

Why Firms Adopt and Discontinue New-Issue Dividend Reinvestment Plans

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Abstract

We examine several arguments—past performance, capital structure adjustment, and broadening the ownership base—involving why firms adopt and discontinue new-issue dividend reinvestment plans (DRPs). We test hypotheses for each argument by analyzing financial characteristics for firms adopting and discontinuing new-issue DRPs compared with matching non-DRP firms. The evidence provides some support for the past performance argument but none for the capital structure adjustment argument. Limited support also exists for the broadening the shareholder base argument. Overall, the results support the notion that firms needing funds initiate new-issue DRPs, and then discontinue them when the need for external funding diminishes. (*JEL* G320 and G350)

Introduction

In a dividend reinvestment plan (DRP), the participating company provides its shareholders with an option to use the announced dividends either to receive the payment in cash or use the amount to purchase additional shares. Initially, all DRPs were market plans in which a company buys its outstanding shares in the open market and then sells them back to its shareholders at low or no commission cost. In the early 1980s, utilities introduced new-issue plans, in which the firm uses either authorized but unissued shares or treasury shares to provide stock to those investors choosing to reinvest their dividends. Thus, new-issue plans provide a source of additional equity to the firm in the form of reinvested dividends.¹

As time passed, non-utilities too began to offer new-issue plans. Additionally, companies added many new features to their DRPs (Baker and Johnson 1988a; Baker and Meeks 1990).

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¹ Fredman and Nichols (1980), Baker and Seippel (1981), and Roden and Stripling (1996) discuss the use of new-issue DRPs as a means of raising equity financing.

Perhaps the most noteworthy feature is the voluntary purchase option that allows stockholders to make additional investment beyond the dividend amount toward purchases of shares. Other features include no commissions and a discount, which allows shareholders to apply dividends to buy additional shares, usually at a 5 percent discount from the market price. Companies use these two features to compensate investors for the tax penalty on reinvested dividends. That is, DRP participants must still pay taxes on the dividends, even though they receive shares in lieu of a dividend. Today, hundreds of market and new-issue plans continue to coexist (American Association of Individual Investors 2001).

Although much research exists on DRPs, researchers have not addressed several important questions. The purpose of this study is to investigate two previously unanswered questions involving new-issue DRPs. First, why do some firms in the same industry and with similar size offer new-issue DRPs, while others do not? Specifically, we examine three arguments for why firms adopt new-issue DRPs: the better past performance or higher future growth argument, the capital structure argument, and the broadening the shareholder base argument. Identifying distinguishing financial characteristics of firms that adopt DRPs is important because several empirical studies show that the market reacts favorably to the adoption of DRPs.² Second, why do some firms abandon their new-issue DRPs? That is, have new-issue DRPs outlived their usefulness to these firms? To investigate these questions, we compare the financial characteristics (representing the same three arguments) of new-issue DRP-discontinuing firms with those of a group of matching non-DRP firms.³

Although several past studies focus on determining the characteristics of firms with DRPs and the features of such plans, most focus on market plans. In our study, we examine new-issue plans and try to determine the financial characteristics relating to adopting and discontinuing these plans. This study should be useful to three groups—academic researchers, financial managers, and investors. First, the study provides evidence about several research questions involving new-issue DRPs not previously addressed in the academic literature. Second, the study gives financial managers a profile to help them understand the characteristics associated with adopting and discontinuing new-issue DRPs. Third, the study presents evidence that specific differences exist between firms that adopt and discontinue new-issue DRPs and their matching non-DRP firms. Although not addressed specifically in the current study, these different characteristics may have price or return implications for investors who hold shares in such corporations. For example, firms adopting new-issue DRPs, on average, exhibit better past performance but not higher future growth than matching non-DRP firms.

The remainder of the paper has the following organization. The next section reviews several previous studies on DRPs. We then discuss raising equity through regular issuances of shares using a new-issue DRP versus occasional issuances using an investment banker. Next, we discuss hypotheses involving specific financial characteristics for firms adopting and discontinuing new-issue DRPs compared with matching non-DRP firms. This is followed by a description of our data and methodology. Our empirical results are presented next. The paper closes with a summary and conclusions.

² See, for example, Hansen, Pinkerton, and Keown (1985), Peterson, Peterson, and Moore (1987), Dubofsky and Bierman (1988), Scholes and Wolfson (1989), Dammon and Spatt (1992), Hingorani and Mukherjee (1994), and Ogden (1994). Despite some mixed results, these studies generally show positive wealth effects associated with DRPs.

³ One way to examine this question is to compare the characteristics of the same firms at two different periods—when they initiate and when they discontinue DRPs. Unfortunately, only nine firms in our discontinuing sample originate from the sample of the initiating firms, rendering any conclusion based on such comparisons unreliable.

Previous Studies on DRPs

Several studies have attempted to develop profiles of DRP firms, including Pettway and Malone (1973), Fredman and Nichols (1980), Baker and Seippel (1980), and Baker and Johnson (1988b). Most of these studies focus on market plans because such plans not only represent the earliest type of DRP but also constitute the vast majority of DRPs. Tamule, Bubnys, and Sugrue (1993) examine both market and new-issue plans and show that firms primarily establish market plans to improve shareholder goodwill but establish new-issue plans to raise capital.

A recent study by Michal (1999) compares the characteristics of 854 firms with DRPs to those without DRPs. Michal, however, does not partition his sample into firms with market versus new-issue plans. His results show that companies with DRPs are significantly larger, more mature firms than those without DRPs. Although he provides evidence that differences exist between firms with and without DRPs involving growth, valuation, profitability, financial structure, shares/ownership, and price, he does not test to determine whether these differences are statistically significant.

The differences between the previous studies and the current study are two-fold. First, we focus on firms with new-issue DRPs. Second, we develop a model to identify characteristics of firms adopting and discontinuing new-issue DRPs. Thus, the current paper provides a new look at the financial characteristics for firms adopting and discontinuing new-issue DRPs.

Raising Equity Through DRPs Versus Underwriters

Modigliani and Miller (1958, 1963) state that financial policy does not affect a firm's value under perfect capital markets with symmetrical information. Because DRPs are part of financial policy, this suggests that DRPs should not affect value. As Myers and Majluf (1984) and Lease, John, Kalay, Loewenstein, and Sarig (2000) show, however, financial policy can affect value when such restrictive assumptions are not present.

New-issue DRPs offer firms an alternative way to raise equity financing without directly using the primary market. Roden and Stripling (1996) note that new-issue DRPs are an "indirect way" to raise equity financing. Raising equity through DRPs versus underwriters involves several potential tradeoffs. On the negative side, using new-issue DRPs to raise equity avoids market scrutiny and increases investor uncertainty. Evidence by Barnea, Haugen, and Senbet (1980) and Kao and Wu (1990) shows that forcing firms to enter the financial markets reduces agency costs. Also, firms using new-issue DRPs to raise equity lose underwriter certification of a new offering. Issuers using a prestigious underwriter to certify the quality of the public offering may benefit shareholders by achieving a higher offering price. Tinic (1988) suggests that reduced security returns are likely to result from losing underwriter certification on a new offering.

On the positive side, using new-issue DRPs to raise equity avoids the negative signal a new equity offering provides. Asquith and Mullins (1986) find that a new offering of common stock to the public signals negative information to investors, resulting in decline in shareholder wealth. Compared with issuing shares directly via an underwritten offering, investors are likely to view regular issuances of shares via new-issue DRPs as having a weaker signal. Using new-issue DRPs also avoids flotation costs associated with a new offering.

Several studies examine alternative methods of raising capital. Smith (1977) concludes that using underwriters appears to be inconsistent with rational, wealth-maximizing behavior by the owners of the firm. Scholes and Wolfson (1989) suggest that avoiding paying underwriting fees and other issue costs may outweigh negative aspects associated with DRPs. Roden and Stripling (1996) find that new-issue DRPs are an efficient alternative to using underwriters to raise equity financing. Bierman (2001) reaches a similar conclusion by noting that a DRP may compare

favorably on a cost basis with other ways of raising capital. These studies indicate that if a firm pays a cash dividend and needs equity capital, a DRP is likely to raise equity capital cheaper than the alternative ways of raising new capital.

Hypotheses

In this section, we set forth the principal hypotheses about the differences in specific financial characteristics between firms adopting new-issue DRPs and matching non-DRP firms based upon three key arguments. We expect no statistically significant differences in these characteristics between firms discontinuing new-issue DRPs and matching non-DRP firms. We develop our hypotheses based on theoretical or empirical priors.

Firms Adopting New-Issue DRPs Versus Matching Non-DRP Firms

Better Past Performance or Higher Future Growth Argument

This argument suggests that firms adopting new-issue DRPs are likely to have experienced better past performance or higher future growth prospects than matching non-DRP firms. Why may this occur? Damodaran (1999) states that a firm's dividend policy tends to follow the life cycle of the firm. During their introduction stage (stage 1), firms typically pay no dividends and consequently do not have DRPs. During their rapid expansion stage (stage 2), firms, especially toward that latter part of this stage, often initiate paying low cash dividends. During the mature growth stage (stage 3), firms with larger cash flows and fewer investment opportunities tend to pay out more of their earnings as dividends than firms in the previous stage. During the decline stage (stage 4), firms experience negative growth in revenues and earnings. When firms start paying dividends or shortly thereafter, some also adopt DRPs. Those wanting to retain at least part of the cash dividends to finance future growth may establish new-issue DRPs. Consequently, when firms adopt new-issue DRPs, they are likely to be in the latter phase of rapid expansion or the early phase of mature growth. Characteristics of these stages include high past performance and continuing prospects of growth at least in the short run.

Firms adopting new-issue DRPs may also be in greater need of funding than their non-DRP counterparts. Growing firms face the choice of using either internal or external financing to meet additional funding needs. For some firms, augmenting internal financing by reducing cash dividend payments may not be a viable option because of negative signaling implications for share prices resulting from the information asymmetry problem. Issuing external financing (either debt or equity) also may have negative implications for share prices resulting from the information asymmetry problem. According to Myers and Majluf (1984), a major reason for avoiding external financing is that, in the presence of information asymmetry, much of the added benefit from positive net present value (NPV) projects accrues to new shareholders, often at the expense of the existing shareholders.

Thus, using a new-issue DRP to raise capital offers several potential advantages over using external equity. First, a firm may avoid the negative signal often associated with a new equity offering. This is because firms with new-issue DRPs raise funds incrementally over time instead of in larger amounts through a single issue. Second, a firm confines gains to existing shareholders because they are the only ones who receive additional shares.

Some support exists for the better performance or higher growth argument. For example, Todd and Domain (1997) contend that shareholders who participate in new-issue DRPs are more interested in growth over time than in periodic cash flow. Investment strategies focusing on growth are normally made in low dividend and medium-to-high growth firms. The greater capital

needs of growth firms may imply greater availability of positive NPV projects in the future, and therefore, higher expected earnings growth.

Three additional implications arise from the better past performance or higher future growth argument. The implications are that firms adopting new-issue DRPs, compared with matching non-DRP firms, have lower dividend payouts, experience higher risk, and have lower leverage. The rationale for each premise follows.

Because firms adopting new-issue DRPs may need to rely more heavily on financing growth than their non-DRP counterparts, an argument can be made that the former group should have lower dividend payouts. Tamule, Bubnys, and Sugrue (1993) argue that firms with new-issue DRPs should have a lower dividend payout ratio than non-DRP firms.⁴ They report that firms with low dividend payouts, which result from their need to retain internally generated capital, tend to use new-issue plans. Over time, such firms should be able to raise additional equity capital and to increase their dividend payouts. Finnerty (1989) also finds that the new-issue plans ease "homemade retentions" by shareholder clienteles who prefer a low-payout policy.

An argument can also be made that better past performance or higher future growth comes at the expense of higher risk. Scholes and Wolfson (1989) and Dammon and Spatt (1992) discuss new-issue DRPs in the option pricing theory framework and argue that DRPs are implicit options. New-issue DRPs create value through options either by way of allowing investors to reinvest dividends or invest more than their dividend amount. Because an important determinant of an option is the volatility of the underlying asset, an argument can be made that these firms are inherently riskier than their non-DRP counterparts. Because firms with higher growth options find debt more expensive (Myers 1977), another implication of the higher growth argument is that these firms carry lower leverage than matching non-DRP firms.

Given below are two principal hypotheses that emerge from the better past performance or higher future growth argument.

Compared with matching non-DRP firms, firms adopting new-issue DRPs have:

- H_1 : better past performance and
- H_2 : higher future growth prospects.

Based on the better past performance or higher future growth argument, we also expect that firms adopting new-issue DRPs have lower dividend payout ratios, higher risk, and lower leverage than matching non-DRP firms.

Capital Structure Adjustment Argument

Chang and Nichols (1992) show that firms use new-issue plans to raise equity capital and to decrease reliance on debt. Tamule, Bubnys, and Sugrue (1993) report that firms tend to use new-issue plans when they are closer to their debt capacity.⁵ By using authorized but unissued shares, firms experience an influx of new equity capital, which can reduce financial leverage. Michal (1999) reports that firms offering DRPs have more leverage than those without DRPs, but he does not distinguish between market and new-issue plans. This argument is consistent with the following hypothesis:

⁴ By contrast, Baker and Seippel (1980) found that firms offering market DRPs tend to have high dividend payouts and low growth.

⁵ By contrast, Pettway and Malone (1973) report that firms offering market DRPs tend to have low leverage.

H₃: Compared with matching non-DRP firms, firms adopting new-issue DRPs have higher leverage.

The above hypothesis contradicts the predicted sign of the leverage (debt) variable that resulted from the better past performance or higher future growth argument. Whether the firms with new-issue DRPs have higher or lower leverage than the matching non-DRP firms is an empirical question.

Broadening the Ownership Base Argument

The law pertaining to DRPs allows only individuals to participate. Some firms may prefer individual to institutional investors because they believe that the former group is less vocal and active than the latter group in raising questions about a firm's management policies. In their survey of research about corporate activism, Gillan and Starks (1998) describe the monitoring role that institutional shareholders play to keep management in check. Small individual investors, on the other hand, have little initiative to take on the task of monitoring managers. According to this view, firms are more likely to initiate new-issue DRPs when their shareholder base consists of a high proportion of institutional ownership. The resulting hypothesis is:

H₄: Compared with matching non-DRP firms, firms adopting new-issue DRPs have higher institutional holdings.

Firms Discontinuing New-Issue DRPs Versus Matching Non-DRP Firms

If firms adopt new-issue DRPs to help finance growth, then firms discontinuing new-issue DRPs are likely to be those that no longer need equity capital in the form of new shares to finance growth. Thus, firms adopting and subsequently discontinuing new-issue DRPs may do so because they no longer derive the benefits they once received by offering these plans. Consequently, no significant differences should exist in past performance, future growth, dividend payout ratios, risk, and leverage between firms discontinuing new-issue DRPs and matching non-DRP firms. If the broadening-the-shareholder-base argument holds, no significant difference should exist in the percentage of institutional holdings between the two groups.

Proxy Variables

In this study, we use three measures of past performance (Pagr, Mkbk, Arcs), one measure of future growth (Fagr), two measures of risk (Covr and Beta), and one measure each for leverage (Debt), dividend payout ratio (Dvpr), and institutional holding (Inst). In all cases t_0 refers to the year in which a firm either adopts or discontinues a new-issue DRP.

Past performance

- Pagr = Asset growth from t_{-3} to t_0 years
- Mkbk = Three-year average market-to-book value (t_{-2} , t_{-1} , and t_0 years)
- Arcs = Average return on a firm's common stock over t_{-280} to t_{-30} days

Future growth

- Fagr = Asset growth from t_0 to t_{+3} years

Leverage

- Debt = Three-year average long-term debt-to-total assets ratio (t_{-2} , t_{-1} , and t_0 years)

Dividend payout

- Dvpr = Three-year average dividend payout ratio (t_{-2} , t_{-1} , and t_0 years)

Risk

- Covr = Coefficient of variation of stock returns as a percent: $\sigma_{Arcs}/Arcs$
- Beta = Common stock beta obtained by regressing stock returns against market returns (using the S&P 500 index as the market portfolio) using t_{-280} to t_{-30} days

Institutional holdings

- Inst = Three-year average institutional holdings (t_{-2} , t_{-1} , and t_0 years)

Table 1 summarizes the expected signs of these variables for firms adopting new-issue DRPs compared with matching non-DRP firms.

TABLE 1. HYPOTHESIZED RELATIONSHIPS
BETWEEN THE MATCHED PAIRS OF FIRMS

Variables	Compared with matching non-DRP firms, firms adopting new-issue DRPs are expected to have:	Predicted Sign
<i>Past performance</i>		
1. Pagr	Higher	+
2. Mkbk	Higher	+
3. Arcs	Higher	+
<i>Future growth</i>		
4. Fagr	Higher	+
<i>Leverage</i>		
5. Debt	Lower/Higher	-/+
<i>Dividend Payout</i>		
6. Dvpr	Lower	-
<i>Risk</i>		
7. Covr	Higher	+
8. Beta	Higher	+
<i>Institutional Holdings</i>		
9. Inst	Higher	+

Notes: The predicted sign for Debt is negative for the future growth argument and positive for the capital structure adjustment argument.

Sample and Methodology

Sample

The source of our sample of DRPs is Kinoshita's *Guide to Dividend Reinvestment Plans*. We limit the sample to U.S. corporations that adopted or discontinued new-issue plans between 1983 and 1992. Our rationale for choosing this period is to exclude firms that participated in the trend of discontinuing DRPs only to reestablish them as direct purchase plans, which showed a marked increase after the mid-1990s (Steinbart and Swanson 1998). The initial sample consists of 68 DRP

adopting firms and 31 DRP discontinuing firms. Of the 68 DRP adopting firms, we include the 55 firms adopting new-issue plans but exclude the 13 firms adopting market plans. Our sample of 31 DRP discontinuing firms includes only nine firms that adopted new-issue DRPs during the study period. Of the new-issue DRPs, 36.4 percent (20 of 55) offer discounts. Of all the 31 firms discontinuing new-issue plans, only 19.4 percent (6 of 31) offer discounts.

Using COMPUSTAT, we match firms using industry SIC classification (four-digit codes) and asset size to avoid introducing an industry or a size bias.⁶ We match firms adopting new-issue DRPs with non-DRP firms based on the closest asset size. If more than one firm in the industry had the same asset size, the matching firm is randomly chosen from the same group. Similarly, we match the DRP discontinuing firms with firms that never adopted DRPs.⁷

Statistical Procedures

We use both univariate and multivariate tests in our analysis. We test for differences in each of the nine variables between two subsets: (1) firms adopting new-issue DRPs and matching non-DRP firms and (2) firms discontinuing new-issue DRPs and matching non-DRP firms. We use one-tailed t-tests for subset 1 because we predict the direction of the results, but two-tailed tests for subset 2. For our multivariate analysis, we use logistic regression analysis to differentiate between firms adopting new-issue DRPs and matching non-DRP firms. We limit the logit procedure to the subset 1 because of the limited sample size in subset 2.

We gather the financial data for all companies from COMPUSTAT and information on institutional holdings from Disclosure. We develop correlation matrices for the nine-predictor variables for both the firms adopting and discontinuing new-issue DRPs and their matching firms. With a few exceptions, the vast majority of the correlations are low.⁸ For example, only one correlation coefficient is greater than +0.25 for firms adopting new-issue DRPs ($r = 0.2522$ for *Pagr* and *Debt*) and matching non-DRP firms ($r = 0.4536$ for *Dvpr* and *Debt*). For firms discontinuing new-issue DRPs, only three of 36 correlation coefficients are above +0.25, with the highest correlation being 0.6865 for *Beta* and *Debt*. For the matching counterparts of the discontinuing firms, four of 36 correlations coefficients are above +0.25, with the highest correlation being 0.7235 for *Pagr* and *Mkbk*. Overall, we do not believe that multicollinearity presents a major problem in interpreting our logit regression results.

Empirical Results

Firms Adopting New-Issue DRPs and Matching Non-DRP Firms

For firms adopting new-issue DRPs and matching non-DRP firms, Table 2 shows the means for each of the nine variables and corresponding t-values. Although all the t-values of the proxy variables have the predicted sign, except *Dvpr*, only four are statistically significant: *Pagr* and *Inst* at the 0.05 level and *Debt* and *Beta* at the 0.10 level. These results show that, compared with matching non-DRP firms, those adopting new-issue DRPs have a higher past asset growth rate (12.12 percent versus 10.78 percent), lower debt ratio (26.33 percent versus 30.97 percent), higher beta (0.974 and 0.809), and a higher percentage of institutional holdings (25.26 percent versus

⁶ Pettway and Malone (1973) and Michal (1999) report that DRPs have some industry characteristics.

⁷ Descriptive statistics including the mean, median, maximum, minimum, and standard deviation for all the subsets are available from the authors upon request.

⁸ The correlation matrices are available from the authors upon request.

17.17 percent). Overall, these findings provide support for the better past performance argument (H_1) and the broadening of ownership base argument (H_4), but they do not support the higher future growth (H_2) and capital structure adjustment arguments (H_3).

TABLE 2. T-TESTS FOR 55 FIRMS ADOPTING NEW-ISSUE DRPs AND MATCHING NON-DRPs

Variable	Firms Adopting New- Issue DRPs	Matching Non-DRP Firms	t-Value
<i>Pagr</i>	0.161	0.108	1.87**
<i>Mkbbk</i>	1.772	1.653	0.48
<i>Arcs</i>	0.075	0.072	0.91
<i>Fagr</i>	0.091	0.084	0.41
<i>Debt</i>	0.263	0.310	-1.56*
<i>Dvpr</i>	43.924	43.909	0.00
<i>Covr</i>	11.257	9.074	0.85
<i>Beta</i>	0.974	0.809	1.51*
<i>Inst</i>	0.253	0.172	2.09**

Notes: The t-values of all variables have the predicted sign, except *Dvpr*, but the difference is not statistically significant at normal levels. *, **, and *** significant at the 0.10, 0.05, and 0.01 levels, respectively, using a one-tail test.

TABLE 3. SUMMARY OF CHARACTERISTICS OF 55 FIRMS ADOPTING NEW-ISSUE DRPs AND MATCHING NON-DRP FIRMS BASED ON LOGISTIC REGRESSION

Variable	Coefficient	Standard Error	z-statistic
Intercept	1.839	1.361	-1.34
<i>Pagr</i>	10.339	4.145	2.01**
<i>Mkbbk</i>	-0.024	0.280	-0.85
<i>Arcs</i>	8.307	5.045	1.65*
<i>Fagr</i>	-5.690	4.320	-1.32
<i>Debt</i>	2.822	3.104	1.13
<i>Dvpr</i>	-0.011	0.010	-1.12
<i>Covr</i>	0.000	0.000	0.46
<i>Beta</i>	-4.472	0.845	-0.56
<i>Inst</i>	1.211	1.632	0.74
Observations	55		
LR ratio	13.28		
Classified correctly	75.00%		

Notes: *, **, and *** significant at the 0.10, 0.05, and 0.01 level, respectively.

We use logistic regression to examine the simultaneous effects of the hypothesized variables on firms adopting new-issue DRPs and matching non-DRP firms. As previously discussed, the

correlations between the variables are low with a few exceptions. As Table 3 shows, two performance-related variables, *Pagr* and *Arcs*, are significant at the 0.05 and 0.10 levels, respectively. The estimated equation correctly classifies 75.0 percent of the firms in the appropriate categories of new-issue DRP adopting firms and matching no-DRP firms.⁹

Both the t-test and logit results do not support our hypothesis about dividend payout ratios (*Dvpr*) of the new-issue DRP firms relative to non-DRP firms. In keeping with the superior performance of the former group, we expect these firms to have a lower payout ratio than the control group. Our results do not support this. Several reasons may explain this apparent inconsistency. First, for a DRP to be cost effective, the dividend payout ratio needs to be high. Second, these firms are likely to be in the third or fourth stage of their life cycle, which indicates a slowing of the growth rate. Instead, they find that their growth rate is higher than they originally expected and the funding needed is larger than initially anticipated. These firms face the choice of whether to reduce the dividend payout or to raise funds externally. Both options have information asymmetry-related shortcomings. Under this circumstance, the DRP presents the more viable option.

Firms Discontinuing New-issue DRPs and Matching Firms with No DRPs

Table 4 presents the means and t-value for each variable for the firms discontinuing new-issue DRPs and the matching non-DRP firms. Overall, the results are consistent with our hypotheses that no significant differences exist in the financial characteristics between the two groups. Two exceptions are *Pagr* and *Mkbc*, which are significantly lower at the 0.10 level than their matching non-DRP counterparts. These exceptions are, however, well within the spirit of the performance-related hypotheses. The inferior performance relative to the matching group may explain why these firms abandoned their DRPs as the need for external funding evaporated. These findings lend support to the argument that a major reason for offering DRPs is to finance growth. When the growth subsides, the need for continuing new-issue DRPs diminishes.

TABLE 4. T-TESTS FOR 31 FIRMS DISCONTINUING NEW-ISSUE DRPS AND MATCHING NON-DRP FIRMS

Variable	Firms Discontinuing New-Issue DRPs	Matching Non-DRP Firms	t-Value
<i>Pagr</i>	0.038	0.086	-1.72*
<i>Mkbc</i>	1.107	1.435	-1.75*
<i>Arcs</i>	0.046	0.084	-0.86
<i>Fagr</i>	0.021	0.045	-1.11
<i>Debt</i>	0.329	0.306	0.31
<i>Dvpr</i>	54.273	65.057	-0.73
<i>Covr</i>	16.827	9.821	-1.11
<i>Beta</i>	0.920	0.950	-0.17
<i>Inst</i>	0.274	0.233	0.74

Notes: *, **, and *** significant at the 0.10, 0.05, and 0.01 level, respectively, using a two-tail test.

⁹ A comparison of firms adopting new-issue DRPs offering discounts with those not offering discounts shows that the only significant variable at the 0.05 level is *Dvpr*. Firms offering discounts have a significantly higher (53 percent) dividend payout ratio than those not offering discounts (34 percent).

Summary and Conclusions

This study examines several arguments—past performance or future growth, capital structure adjustment, and broadening the ownership base—involving why firms adopt and discontinue new-issue DRPs. We develop hypotheses for each argument and test them by analyzing proxy variables for firms adopting and discontinuing new-issue DRPs compared with matching non-DRP firms.

Results of both t-tests and logit regression show some support for the better past performance argument. Based on the t-tests, firms adopting new-issue DRPs have a significantly greater past asset growth rate (Pagr), debt-to-assets ratio (Debt), and systematic risk (Beta) than do the matching non-DRP firms. The t-tests also provide support for the broadening the ownership base argument. The logistic regression shows the importance of two performance-related variables (Pagr and Arcs) in differentiating between these two groups. The estimated equation correctly classifies 75.0 percent of the firms into the appropriate categories. Results of both t-tests and logit regression show no evidence supporting the capital structure adjustment argument. As predicted, the financial characteristics of firms discontinuing new-issue DRPs generally do not differ significantly from those of the matched non-DRP firms, with two exceptions. The former firms have a significantly lower past asset growth rate (Pagr) and market-to-book ratio (Mkbk), both at the 0.10 level, compared with matching non-DRP firms.

Overall, the results lend some support to the notion that firms needing funds initiate new-issue DRPs, and they discontinue such plans when the need for external funding diminishes. This study provides new insights involving the characteristics of firms adopting and discontinuing new-issue DRPs.

Several avenues are available for future research on this topic. One avenue would be to examine the before and after adoption-discontinuance conundrum. This would require a time series investigation into financial and accounting variables of a large sample of DRP-discontinuing firms that is also the subset of a larger sample of DRP-initiating firms. Because our sample contained only a limited number of the same firms that adopted and then discontinued their new-issue DRPs, we were unable to conduct this analysis. Another extension would be to increase the sample size and extend the sample over a longer period. Finally, researchers could investigate the characteristics of firms that discontinue their traditional DRPs, only to replace them with direct purchase plans.

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