

Do Corporate Managers Care about Dividend Clienteles?

Evidence from M&A Transactions

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ABSTRACT

Previous literature reports mixed empirical evidence on the existence of dividend clienteles. In this paper, we hypothesize that corporate managers are aware of dividend clienteles, irrespective of whether they exist, when making corporate decisions. Consistent with the hypothesis, we find that if the dividend policies of the acquirer and the target in M&As are materially different (similar), the method of payment is more likely to be cash (stock). We also find that the market responds to the payment method and dividend clientele. In stock-based deals, a difference in dividend policies is negatively correlated with announcement returns.

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I. Introduction

Miller and Modigliani (1961) originally showed that in a world without frictions, dividend policy is irrelevant to the valuation of the firm. Clearly, in such a world, dividend policy should not affect the method of payment choice in mergers and acquisitions (M&As). The finance literature offers many explanations of why firms do, in fact, pay dividends that involve relaxing the various perfections assumed in the Miller-Modigliani world. These include signaling (e.g. Bhattacharya, 1979) and the control of agency problems resulting from excess free cash flow (Jensen, 1986), among others. Dividend paying behavior has changed over time.¹ It is also likely that the factors leading firms to pay dividends have changed over time.²

One unsettled area of the dividend literature is that of dividend clienteles, which posits that different payout policies appeal to different classes of investors. Some investors prefer to receive the payout from firms as dividends, while others may prefer to receive the payout as capital gains. While some recent literature finds little support for the existence of dividend clienteles (e.g. DeAngelo, DeAngelo, and Stulz, 2006; Brav, Graham, Harvey and Michaely, 2005), other literature provides evidence on the clienteles (Grinstein and Michaely, 2005;

¹ Fama and French (2001) document that the proportion of firms paying dividends falls from 66.55% in 1978 to 20.8% in 1999, due, in part, to the changing characteristics of publicly traded firms. However, DeAngelo, DeAngelo, and Skinner (2004) find that the aggregate level of dividends actually increased over the time period studied by Fama and French (2001) even though the number of payers decreased by over 50%. This implies that dividend payments are increasingly concentrated among the largest dividend paying firms. The results of Grullon, Paye, Underwood, and Weston (2011) show that the overall propensity to pay out has not declined and, in fact, net payout yields have been increasing over time, suggesting there has been some substitution of repurchases for dividends at some firms.

² The life cycle hypothesis, which is an extension of the free-cash flow hypothesis, suggests that older, more mature firms with high cash-flows and fewer positive net present value projects are more likely to be dividend payers. This hypothesis receives considerable support in DeAngelo, DeAngelo, and Stulz (2006). The results of Brav, Graham, Harvey, and Michaely (2005), who survey executives regarding payout policy, also suggest differences in the motivations of today's executives for dividends versus those found in Linter's (1956) classic survey of managers on payout policy.

Graham and Kumar, 2006; Rantapuska, 2008; Moser and Puckett, 2009).

In this paper, we argue that while managers may not choose dividend policy with an eye toward attracting a particular clientele, they are likely aware of clienteles and reluctant to significantly change dividend policy for fear of disturbing the clienteles that are attracted by the existing policy of the firm. This argument is consistent in spirit with Brav, Graham, Harvey, and Michaely (2005)'s findings that some managers would forego a positive net present value project before reducing dividends, which causes clientele disruption. Baker and Wurgler (2004) also find that managers recognize and cater to investor demand for dividends by establishing relevant dividend policies, and their results are consistent with a view that dividends are a critical driver for firm value. Hotchkiss and Lawrence (2007) argue that a substantial change in dividend policy can lead to a shift in the clientele through portfolio readjustment by a particular group that tries to achieve their investment objectives. This readjustment will further lead to a change in ownership structure and therefore corporate governance, which would be highly relevant to firm valuation and be a critical consideration when managers establish their corporate policies.

Our study attempts to provide the evidence consistent with this form of the dividend clientele hypothesis on the side of the managers using M&A transactions. We test whether managers are aware of such clienteles and the awareness is reflected in the choice of the payment method in M&A transactions. Unlike prior literature on dividend clientele, our focus is to investigate not the existence of the clientele phenomenon on the investor side but its awareness and reflection into the choice of deal payment method on the manager side. Baker, Coval, and Stein (2007) point out that inertia on the part of investors can significantly affect managers in terms of corporate financial policy, suggesting that dividend clienteles of the investors are a critical consideration for and tightly linked to the decision making on the method of payment in

M&As by managers. We take a closer look at how the (dis)similarity in dividend policies affects the manager's decision making on the choice of payment method in light of the dividend clientele consideration.

We hypothesize that if managers of both target and acquiring firms care about dividend clienteles of shareholders, the likelihood of acquirers using stock as the payment method in takeovers increases with the degree of similarity in dividend policies.³ This is plausible because payment in stock may cause a change in the shareholder composition of the target's shareholder base—clientele disruption—when the dividend policies of the acquirer and the target are materially different. That is, target shareholders may decide to rebalance their portfolios and sell their position in the target, before the merger is consummated, or in the survivor firm, after the merger is consummated. In anticipation of such consequence, acquirer shareholders may also have an incentive to sell off their shares before the price plunges due to the selling pressure from portfolio rebalancing by target shareholders. Managers who might be concerned with the potential selling pressure from target and/or acquirer shareholders are more likely use cash as a payment method.

We examine our premise using M&A transaction data from June 2001 to 2015. First, we consider the case where acquirer management faces the qualitative decision to pay in the form of either stock, cash, or some mix of the two. The results of our multinomial regressions show that the degree of difference in dividend policies is significantly higher for pure cash deals than pure stock deals. We alternatively examine the determinants of the proportion of cash payment used in takeovers using a two-limit Tobit approach. The results are similar to our discrete analysis showing that a difference in dividend policies significantly increases the percentage of cash

³ The two most common currencies for payments in corporate M&As are cash and stock. More discussion on the method of payment is found in Section II.A.

payment. The results are more significant in the sub-sample analysis where we excluded the observations during the 2008-2009 financial crisis from the sample. In addition, consistent with previous studies, we find that several deal, target, and acquirer characteristics serve as important determinants of the payment choice.

According to Fuller, Netter, and Stegemoller (2002), acquirers tend to change their method of payment from one acquisition to the next. Using a cluster sample of 292 multiple acquirers that made 749 acquisitions, we perform fixed effects regressions to examine whether the way in which multiple acquirers change the method of payment across acquisitions is associated with dividend differentials. As for single acquirers, a greater similarity (difference) in dividend policy increases the use of stock (cash). As this approach controls for firm fixed effects, it gives us more confidence that our results are generated by the difference in dividend policy rather than some unobservable firm characteristic that may be correlated with dividend policy.

Next, we examine the market responses to the payment method and dividend differentials. Our results show that acquirer cumulative abnormal returns (CARs) at the takeover announcement date for stock deals are significantly lower when the difference in dividend policies between target and acquiring firms is greater. The results are consistent with the market's expectation of potential selling by target shareholders dissatisfied with acquirer dividend policy. However, we find no evidence that target CARs for stock deals decrease in the difference in dividend policies, suggesting that target shareholders do not immediately take actions to sell their position before the merger is consummated since they can sell whenever they make a profit.

In sum, this study provides a new perspective to the existing dividend clientele literature. While the prior literature focuses on whether the clientele exists on the investors' side, we take a

closer look at the managers' side that has received little attention so that we can have more complete picture of the unsettled phenomenon. We show that, regardless of whether or not the dividend clientele phenomenon exists, corporate managers are aware of dividend clienteles when making financial decisions. Also, our results suggest that the dividend policies of target and acquiring firms are a newly found key determinant of the payment choice, in addition to other factors related to traditional explanations in the method of payment literature. Our findings empirically confirm Baker, Farrelly, and Edelman's (1985) survey results of management views on dividend policy that managers are aware of signaling and clientele effects of the dividend policy, and they believe dividend policy affects firm value.

The remainder of this paper is organized as follows. In Section II, we present the research hypothesis and describe the dependent and test variables and the testing techniques. Section III details the sample selection process and provides the descriptions of the control variables and the rationales for including them, including references to relevant literature, and presents the descriptive statistics. Section IV analyzes the determinants of the payment method and Section V analyzes the behavior of multiple acquisitions. Section VI analyzes announcement returns, while Section VII concludes.

II. Hypothesis, Key Variables, and Empirical Methodology

A. Hypothesis Development

The literature on dividend clienteles is still unsettled. While some recent literature finds little support for managerial recognition of the importance of dividend clienteles (e.g. DeAngelo, DeAngelo, and Stulz, 2006; Brav, Graham, Harvey and Michaely, 2005), other literature has found strong support for the existence of such clienteles. Grinstein and Michaely (2005) find that

institutions avoid firms that do not pay dividends, but among firms that pay dividends, institutions do not prefer higher dividend levels. Graham and Kumar (2006) document that retail investors show a preference for dividend yield, which increases with age and decreases with income. By using comprehensive investor level data in the Finnish stock market, Rantapuska (2008) documents that investors who have a tax advantage switch from buys to sells on the ex-dividend day, while heavily taxed investors switch from sells to buys. The result suggests that tax status drives investors to take different positions around the ex-dividend day. Moser and Puckett (2009) find that when the dividend tax penalty is high, dividend firms constitute a significantly larger percentage of tax-advantaged institutions' portfolios, and vice versa when the tax penalty is low. When the penalty is reduced, the dividend payer holdings of tax-advantaged and non-tax advantaged institutions approach one another. Dahlquist, Robertsson and Rydqvist (2014) provides evidence that, in the Swedish market, investment funds facing a higher effective tax rate on dividend income are reluctant to include dividend-paying firms in their portfolios. This literature suggests clienteles do, in fact, exist.

While it may indeed be true that managers do not choose dividend policy with an eye toward attracting a particular clientele, it does seem plausible that they are aware of dividend clienteles and therefore are reluctant to significantly change dividend policy for fear of disturbing the clienteles deemed to be attracted by the current dividend policy of the firm.⁴ The results of Brav, Graham, Harvey, and Michaely (2005), which suggest that some managers would forego a positive net present value project before reducing dividends, are consistent with this idea. Because a reduction of the dividend to finance profitable investment is unlikely to be interpreted as a negative signal, the Brav, Graham, Harvey, and Michaely results suggest some concern about clientele disruption.

⁴ Hamada and Scholes (1985) note that if clienteles exist, they may influence corporate financial decisions.

This reluctance stems from the possibility that disturbing clienteles could be costly. Elton and Gruber (1970, p. 68) comment that "... a change in dividend policy might cause a change in clientele and this could be costly." They explain that, "One type of cost would be the transaction costs incurred by both buyers and sellers as the firm's clientele changes. Furthermore, there could be at least a short-run unfavorable price movement as the change in dividend policy is more apparent to those investors who find it less favorable (present stockholders) than to those who find it more favorable."

We apply the idea of dividend clienteles to the method of payment in takeover. The two most common currencies for payments in corporate M&As are cash and stock. Some mergers involve all cash and some all stock, but a mixture of both currencies is also widely observed (Boone, Lie, and Liu, 2014). Stock became increasingly important as a payment method during the 1990's, but its use has declined somewhat in the first decade of this century.⁵ Studies on the method of payment have identified many possible factors that influence the choice of payment method used in M&As including managerial ownership, asymmetric information, and relative cost, among others. In this study, we look at how the dividend policies of the two firms involved in a merger or acquisition affect the method of payment used in the deal.

Baker, Coval, and Stein (2007) show that if the demand curve for the acquirer's stock is downward sloping, then the cost of a stock-for-stock merger and the negative merger announcement effect decrease in the fraction of target shareholders who passively accept and retain acquirer shares ("inertial" investors in the target firm in their language). Each share retained by a passive target shareholder is one less share that must be absorbed by market

⁵ Heron and Lie (2002), for instance, find that about 31% of their takeover sample (427 out of 1,376 deals) are entirely stock financed between 1985 and 1997. Faccio and Masulis (2005) use European takeover data and report that 26.8% of their sample deals are financed only with stock.

investors with a lower evaluation of the acquirer.⁶ They find evidence in support of inertial behavior by target shareholders and that acquirer returns are lower when inertia is lower.

If shareholders care about dividend levels and the dividend policies of the acquirer, and the target are materially different, target shareholders in stock-based mergers have an incentive to liquidate their holdings. That is, target shareholders may decide to rebalance their portfolios. They can sell their position in the target, before the merger is consummated, or in the survivor firm, after the merger is consummated. Material differences in dividend policies serve as a disincentive to a stock-based acquisition. In the language of Baker, Coval, and Stein (2007), a similarity in dividend policies between the target and the acquirer increases inertia, while a dissimilarity in dividend policies between the target and the acquirer decreases inertia, other things equal. Managers of both target and acquiring firms may consider the effect of dividend policies on shareholders' behavior when determining the method of takeover payment. The literature cited and arguments made above suggest the following hypothesis:

H1: If managers care about dividend clienteles and the dividend policies of the two firms involved in an acquisition are quite similar, stock is more likely to be the method of payment, other things equal. The method of payment is more likely to be cash if the dividend policies are significantly different, other things equal.

We also examine whether the market responds to takeover financing decisions and dividend differentials. Target shareholders who do not prefer the dividend policy of the acquirer can sell at any point from the announcement date until after the merger consummation. If they sell around the announcement date, target shareholder returns will be negative. Whether this

⁶ Demand curves for stocks may slope down for a number of reasons. Miller (1977) suggested the combined effects of differences of opinion and short-sale constraints. The empirical literature provides clear support for downward-sloping demand curves (e.g. Harris and Gurel, 1986; Shleifer, 1986; Bagwell, 1992; Hodrick, 1999; Kaul, Mehrotra, and Morck, 2000; Wurgler and Zhuravskaya, 2002; Greenwood, 2005; and Petajisto, 2009).

appears in target returns, reflecting the initial sales by target shareholders who do not prefer the new dividend level, depends on whether target shareholders sell immediately on the announcement of the deal and upon the activity of merger arbitragers. If merger arbitragers immediately transfer, at least partially, the effects of any selling by target shareholders to the acquirer, then acquirer announcement returns will be lower.⁷ Acquirer shareholders may have an incentive to sell off their shares before the price plunges due to potential upcoming portfolio rebalancing by target shareholders. Clienteles preferring the dividend policy of the acquirer would not buy until the likelihood of merger consummation was high enough and the price drops large enough to compensate them for the risk of merger failure and the transaction costs of rebalancing. This suggests that overall announcement returns may be lower when the dividend policies of the target and acquirer differ. We summarize this prediction as follows:

H2a: Abnormal announcement returns in stock-based acquisitions are lower for the target if the level of difference in dividend policies is larger and target shareholders react immediately.

H2b: Abnormal announcement returns in stock-based acquisitions are lower for the acquirer if the level of difference in dividend policies is larger and acquirer shareholders react immediately.

B. Key Variables

1. Dependent Variables: Measures of the Method of Payment

⁷ Prior literature documents that acquirer (target) shareholders earn negative (positive) announcement returns from mergers (e.g., Jensen and Ruback, 1983; Moeller, Schlingemann, and Stulz, 2004). This fact may provide a disincentive for target shareholders to rebalance their portfolios right after the announcement because they can earn positive return in the post-announcement period even when the dividend differentials are substantial. Rational target shareholders dissatisfied with the acquirer's dividend policy would have a relatively longer window for portfolio rebalancing and can defer the rebalancing until the point they can fully realize positive abnormal announcement returns. In anticipation of the future negative price pressure from such instant or delayed rebalancing by target shareholders, acquirer shareholders would have an incentive to sell off their shares before loss is observed.

In our primary tests, our dependent variable is the method of payment. We use both dummy variable and continuous variable approaches to measure the payment method. First, we categorize deals into three groups in terms of their payment methods; *Cash Only*, *Mixed Payment* and *Stock Only*. *Cash Only* includes deals containing only cash, *Stock Only* includes deals containing only stock, and *Mixed Payment* includes deals financed with both stock and cash.⁸ Alternatively, we use continuous variables for the percentage of cash payment, *%Cash PMT*, or the percentage of stock payment *%Stock PMT*, which take on any value between zero and one.

In extensions of our primary analysis, we consider regressions where the dependent variables are *%Cash PMT* (as defined above) and announcement returns. Announcement returns are the cumulative abnormal returns (CARs) over the three-day window [-1, +1] or five-day window [-2, +2] around the bid announcement, computed using the firm return minus the CRSP value-weighted market return. We calculate abnormal turnover and the announcement returns for both target and acquiring firms.

2. Measures of the Difference in Dividend Policies

We obtain cash dividends for each acquiring firm and target firm from the COMPUSTAT database. We collect quarterly dividend data as of the end of the quarter immediately preceding the quarter when a merger is announced. We then average actual dividend payments over the last 4 quarters in order to account for seasonality in dividend payments. For example, if a merger is announced in the second quarter of 2015, we average quarterly dividends from the second quarter of 2014 to the first quarter of 2015.⁹

⁸ Following Officer, Poulsen, and Stegemoller (2009), we defined *Cash Only* (*Stock Only*) as deals with at least 90% of the consideration is cash (stock) and found the qualitatively same results.

⁹ In unreported results, we also use the quarterly dividend prior to the announcement date. The results are similar to those presented here.

We use three measures of a difference in dividend policies between an acquirer and target. First, *One is Payer* is a dummy variable equal to 1 if one of the two firms involved in the merger pays any dividend during the last 4 quarters prior to the deal announcement, while the other does not, and equals 0 otherwise. Dividend policies are significantly different in the case that only one of the two firms pays a dividend. There is less difference in dividend policies if both or neither firm pays dividends. We also calculate the absolute value of differences in the dividend yield between targets and acquirers, *Diff.DivYield*. In order to ensure that our results are not affected by stock price variation (Grinstein and Michaely, 2005; Li and Zhao, 2008), we further use the absolute value of differences in the dividend to book value ratio between targets and acquirers, *Diff.Div/Book*. *DivYield* is defined as the ratio of dividend per share to the market price per share and *Div/Book* is the ratio of the amount of dividends to the book value of assets.

For example, for a merger between a firm with a dividend yield of 2.0% and a firm with a dividend yield of 5.0%, the dividend yield difference between the two companies would be $|2.0\% - 5.0\%| = 3.0\%$. The closer this number is to zero, the more similar the dividend policies between the two firms are. For the coefficient on *Diff.DivYield* to be meaningful, we add a control variable *Acquirer DivYield* to control for the levels of dividend yields of the acquiring firms.¹⁰ Likewise, we add a control variable *Acquirer Div/Book* when *Diff.Div/Book* is included as the variable of interest.

C. Empirical Methodology

For the primary tests of our hypothesis, we adopt the multinomial logit model as well as

¹⁰ We do so because a 3% value reported in *Diff.DivYield* may result, for example, from a 3%-dividend-yield acquirer taking over a non-dividend-paying firm, or it may result from a non-dividend-paying acquirer buying a 3%-dividend-yield firm. The impact on the method of payment from these two cases may be different. Hence, we use the variable *Acquirer DivYield* to control for the differences in the acquirers' dividend yields.

the two-limit Tobit model. First, we consider the case where acquirer management faces the qualitative financing decision. Faccio and Masulis (2005) argue that in many mixed deals, target shareholders have a choice to receive cash or stock, implying that acquiring firms do not determine the fraction of cash financing.¹¹ Accordingly, we categorized the sample into three groups in terms of their payment methods. An indicator variable, *MOP*, takes a value of 0 for pure cash deals, 1 for mixed deals (whether the mix is acquirer or target determined), and 2 for pure stock deals. Using *MOP* as a dependent variable, we estimate the following multinomial logit regression:

$$(1) \quad P(MOP_i = K) = \frac{\exp(x'_{ik} \times \beta)}{\sum_{j=0}^J \exp(x'_{ij} \times \beta)}$$

where $P(MOP_i = K)$ is the probability that a deal i will have the K^{th} payment method. The variables of interest are the measures of the degree of similarity in dividend policies, *One is Payer*, *Diff.DivYield*, or *Diff.Div/Book*. Following previous literature, we include a number of other control variables, including deal characteristic, acquirer characteristic, and target characteristic variables. All the control variables and the rationales for including them are discussed fully in Section III.B.

We also examine the effect of a difference in dividend policies on the fraction of cash financing by adopting the two-limit Tobit model. In this model, the dependent variable, *%Cash PMT*, can be thought of as a latent variable that is censored at both lower and upper limits, namely at zero and one. Values of *%Cash PMT* that we actually observe are bounded between zero and one. Specifically, we estimate the following model:

¹¹ The fact that target shareholders have a choice to receive cash or stock should not affect our investigation of the relationship between method of payment and dividend differences since, in equilibrium, the more similar the dividend policies of the two firms the more likely stock is the method of payment, ceteris paribus, irrespective of whether the choice is made by the acquirer or target shareholders. In our examination of turnover and announcement returns, our key test variable is an interaction term related to stock only acquisitions.

$$(2) \quad \%CashPMT_i^* = \beta' x_i + u_i$$

where x is the set of explanatory variables and,

$$\begin{aligned} \%CashPMT_i &= 1 && \text{if } \%CashPMT_i^* \geq 1, \text{ all cash} \\ \%CashPMT_i &= \%CashPMT_i^* && \text{if } 0 < \%CashPMT_i^* < 1, \text{ mix of cash and stock} \\ \%CashPMT_i &= 0 && \text{if } \%CashPMT_i^* \leq 0, \text{ all stock} \end{aligned}$$

We estimate this Tobit equation employing the quasi maximum likelihood estimation (Q-MLE) that uses Huber-White sandwich estimators. This method enables us to have robust estimators in the presence of possible model misspecification in the nonlinear framework (Cameron and Trivedi, 2005). This model has some advantages over other models. First, we do not need to limit our choice dependent variable to a binary type or multinomial type of variable. Second, although our dependent variable now is a continuous variable, it is truncated. An OLS regression model may return a $\%Cash\ PMT$ value of less than zero or greater than one in such cases. The two-limit Tobit model overcomes that inherent limitation of the standard OLS regression.

We conduct two more tests in an effort to provide additional evidence in support of our hypothesis. The first of these considers the behavior of multiple acquirers and effectively employs model (2) above with the addition of firm fixed effects. One advantage of using the multiple acquirer sample with panel analysis is that we can control for unobservable acquirer heterogeneity through time-demeaning, which is not usually possible in merger studies where one takeover transaction is matched with one acquirer. This helps ensure that the significance of dividends is not a proxy for some other firm level effect. That is, we estimate

$$(3) \quad \%Cash\ PMT_{it} = \beta' x_{it} + c_i + u_{it}$$

where c_i is an acquirer level fixed effect. The model is estimated based on robust standard errors clustered at the level of acquirers.

We also estimate a similar OLS regression model of announcement return effects:

$$(4) \quad CARs = \alpha + \beta_1(Stock\ Only \times Measures\ of\ Dividend\ Differences) + \beta_2 Measures\ of\ Dividend\ Differences + \beta_3 Stock\ Only + \beta_4 X + e$$

Announcement returns, *CARs*, are measured as the cumulative abnormal returns of targets and acquirers, respectively, relative to the CRSP value-weighted market index, computed for the event windows of [-1, +1] and [-2, +2] days around a bid announcement date. We expect that the interaction term of a dividend difference and a stock-based acquisition dummy, *Stock Only* \times *Measures of Dividend Differences*, is negatively correlated with target and/or acquirer announcement returns. The control variable vector, *X*, are described in Section III.B.

III. Sample Selection, Control Variables, and Summary Statistics

A. Sample

Our sample consists of all M&As that were announced from July 1, 2001, to December 31, 2015, obtained from the Securities Data Corporation (SDC) Platinum Mergers and Acquisitions database. The Financial Accounting Standards Board banned the pooling of interest accounting method for mergers effective July 1, 2001. By choosing this as our starting date, we do not have to control for the relative attractiveness of accounting method on payment choice. All M&As must satisfy the following screening criteria to be included in our sample: 1) deal value is greater than one million dollars and is publicly disclosed, 2) the percentage of shares of the target firm held by an acquirer at announcement is less than 50%, 3) stock prices are available in the Center for Research in Securities Prices (CRSP) database, 4) financial data are available in COMPUSTAT for both targets and acquirers, and 5) insider ownership data are

available in the Thomson Financial Network (TFN) Insider Filing database for both targets and acquirers. The sample restrictions result in a final sample of 1,591 deal observations.

B. Control Variable Descriptions

The literature has suggested that various factors may have some impact on the outcome of a method of payment in acquisitions. The variables mentioned below will be used as our control variables for these factors in our payment choice regression models.

Institutional Ownership. Baker, Coval, and Stein (2007) show that if the proportion of passive shareholders who accept and retain the acquirer stock in a stock-for-stock deal decreases, acquirer returns to the acquisition decrease. They find that institutional shareholders are less likely to be passive than individual shareholders. Accordingly, we control for the percentage of institutional target shareholders using target *Institutional Ownership*. The larger this percentage, the less attractive a stock merger is for the acquirer and, hence, acquirers would be less likely to use stock and, if they do so, the merger is likely to have lower announcement returns. Faccio and Masulis (2005) note that an acquirer with highly dispersed ownership is less likely concerned about corporate control issues. As high institutional ownership represents a less diffuse ownership, we expect cash payment to be more likely when institutional ownership is high because stock payment will create a large target shareholder, which will dilute the control of the acquirer shareholders.

Cash/Deal Value. Myers' (1984) pecking order theory suggests that firms should fund their investment opportunities from internally generated cash flow whenever feasible. This suggests that if the acquiring firm has a lot of free cash flow (FCF), the firm is more likely to use cash as a means of payment for the acquisition. Martin (1996) and Mayer and Walker (1996)

find acquirers who have an ample amount of cash on the balance sheet or who can generate a large amount of FCF and have a low level of leverage tend to use cash and/or debt to finance their acquisitions. Our variable, *Cash/Deal Value*, measures the amount of acquirer cash plus marketable securities normalized by the value of the merger or acquisition.

Leverage and PP&E/Book. In the case where the acquirer does not have enough cash, but it is not already highly leveraged, the acquirer can issue new debt to fund the acquisition. The acquirer can also use the unused lending capacity from the target firm if the target firm is under-leveraged. Chaney, Lovata, and Philipich (1991) find that acquiring firms that use cash acquisitions tend to be highly levered small firms with high return on assets, while acquiring firms that use stock acquisitions tend to have large asset bases, low leverage, low return on assets, and high price-earnings ratios. Karampatsas, Petmezas, and Travlos (2014) find that the use of cash financing is more likely when the firm has lower financial constraints and better capability to access public debt markets. *Acquirer Leverage* and *Target Leverage* measure the debt-to-assets ratio of acquirers and target firms, respectively. Faccio and Masulis (2005) control for the borrowing power of the acquirer using a variable related to the collateral capacity of the firm, which they measure using property, plant, and equipment (PP&E) over the book value of total assets. We also include *PP&E/Book* to control for the collateral value of the acquiring firm's assets.

PreReturn. When the stock price runs up considerably, it makes equity financing relatively less expensive. Acquirers can take advantage of a stock run-up prior to a merger or acquisition by using stock as a means of payment. Conventional wisdom suggests that targets would recognize such overvalued stock offers and refuse them. However, research by Rhodes-Kropf and Viswanathan (2004) suggests that stock price appreciation of bidders and targets may

be positively correlated. Mutual overvaluation can lead bidders to make, and targets to accept, stock offers, introducing a possible positive correlation between stock price appreciation, merger frequency, and use of stock as a method of payment. Shleifer and Vishny (2003) construct a model where mutual overvaluation can also lead to a positive correlation between stock price performance and the use of stock as a method of payment in acquisitions. We use a 600 trading-day market-adjusted cumulative return up to the 30th trading day prior to the announcement date, *Acquirer PreReturn*, to measure how much the stock price of each acquiring firm has run-up. We predict a negative sign on this coefficient. The higher the stock returns prior to mergers or acquisitions announcements, the higher the likelihood that acquirers will use stock. We also include a pre-agreement return of the target, *Target PreReturn*, during the [-600, -30] trading day window. If target shareholders have large unrealized capital gains prior to the deal agreement, they would prefer receiving stock rather than cash in order to defer payment of the tax on their capital gains. Also, as Rhodes-Kropf and Viswanathan suggest, mutual stock run-ups by the target and the acquirer favor the use of stock.

Market/Book. The growth opportunities of acquiring firms also affect the payment choice. An acquirer with a high growth rate may be able to use their high multiple stock to pay for acquisitions. *Acquirer Market/Book* is defined as the sum of total assets and market value of equity minus book value of equity divided by total assets.¹² We also include *Target Market/Book*. According to Carleton, Guilkey, Harris and Stewart (1983), a high target market-to-book ratio represents potentially high capital gains for target shareholders and non-deductible goodwill for

¹² Rhodes-Kropf, Robinson, and Viswanathan (2005) decompose market to book into “true” value to book, inter-temporal industry over/undervaluation, and firm specific over/under valuation. They show that looking at raw market to book can give misleading inferences in merger contexts. However, they also find that each component has the same effect on the likelihood of a stock payment (Panel C of their Table 9). Thus, in a study focused on method of payment, decomposition of market to book does not seem productive.

acquirers; hence, low market-to-book ratios of targets are associated with the use of cash. Jung, Kim, and Stulz (1996) find the high frequency of stock financing for high market-to-book ratio acquirers.

Payment for acquisitions in the form of stock can help alleviate an asymmetric information problem. Asymmetric information exists in acquisitions because acquirers may know more about the value of their own firms than do target firms, but may not be able to derive a correct estimate of the true value of target firms, and vice versa. Hansen (1987) regards a stock offer as a contingent pricing mechanism. He finds that when target firms know their values better than acquirers, the acquirers will prefer to use stock, which has desirable contingent-pricing characteristics, rather than cash. When asymmetric information exists on both acquirers' and target firms' sides, a signaling equilibrium develops whereby targets regard both the method of payment used and the size of the stock offer as signals of the value of the acquiring firms. However, he finds only minimal supportive evidence. Fishman (1988) and Eckbo, Giammarino, and Heinkel (1990) also provide adverse selection based models of the acquirer's choice of payment. More recently, Eckbo, Makaew, and Thorburn (2016) find that payments with stock are more likely when the target knows more about the acquirer.

Relative Size. When stock is used as a payment in acquisitions, the risks of a miscalculated firm valuation are shared between acquirers and targets. This type of risk is likely to be small when an acquirer is a much larger firm than is a target firm. As the target firm's size increases, the risks are larger. Following Martin (1996), *Relative Size* is our proxy variable for information asymmetry. *Relative Size* is a ratio of target's total assets to the sum of target's total assets and acquirer's total assets as of the year-end prior to the deal announcement.¹³ The larger the size of the target firm relative to the acquirer, the higher the risks of valuation miscalculation

¹³ In unreported regressions we substitute an alternative relative size measure, which is the ratio of target firm's market value to the sum of target's market value and acquirer's market value. The results are essentially unchanged.

and, thus, the higher the probability of a use of stock as a payment consideration.¹⁴ *Relative Size* may also capture the relative importance of the ownership considerations discussed above. For example, if the target is relatively small, allowing target shareholders a position in the acquirer may be less disruptive.

Controls for deal characteristics. We examine several variables that capture deal characteristics. *Deal Premium* is defined as an acquirer's offer value for the target over the pre-offer market value of the target minus one. We follow the approach of Officer (2003) to calculate deal premium. $\ln(\text{Deal Value})$ is the natural logarithm of deal value. *Hostile* is a dummy variable equal to 1 if deal attitude is "hostile" and 0 if "friendly" or "unsolicited" as classified by SDC. Karampatsas, Petmezas, and Travlos (2014) find that hostile deals are more likely to use cash financing.

In the analysis using announcement returns, we also include the natural log of the acquirer's market value, $\ln(\text{Market Value})$. Our control variables in the announcement returns regressions follow previous literature such as Moeller, Schlingemann, and Stulz (2004), Officer, Poulsen, and Stegemoller (2009), and Jeon and Ligon (2011).

C. Descriptive Statistics.

[Table 1 about here]

Table 1 presents the summary statistics when deals are classified by the payment method and dividend policy. Out of 1,591 sample deals, 587 target and 1420 acquiring firms pay dividends. The average dividend yields of target and acquiring firms are 4.203% and 3.182%, respectively. The average dividend to book value ratio is 4.750% for targets and 3.287% for

¹⁴ Mayer and Walker (1996) use both the interaction between earnings predictability and the market-to-book ratio of acquirers, and the ratio of market value of equity for target firms to that of acquirers to proxy for the information asymmetry. However, they find that these variables have only minimal impact on the method of payment.

acquiring firms. In 556 mergers, only one firm (either a target or an acquirer) pays a positive dividend during last 4 quarters prior to the deal agreement. In 475 merger deals, both firms pay dividends, while no firm pays a dividend in 560 deals. The average of the absolute differences in dividend yields, *Diff.DivYield*, is 1.567%, while that of *Diff.Div/Book* is 1.738%.

IV. Effects of Differences in Dividend Policies on the Payment Method

[Table 2 about here]

Table 2 presents the mean and median differences in dividend policies for the three payment method sub-groups. Three categories of the payment methods are approximately evenly distributed, which is in line with previous findings. For example, Boone, Lie, and Liu (2014) point out that the fraction of mixed payments has tripled from 10% to 30% around the turn of the century while that of all stock deals that had been a dominant choice in the late 1990s has plunged. De Bodt, Cousin, and Roll (2016) attribute this shrinkage of all stock deals to the abolishment of pooling accounting in M&As that may have decreased earnings-based managerial incentives to pay with stock. Tests for statistically significant differences between the *Stock Only* group and other groups are from t-tests and Wilcoxon rank-sum tests for each of the three measures of dividend differences: *One is Payer*, *Diff.DivYield*, and *Diff.Div/Book*. The overall results in Table 2 support the hypothesis that acquirers are more likely to pay with stock when dividend policies are similar. 38.723% of the merger deals in the *Cash Only* group have a single dividend payer (i.e. are part of the *One is Payer* classification), which is significantly higher than that in the *Stock Only* group, 26.897%. In the *Mixed Payment* group, 29.020% of the deals have only one dividend payer. The mean and median *Diff.DivYield* of the *Cash Only* group are 1.746% and 0.235%, respectively, which are (weakly, in the case of the mean) significantly

greater than those of the *Stock Only* group, 1.448% and 0.136%. The mean and median of *Diff.Div/Book* are also significantly higher for the *Cash Only* group (1.858% and 0.151%, respectively) than for the *Stock Only* group (1.715% and 0.123%). The *Mixed Payment* group also has greater dividend policy differences than the *Stock Only* group, but these are smaller than those of the *Cash Only* group (these test results are not reported).

[Table 3 about here]

Table 3 reports estimates of multinomial logit models on the acquirer's financing decisions as a function of the measures for dividend differences and the control variables. The table makes pair-wise comparisons between three categories of payment methods: *Cash Only*, *Mixed Payment* and *Stock Only*. Note that in a multinomial logit analysis, a regression coefficient indicates the effects on the log-odds between each of the groups and the reference group which is the *Stock Only* group in this table. In the full sample analysis, the coefficients of *One is Payer*, *Diff.DivYield* and *Diff.Div/Book* are all positive but weakly significant in the *Cash Only* group of Panel A. The relationship becomes more significant when we excluded deals announced during the 2008-2009 financial crisis.¹⁵ Thus, if dividend differences between the target and acquirer are greater, the acquisition is more likely to be financed by cash than stock, which is consistent with our hypothesis.

In each regression of Panel B, where the dependent variable is *Mixed Payment* and the reference group is *Stock Only*, the coefficients of our dividend difference measures are positive but only weakly significant in the subsample estimations for *One is Payer* and *Diff.Div/Book*.

¹⁵ The recent 2008-2009 financial crisis has changed the landscape of the banking sectors around the world (Beltratti and Paladino, 2013), which in turn affected acquirers' financing methods as crisis-hit banks changed their lending behavior (Ivashina and Scharfstein (2010). During the crisis, corporate borrowing and access to capital in general fall sharply (Kahle and Stulz, 2013). For this reason, we conduct the subsample analysis since the determinants of the takeover financing method might be quite different during the financial crisis period, which we do not examine in this paper.

Overall, the results suggest that a greater degree of dividend differences clearly appears to lead managers to choose a cash deal rather than a stock deal, and possibly affects the choice between a cash deal versus a mixed deal.

Note that most of the coefficients of the control variables are signed in accordance with our expectations and prior literature. We find that cash is more likely used in the deal with high takeover premium, but less likely used in large deals. Hostile deals are usually financed with cash (Jensen and Ruback, 1983). The positive coefficient of *Cash/Deal Value* implies that an acquirer maintaining more cash has a greater ability for cash financing and, therefore, is more likely to use cash as a means of payment. Consistent with Faccio and Masulis (2005), the negative coefficient of *Acquirer Market/Book* suggests that when an acquirer's stock price is overvalued at the announcement date, the acquirer is more likely to use stock financing. *Relative Size* is negatively correlated with the probability of cash payment and is weakly significant, implying a larger target size, which increases the risk of valuation miscalculation, results in a lower (higher) chance of cash (stock) financing. The results support the asymmetric information hypothesis (Hansen, 1987; Martin, 1996). *Target Institutional Ownership* is positively related to the probability of a cash payment, consistent with the arguments of Faccio and Masulis (2005) and Baker, Coval, and Stein (2007). Target institutional ownership will turn into post-merger large block ownership when stock is used, which is against corporate control motive by acquirer block shareholders.

[Table 4 about here]

In Table 4, we alternatively employ a two-limit Tobit approach to examine the effect of dividend differences on the fraction of cash financing, *%Cash PMT*. The Q-MLE is used to maximize a log-likelihood function in cases where that function is possibly misspecified

(Cameron and Trivedi, 2005, p. 146). The proxies for a difference in dividend policies (*One is Payer*, *Diff.DivYield* and *Diff.Div/Book*) have positive and significant coefficients, implying that the proportion of cash financing is increasing in these variables. The result is consistent with our hypothesis that with a greater difference in the dividend policies between an acquirer and target, acquirer management is more likely to choose cash as the payment form. Similar to Table 3, the relationship becomes more significant in the subsample analysis where deals announced during the financial crisis are excluded. As expected, other important determinants of the percentage of cash payment include *Deal Premium*, *Ln(Deal Value)*, *Tender Offer*, *Acquirer Leverage*, *Cash/Deal Value*, *Target Insider Ownership*, *Target Institutional Ownership*, and *Target Leverage*. They are correctly signed as discussed in the results for Table 3.

Overall, the results of our univariate tests, multinomial regressions, and Tobit regressions are consistent with a notion that managers consider the potential dividend clientele effect when choosing the payment method. Specifically, after controlling for the acquirers' dividend levels, the closer the dividend policies between acquirers and target firms are, the more likely the acquirers pay for the acquisition with stock. This implies that, for a given acquirer's dividend level, the likelihood of an acquirer using stock as a means of payment in acquisitions increases with the degree of similarity in the dividend policies of acquirers and target firms.

V. The Behavior of Frequent Acquirers

We now consider alternative analyses that provide supporting evidence and confidence for our primary results in the preceding section. One concern is that there is some unobservable firm characteristic correlated with dividend policy that is driving the results in Tables 3 and 4. Fuller, Netter, and Stegemoller (2002) provide evidence that acquirers change their method of

payment from one acquisition to the next. Examining the behavior of multiple acquirers allows us to control for unobservable firm fixed effects and address this potential concern. If the way in which multiple acquirers change their method of payment is consistent with our results for single acquirers, this would be additional evidence that acquirers are aware of the effects of differences in dividend policy and alter their payment method accordingly, using more cash if the dividend policies of the target and the acquirer are significantly different.

We identify 292 acquiring firms from our sample that make more than one acquisition during our sample period. The summary statistics and the related univariate analysis appear in Table 5.

[Table 5 about here]

Panel A indicates that most multiple acquirers are involved in two acquisitions, although some firms are quite active. There are 36 firms with four or more acquisitions. Panel B presents the evolution of payment methods between sequential acquisitions by a particular acquirer. Consistent with Fuller, Netter, and Stegemoller (2002), we observe that there is a reasonable amount of change in payment method between successive acquisitions. Of the 190 acquirers that paid with cash only in the previous takeover, 43 acquirers change their method of payment to a mixture of cash and stock, while 63 acquirers pay with stock only in a current merger. For acquirers that used mixed payment in a previous merger 41 out of 167 pay with cash only in a current deal, while 55 of them use stock only. Likewise, of 227 acquirers that paid with stock only in the previous merger, 43 use cash only and 43 use mixed payment in their current deal.

Panel C presents the results of univariate tests. *Changes in %Cash PMT* is a change in cash financing between the previous and current deals. The table provides the tests for the statistical differences in dividend differentials between the *Increase* and other groups. The table

shows that irrespective of whether we measure the difference in dividend policy by *One is Payer*, *Diff.DivYield*, or *Diff.Div/Book*, we find that acquiring firms are more likely to increase than to decrease the proportion of cash in the deal if the dividend policies of the two firms are more different.

[Table 6 about here]

Table 6 presents the regressions of the method of payment of frequent acquirers as a function of dividend differentials and our control variables. Using a cluster sample of frequent acquirers allows us to conduct panel analysis and we run fixed effects regressions based on robust standard errors clustered at the level of acquirers. The results in Table 6 confirm our earlier findings that a difference in dividend policies between two firms involved in an acquisition is positively correlated with the use of cash. Given that this analysis controls for any firm fixed effects, these results give us more confidence that our results are generated by the difference in dividend policy rather than some unobservable firm characteristic that may be correlated with dividend policy.

The results up to this point overall manifest that the likelihood of acquirers using stock as the payment method in M&As increases with the degree of similarity in dividend policies. These findings translate into a conclusion that managers are aware of the dividend clienteles and they in fact choose a method of payment after taking the consequential clientele effect into account, which is in line with our hypothesis 1.

VI. Effects of Dividend Policies on Announcement Returns

An acquirer, with a dividend policy that differs from that of its target, who uses stock as a method of payment may experience selling activities by target shareholders who do not prefer the acquirer's dividend policy. Selling activities, resulting from shareholders exiting the target

firm's clientele base, can have immediate adverse effects on target stock prices if some non-passive shareholders exit immediately upon the announcement, although their exit could occur at any point prior to or possibly after the merger. Since acquirer shareholders would not necessarily expect a change in dividend policy post-merger, they would have no immediate reason to sell at the announcement date for dividend policy related reasons. An acquirer related announcement effect might be possible, however, if merger arbitrageurs anticipate and respond immediately to effects on the target share price. Whether merger arbitrageurs respond immediately to dividend related sales of target shares, or respond only with a lag, is an empirical question. However, potential long-term shareholders who might prefer the dividend policy of the acquirer would delay purchase at least until the price drops sufficiently to cover the transaction costs of rebalancing and until the merger has a high enough probability of being consummated. Thus, if a difference in dividend policy reduces target shareholders' inertia, there is a possibility that an announcement has a negative return effect.

[Table 7 about here]

Table 7 presents the average announcement CARs of both target and acquiring firms. In this table, the sample is divided into three groups based on payment methods. The overall average CARs in Panel A suggest that target firms are clearly winners in merger transactions with average three-day and five-day CARs of 23.638% and 23.463%, respectively. In contrast, deals are possibly wealth destroying for acquiring firms where average CARs are -0.758% and -0.950% in the three-day and five-day windows, respectively. The table also shows that the average CARs of the *Cash Only* group are higher than the *Stock Only* group in both acquiring and target firms. As widely documented in the literature, the lower announcement returns associated with stock deals are consistent with the adverse selection argument initially suggested

by Myers and Majluf (1984). The M&As literature applies the adverse selection argument to suggest that acquiring firms pay with stock only when their shares are overvalued (Travlos, 1987; Amihud, Lev and Travlos, 1990). Results in Panel B exhibit the qualitatively same implications.

[Table 8 about here]

Table 8 presents the results of OLS regressions that analyze the determinants of the takeover announcement returns for both target and acquiring firms. The variable of interest in the regressions is the interaction variable of a dummy for a stock deal (*Stock Only*) and the difference in dividend policies (*One is Payer*). If abnormal announcement returns are lower for stock-based deals with a greater difference in dividend policies, this is consistent with a notion that a difference in dividend policies decreases the inertia of target shareholders. Whether this negative announcement effect is greater for target firms or acquiring firms depends upon whether merger arbitrageurs anticipate the extent of dividend related selling and the speed with which they shift its effects to acquirers.

Consistent with our hypothesis, the coefficients of the interaction variables between a stock deal dummy and *One is Payer* are negatively statistically significant on acquirer CARs. In stock-based mergers, acquirer CARs decrease by, on average, 3.3% during the three-day window around the deal announcement and 2.9% during the five-day window if only one firm pays a dividend. In the target CARs regressions, the coefficients of the interaction terms are not statistically significant. The evidence suggests that the market does not fully immediately shift the dividend effect to the target stock price, but that some arbitrage activity does occur.

We include several control variables in both the target and acquirer CARs regressions as suggested by previous literature. Target announcement returns are positively correlated with deal

premium and the size of acquiring firms, but negatively correlated with deal size and the leverage of acquiring firms. Acquirer announcement returns are higher for hostile takeovers, but lower when target size is relatively large.

The results on the announcement returns overall suggest that around the announcement the acquirer shareholders sell their shares when dividend policy differentials are greater while target shareholders do not. We can infer that the transactions would not be consummated and the negative price effect on the acquirer stock would not appear if acquirer shareholders were not willing to sell, suggesting that a difference in dividend policies decreases the inertia of the acquirer shareholders, in anticipation of the upcoming negative price pressure due to instant or delayed portfolio rebalancing by target shareholders. The results on Table 8 provide evidence for the existence of the dividend clienteles triggered by the method of payment in M&A transactions although the main focus is on the managers' side in terms of dividend clienteles in the choice of payment method.

VII. Conclusions

The dividend clientele hypothesis suggests that shareholders are different in their preferences for payouts from the firms in which they invest. Previous literature, however, reports mixed empirical evidence on the existence of dividend clienteles. In this paper, we propose a premise that corporate managers are aware of dividend clienteles, irrespective of whether they exist, when making corporate decisions. Accordingly, we test the hypothesis that if managers of both target and acquiring firms care about dividend clienteles of shareholders, the likelihood of acquirers using stock as the payment method in takeovers increases with the degree of similarity in dividend policies.

Using M&A transaction data from June 2001 to 2015, we show that the degree of difference in dividend policies is significantly higher for pure cash deals than pure stock deals in our multinomial and two-limit Tobit regressions. This holds in general, and for both a subsample without the financial crisis period and a subsample of multiple acquirers. The results are more significant in the sub-sample analysis where we excluded the observations during the 2008-2009 financial crisis from the sample. We also perform fixed effects regressions to examine whether the way in which multiple acquirers change the method of payment across acquisitions is associated with dividend differentials. Results for multiple acquirers are quite the same as those for single acquirers, which gives us more confidence that our results are generated by the difference in dividend policy rather than some unobservable firm characteristic that may be correlated with dividend policy.

In addition, we examine the market responses to the payment method and dividend differentials. Our results show that acquirer cumulative abnormal returns (CARs) around the announcement date for stock-based deals are significantly lower when the degree of difference in dividend policies is higher. However, we find no evidence that target CARs for stock deals decrease in the difference in dividend policies, suggesting that target shareholders do not take actions to sell their position before the merger is consummated because they can sell whenever they make a profit. The results are consistent with the idea that a difference in dividend policies decreases the inertia of the acquirer shareholders, which represents the dividend clientele effect through the method of payment.

In sum, this study provides a new perspective regarding the dividend clientele hypothesis. We show that, whether or not the dividend clientele phenomenon exists, corporate managers are aware of dividend clienteles when making financial decisions. Also, our results suggest that the

dividend policies of target and acquiring firms are a key determinant of the payment choice in M&A transactions, in addition to other factors related to traditional explanations of method of payment.

References

- Allen, F.; A. Bernardo; and I. Welch. "A Theory of Dividends Based on Tax Clienteles." *Journal of Finance* 55 (2000), 2499–2536.
- Amihud, Y.; B. Lev; and N.G. Travlos. "Corporate Control and the Choice of Investment Financing: The Case of Corporate Acquisitions." *Journal of Finance* 45 (1990), 603-616.
- Bagwell, L. "Dutch Auction Repurchases: An Analysis of Shareholders Heterogeneity." *Journal of Finance* 47 (1992), 71-105.
- Baker, M.; and J. Wurgler. "A Catering Theory of Dividends." *Journal of Finance* 59 (2004), 1125-1165.
- Baker, M.; J. Coval; and J.C. Stein. "Corporate Financing Decisions When Investors Take the Path of Least Resistance." *Journal of Financial Economics* 84 (2007), 266-298.
- Baker, H. K.; G.E. Farrelly; and R.B. Edelman. "A Survey of Management Views on Dividend Policy." *Financial Management* (1985), 78-84.
- Beltratti, A.; and G. Paladino. "Is M&A Different during a Crisis? Evidence from the European Banking Sector." *Journal of Banking & Finance* 37 (2013), 5394-5405.
- Bhattacharya, S. "Imperfect Information, Dividend Policy, and 'The Bird in the Hand' Fallacy." *Bell Journal of Economics* 10 (1979), 259-270.
- Boone, A. L.; E. Lie; and Y. Liu. "Time Trends and Determinants of the Method of Payment in M&As." *Journal of Corporate Finance* 27 (2014), 296-304.
- Brav, A.; J.R. Graham; C.R. Harvey; and R. Michaely. "Payout Policy in the 21st Century." *Journal of Financial Economics* 77 (2005), 483-527.
- Carleton, W.; D. Guilkey; R. Harris; and J. Stewart. "An Empirical Analysis of the Role of the Medium of Exchange in Mergers." *Journal of Finance* 38 (1983), 813-826.
- Cameron, A. C.; and P.K. Trivedi. *Microeconometrics*. New York: Cambridge University Press (2005).
- Chaney, P. K.; L.M. Lovata; and K.L. Philipich. "Acquiring Firm Characteristics and The Medium Of Exchange." *Quarterly Journal of Business and Economics* 30 (1991), 55-69.
- Dahlquist, M.; G. Robertsson; and K. Rydqvist. "Direct Evidence of Dividend Tax clienteles." *Journal of Empirical Finance* 28(2014), 1-12.
- DeAngelo, H.; L. DeAngelo; and D.J. Skinner. "Are Dividends Disappearing? Dividend Concentration and the Consolidation of Earnings." *Journal of Financial Economics* 72 (2004), 425-456.
- DeAngelo, H.; L. DeAngelo; and R.M. Stulz. "Dividend Policy and the Earned/Contributed Capital Mix: A Text of the Life-Cycle Theory." *Journal of Financial Economics* 81 (2006), 227-254.
- De Bodt, E.; J.-G. Cousin; and R. Roll. "The Full Stock Payment Marginalization in M&A Transactions." *Management Science* (2016), forthcoming.
- Eckbo, B.E.; R.M. Giammarino; and R.L. Heinkel. "Asymmetric Information and the Medium of Exchange in Takeovers: Theory and Tests." *Review of Financial Studies* 3 (1990), 651-675.
- Eckbo, B.E.; T. Makaew; and K.S. Thorburn. "Are Stock-Financed Takeovers Opportunistic?" (July 30, 2016). Tuck School of Business Working Paper Available at SSRN: <http://ssrn.com/abstract=2356900>.

- Elton, E. J.; and M.J. Gruber. "Marginal Stockholder Tax Rates and the Clientele Effect." *Review of Economics and Statistics* 52 (1970), 68-74.
- Faccio, M.; and R. Masulis. "The Choice of Payment Method in European Mergers and Acquisitions." *Journal of Finance* 60 (2005), 1345-1388.
- Fama, E.F.; and K.R. French. "Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay." *Journal of Financial Economics* 60 (2001), 3-43.
- Fishman, M. J. "Preemptive Bidding And The Role Of The Medium Of Exchange In Acquisitions." *Journal of Finance* 44 (1988), 41-57.
- Fuller, K.; J. Netter; and M. Stegemoller. "What Do Returns to Acquiring Firms Tell Us? Evidence from Firms That Make Many Acquisitions." *Journal of Finance* 57 (2002), 1763-1793.
- Ghosh, A., and W. Ruland. "Managerial Ownership, The Method Of Payment For Acquisitions And Executive Job Retention." *Journal of Finance* 53 (1998), 785-798.
- Graham, J.R.; and A. Kumar. "Do Dividend Clienteles Exist? Evidence on Dividend Preferences of Retail Investors." *Journal of Finance* 61 (2006), 1305-1336.
- Greenwood, R. "Short- and Long-Term Demand Curves for Stocks: Theory and Evidence on the Dynamics of Arbitrage." *Journal of Financial Economics* 75 (2005), 607-649.
- Grinstein, Y.; and R. Michaely. "Institutional Holdings and Payout Policy." *Journal of Finance* 60 (2005), 1389-1426.
- Grullon, G.; B. Paye; S. Underwood; and J.P. Weston. "Has the Propensity to Pay out Declined?" *Journal of Financial and Quantitative Analysis* 46 (2011), 1-24.
- Hamada, R.; and M. Scholes, "Taxes and Corporate Financial Management," in E. Altman and M. Subrahmanyam (eds.), *Recent Advances in Corporate Finance* (Homewood, IL: Irwin, 1985), 187-226.
- Hansen, R. G. "A Theory for the Choice of Exchange Medium in Mergers and Acquisitions." *Journal of Business* 60 (1987), 75-95.
- Harris, L.; and E. Gurel. "Price and Volume Effects Associated with Changes in the S&P500 List: New Evidence for the Existence of Price Pressures." *Journal of Finance* 41 (1986), 815-829.
- Heron, R.; and E. Lie. "Operating Performance and the Method of Payment in Takeovers." *Journal of Financial and Quantitative Analysis* 37 (2002), 137-155.
- Hodrick, L. "Does Stock Price Elasticity Affect Corporate Financial Decisions?" *Journal of Financial Economics* 52 (1999), 225-256.
- Hotchkiss, E.S.; and S. Lawrence. "Empirical Evidence on the Existence of Dividend Clienteles." (2007), working paper, Boston College.
- Ivashina, V.; and D. Scharfstein. "Bank Lending during the Financial Crisis of 2008." *Journal of Financial Economics* 97, no. 3 (2010), 319-338.
- Jensen, M.C. "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers." *American Economic Review* 76 (1986), 323-329.
- Jensen, M.C.; and R.S. Ruback. "The Market for Corporate Control. The Scientific Evidence." *Journal of Financial Economics* 11 (1983), 5-50

- Jeon, J.; and J.A. Ligon. "How Much is Reasonable? The Size of Termination Fees in Mergers and Acquisitions." *Journal of Corporate Finance* 17 (2011), 959-981.
- Jung, K.; Y-C. Kim; and R.M. Stulz, "Timing, Investment Opportunities, Managerial Discretion, and the Security Issue Decision." *Journal of Financial Economics* 42 (1996), 159-185.
- Kahle, K.M.; and R.M. Stulz. "Access to Capital, Investment, and the Financial Crisis." *Journal of Financial Economics* 110, no. 2 (2013), 280-299.
- Kalay, A. "The Ex-Dividend Day Behavior of Stock Prices: A Re-Examination of the Clientele Effect." *Journal of Finance* 37 (1982), 1059-1070.
- Karampatsas, N.; D. Petmezas; and N.G. Travlos. "Credit ratings and the choice of payment method in mergers and acquisitions." *Journal of Corporate Finance* 25 (2014), 474-493.
- Kaul, A.; V. Mehrotra; and R. Morck. "Demand Curves for Stocks Do Slope Down: New Evidence from an Index Weights Adjustment." *Journal of Finance* 55 (2000), 893-912.
- Li, K.; and X. Zhao. "Asymmetric Information and Dividend Policy." *Financial Management* 37 (2008), 673-694.
- Lintner, J. "Distribution of Incomes of Corporations among Dividends, Retained Earnings, and Taxes." *American Economic Review* 46 (1956), 97-113.
- Martin, K.J. "The Method Of Payment In Corporate Acquisitions, Investment Opportunities And Management Ownership." *Journal of Finance* 51 (1996), 1227-1246.
- Mayer, W.J., and M.M. Walker. "An Empirical Analysis of the Choice of Payment Method in Corporate Acquisitions during 1980 to 1990." *Quarterly Journal of Business and Economics* 35 (1996), 48-65.
- Miller, E. "Risk, Uncertainty and Divergence of Opinion." *Journal of Finance* 32 (1977), 1151-1168.
- Miller, M.; and F. Modigliani. "Dividend Policy, Growth and the Valuation of Shares," *Journal of Business* 34 (1961), 411-433.
- Mitchell, M; T. Pulvino; and E. Stafford. "Price Pressure around Mergers." *Journal of Finance* 59 (2004), 31-63.
- Moeller, S.; F. Schlingemann; and R. Stulz. "Firm Size and the Gains from Acquisitions." *Journal of Financial Economics* 73 (2004), 201-228.
- Moser, W.J., and A. Puckett. "Dividend Tax Clienteles: Evidence from Tax Law Changes," *Journal of the American Taxation Association* 31 (2009), 1-22.
- Myers, S.C. "The Capital Structure Puzzle." *Journal of Finance* 39 (1984), 575-592.
- Myers, S., and N. Majluf. "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have." *Journal of Financial Economics* 13 (1984), 187-221.
- Officer, M. S. "Termination Fees in Mergers and Acquisitions." *Journal of Financial Economics* 69 (2003), 431-67.
- Officer, M. S.; A.B. Poulsen; and M. Stegemoller. "Target-Firm Information Asymmetry and Acquirer Returns." *Review of Finance* 13 (2009), 467-493.
- Petajisto, A. "Why Do Demand Curves for Stocks Slope Down?" *Journal of Financial and Quantitative Analysis* 44 (2009), 1013-1044.

- Rantapuska, E. "Ex-Dividend Day Trading: Who, How, and Why?" *Journal of Financial Economics* 88 (2008), 355-374
- Rhodes-Kropf, M.; D.T. Robinson; and S. Viswanathan. "Valuation Waves and Merger Activity: The Empirical Evidence." *Journal of Financial Economics* 77 (2004), 561-603.
- Rhodes-Kropf, M.; and S. Viswanathan. "Market Valuation and Merger Waves." *Journal of Finance* 59 (2004), 2685-2718.
- Scholz, J. K. "A Direct Examination of the Dividend Clientele Hypothesis." *Journal of Public Economics* 49 (1992), 261-285.
- Shleifer, A. "Do Demand Curves for Stocks Slope Down?" *Journal of Finance* 41 (1986), 579-590.
- Shleifer, A.; and R.W. Vishny. "Stock Market Driven Acquisitions." *Journal of Financial Economics* 70 (2003), 295-311.
- Travlos, N. "Corporate Takeover Bids, Methods of Payment, and Bidding Firms' Stock Returns." *Journal of Finance* 42 (1987), 943-963.
- Wooldridge, J. M. *Econometric Analysis of Cross Section and Panel Data*. Cambridge, MA: The MIT Press (2002).
- Wurgler, J.; and E. Zhuravskaya. "Does Arbitrage Flatten Demand Curves for Stocks?" *Journal of Business* 75 (2002), 583-608.

TABLE 1.
Descriptive Statistics

This table provides summary statistics regarding the method of payment and dividend policies of target and acquiring firms. The sample includes 1,591 merger agreements during the period July, 2001, to December, 2015. *One is Payer*, *Diff.DivYield* and *Diff.Div/Book* are our measures of the degree of difference in dividend policies which are discussed in Section II.B.2.

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
	July~															
N	88	110	150	149	148	143	114	118	93	105	73	74	71	81	74	1591
Target Dividends																
Dividend payer (N)	29	34	54	52	53	56	49	36	31	36	32	22	39	33	31	587
DivYield (% , Mean)	3.274	3.352	3.249	2.776	3.256	3.397	2.865	2.677	15.488	3.176	4.796	3.117	6.858	3.954	4.022	4.203
Div/Book (% , Mean)	3.477	3.160	1.076	2.404	6.768	10.492	6.316	1.944	4.366	3.566	7.489	3.094	7.229	3.702	3.094	4.750
Acquirer Dividends																
Dividend payer (N)	35	53	75	93	82	90	63	63	46	65	48	42	50	57	58	1420
DivYield (% , Mean)	2.182	3.432	6.304	3.310	3.933	3.512	3.191	3.519	4.562	2.795	3.004	2.909	3.376	3.970	2.910	3.180
Div/Book (% , Mean)	4.094	5.250	4.663	4.014	11.010	6.938	6.960	6.323	3.244	3.079	2.201	3.337	2.484	4.934	2.732	3.287
Dividends Differences (%)																
One is Payer (N)	22	27	31	51	49	50	36	38	33	43	30	38	35	40	33	556
Both are Payers (N)	21	30	49	47	43	48	38	30	22	29	25	13	27	25	28	475
Neither is Payer (N)	45	53	70	51	56	45	40	50	38	33	18	23	9	16	13	560
Diff.DivYield (% , Mean)	0.788	0.575	0.653	0.682	1.753	1.694	1.692	1.688	5.258	1.454	2.096	1.875	3.213	2.753	1.711	1.567
Diff.Div/Book (% , Mean)	0.739	0.517	0.563	0.667	1.845	1.796	2.240	3.165	2.173	2.029	1.799	2.395	3.641	3.853	1.690	1.738

TABLE 2.
Univariate Tests on Payment Methods

The sample is divided into three groups based on the payment method. *Cash Only* includes deals containing only cash, *Stock Only* includes deals containing only stock, and *Mixed Payment* includes deals containing the mixture of stock and cash. Tests for statistically significant differences between the *Cash only* and *Stock Only* group are from t-tests for mean and Mann-Whitney-Wilcoxon rank-sum tests for medians. The symbols ***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively.

N = 1591	Cash Only 501		Stock Only 510		Cash-Stock t Rank- sum	Mixed Payment 580		
	Mean	Median	Mean	Median		Mean	Median	
One is Payer (%)	38.723	0	26.897	0	***	**	29.020	0
Diff.DivYield (%)	1.746	0.235	1.448	0.136	*	**	1.668	0.225
Diff.Div/Book (%)	1.858	0.151	1.715	0.123	**	**	1.645	0.126

TABLE 3.
Determinants of the Payment Choice

Multinomial logit regressions are estimated for the payment method categories. *Cash Only* includes deals containing only cash, *Stock Only* includes deals containing only stock, and *Mixed Payment* includes deals containing the mixture of stock and cash. The subsample excludes observations for the 2008-2009 financial crisis period, i.e., 2001 July to December 2007 and January 2010 to December 2015. The measures of differences in dividend policies include *One is Payer*, *Diff.DivYield*, and *Diff.Div/Book*, which are discussed in Section II.B.2. All tests use the QML robust standard errors and z statistics which are reported in brackets. The symbols ***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively. Coefficients on *Relative Size* have been multiplied by 10,000 for presentation purposes. All of the control variables are discussed in Section III.B.

Reference Group : Stock Only	Full Sample		Subsample		Full Sample		Subsample		Full Sample		Subsample	
Panel A: Dependent Variable: Cash Only												
Dividend Differential												
One is Payer	0.122	[1.75] [*]	0.467	[2.16] ^{**}								
Diff.DivYield					0.946	[1.70] [*]	3.057	[2.09] ^{**}				
Acquirer DivYield					0.876	[0.31]	-0.982	[-0.20]				
Diff.Div/Book									0.039	[0.03]	0.536	[1.88] [*]
Acquirer Div/Book									3.292	[1.27]	4.507	[0.65]
Deal Characteristics												
Deal Premium	0.020	[1.77] [*]	0.620	[2.37] ^{**}	0.025	[1.69] [*]	0.649	[2.48] ^{**}	0.030	[1.65]	0.657	[2.52] ^{**}
ln (Deal Value)	-0.179	[-2.17] ^{**}	-0.251	[-1.98] ^{**}	-0.187	[-2.28] ^{**}	-0.270	[-2.12] ^{**}	-0.193	[-2.36] ^{**}	-0.287	[-2.24] ^{**}
Hostile	0.262	[1.84] [*]	1.462	[2.75] ^{***}	0.286	[1.93] [*]	1.514	[2.88] ^{***}	0.284	[1.92] [*]	1.507	[2.88] ^{***}
Acquirer Characteristics												
ln (Market Value)	-0.007	[-0.09]	0.042	[0.41]	0.009	[0.13]	0.074	[0.71]	0.013	[0.18]	0.083	[0.80]
Leverage	0.209	[0.49]	0.330	[0.63]	0.212	[0.52]	0.423	[0.82]	0.218	[0.53]	0.475	[0.93]
PP&E/Book	0.445	[1.13]	0.360	[0.76]	0.424	[1.08]	0.403	[0.85]	0.438	[1.12]	0.393	[0.83]
Market/Book	-0.018	[-2.79] ^{***}	-0.025	[-2.99] ^{***}	-0.022	[-2.84] ^{***}	-0.026	[-3.10] ^{***}	-0.019	[-3.11] ^{***}	-0.026	[-3.15] ^{***}
Cash/Deal value	0.005	[2.16] ^{**}	0.005	[1.76] [*]	0.005	[2.11] ^{**}	0.005	[1.72] [*]	0.005	[2.14] ^{**}	0.005	[1.76] [*]
PreReturn	-0.021	[-1.13]	-0.043	[-0.67]	-0.021	[-1.16]	-0.046	[-0.62]	-0.021	[-1.15]	-0.046	[-0.60]
Target Characteristics												
Relative Size	-2.258	[-3.19] ^{***}	-4.334	[-4.34] ^{***}	-2.241	[-3.16] ^{***}	-4.330	[-4.29] ^{***}	-2.219	[-3.12] ^{***}	-4.267	[-4.24] ^{***}
Institutional Ownership	1.252	[3.27] ^{***}	1.936	[3.90] ^{***}	1.283	[3.37] ^{***}	2.009	[4.11] ^{***}	1.297	[3.41] ^{***}	2.027	[4.15] ^{***}
Leverage	0.776	[1.73] [*]	-1.024	[-2.25] ^{**}	0.748	[1.92] [*]	-1.052	[-2.29] ^{**}	0.775	[1.95] [*]	-1.044	[-2.27] ^{**}
Market/Book	0.003	[0.41]	0.004	[0.20]	0.003	[0.44]	0.006	[0.27]	0.003	[0.34]	0.006	[0.31]
PreReturn	0.003	[0.21]	-0.025	[-0.81]	0.001	[0.08]	-0.026	[-0.81]	0.001	[0.08]	-0.025	[-0.78]

Intercept	2.975	[2.21]**	3.818	[1.90]*	3.047	[2.28]**	4.007	[2.00]**	3.102	[2.31]**	4.170	[2.09]**
Panel B: Dependent Variable: Mixed Payment												
Dividend Differential												
One is Payer	0.041	[0.25]	0.093	[1.76]*								
Diff.DivYield					2.018	[0.76]	0.702	[1.23]				
Acquirer DivYield					3.304	[1.25]	1.066	[0.25]				
Diff.Div/Book									1.385	[1.64]	0.523	[1.85]*
Acquirer Div/Book									4.797	[1.71]*	4.954	[0.74]
Deal Characteristics												
Deal Premium	0.151	[1.95]*	0.551	[2.23]**	0.156	[1.85]*	0.558	[2.23]**	0.166	[1.77]*	0.576	[2.31]**
ln (Deal Value)	0.528	[5.60]***	0.339	[2.83]***	0.523	[5.53]***	0.329	[2.74]***	0.512	[5.39]***	0.320	[2.64]***
Hostile	-0.372	[-1.11]	0.197	[0.37]	-0.364	[-1.08]	0.224	[0.42]	-0.349	[-1.03]	0.244	[0.46]
Acquirer Characteristics												
ln (Market Value)	-0.378	[-4.52]***	-0.229	[-2.25]**	-0.372	[-4.48]***	-0.219	[-2.17]**	-0.362	[-4.32]***	-0.214	[-2.12]**
Leverage	0.666	[1.96]*	0.375	[0.87]	0.652	[1.95]*	0.384	[0.88]	0.639	[1.92]*	0.380	[0.87]
PP&E/Book	0.365	[1.01]	0.127	[0.30]	0.328	[0.90]	0.119	[0.28]	0.324	[0.89]	0.081	[0.19]
Market/Book	0.003	[0.61]	-0.005	[-0.67]	0.000	[0.15]	-0.004	[-0.65]	0.001	[0.27]	-0.004	[-0.63]
Cash/Deal value	0.003	[0.97]	0.003	[0.64]	0.003	[0.97]	0.003	[0.62]	0.003	[0.93]	0.002	[0.63]
PreReturn	-0.017	[-0.94]	-0.013	[-0.48]	-0.017	[-0.97]	-0.013	[-0.45]	-0.017	[-0.97]	-0.012	[-0.43]
Target Characteristics												
Relative Size	-1.560	[-2.23]**	-1.760	[-2.34]**	-1.547	[-2.21]**	-1.741	[-2.33]**	-1.468	[-2.09]**	-1.722	[-2.29]**
Institutional Ownership	-0.480	[-1.36]	0.299	[0.64]	-0.440	[-1.24]	0.315	[0.68]	-0.431	[-1.21]	0.331	[0.72]
Leverage	1.103	[3.07]***	0.989	[2.58]***	1.163	[3.57]***	0.987	[2.60]***	1.170	[3.56]***	1.006	[2.64]***
Market/Book	-0.002	[-0.18]	0.012	[0.59]	-0.002	[-0.20]	0.012	[0.60]	-0.003	[-0.25]	0.012	[0.60]
PreReturn	-0.001	[-2.01]**	-0.073	[-2.32]**	-0.005	[-2.26]**	-0.074	[-2.29]**	-0.004	[-2.21]**	-0.073	[-2.30]**
Intercept	-7.723	[-5.20]***	-5.589	[-3.00]***	-7.714	[-5.18]***	-5.486	[-2.95]***	-7.605	[-5.10]***	-5.397	[-2.89]***
No. of Observations	1,390		1,227		1,388		1,225		1,388		1,225	
Wald test	722.21		573.36		729.54		563.47		729.33		562.43	
(Pseudo) R ²	0.174		0.171		0.175		0.169		0.175		0.169	

TABLE 4.
Determinants of the Proportion of Cash Payment

Two-limit Tobit regressions are estimated where the dependent variable is the proportion of cash payment, %Cash PMT. The subsample excludes observations for the 2008-2009 financial crisis period, i.e., 2001 July to December 2007 and January 2010 to December 2015. The measures of differences in dividend policies include *One is Payer*, *Diff. DivYield*, and *Diff. Div/Book*, which are discussed in Section II.B.2. All tests use the QML robust standard errors and *t* statistics which are reported in brackets. The symbols ***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively. All of the control variables are discussed in Section III.B.

Dependent variable:	%Cash PMT					
	Full Sample	Subsample	Full Sample	Subsample	Full Sample	Subsample
Dividend Differential						
One is Payer	0.079** [2.01]	0.232*** [2.64]				
Diff.DivYield			0.183* [1.88]	3.495** [2.01]		
Acquirer DivYield			0.968 [0.89]	-3.660* [-1.80]		
Diff.Div/Book					0.143 [0.14]	1.811* [1.95]
Acquirer Div/Book					-0.008 [-0.01]	-1.931 [-0.98]
Deal Characteristics						
Deal Premium	0.054* [1.90]	0.281*** [2.87]	0.059** [1.98]	0.267*** [2.93]	0.055* [1.91]	0.288*** [2.92]
ln (Deal Value)	-0.084** [-2.06]	-0.130*** [-2.62]	-0.089** [-2.27]	-0.141*** [-3.15]	-0.089** [-2.26]	-0.144*** [-2.90]
Hostile	0.020* [1.78]	0.492** [2.10]	0.041* [1.77]	0.518** [2.41]	0.030* [1.75]	0.514** [2.24]
Acquirer Characteristics						
ln (Market Value)	0.016 [0.45]	0.065 [1.51]	0.023 [0.64]	0.082** [2.10]	0.023 [0.63]	0.084* [1.95]
Leverage	0.088 [0.46]	0.179 [0.79]	0.089 [0.51]	0.246 [1.21]	0.102 [0.59]	0.245 [1.08]
PP&E/Book	0.246 [1.50]	0.228 [1.27]	0.236 [1.49]	0.248 [1.47]	0.246 [1.55]	0.250 [1.40]
Market/Book	0.000 [-0.21]	-0.004 [-0.45]	-0.001 [-0.24]	-0.004 [-0.85]	0.000 [-0.19]	-0.004 [-0.44]
Cash/Deal value	0.004** [2.48]	0.003** [2.11]	0.004** [2.07]	0.003 [1.49]	0.004** [2.08]	0.003** [2.12]
PreReturn	-0.007** [-2.18]	-0.023 [-0.95]	-0.007* [-1.72]	-0.024 [-1.51]	-0.007* [-1.72]	-0.025 [-0.91]
Target Characteristics						
Relative Size	-0.795** [-2.60]	-1.369*** [-3.91]	-0.780** [-2.54]	-1.367*** [-4.18]	-0.786** [-2.55]	-1.330*** [-3.77]
Institutional Ownership	0.558*** [3.16]	0.783*** [3.83]	0.575*** [3.47]	0.818*** [4.34]	0.574*** [3.46]	0.822*** [4.05]
Leverage	0.262** [2.08]	-0.524*** [-2.93]	0.247** [2.02]	-0.549*** [-3.24]	0.260** [2.15]	-0.538*** [-2.94]
Market/Book	0.001	0.000	0.001	0.000	0.001	0.001

	[0.30]	[-0.09]	[0.23]	[0.06]	[0.21]	[0.11]
PreReturn	0.004	-0.001	0.004	-0.001	0.003	-0.001
	[0.56]	[-0.15]	[0.43]	[-0.07]	[0.43]	[-0.12]
Intercept	1.737***	2.343***	1.792***	2.465***	1.795***	2.487***
	[2.74]	[3.05]	[2.87]	[3.49]	[2.87]	[3.24]
No. of Observations	1,390	1,227	1,388	1,225	1,388	1,225
LR test	5.03	5.57	244.31	5.3	242.97	5.23
(Pseudo) R ²	0.081	0.109	0.081	0.108	0.080	0.107

TABLE 5.
Methods of Payment in Multiple Acquisitions

This table presents analysis of the behavior of multiple acquirers. Panel A gives the distribution of multiple acquisitions across acquirers. Panel B give the evolution of payment methods across multiple acquisitions. Panel C shows the relation between differences in dividend policy and method of payment in multiple acquisitions. *Increase (Decrease)* means that the percentage of cash increased (decreased) from the immediately previous acquisition by the multiple acquirer. *Unchanged* means the percentage of cash was the same in successive deals for the multiple acquirer. Tests for statistical significance are from the t-tests and Wilcoxon rank-sum tests for differences between *Increase* and other groups.

Panel A: Distribution of Multiple Acquisitions

# of Multiple Takeovers	# of Acquirers
2	164
3	67
4	25
>4	36
N	292

Panel B: Methods of Payment in Multiple Acquisitions

Previous MOP	Current MOP			Total
	Cash	Mix	Stock	
Cash	84	43	63	190
Mix	41	71	55	167
Stock	43	43	141	227
Total	168	157	259	584

Panel C: Changes in Cash Financing and Dividend Differentials

Changes in %Cash PMT		Increase	Unchanged	Decrease	
N		156	236	192	
One is Payer (%)	Mean	42.208	45.299	39.683	**
	Median	0	0	0	*
Diff.DivYield (%)	Mean	4.191	1.663	1.534	** ***
	Median	1.215	0.683	0.681	**
Diff.Div/Book (%)	Mean	2.874	2.075	1.769	**
	Median	0.758	0.429	0.454	**

TABLE 6.

Determinants of the Proportion of Cash Payment in Multiple Acquisitions

Fixed effects regressions are estimated where the dependent variable is the proportion of cash payment, %Cash PMT. The subsample excludes observations for the 2008-2009 financial crisis period, i.e., 2001 July to December 2007 and January 2010 to December 2015. The measures of differences in dividend policies include *One is Payer*, *Diff.DivYield*, and *Diff.Div/Book*, which are discussed in Section II.B.2. All tests are based on robust standard errors clustered at the level of acquirers. The symbols ***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively. All of the control variables are discussed in Section III.B.

Dependent variable:	%Cash PMT					
	Full Sample	Subsample	Full Sample	Subsample	Full Sample	Subsample
Dividend Differential						
One is Payer	0.004 [0.58]	0.077 ** [1.99]				
Diff.DivYield			0.266 *** [4.87]	0.148 *** [3.16]		
Acquirer DivYield			-0.249 [-0.55]	-2.711 [-1.62]		
Diff.Div/Book					0.799 ** [2.13]	0.911 *** [2.80]
Acquirer Div/Book					-0.746 * [-1.83]	0.290 [0.13]
Deal Characteristics						
Deal Premium	0.028 [0.80]	0.102 * [1.85]	0.026 [0.72]	0.111 ** [2.05]	0.029 [0.81]	0.110 ** [1.99]
ln (Deal Value)	-0.014 [-0.60]	0.001 [0.02]	-0.015 [-0.61]	-0.001 [-0.04]	-0.014 [-0.59]	-0.003 [-0.09]
Hostile	0.022 [0.18]	0.175 [1.63]	0.021 [0.17]	0.190 * [1.73]	0.020 [0.16]	0.170 [1.61]
Acquirer Characteristics						
ln (Market Value)	0.043 [1.07]	0.045 [0.90]	0.043 [1.07]	0.049 [0.97]	0.040 [0.99]	0.044 [0.88]
PP&E/Book	0.454 ** [2.31]	0.165 * [1.72]	0.462 ** [2.31]	0.185 * [1.80]	0.461 ** [2.33]	0.191 * [1.82]
Market/Book	-0.001 * [-1.96]	-0.006 *** [-7.71]	-0.002 * [-1.86]	-0.006 *** [-7.54]	-0.001 * [-1.77]	-0.007 *** [-8.48]
Cash/Deal value	0.001 * [1.66]	0.001 * [1.96]	0.001 [1.62]	0.001 ** [2.05]	0.001 * [1.68]	0.001 * [1.97]
PreReturn	-0.034 ** [-2.07]	-0.061 ** [-2.49]	-0.034 ** [-2.02]	-0.075 *** [-2.75]	-0.033 ** [-2.00]	-0.066 ** [-2.56]
Target Characteristics						
Relative Size	-0.331 * [-1.77]	-0.605 ** [-2.33]	-0.326 * [-1.80]	-0.596 ** [-2.26]	-0.316 * [-1.78]	-0.578 ** [-2.12]
Institutional Ownership	0.115 [1.22]	0.230 ** [2.19]	0.122 [1.30]	0.230 ** [2.15]	0.131 [1.40]	0.234 ** [2.20]
Leverage	0.183 *** [3.48]	-0.017 [-0.18]	0.182 *** [2.63]	-0.023 [-0.24]	0.176 *** [2.62]	-0.025 [-0.26]
Market/Book	0.000 [0.04]	-0.002 [-1.11]	0.000 [0.08]	-0.001 [-0.47]	0.000 [-0.10]	-0.001 [-0.82]
PreReturn	0.001 [0.23]	0.000 [0.03]	0.000 [-0.08]	0.001 [0.16]	0.000 [0.01]	0.001 [0.18]
Intercept	0.152 [0.34]	0.116 [0.22]	0.149 [0.33]	0.176 [0.32]	0.164 [0.36]	0.203 [0.37]
No. of Observations	749	663	749	663	749	663
F test	3.52	8.98	11.99	8.13	4.1	10.11
R ²	0.082	0.159	0.079	0.133	0.075	0.132

TABLE 7
Descriptive Statistics of Announcement Returns

Announcement returns are measured as the cumulative abnormal returns (CARs) relative to the CRSP value-weighted market index over three-day [-1, 1] and five-day [-2, 2] horizons. The sample is divided into three groups based on the method of payment. Panel A uses the full sample and Panel B uses the subsample. The subsample excludes observations for the 2008-2009 financial crisis period, i.e., 2001 July to December 2007 and January 2010 to December 2015.

Panel A. Full Sample

		Cash Only	Mixed Payment	Stock Only	Overall
Target CARs (%)	[-1,1]	26.606	21.404	23.036	23.638
	[-2,2]	27.116	21.345	22.169	23.463
Acquirer CARs (%)	[-1,1]	-0.013	-1.683	-0.584	-0.758
	[-2,2]	-0.448	-1.478	-0.913	-0.950

Panel B. Subsample

		Cash Only	Mixed Payment	Stock Only	Overall
Target CARs (%)	[-1,1]	27.739	20.570	19.213	22.992
	[-2,2]	28.222	20.890	19.082	23.261
Acquirer CARs (%)	[-1,1]	0.568	-1.164	-2.672	-1.164
	[-2,2]	0.487	-1.188	-2.929	-1.188

TABLE 8.
Determinants of Announcement Returns

This table reports the results of OLS regressions that test the determinants of takeover announcement returns, defined as the cumulative abnormal returns (CARs) over the three-day [-1, +1] and five-day [-2, +2] windows. The dependent variables are Acquirer CARs and Target CARs. The measures of differences in dividend policies include *One is Payer*. The *t*-statistics are based on White robust standard errors. The symbols ***, **, and * represent statistical significance at the 1%, 5%, and 10% level, respectively. All of the control variables are discussed in Section III.B.

	Acquirer CAR		Target CAR	
	[-1, 1]	[-2, 2]	[-1, 1]	[-2, 2]
Stock Only*One is Payer	-0.033 ** [-2.07]	-0.029 * [-1.82]	0.025 [0.76]	0.008 [0.23]
One is Payer	0.017 *** [2.86]	0.018 ** [2.45]	0.009 [0.49]	0.010 [0.58]
Stock Only	0.006 [0.69]	0.005 [0.43]	-0.025 [-1.25]	-0.030 [-1.57]
Deal Characteristics				
Deal Premium	-0.003 [-0.48]	-0.001 [-0.20]	0.158 *** [5.58]	0.160 *** [5.63]
ln (Deal Value)	0.000 [0.00]	0.005 [0.68]	-0.031 *** [-2.69]	-0.031 *** [-2.89]
Hostile	0.028 ** [2.01]	0.025 ** [2.11]	0.038 [1.37]	0.013 [0.34]
Acquirer Characteristics				
ln (Market Value)	-0.001 [-0.40]	-0.002 [-0.75]	0.021 ** [2.06]	0.024 ** [2.50]
Market/Book	0.000 [-1.34]	0.000 [-1.29]	-0.001 [-0.88]	-0.001 [-0.98]
Leverage	0.007 [0.30]	-0.007 [-0.20]	-0.065 * [-1.86]	-0.064 * [-1.76]
PP&E/Book	0.021 [1.27]	0.022 [1.28]	-0.076 ** [-2.05]	-0.080 ** [-2.14]
Target Characteristics				
Relative Size	-0.045 ** [-2.02]	-0.070 ** [-2.12]	-0.058 [-0.85]	-0.037 [-0.54]
Institutional Ownership	-0.015 [-0.64]	-0.041 [-1.00]	0.022 [0.63]	0.034 [0.97]
Leverage	0.018 * [1.83]	0.023 *** [2.78]	-0.035 * [-1.95]	-0.036 * [-1.90]
Market/Book	0.000 [-0.97]	-0.001 [-1.11]	-0.001 [-0.95]	-0.001 [-0.94]
Intercept	0.069 [0.90]	0.003 [0.02]	0.651 *** [3.71]	0.559 *** [3.10]
No. of Observations	1,377	1,377	1,393	1,393
F test	5.20	5.05	7.08	6.27
R ²	0.047	0.041	0.206	0.206