president (10.1 percent), and chief executive officer (4.8 percent). No other category amounted to more than 5.0 percent of the responses. A total of 92.5 percent of the respondents said they were actively involved in determining their firm's dividend policy.

Limitations

The current study has several potential limitations. Despite the high response rate for surveys of this type, the possibility of non-response bias exists. This is true even though we took the normal precautions to reduce this bias including using multiple mailings and guaranteeing confidentiality. To investigate whether non-response bias might affect our results, we conduct

We exclude the survey from this paper due to space limitations, but it is available from the authors upon request.

three tests. First, we use an approach similar to that suggested by Moore and Reichert (1983). Specifically, we conduct t-tests for differences in means to determine whether certain firm characteristics (total assets, sales, dividend payout, dividend yield, and price-to-book ratio) of the 188 responding firms differ significantly from the 461 non-responding firms. We include all firms in our study for which data are available from Compustat for 1996. No significant differences exist between the responding and non-responding firms on any of these variables at the 0.05 level.⁵

Second, we use a chi-square goodness-of-fit test to determine whether the responses represent the six industry groupings in about the same proportions as the population of dividend-paying Nasdaq firms. These industry groups are (1) finance, insurance, and real estate, (2) manufacturing, (3) transportation, communication, electricity, gas, and sanitary, (4) services, (5) wholesale and retail, and (6) agriculture, forestry, and fishing. The test result ($\Pi^2 = 2.964$ with df = 5) is not statistically significant at the 0.05 level.

Third, using an approach suggested by Wallace and Mellor (1988), we compare the responses to each of the 27 closed-end statements for the 162 firms that returned the survey on time (first mailing) to the 26 firms that did not (second mailing). To perform the chi-square tests, we collapse the five-point scale to three categories—(1) strongly disagree and disagree, (2) no opinion, and (3) agree and strongly agree—to reduce the potential problem associated with small cell size. Based on the chi-square tests, we find only one statement in which the responses to the first and second mailings differ significantly at the 0.05 level. This is S20 ($\Pi^2 = 6.294$ with df = 2), which states that a "firm's stock price generally falls when the firm unexpectedly decreases its dividend."

Accepting that non-response bias is small, other concerns about the survey data exist. For example, the respondents might not answer truthfully. Given that the survey was confidential and executives took the time to complete the survey, we believe this problem is minimal. As previously mentioned, the survey was not anonymous, because of the inclusion of a code number. We believe, however, that the benefits of including a code number far outweigh any potential bias. For example, including a code number enables us to compare firm characteristics of respondents and non-respondents in order to investigate directly whether non-response bias may affect our results. Also, having a code number avoids potential problems of including duplicate responses and alienating respondents with multiple mailings. Although in some surveys using a code number may bias results toward responses that present the managers in a more positive way, we believe this likelihood is minimal in our study. For the 27 statements involving corporate dividend policy, we asked managers to indicate their level of agreement or disagreement with each statement about "dividend policy in general." Because we do not ask respondents to reveal information about their firm's dividend policy, we see a low probability that manager responses would be designed to present themselves in a more positive way.

Another potential bias is that the probability of getting responses to each question might depend on the question's location in the survey. For example, respondents may be less likely to answer questions at the end of a section or in sections at the end of the survey. Because all 27 statements appeared in one section on a single page, we believe this potential bias is also minimal. Based on an examination of the number of responses for the 27 statements, we find no evidence of this bias. For example, the average number of responses for S1-S9 is 186.4 compared with 185.3 for S10-S19 and 185.9 for S20-S27. As Tables 1 through 3 show, the number of responses for the 27 statements ranges from 182 to 187. The literature contains many instances of order having no effect on response rates including Schuman and Presser (1981) and Graham and Harvey (2001).

Another potential problem is that respondents may not properly understand the questions or the questions might not elicit the appropriate information. Given that we pretested the survey, we believe that the questions are generally well crafted. Also, we could have asked more questions to

⁵ The t-test results are available from the authors upon request.

gain even greater insight into the attitudes and opinions of financial executives. Given the tradeoff between survey length and the probability of realizing a high response rate, we chose to limit the number of questions.

Finally, we remind the reader that the population studied here does not include nondividend-paying firms and firms paying cash dividends irregularly. Thus, our findings are likely to be different than if these other firms had been included in the sample. For example, managers of dividend-paying firms may be more likely to believe that paying dividends enhances firm value or lowers the cost of capital than managers of nondividend-paying firms. Such managers may also assign higher benefits and lower costs to paying dividends than their nondividend paying counterparts. As previously mentioned, our study focuses on a subset of Nasdaq firms, not on Nasdaq firms in general. Therefore, the findings of this study relate to Nasdaq firms that have an established pattern of paying cash dividends. Previous studies, such as Baker (1989), have investigated why companies pay no dividends.

Survey Results

We report the results in three sub-sections. First, we discuss Nasdaq managers' responses to statements about dividend policy involving the dividend setting process and the historical pattern of dividends. Next, we examine respondent views on dividend relevance. The third sub-section examines the responses about the four common explanations for paying dividends.⁶

Tables 1 through 3 report our empirical findings. For presentation purposes, we collapse the responses into three categories: disagree (-2 and -1), no opinion (0), and agree (+1 and +2). In each panel of the tables, we list the results in order of their mean responses, from largest to smallest. Although not shown, we also use t-tests to determine if any of the mean responses differs significantly from 0 (no opinion). Based on the t-tests, we reject the null hypothesis that the mean value of each statement does not differ from zero, except statements S24 and S27. This test was conducted at the 0.05 level.⁷

Corporate Dividend Policy

Panel A of Table 1 reports how the respondents view five statements (S4 through S8) relating to Lintner's description of the dividend-setting process. Of the 27 statements contained in the survey, Nasdaq managers show the highest level of agreement with S6 (mean = 1.53) and S7 (mean = 1.47). More than 90 percent agree that a firm should avoid increasing its regular dividend if it expects to reverse the dividend decision in a year or so (S6) and a firm should strive to maintain an uninterrupted record of dividend payments (S7). The high level of agreement with these two statements suggests concern of the responding Nasdaq managers about the continuity of paying dividends.

Wide agreement also exists that the market places greater value on stable dividends than stable payout ratios (S8) and a firm should change dividends based on sustainable shifts in earnings (S5). More than 60 percent also agree that a firm should set a target dividend payout ratio and periodically adjust its current payout toward the target (S4). Overall, the high level of

⁶ We partitioned our sample into financial firms and non-financial firms, 64.4 percent versus 35.6 percent of the responses, to test for industry effects due to different characteristics. Using t-tests, the results show that financial firms have significantly higher dividend payouts, dividend yields, and total assets, but lower sales (revenue) and price-to-book ratios than non-financial firms. The results of the chi-square tests show significant differences in responses for only two of the 27 statements (S23 and S27). Thus, industry type generally has no significant effect on managerial perceptions. The test results are available from the authors upon request.

⁷ The t-tests are available from the authors upon request.

agreement with these five statements provides support for our first prediction involving Lintner's (1956) behavioral description of the dividend-setting process. These results are not surprising given that our responses come from firms with a pattern of consistently paying cash dividends.

TABLE 1. RESPONSES TO STATEMENTS ABOUT THE DIVIDEND-SETTING PROCESS, HISTORICAL PATTERNS OF DIVIDENDS, AND DIVIDEND LIFE CYCLE

			Level of				
Location	Statement	n	Disagree	No Opinion	Agree	Mean	Std.
in Survey			-2 & -1	0	+1 & +2		Dev.
Panel A. I	Dividend Setting Process						
S6	A firm should avoid increasing its regular dividend if it expects to reverse the dividend decision in a year or so.	187	5.3	1.6	93.1	1.529	0.798
\$ 7	A firm should strive to maintain an uninterrupted record of dividend payments.	187	1.6	3.2	95.2	1.465	0.690
S8	The market places greater value on stable dividends than stable payout ratios.	186	5.9	19.4	94.4	0.957	0.856
S5	A firm should change dividends based on sustainable shifts in earnings	187	16.6	7.5	77.0	0.829	1.011
S4	A firm should set a target dividend payout ratio and periodically adjust its current payout toward the target.	187	18.9	20.5	60.5	0.481	0.978
Panel B. H	listorical Pattern of Dividends and	the Divid	end Life Cyc	:le			
S2	Dividends generally follow a smoother path than earnings.	187	3.7	4.3	92.0	1.262	0.734
S1	Dividend changes generally lag behind earnings changes.	187	13.4	10.2	76.5	0.797	0.962
S3	The pattern of cash dividends generally changes over a firm's life cycle.	185	15.6	26.5	57.8	0.551	0.926

Notes: Within each panel, statements are listed in order of their mean values from largest to smallest. The percentages may not add to 100 due to rounding. Based on t-tests, all means are significantly different from zero (no opinion) at the 0.05 level.

Panel B of Table 1 reports whether the respondents generally agree with two statements about well-documented historical patterns on dividends (S1 and S2). The first pattern is that dividends generally follow a smoother path than earnings (S2). A total of 92.0 percent of the responding Nasdaq managers agree with this statement. Historically, the variation in earnings yields across firms is much greater than the variation in dividend yields.⁸

⁸ Using annual data on aggregate earnings and dividends from 1960 to 1994, Damodaran (1999) finds that the standard deviation of earnings yields across companies is 18.57 percent, which is significantly higher than the standard deviation in dividend yields of only 3.15 percent.

The second pattern is that dividend changes generally lag behind earnings changes (S1). About three quarters of the respondents (76.5 percent) agree with this statement. This finding is not surprising because firms pay dividends out of earnings. The views expressed by these managers are also consistent with the lagged effect that earnings have on dividends noted by Lintner (1956) and Fama and Babiak (1968).

Panel B of Table 1 also provides evidence about the dividend life cycle. Damodaran (1999) suggests that the pattern of cash dividends generally changes over a firm's life cycle (S3). He bases this notion on evidence that dividend yields and payout ratios decrease as expected growth rates increase. According to his life cycle model, firms generally pay no dividends during the introduction stage of their life cycle. Firms have no or very low dividends during the rapid expansion stage, increase dividends during the mature growth stage, and use special dividends or repurchase stock during the decline stage. Although a majority of the respondents (57.8 percent) agree with this statement, the level of agreement is much lower than on the two previous statements (S1 and S2). Apparently, the majority of the responding Nasdaq managers believe that a relationship exists between a firm's dividend policy and its life cycle.

Dividend Policy and Firm Value

Panel A of Table 2 reports the results of how Nasdaq managers view five statements about the relationship between dividend policy and firm value (S9, S10, S11, S13, and S15). More than 90 percent agree with the statement that an optimal dividend policy strikes a balance between current dividends and future growth that maximizes stock price (S11). More than 80 percent of the respondents agree that a firm should formulate its dividend policy to produce maximum value for its shareholders (S10) and that a firm's investment, financing, and dividend decisions are interrelated (S13). About 65 percent of responding Nasdaq managers agree that a change in a firm's cash dividends affects firm value (S9). Only about half agree that a firm's dividend policy generally affects the firm's cost of capital (S15). These responses are consistent with our second prediction that respondents generally believe dividend policy matters.

When designing these questions, our intention was not to provide insights into whether the respondents support the bird-in-the-hand approach or tax preference theory. Instead, our concern was whether respondents perceive a relationship between dividend policy and firm value. This is a complex issue on which many academics still disagree. Not surprisingly, about a quarter of the respondents express "no opinion" about the relationship between dividend policy and a firm's value (S9) or its cost of capital (S15).

The two questions (S12 and S14) in Panel B of Table 2 relate to the residual approach to paying dividends. The respondents express slight agreement (mean = 0.21) with S12 that a firm should view cash dividends as a residual after funding desired investments from earnings, but slight disagreement (mean = -0.28) with S14 that a firm's expenditures on new capital investments generally affect its dividend pattern. The apparent inconsistency in responses involving S12 and S14 may reflect differences in wording or interpretation of the statements.

As expected, less than half the respondents agree with S12 and S14. The fact that the respondents do not express strong agreement with either statement involving residual dividend theory is not surprising given their responses to several earlier statements (S6, S7, and S8) that favor dividend continuity and stability. Also, respondents from dividend-paying firms are probably much less sensitive to questions involving the link between dividend policy decisions

⁹ Lease et al. (2000) develop a slightly different dividend life cycle model than Damodaran (1999), but contend that a relationship exists between dividends and a company's life cycle.

and financing decisions (S13) and how dividend policy links up with the firm's investment decisions (S12 and S14) than their counterparts at nondividend-paying firms.

TABLE 2. RESPONSES TO STATEMENTS ABOUT DIVIDEND POLICY AND VALUE AND RESIDUAL DIVIDEND POLICY

	Statement	n	Level o				
Location in Survey			Disagree -2 & -1	No Opinion 0	Agree +1 & +2	Mean	Std. Dev.
Panel A. Di	ividend Policy and Value						
\$11	An optimal dividend policy strikes a balance between current dividends and future growth that maximizes stock price.	187	2.7	4.8	92.5	1.299	0.730
\$10	A firm should formulate its dividend policy to produce maximum value for its shareholders.	187	6.9	12.3	80.7	1.128	0.936
\$13	A firm's investment, financing, and dividend decisions are interrelated.	187	10.2	9.1	80.7	0.930	0.973
S9	A change in a firm's cash dividends affects its value.	187	10.2	24.6	65.2	0.668	0.853
\$15	A firm's dividend policy generally affects its cost of capital.	182	23.6	25.3	51.1	0.324	1.030
Panel B. Re	sidual Dividend Policy						
S 12	A firm should view cash dividends as a residual after funding desired investments from earnings.	185	32.4	20.5	47.1	0.205	1.123
S14	A firm's expenditures on new capital investments generally affect its dividend pattern.	185	49.2	25.4	25.4	-0.281	1.046

Notes: Within each panel, statements are listed in order of their means from largest to smallest. The percentages may not add to 100 due to rounding. Based on t-tests, all means are significantly different from zero (no opinion) at the 0.05 level.

Taken as a whole, our results suggest Nasdaq managers believe that their firm's dividend policy matters. That is, dividend policy affects a firm's value as reflected in share prices, and to a lesser extent, the cost of capital. An implication of these findings is that firms tend to follow a managed, rather than a residual, dividend policy. If this is true, then firms cannot establish dividend policy in a vacuum. They must consider dividend policy as an integral part of business strategy, which includes both financial and investment decisions. When the dynamics and characteristics of the firm change, a firm's dividend policy may also change if firms want to maximize value for shareholders. Trying to understand why managers of dividend-paying Nasdaq firms believe dividend policy matters is an important issue to investigate. Therefore, we examine managerial perspectives on the underlying reasons for paying dividends.

Explanations for Paying Dividends

Table 3 presents the Nasdaq managers' responses to the statements about four explanations for paying dividends. Panel A contains six statements that reflect various aspects of the signaling explanation. Managers agree most strongly with the statements that investors generally regard dividend changes as signals about a firm's future prospects (S18); a firm should adequately disclose to investors its reasons for changing its cash dividend (S22); and a firm's stock price generally falls when the firm unexpectedly decreases its dividend (S20). Of the 12 statements about why firms pay dividends, these three statements have the highest level of agreement.

While still supportive, managers are less enthusiastic about the statements that a firm's stock price generally rises when the firm unexpectedly increases its dividend (S19); dividend increases are ambiguous because they can suggest either future growth or a lack of investment opportunities (S21); and investors generally use dividend announcements as information to help assess a firm's stock value (S17).

Panel B contains a statement about the bird-in-the-hand explanation, which states that investors generally prefer cash dividends today to uncertain future price appreciation (S16). The majority of respondents (54.9 percent) disagree with this statement, and 28.0 percent express no opinion. On average, this finding does not provide support for the bird-in-the-hand explanation for why firms pay dividends, which is consistent with previous evidence.

Panel C contains three statements associated with a tax preference explanation for why firms pay dividends. The majority of respondents agree with only one of these three statements, namely, that a firm should be responsive to the dividend preference of its shareholders (\$23). The most common response for \$24 and \$25 is "no opinion." For example, half of the respondents express no opinion about the statement that stocks paying high (low) dividends attract investors in low (high) tax brackets (\$24). Respondents may have been ambivalent to these two statements for several reasons. One possible reason is that respondents may be unaware of the tax brackets of investors who are attracted to firms that pay high or low dividends. Another possibility is that a dividend-paying firm may attract a wide range of institutional and individual investors who face different tax consequences of receiving dividends. Also, \$24 and \$25 presume that all else is held equal and respondents may have disregarded this admonition.

Finally, Panel D contains two statements associated with an agency cost explanation for why firms pay dividends. Managers express only slight agreement (mean = 0.14) with the statement that the payment of dividends encourages a firm's managers to act in the interest of the firm's outside shareholders (S27). Respondents disagree strongly that the payment of dividends forces a firm to seek more external (debt or equity) financing, which subjects the firm to additional investor scrutiny (S26). In fact, S26 is the lowest ranked of the 12 explanations for why firms pay dividends. The agreement with the former statement may simply reflect a belief that shareholders want firms to pay dividends, and, as evidenced by their disagreement with the latter statement, show little, if any, support for an agency cost explanation.

Taken as a whole, the results support our prediction that managers would express the strongest support for the signaling explanation for paying dividends. Surprisingly little or no support exists for the tax-preference and agency costs explanations. The finding that most respondents disagree with the bird-in-the-hand argument is not surprising.

Several implications flow from the evidence that managers express the strongest support for the signaling explanation of paying dividends. If firm behavior is consistent with managerial perceptions, managers should exercise considerable care when making dividend changes, especially when decreasing dividend payments. The established empirical relationship between dividend cuts or omissions and stock prices reinforces the reluctance of firms to lower or eliminate dividends. For example, the case of Florida Power & Light (FPL) discussed by Soter, Brigham,

and Evanson (1996) clearly demonstrates the importance of disclosing the reasons for changing cash dividends. In this situation, the company wanted to minimize unintended "signaling effects" associated with the 32 percent reduction in its quarterly dividend payout.

TABLE 3. RESPONSES TO STATEMENTS ABOUT EXPLANATIONS OF DIVIDEND POLICIES

Location		n	Level of Agreement					
in Survey	Statement		Disagree No Opinion Agree			Mean	Std.	Rank
			-2 & -1	Ō	+1 & +2		Dev.	
Panel A. Signaling Explanation								
	Investors generally regard dividend changes as signals about a firm's future prospects.	184	6.5	15.8	77.7	0.837	0.721	1
S22	A firm should adequately disclose to investors its reasons for changing its cash dividend.	187	9.7	18.7	71.6	0.844	0.917	2
S20	A firm's stock price generally falls when the firm unexpectedly decreases its dividend.	186	15.1	18.8	66.1	0.667	1.000	3
S 19	A firm's stock price generally rises when the firm unexpectedly increases its dividend.	186	15.6	33.9	50.5		0.825	5
	Dividend increases are ambiguous because they can suggest either future growth or a lack of investment opportunities.	186	25.3	31.2	43.5	0.253	0.984	6
S17	Investors generally use dividend announcements as information to help assess a firm's stock value.	187	25.4	27.6	47.0	0.205	0.956	8
	Bird-in-the-Hand Explanation							
	Investors generally prefer cash dividends today to uncertain future price appreciation. Tax Preference Explanation	186	54.9	28.0	17.2	-0.473	0.976	11
	A firm should be responsive to the	186	18.3	22.0	59.6	0.527	0.987	4
	dividend preferences of its shareholders.	100	10.5	22.0				·
	Investors generally prefer to invest in firms whose dividend policies complement their particular tax circumstances.	187	17.6	42.2	40.1	0.230	0.800	7
	Stocks that pay high (low) dividends attract investors in low (high) tax brackets.	184	27.8	50.0	22.3	-0.103	0.878	10
Panel D. A	Agency Theory							
	The payment of dividends encourages a firm's managers to act in the interest of the firm's outside shareholders.	185	24.3	36.8	38.9	0.135	1.004	9
S26	The payment of dividends forces a firm to seek more external (debt or equity) financing, which subjects the firm to additional investor scrutiny.	186	53.3	34.4	12.3	-0.511	0.859	12

Notes: Within each panel, the statements are listed in order of their means from largest to smallest. The percentages may not add to 100 due to rounding. Based on t-tests, all means are significantly different from zero (no opinion) at the 0.05 level, except S24 and S27.

Summary and Conclusions

We survey managers of dividend-paying Nasdaq firms to learn their beliefs about the dividend setting process, whether dividend policy affects firm value, and four common explanations for paying dividends. Some evidence tends to confirm what we already know from earlier surveys of NYSE firms and other empirical research. This evidence is still important because it reinforces some earlier findings while not supporting others using a new dataset and time period.

First, our results show that respondents from dividend-paying Nasdaq firms strongly agree with statements supporting Lintner's (1956) findings. In particular, respondents stress the importance of dividend continuity. An implication of this finding is that managers generally perceive that firms today set dividend payments in a manner consistent with that described by Lintner more than four decades ago.

Second, Nasdaq managers widely support statements consistent with the concept that a firm's dividend policy matters. They agree that an optimal dividend policy strikes a balance between current dividends and future growth that maximizes stock price, and that a firm should formulate its dividend policy to produce maximum value for shareholders. An implication of this finding is that market imperfections lead to the relevance of dividend policy.

Third, managers give the strongest support to a signaling explanation for paying dividends. Again, this finding is not surprising because much empirical evidence is consistent with hypotheses generated by dividend signaling models. An implication of this finding is that managers who are concerned about dividend continuity should be careful of the signals conveyed to the market by changes in dividends. However, managers offer little or no support for the tax preference and agency cost explanations. The latter finding is surprising especially considering that other empirical evidence is consistent with the monitoring role of dividends. Not unexpectedly, most respondents disagree with statements supporting the bird-in-the-hand explanation for paying dividends. Further tests show that industry classification (financial versus non-financial firms) has little effect on how managers view different explanations about dividend policy.

This study also provides some additional insights about several dividend policy issues. For example, most responding managers are aware of historical patterns relating to dividends and earnings. Such awareness may influence their dividend policy decisions. Our study also provides some support for the concept of a dividend life cycle set forth by Damodaran (1999) and Lease et al. (2000). Mixed support exists about issues relating to residual dividend policy, a common concept in the dividend literature.

Because we confine our examination to Nasdaq firms with established patterns of paying cash dividends, other datasets may provide new insights about dividend policy. As an avenue for future investigation, researchers may want to survey nondividend-paying Nasdaq firms or those firms with irregular patterns of cash dividends. Comparing the view of managers from firms with different dividend policies or patterns could result in substantially different responses than those contained in the current study.

References

- Agrawal, Anup, and Narayanan Jayaraman. 1994. "The Dividend Policies of All-Equity Firms: A Direct Test of the Free Cash Flow Theory." Managerial Decision Economics 15: 139-148.
- Aharony, Joseph, and Itzhak Swary. 1980. "Quarterly Dividend and Earnings Announcements and Stockholders' Returns: An Empirical Analysis." *Journal of Finance* 35: 1-12.
- Ang, James S. 1987. "Do Dividends Matter? A Review of Corporate Dividend Theories and Evidence." Monograph 1987-2, Salomon Brothers Center for the Study of Financial institutions and Graduate School of Business Administration, New York University.
- Ang, James S., and David R. Peterson. 1985. "Return, Risk, and Yield: Evidence from Ex Ante Data." Journal of Finance 40: 537-548.
- Asquith, Paul, and David W. Mullins. 1983. "The Impact of Initiating Dividend Payments on Shareholder Wealth." Journal of Business 56: 77-96.
- Baker, H. Kent. 1988. "The Relationship Between Industry Classification and Dividend Policy." Southern Business Review 14: 1-8.
- Baker, H. Kent. 1989. "Why Companies Pay No Dividends." Akron Business and Economic Review 20: 48-61.
- Baker, H. Kent, Gail Farrelly, and Richard B. Edelman. 1985. "A Survey of Management Views on Dividend Policy." Financial Management 14: 78-84.
- Baker, H. Kent, and Gary E. Powell, 1999. "How Corporate Managers View Dividend Policy." Quarterly Journal of Business and Economics 38: 17-35.
- Benartzi, Shlomo, Roni Michaely, and Richard Thaler. 1997. "Do Changes in Dividends Signal the Future or the Past?" *Journal of Finance* 52: 1007-1034.
- Bernstein, Peter L. 1996. "Dividends: The Puzzle." Journal of Applied Corporate Finance 9: 16-22.
- Bhattacharya, Sudipto 1979. "Imperfect Information, Dividend Policy, and 'the Bird in the Hand Fallacy." Bell Journal of Economics 10: 259-270.
- Black, Fischer. 1976. "The Dividend Puzzle." Journal of Portfolio Management 2: 5-8.
- Black, Fischer, and Myron Scholes. 1974. "The Effects of Dividend Yield and Dividend Policy on Common Stock Prices and Returns." *Journal of Financial Economics* 1: 1-22.
- Blume, Marshall E. 1980. "Stock Return and Dividend Yield: Some More Evidence." Review of Economics and Statistics 62: 567-577.
- Brennan, Michael. 1970. "Taxes, Market Valuation and Financial Policy." National Tax Journal 23: 417-429.
- Damodaran, Aswath. 1999. Applied Corporate Finance. New York: John Wiley and Sons, Inc.
- Easterbrook, Frank H. 1984. "Two Agency Cost Explanations of Dividends." *American Economic Review* 74: 650-659.
- Elton, Edwin, and M. Gruber. 1970. "Marginal Stockholders' Tax Rates and the Clientele Effect." Review of Economics and Statistics 52: 68-74.

- Fama, Eugene F., and Harvey Babiak. 1968. "Dividend Policy: An Empirical Analysis." Journal of the American Statistical Association 63: 1132-1161.
- Fama, Eugene F., and Kenneth R. French. 2001. "Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?" Journal of Financial Economics 60: 3-43.
- Frankfurter, George, and Bob G. Wood, Jr. 1997. "The Evolution of Corporate Dividend Policy." Journal of Financial Education 23: 16-32.
- Gordon, Myron. 1959. "Dividends, Earnings, and Stock Prices." Review of Economics and Statistics 41: 99-105.
- Graham, Benjamin, and David Dodd. 1951. Security Analysis: Principles and Techniques. 3rd ed. New York: McGraw-Hill Book Company.
- Graham, John R., and Campbell R. Harvey. 2001. "The Theory and Practice of Corporate Finance: Evidence from the Field." *Journal of Financial Economics* 60: 187-243.
- Healy, Paul, and Krishna G. Palepu. 1988. "Earnings Information Conveyed by Dividend Initiations and Omissions." Journal of Financial Economics 21: 149-176.
- Jensen, Michael C. 1986. "Agency Costs of Free Cash Flow, Corporate Finance, and Takeover." American Economic Review 76: 323-329.
- Jensen, Gerald, Donald P. Solberg, and Thomas S. Zorn. 1992. "Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies." *Journal of Financial and Quantitative Analysis* 27: 247-264.
- John, Kose, and Joseph Williams. 1985. "Dividends, Dilution, and Taxes: A Signaling Equilibrium." Journal of Finance 40: 1053-1070.
- Kalay, Avner, and Uri Lowenstein. 1986. "The Informational Content of the Timing of Dividend Announcements." Journal of Financial Economics 16: 373-388.
- Kalay, Avner, and Roni Michaely. 1993. "Dividends and Taxes: A Reexamination." Working paper, University of Utah.
- Lang, Larry H. P., and Robert H. Litzenberger. 1989. "Dividend Announcements: Cash Flow Signaling vs. Free Cash Flow Hypothesis." *Journal of Financial Economics* 24: 181-191.
- Lease, Ronald C., Kose John, Avner Kalay, Uri Loewenstein, and Oded Sarig. 2000. Dividend Policy: Its Impact on Firm Value. Boston: Harvard Business School Press.
- Lintner, John. 1956. "Distribution of Incomes of Corporations Among Dividends, Retained Earnings and Taxes." American Economics Review 46: 97-113.
- Litzenberger, Robert H., and Krishna Ramaswamy. 1979. "The Effects of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence." *Journal of Financial Economics* 7: 163-195.
- Litzenberger, Robert H., and Krishna Ramaswamy. 1982. "The Effects of Dividends on Common Stock Prices: Tax Effects or Information Effects?" *Journal of Finance* 37: 429-443.
- Michaely, Roni. 1991. "Ex-Dividend Day Stock Price Behavior: The Case of the 1986 Tax Reform Act." Journal of Finance 46: 845-860.
- Michel, Allen. 1979. "Industry Influence on Dividend Policy." Financial Management 8: 22-26.

- Miller, Merton. 1986. "Behavioral Rationality in Finance: The Case of Dividends." Journal of Business 59: S451-S468.
- Miller, Merton, and Franco Modigliani. 1961. "Dividend Policy, Growth, and the Valuation of Shares." Journal of Business 34: 411-433.
- Miller, Merton H., and Kevin Rock. 1985. "Dividend Policy Under Asymmetric Information." Journal of Finance 40: 1031-1051.
- Miller, Merton H., and Myron S. Scholes. 1978. "Dividends and Taxes." Journal of Financial Economics 6: 333-364.
- Miller, Merton H., and Myron S. Scholes. 1982. "Dividends and Taxes: Some Empirical Evidence." *Journal of Political Economy* 90: 1118-1141.
- Moore, James S., and Alan K. Reichert. 1983. "An Analysis of the Financial Management Techniques Currently Employed by Large U.S. Corporations." *Journal of Business Finance and Accounting* 10: 623-645.
- Nissim, Doron, and Amir Ziv. 2001. "Dividend Changes and Future Profitability." Journal of Finance 56: 2111-2133.
- Rozeff, Michael. 1982. "Growth, Beta and Agency Costs As Determinants of Dividend Payout Ratios." Journal of Financial Research 5: 249-259.
- Schuman, Howard, and Stanley Presser. 1981. Questions and Answers in Attitude Surveys: Experiments on Question Form, Wording, and Context. New York: Academic Press.
- Shefrin, Hersh M., and Meir Statman. 1984. "Explaining Investor Preference for Cash Dividends." Journal of Financial Economics 13: 253-282.
- Soter, Dennis, Eugene Brigham, and Paul Evanson. 1996. "The Dividend Cut 'Heard 'Round the World': The Case of FPL." Journal of Applied Corporate Finance 9: 4-15.
- Statman, Meir. 1997. "Behavioral Finance." Contemporary Finance Digest 1: 5-21.
- Trahan, Emery, and Lawrence Gitman. 1995. "Bridging the Theory-Practice Gap in Corporate Finance: A Survey of Chief Financial Officers." Quarterly Review of Economics and Finance 35: 73-87.
- Wallace, R. S. O., and C. J. Mellor. 1988. "Nonresponse Bias in Mail Accounting Surveys: A Pedagogical Note." British Accounting Review 20: 131-139.