

Framing and Disposition Effects in Stockholders' Dividend Preferences: Evidence from Optional Scrip Dividends

Abstract:

This paper examines stockholders preference for cash dividends by identifying the determinants of the cash dividend payment when stockholders are given a choice between cash and stock dividends by Hong Kong firms. The evidence does not support Shefrin and Statman's (1984) returns segregation argument, nor is it consistent with the general disposition to sell stocks following positive returns. An unusual feature of Hong Kong optional scrip dividends is that some firms have default scrip dividends instead of the more common cash default found in dividend reinvestment plans. While the choice of default does not affect the average level of cash preference it appears to affect which financial factors stockholders consider when choosing between cash and scrip. While these results do not provide evidence supporting the main arguments for behavioral dividend preferences they do provide new evidence on the nature of those dividend preferences.

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1. Introduction

The dividend puzzle (Black (1976)) is one of the more enduring challenges to standard finance theory. The fact that many firms persist in paying dividends when there are more tax efficient means to provide stockholders with financial returns, such as capital gains or stock repurchases, simply seems irrational. Therefore it is hardly surprising that behavioral explanations have been proposed to explain corporate dividend policy. However, empirical support for behavioral dividend theory is in short supply.

While there is evidence that stockholders have dividend preferences (see Lewellen, et al. (1978), Baker and Wurgler (2004)), the goal of providing a behavioral explanation with supporting evidence is proving elusive. Part of the problem is that dividend preferences are difficult to observe beyond a general preference for dividend paying firms. Another problem is that explanations for dividend preferences are dominated by stockholders' marginal tax rates, which makes it difficult to isolate behavioral factors. Despite these issues we can test behavioral aspects of stockholders' dividend preferences. This paper presents tests of behavioral dividend theories by examining the role of framing and disposition effects on stockholders' cash dividends preference, when they are offered the choice between cash and scrip dividends, in a non-tax setting.

This paper continues with a review of the literature on behavioral finance explanations for dividend preferences and their empirical evidence. This is followed by an overview of the data and methodology to be used, and the presentation of empirical results. The paper finishes with a section on limitation and the conclusion.

2. Literature Review

In this section we consider what role behavioral finance has in our understanding of dividend preferences and the empirical evidence for these preferences. We begin by considering how the main behavioral finance theories apply to dividends. Then we look at how well the available empirical evidence links stockholder preferences to behavioral explanations.

2.1. Behavioral Theories for Dividend Preferences

A firm's dividend policy involves two decisions. The first decision is to distribute profits or maintain capital gains. When management chooses to distribute profits there is a second decision, to use cash dividends or stock repurchases. Traditional finance theory concludes that in a perfect market, with neither taxes nor transaction costs, dividend policy is irrelevant (Miller and Modigliani (1961)). Even if stockholders do have dividend preferences, dividends and capital gains are treated as perfect substitutes. When dividends are not paid stockholders who want dividends can simply sell their stock to receive cash. Conversely, when unwanted dividends are paid stockholders can use the funds to buy more stock and maintain their portfolio's value. Following the traditional approach in a perfect market there is no need for management to know their stockholders' preference and adopt an appropriate dividend policy.

Our objective is to understand the behavioral factors leading to stockholders' dividend preferences if the market is not perfect. Financial managers could benefit from knowing which factors affect the majority of stockholders provided managers can observe and incorporate those factors into the firm's dividend policy. However, we should also recognize that as Miller (1986) observed there are probably many personal reasons for individuals to prefer dividends or capital gains but these are not represented by the sort of variables found in standard financial research. As finance is largely the study of risk and return which in turn provides the basis of core behavioral finance theories such as mental accounting, framing, regret aversion, and prospect theory, this is where we start.

Behavioral explanations for dividend preference based on mental accounting, regret aversion, and prospect theory are found in Shefrin and Statman (1984). From these theories they developed three arguments for dividend preferences; better self control, the desire to segregate dividend returns from stock returns, and minimizing regret.

Shefrin and Statman argued that self control and regret aversion could both create a general preference for dividends over capital gains. Their self control argument is that stockholders have different mental accounts for dividends and capital gains, with dividend income allocated for consumption. Stockholders prefer firms providing cash dividends as investing in non-dividend firms means they would need to sell stock to finance consumption and they would then be tempted to sell more than they should. With regret aversion they suggest stockholders prefer the passive receipt of dividends over the act of selling stock. While both lead to feelings of regret if the stock price subsequently appreciates, regret is stronger following the deliberate action of selling stock than the passive action of receiving dividends.

While self control and regret suggest a general preference for dividends any preference arising from past stock returns should vary with those returns. The issue of whether dividend preferences are framed by past gains or losses may be approached using prospect theory. Prospect theory (Kahneman and Tversky (1979); Tversky and Kahneman (1981)) indicates that decisions are affected by the frame of reference and in financial cases the frame is usually whether the original investment has provided a gain or loss. The following scenarios illustrate how dividend preferences may arise from prospect theory.

Scenario 1:

Six months ago you invested \$1000 in ABC Corp. Your stock is now worth \$800, you are offered the following choices:

- A. A \$50 dividend with the value of your stock dropping to around \$750.
- B. No dividend. Stock remains around \$800.

Scenario 2:

Six months ago you invested \$1000 in XYZ Corp. Your stock is now worth \$1200, you are offered the following choices:

- C. A \$50.00 dividend with the value of your stock dropping to around \$1150.
- D. No dividend. Stock remains around \$1200.

There are two main issues raised by these scenarios; the first is whether stockholders have a preference between choices with the same dollar value but different risks, the second is whether their preference is framed by past market gains or losses.

When stockholders have prior gains they are more risk averse, which should make them prefer the certain dividend over risky stock, and when they have prior losses they are risk seeking and will prefer the risky stock to dividends. Taking this a step further we get what Shefrin and Statman (1985) labeled the disposition effect, the tendency for stockholders to sell winners too early and hold losers too long. By viewing dividends as the partial liquidation of an investment we again reach the conclusion that owning stock which has increased in value means the stockholder is inclined to prefer dividends over capital gains. Similarly, a stockholder facing losses is more inclined to reject a dividend, and the associated ex-dividend price drop, in the hope that the stock price recovers to eliminate the loss. Overall this suggests a positive relationship between stock returns and cash dividend preference.

However, this interpretation of prospect theory's implications for stockholder dividend preferences is inconsistent with the Shefrin and Statman's conclusions. Their approach combined prospect theory with mental accounting to conclude that either gains or large losses could produce a dividend preference and small losses would create a capital gains preference. Their application of prospect theory to dividend preferences was based on integrating and segregating outcomes (Thaler (1985)). Dividends and stock returns are two distinct return types which a stockholder may mentally segregate or integrate. If segregated returns have greater value than integrated returns then the stockholder will have a dividend preference as segregation requires dividends. When integrated returns have greater value than segregated returns then dividends are still acceptable provided the stockholder can mentally integrate returns. If mental integration is difficult then stockholders should avoid dividends.

Using Thaler's mental accounting framework Shefrin and Statman considered the joint outcome of three combinations of dividends and stock returns. When there are multiple gains segregation allows stockholders to separately experience pleasure from capital gains and from dividends. When there is a mixed loss which combines capital loss with a small dividend, so the combined return is negative, segregation allows stockholders to get some pleasure from the dividend as a silver lining on the cloud of capital loss. The mixed gain has a capital loss outweighed by a larger dividend, so integrating returns cancels the loss and gives the stockholder pleasure from a small overall gain. These scenarios imply stock returns will affect dividend preferences. Segregating multiple gains or mixed losses creates dividend preferences, and if integrating returns is easier without dividends, mixed gains should create a capital gains preference.

2.2. Evidence for Dividend Preferences

At this stage it seems reasonable to ask if there is evidence that stockholders have dividend preferences for any reason, behavioral or otherwise. The general consensus (see Elton and Gruber (1970), Lewellen, et al. (1978), Allen, et al. (2000), Baker and Wurgler (2004)) is that dividend

clienteles with common dividend preferences exist. Less certain is whether clienteles affect stock prices, and if they do not affect prices then there is less reason for management to be concerned with satisfying stockholder preferences. Clientele theory tends to treat stockholder preferences as static and therefore is used to explain corporate practice of maintaining stable dividend ratios. Catering theory is a more recent development of clientele theory with a more dynamic approach where dividend preferences vary over time and firms modify dividend payments to match stockholder demand.

Normally dividends are paid to all stockholders on a pro-rata basis. If an individual stockholder does not like their firm's dividend policy all they can do is sell their stock and buy stock of a firm with their preferred dividend policy. So even when we observe dividend clienteles we see dividend preferences within the broader question of stockholder investment decisions. A different approach to observing dividend preference is to study stockholders' reaction to firms offering dividend choice in the form of optional scrip dividends or dividend reinvestment plans.

In their study of U.S. firms introducing dividend reinvestment plans Peterson, et al. (1987) only found a positive stock price reaction when there was a clear tax advantage for reinvesting stockholders. Chan, et al. (1993) similarly found a positive reaction following tax changes in Australia. We should note that neither study found negative reactions in the absence of tax advantages, which we would expect if stockholders did not want dividend choice.

Similar stockholder preferences can be seen in dual class stock structures when they are used to provide different distributions to separate groups of stockholders. If one class pays cash dividends and the other pays scrip dividends, then stockholders can simply invest in the class that provides their preferred dividend. This practice is not common, but has been used by Citizens Utilities Corporation in the U.S. and some Canadian firms.

During the mid-1950s Citizens Utilities introduced a dual stock structure where one class paid scrip dividends while the other paid cash dividends of equivalent value. Loomis (1968) noted that Citizens Utilities had obtained a tax ruling that the stockholders would not be subject to income tax on the scrip dividends but would instead pay the lower capital gains tax rate, and only when the new stock was sold. Notwithstanding the tax costs Long (1978) found that cash dividend stock traded at a slight premium to the scrip dividend stock, which shows a preference for cash dividends despite higher income tax rates.

Poterba (1986) updated Long's study but found no premium for cash dividend stock in the later period. He also examined the ex-dividend price drop, finding it was smaller for the cash dividend stock, indicating the market placed greater value on scrip dividends. While Poterba could not provide a definite explanation for these inconsistent results raises the possibility that regret avoidance is an explanation. A scrip dividend's tax advantages makes it more valuable but stockholders still do not want it because they will ultimately need to sell the new stock, and this increases their exposure to regret.

The Canadian dual-class stock examined by Bailey (1988) also offered tax advantages to stockholders choosing scrip dividends. The cash dividend stock traded at a premium to scrip dividend stock, but this premium could be explained by other factors. The scrip dividend stock was less liquid and exposed stockholders to greater uncertainty they would not know the value of the dividend until after the new stock was issued.

While the main type of dividend choice is to offer stock as an alternative to cash, the opposite arrangement of offering cash as an alternative to scrip dividends has been attempted, but with limited success. In an early example from the U.S. General Public Utilities Corporation proposed replacing three of their 1968 quarterly dividends with scrip dividends, while also offering a stock sale facility. This would provide cash to stockholders who wanted it, with tax advantages all stockholders would be taxed at the lower capital gains tax rates irrespective of when they sold the stock. Loomis

(1968) noted that stockholder reaction to General Public Utilities' offer was extremely negative. Stockholders did not understand or trust the company's change in dividend policy. They regarded the attempt to replace cash dividends with scrip dividends as a cut in dividends. The market's strong negative reaction forced the company to abandon the plan.

Curiously, when Hubbard and Michaely (1997) revisited the Citizens Utilities case they found that in the 1990s Citizens Utilities changed from cash dividends to scrip dividends with optional stock repurchase for stockholders just as General Public Utilities had proposed years earlier. Unlike the earlier case stockholders appear to have accepted this proposal. Unfortunately we cannot say whether the U.S. market in general became more receptive to combining scrip dividends with cash conversion, or that the firm's stockholders were receptive to the proposal because the firm had a history of paying regular scrip dividends.

Much of this evidence for stockholder dividend preference is anecdotal, it does not directly address the specific self control, separation, and regret aversion arguments in Shefrin and Statman (1984). The self control argument has been addressed by Winnett and Lewis (1995) and Dong, et al. (2005) with neither finding support for the idea that stockholders use mental accounting to allocate dividend income to consumption. For the self control theory to hold stockholders should spend most of their dividend income and not spend capital gains. Yet both papers found only partial spending from dividend income, and in the earlier study the majority of surveyed stockholders claimed they would spend none of their dividend income.

Overall the evidence explaining behavioral preferences for dividends is weak. While there is little doubt that stockholders have dividend preferences, empirical evidence for behavioral explanations based on regret aversion and prospect theory are not available and evidence contradicts the self control argument. Studies of dividend choice show that in most cases stockholders do not mind having a choice between cash dividends or new stock and this weakens the self control and regret aversion arguments. Nevertheless, the existence of optional dividends creates an opportunity for

more a detailed examination of dividend preference which may provide insights into the conditions necessary for stockholders to want that choice and to exercise it.

3. Data and Methodology

This study of dividend preferences considers situations where stockholders can choose whether to receive a dividend. This choice is available when firms offer dividend reinvestment or optional scrip dividend plans. The scenarios described earlier need to be modified to show how stockholders can choose between receiving dividends or capital gains.

Scenario 3:

Six months ago you invested \$1000 in ABC Corp. Your stock is now worth \$800, you are offered the following choices:

- A. A \$50 dividend with the value of your stock dropping to around \$750.
- B'. A portfolio worth around \$800, containing new stock worth around \$50, and your current stock worth around \$750.

Scenario 4:

Six months ago you invested \$1000 in XYZ Corp. Your stock is now worth \$1200, you are offered the following choices:

- C. A \$50.00 dividend with the value of your stock dropping to around \$1150.
- D'. A portfolio worth around \$1200, containing new stock worth around \$50, and your current stock worth around \$1150.

While the choices are a little different the main issues remain. There is a choice between a cash dividend with a known value, and risky stock, and this choice may be framed by the investment's prior returns. So by observing how stockholders' aggregate preference for cash changes with returns

we can test the Shefrin and Statman (1984) separation and regret aversion hypotheses as well as general disposition and framing effects. Regret aversion implies stockholders are more inclined to choose the default payout, as regret from costly decisions is stronger following active decisions and weaker following passive decisions. Separation suggests that stockholders will either prefer cash dividends, to segregate dividend returns from stock returns, or scrip dividends, to integrate dividend returns with stock returns, depending on the size of the returns.

This paper examines dividends paid by Hong Kong firms offering stockholders a choice between cash and scrip dividends. The cash dividend preference is measured as the ratio of actual cash dividend payout to dividend declared. The main tests involve modeling stockholders' cash dividend preference as a function of stock returns. The default dividend type is initially used as a dummy variable, and later to create sub-samples. Dividend yield, stock price risk and firm size are used as control variables.

There are three reasons for using Hong Kong firms in this study. First; data is readily available as both nominal and real cash payouts can be determined from company announcements. Second; Hong Kong resident stockholders are not taxed on dividend income or capital gains so tax factors should not affect their decisions. Third; the type of optional scrip dividend used by some Hong Kong firms differs from that used in other countries. The majority of Hong Kong firms offering optional dividends have cash dividends as the default, which is consistent with dividend reinvestment and scrip dividend plans in Australia, the U.K. and the U.S., but some instead have a scrip dividend default with the option to convert to cash dividends, this provides a unique opportunity to test how framing the default affects stockholders' choice between cash or stock.

There are three behavioral effects under consideration. Separation and disposition effects are examined by testing whether dividend preference is related to stock returns. Regret is examined by testing whether dividend preference is related to the type of default dividend. One issue with testing the relationship between stock returns and dividend preference is that we need a reference point

from which to calculate returns. Ideally this is start price from which a stockholder's gains or losses are calculated, but as we do not have individual account data we cannot use this. We instead calculate returns over four arbitrary periods; 30, 90, 180, and 365 days. As Hong Kong firms typically pay semi-annual dividends the 180 day period approximates stock returns since the last dividend.

Earlier research on the disposition effect (see Shefrin and Statman (1985), Weber and Camerer (1998)) assumed the initial purchase price was the reference point. More recent research from Lin, et al. (2006), Arkes, et al. (2008) and Kliger and Kudryavtsev (2008) shows that stockholders are much more flexible in selecting reference points. Stockholders will regularly change their reference point, as this often occurs when there is a significant corporate event measuring returns from the previous dividend seems reasonable.

4. Results

In this section we review our examination of the cash dividend ratio. We start by looking at the ratio's descriptive statistics then continue by modeling the determinants of the ratio. In particular we are looking for either a positive relationship between cash preference and returns or a positive relationship between cash dividends and the absolute value of returns. Finally we split the sample by the default dividend type to look for framing effects.

The dependent variable is the percent of the dividend taken as cash, or the cash dividend ratio. Descriptive statistics for the dependent variable are presented in Table 1. Here we see that irrespective of whether the default dividend is cash or scrip the minimum, maximum, and mean values are similar. The t-test indicates the mean cash preferences for two groups are statistically indistinguishable. The F-test shows the variation in the cash dividend ratio for cash-default dividends is significantly higher than the variation in scrip-default dividends. Regret aversion implies stockholders will prefer the default dividend as passive decisions cause less regret than active

decisions if they later turn out to be costly. As t-test shows there is no preference for the default dividend it does not support regret aversion in stockholders' dividend preferences.

Initial tests of cash dividend ratio determinants are presented in Table 2. These models show a consistent positive relationship between price risk and cash preference. This is expected as a cash dividend provides a certain return, which is more valuable when stock returns are riskier. The models in Table 2 use unadjusted returns to test for a predicted positive relationship between returns and cash preference. The results, however, indicate an inverse relationship. Stockholders with losses prefer cash while those with gains prefer scrip. This finding only supports the half of the separation hypothesis covering negative stock returns, not positive returns. These models also raise the possibility, albeit without proof, that stockholders may use optional dividends as a self control mechanism to override the disposition effect. Taking scrip dividends results in less liquid odd-lot stockholdings, so taking scrip dividends after price gains may weaken the disposition to sell winners too early.

Shefrin and Statman's separation hypothesis implies both large gains and losses produce cash dividend preferences. This is tested using models using the absolute value of returns as presented in Table 3. The return variables in these models are not significant shows no support for segregation. An alternative model specification would be to use returns-squared instead of absolute value of returns, such models were tested but as they produced similar results they are not reported here.

The next stage of the analysis involves dividing the sample into sub-samples based on the default dividend to examine framing effects. While the descriptive statistics showed the default did not affect the level of overall cash preference, it did affect the variation in cash dividend ratios. Before we look at the cash dividend ratio determinants for each sub-sample we should consider whether the management's choice of default dividend reflects other financial factors. Table 4 presents a logit model comparing cash-default with scrip-default firms. It shows that scrip-default firms have significantly lower dividend yields, higher risk, and are smaller than their cash-default counterparts.

So scrip-default firms fit the profile of small, high growth, firms that probably need to limit cash dividends to finance growth. Yet on average their stockholders are just as inclined to take cash dividends as stockholders of cash-default firms.

Table 5 presents the determinants of cash preference for each sub-sample. There are interesting differences between the cash preferences for the cash-default and scrip-default firms. The logical approach, in the absence of framing effects, would be for stockholders to ignore the default form and evaluate both cash and scrip options to choose the best. Yet when we look at cash-default dividends the significant variables are stock returns and risk, but not dividend yield. In contrast, for scrip-default dividends the significant variable is yield, but not returns or risk. So the decision appears to be dominated by stockholders' consideration of the alternative, with little consideration of the default. There is a framing effect evident in the choice of default dividend, and that effect is to take the default for granted.

5. Limitations

While this paper contributes to the limited literature on behavioral dividend preferences, it does have some limitations. Firstly, there is little behavioral finance research for the Asian markets which makes it difficult to generalize these results to European or American markets. Secondly, Hong Kong firms do not report their ownership structure, which would have been a useful variable for testing whether these results are stronger for firms with more individual stockholders. Thirdly, individual account data would provide much more detailed analysis through testing individual stockholder's dividend cash preference, but again this data was not available. These limitations are due to the trade-off between the benefits of using data from a market where two types of optional scrip dividend are used and there are no dividend or capital gains taxes, and the costs of not having access to the other data a researcher may want.

6. Conclusion

Prior research has produced a lot of evidence that stockholders have dividend preferences but Shefrin and Statman's specific behavioral reasons for these preferences are not supported by the evidence. When given a choice between cash and scrip dividends stockholders are inclined to take cash when stock returns are negative and scrip when stock returns are positive. Although this is not consistent with segregating returns or the disposition effect, it does raise the possibility that optional scrip dividends provide a disciplinary function by making it harder for stockholders to sell following positive returns. The type of default dividend offered does not affect the mean level of cash preference but does produce interesting framing effects where stockholders appear to concentrate on the alternative they are offered rather than the default. This is hardly evidence of rational decision making, and adds an extra dimension to the issue of stockholder rationality in dividend preferences. Overall, the goal of finding behavioral explanations for stockholder dividend preferences remains elusive.

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Table 1: Percent of Dividend Taken in Cash

	Cash Default	Scrip Default
Mean	48.95%	48.79%
Minimum	0.52%	0.66%
Maximum	99.78%	98.85%
Variance	9.44%	5.68%
Sample Size	236	146

Test for Equal Means

t statistic -0.0593

p-value 0.953

(two tails, assuming unequal variance)

Test for Equal Variance

F statistic 0.6013

p-value 0.000

Table 2: Determinants of cash dividend preference: Unadjusted Returns

Constant	0.2146	0.2100	0.2158	0.1849
<i>P-value</i>	<i>0.095</i>	<i>0.097</i>	<i>0.091</i>	<i>0.159</i>
RET30	-0.1237			
<i>P-value</i>	<i>0.017</i>			
RET90		-0.0834		
<i>P-value</i>		<i>0.050</i>		
RET180			-0.0664	
<i>P-value</i>			<i>0.039</i>	
RET365				-0.0444
<i>P-value</i>				<i>0.084</i>
SCRIP	0.0045	-0.0041	-0.0135	0.0003
<i>P-value</i>	<i>0.938</i>	<i>0.948</i>	<i>0.827</i>	<i>0.996</i>
YIELD	0.5277	0.5514	0.5643	0.5313
<i>P-value</i>	<i>0.369</i>	<i>0.323</i>	<i>0.303</i>	<i>0.328</i>
STDEV	4.1425	3.9090	3.8461	4.0234
<i>P-value</i>	<i>0.000</i>	<i>0.000</i>	<i>0.001</i>	<i>0.001</i>
LOG(SIZE)	0.0180	0.0198	0.0199	0.0228
<i>P-value</i>	<i>0.195</i>	<i>0.158</i>	<i>0.158</i>	<i>0.119</i>
R^2	0.5067	0.5084	0.5097	0.5089
F-statistic	5.3970	5.4273	5.4511	5.4353
<i>P-value</i>	<i>0.000</i>	<i>0.000</i>	<i>0.000</i>	<i>0.000</i>
Durbin-Watson statistic	2.1916	2.1999	2.2142	2.2352
Sample Size	382	382	382	382
White cross-section standard errors & covariance (d.f. corrected)				

Table 3: Determinants of cash dividend preference: Absolute Returns

Constant	0.2667	0.2687	0.2417	0.2539
<i>P-value</i>	0.032	0.027	0.064	0.045
ABS30	-0.1489			
<i>P-value</i>	0.149			
ABS90		-0.0700		
<i>P-value</i>		0.229		
ABS180			0.0249	
<i>P-value</i>			0.614	
ABS365				-0.0413
<i>P-value</i>				0.218
SCRIP	0.0179	0.0181	0.0137	0.0152
<i>P-value</i>	0.763	0.759	0.815	0.801
YIELD	0.6083	0.6173	0.5954	0.5642
<i>P-value</i>	0.305	0.292	0.326	0.311
STDEV	4.4706	4.2909	3.5894	4.7391
<i>P-value</i>	0.001	0.001	0.002	0.000
LOG(SIZE)	0.0113	0.0113	0.0151	0.0124
<i>P-value</i>	0.393	0.382	0.283	0.367
R^2	0.5058	0.5048	0.5031	0.5046
F-statistic	5.3805	5.3631	5.3348	5.3610
<i>P-value</i>	0.000	0.000	0.000	0.000
Durbin-Watson statistic	2.1654	2.1626	2.1725	2.1976
Sample Size	382	382	382	382
White cross-section standard errors & covariance (d.f. corrected)				

Table 4: Model of Default Dividend

Constant	-1.1341
<i>P-value</i>	<i>0.114</i>
YIELD	-5.9280
<i>P-value</i>	<i>0.011</i>
STDEV	71.6537
<i>P-value</i>	<i>0.000</i>
LOG(SIZE)	-0.1543
<i>P-value</i>	<i>0.032</i>
<hr/>	
R ²	0.1115
LR statistic	56.6594
<i>P-value</i>	<i>0.000</i>
Sample Size	382

Logit model with cash default firms coded 0, and scrip default firms coded 1.

Table 5: Determinants of cash dividend preference

Panel A: Default cash dividend sub-sample					Panel B: Default scrip dividend sub-sample				
Constant	0.0563	0.0660	0.0796	0.0895	Constant	0.2127	0.1787	0.1642	0.1281
<i>P-value</i>	0.855	0.839	0.801	0.790	<i>P-value</i>	0.112	0.225	0.267	0.413
RET30	-0.3188				RET30	-0.0111			
<i>P-value</i>	0.010				<i>P-value</i>	0.864			
RET90		-0.1357			RET90		-0.0545		
<i>P-value</i>		0.066			<i>P-value</i>		0.336		
RET180			-0.0903		RET180			-0.0566	
<i>P-value</i>			0.012		<i>P-value</i>			0.236	
RET365				-0.0251	RET365				-0.0544
<i>P-value</i>				0.567	<i>P-value</i>				0.122
YIELD	0.2661	0.3759	0.3754	0.2974	YIELD	2.2294	2.1029	2.0902	2.0325
<i>P-value</i>	0.410	0.189	0.192	0.346	<i>P-value</i>	0.000	0.001	0.000	0.002
STDEV	5.0619	5.0398	4.8901	5.1434	STDEV	3.3748	3.4084	3.4281	3.4512
<i>P-value</i>	0.006	0.011	0.012	0.020	<i>P-value</i>	0.063	0.063	0.076	0.067
LOG(SIZE)	0.0366	0.0354	0.0344	0.0324	LOG(SIZE)	0.0148	0.0193	0.0213	0.0265
<i>P-value</i>	0.313	0.347	0.348	0.400	<i>P-value</i>	0.331	0.265	0.223	0.186
R^2	0.5718	0.5659	0.5653	0.5599	R^2	0.3374	0.3430	0.3490	0.3582
F-statistic	5.7543	5.6416	5.6303	5.5290	F-statistic	3.3073	3.3652	3.4287	3.5293
<i>P-value</i>	0.000	0.000	0.000	0.000	<i>P-value</i>	0.000	0.000	0.000	0.000
Durbin-Watson statistic	2.3667	2.3936	2.4333	2.4241	Durbin-Watson statistic	2.0040	2.0518	2.0620	2.1134
Sample Size	236	236	236	236	Sample Size	146	146	146	146
White cross-section standard errors & covariance (d.f. corrected)					White cross-section standard errors & covariance (d.f. corrected)				