The Role of Accruals as A Signal in Earnings and Dividend Announcements: NZ Evidence

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ABSTRACT

In this study we examine the hypothesis that managers deliberately use accruals to convey information regarding firm future profitability. We use contemporaneous earnings and dividend announcements data as our research setting as the literature strongly suggests that managers use these events to convey private information to the market. This setting reduces the possibility of the opportunistic income smoothing hypothesis to explain the results and increases the validity of the inference on the accrual signaling hypothesis. Employing New Zealand data from 1992 to 2003, we find evidence consistent with managers use both accruals and changes in dividends to communicate private information regarding their firms' future profitability to the market. We find that market's reaction to dividend increase announcements is significantly positive. More importantly, we find that dividend increasing firms report positive accruals which are positively correlated with the firms' future profitability. This finding is robust to the earnings drift effects.

JEL classification: M41, G14, G30

Key Words: Accruals, Signaling, Earnings and Dividend Announcements

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1. Introduction

Studies on earnings management usually hypothesise that managers manipulate accruals for their own benefit. Few studies however, argue that managers can also use accruals to improve the value relevance of reported earnings to help investors better assess their firm operating performance (Holthausen and Leftwich, 1983; Healy and Palepu, 1993). While substantial evidence on managers' opportunistic behavior on accruals has been documented in the literature[1], empirical evidence on the informativeness of accruals is scarce and inconclusive. The purpose of this study is to investigate whether managers use accruals as an instrument to communicate private information regarding their firm future performance.

Preliminary evidence on the accrual signaling hypothesis is reported by Wilson (1986). Wilson finds that total accruals have incremental information content beyond that of cash flows and earnings. Guay, Kothari and Watts (1996) and Subramanyam (1996) decompose total accruals into discretionary and nondiscretionary components and find that discretionary component of accruals are positively correlated with stock returns suggesting that discretionary accruals have information which is priced by the market. In addition to market's pricing on discretionary accruals, Subramanyam also finds that discretionary accruals are significantly and positively correlated with future earnings and future cash flows. Based on these results, Subramanyam argues that discretionary accruals have information in predicting future profitability.

The positive correlation between stock returns and discretionary accruals suggests that managers may deliberately use accruals as a device to convey private information to the market. Sankar and Subramanyam (2001) develop a model which shows that when managerial discretion is allowed by Generally Accepted Accounting Principles (GAAP), managers use this discretion to communicate their private information through reported earnings. Empirical evidence consistent with their conjecture is reported by Brooks (1996) and Kang (2005). Brooks examines the effects of earnings and dividend announcements on the asymmetric information level and finds that the level of

[1] See Healy and Wahlen (1999) and Kothari (2001) for a review.

information asymmetry falls at earnings announcements but not at dividend announcements. This evidence suggests that there is private information released at earnings announcements. The results reported in Kang (2005) suggest that managers use accruals as the device to release the information. Kang shows that the frequency of accruals-related disclosure increases the accuracy of analysts' forecasts and decreases the analysts' forecast dispersion on future earnings.

The positive association between discretionary accruals and stock returns or future profitability, however, is consistent not only with the accrual signalling hypothesis, but also with the opportunistic income smoothing hypothesis (Guay et al., 1996; DeFond and Park, 1997). DeFond and Park argue that in attempt to maintain their job security, when current (future) period earnings are poor (good), managers "borrow" earnings from the future by increasing accruals. On the other hand, when current (future) earnings are good (poor), managers decrease accruals to "save" current earnings for possible use in the future. This hypothesis is similar to the cookie jar accounting reserves phenomenon that managers stash accruals during good times and use accruals during bad times (Levitt, 1998).

The possibility of the two conflicting hypotheses in explaining the results of Subramanyam (1996) and Guay et al. (1996) can be attributed to the authors' use of broad sample data. To mitigate this problem, Louis and Robinson (2005) use stock split firm data as their research setting to examine the accruals signaling hypothesis. Assuming that managers use discretionary accruals to signal and use stock splits to reinforce the signal, Louis and Robinson find a positive association between pre split discretionary accruals and the positive abnormal returns surrounding the split announcement dates. Based on this finding, Louis and Robinson conclude that managers use both discretionary accruals and stock split to communicate private information to the market.

There are, however, several issues concerning with assuming stock split announcements as a signaling event. For example, stock split announcements are often contaminated by dividend announcements around the event window (Nayak and Prabhala, 2001).

Therefore it is not clear if the positive market reaction around the announcement dates, and the positive association between discretionary accruals prior to the events and positive abnormal returns, are attributed to the dividend announcements, or to the stock split signal. In addition to the contamination problem, Crawford, Franz and Lobo (2004) find that the costs of false signaling for stock splits are very small. As the credibility of a signal depends on the cost of the signal, the low costs for issuing a false signal undermine the validity of the signal in stock splits. The low costs of signaling for stock split suggest that firms split their stocks for reasons other than signaling about firm future profitability. Confirming this conjecture, Huang, Liano, and Pan (2006) report that except for dividend paying firms, firms that split their stocks have negative future profitability.

The positive association between pre-split discretionary accruals and the abnormal returns reported by Louis and Robinson (2005) is also consistent with the opportunistic earnings management hypothesis. Stock splits may provide managers with the incentive to increase accruals prior to stock splits, so that the post split stock price would be higher than that when earnings are not managed. As reported by Lakonishok and Lev (1987), the median growth rates of earnings of splitting firms drop significantly after the events. Koerniadi and Tourani-Rad (2007) find that the motivation to issue stock dividends is consistent with the earnings management hypothesis[2]. They observe that accruals of stock dividend issuing firms increase significantly in the issue year and drop to the pre- issue level in the post-issue year. Moreover, they also find that discretionary accruals in the issue year significantly explain the issuing firms' poor future stock performance. This finding is consistent with that of Louis and Robinson (2005) who report that the association between pre-split discretionary accruals and one-year ahead abnormal returns, though statistically insignificant, is negative.

[2] Stock dividends are similar to stock splits. An issue of two additional shares for each share currently held would be called a 3 for 1 split in the U.S., and a 2 for 1 bonus in Australia and New Zealand (Brearley, Myers, Partington and Robinson, 2000, p. 380n). The only difference between the two is the number of additional shares distributed to current shareholders. Stock splits involve larger stock distribution than stock dividends (Ross, Westerfield and Jaffe, 2005; Grinblatt, Masulis and Titman, 1984). However, the literature treats them as synonymous (see for example, Liljeblom, 1989; McNichols and Dravid, 1990; Papaioannau, Travlos and Tsangarakis, 2000; and Crawford et al., 2005).

We tackle these problems by employing the contemporaneous earnings and dividend increase announcements in New Zealand as the research setting in which managers are likely to signal (as reported by Kane, Lee and Marcus, 1984; Emanuel, 1984; Easton, 1991; Leftwich and Zmijewski, 1994; and Cheng and Leung, 2006). We also employ the performance adjusted Jones model, a refined accrual model which is reported in the literature as a better model in estimating discretionary accruals than those used in prior studies.

Our results support the accrual signalling hypothesis. First, consistent with prior studies, we find that the market's reaction to the contemporaneous earnings and dividend increase announcements is significantly positive. Next, we find that discretionary accruals of dividend increasing firms are positive. More importantly, we find that total accruals and discretionary accruals of dividend increasing firms are significantly correlated with the firms' future profitability. The significantly positive association between discretionary accruals and firm future profitability is robust to the performance, the growth and the earnings drift effects.

The rest of the paper proceeds as follows. In section 2 we formulate the hypotheses, describe the methodology and the sample selection process. In section 3 we present the empirical results and in section 4 we conclude.

2. Research Design

2.1. Hypothesis development

According to the information content of the dividend hypothesis, dividend changes affect stock returns because they reveal new information about the firm's future profitability. Empirical results on the information content of the dividend changes hypothesis, however, are inconclusive. While several studies report that dividend changes signal information about future profitability, several others find results inconsistent with the

information content of dividend hypothesis[3]. The mixed results on the information content of dividend suggest that companies change their dividend policy for reasons other than signaling such as free cash flows or tax clienteles.

The literature also reports that stock markets' reaction is positively correlated with the direction of unexpected earnings in earning announcements. Managers' opportunistic behavior over accruals, however, could influence market reaction by distorting firms' earnings towards their desired level. As a result, either dividend changes or earnings announcements alone may be a noisy signal for future profitability.

Healy and Palepu (1993) argue that when financial reporting is inadequate for communicating information on a firm's performance, financial policy changes (such as dividend changes) are needed to communicate the economics of the firm. Their conjecture suggests that managers may communicate information through both earnings and dividends such as in contemporaneous earnings and dividend announcements.

Kane et al. (1984), Emanuel (1984), Easton (1991), Leftwich and Zmijewski (1994), and Cheng and Leung (2006) document that stock markets respond positively to contemporaneous earnings and dividend announcements when positive earnings surprises are accompanied by dividend increases. The positive market reaction to the contemporaneous earnings and dividend increase announcements suggests there is new information released in such announcements either through earnings or dividends, or both.

Prior studies on the contemporaneous earnings and dividend announcements report that earnings and dividends have incremental information beyond each other. Ely and Mande (1996) find that analysts earnings forecast are related to the noisiness of earnings information. They report that when earnings are noisy, analysts focus on the information in dividends. More specifically, Best and Best (2000) find that analysts' earnings forecast

[3] See for example, Kalay and Loewenstein (1985), De Angelo, De Angelo and Skinner (1996), Benartzi, Michaely and Thaler (1997), and Nissim and Ziv (2001), among others.

revisions following such announcements are attributed primarily to earnings announcements. Best and Best conclude that firms increase dividends to corroborate information in earnings. As reducing dividends is costly (Bajaj and Vijh, 1990; Denis, Denis and Sarin, 1994), increasing dividends validates the signal in earnings.

Firms in New Zealand typically announce earnings and dividends contemporaneously. The contemporaneous earnings and dividend increase announcements in New Zealand provide an opportunity to examine the hypothesis that managers are likely to use both accruals and changes in dividends to signal private information regarding firm future profitability to the market. Therefore, the first hypothesis to be examined in this chapter is:

H_1: The market's reaction to the dividend increase announcements is positive.

When managers use accruals to communicate information about future profitability and use dividends to corroborate their signals, it is very unlikely that accruals are negative. Moreover, if accruals are negative, the positive association between negative accruals and future profitability implies that the firm's operating performance declines in the future. Accordingly, accruals of dividend increasing firms should be positive and be positively correlated with the firms' future profitability. Thus, the second and third hypotheses are:

H_2: Dividend increasing firms report positive accruals.

H_3: The positive accruals of dividend increasing firms are positively correlated with future profitability.

2.2. Methodology

2.2.1. Information content on the contemporaneous dividend and earnings announcements.

In New Zealand, the interim reporting period usually is half yearly. This chapter uses final dividend announcement dates of dividend increasing firms as the announcement events. Dividend changes are measured as the difference between total (interim plus final) ordinary cash dividend in current year and total dividend in previous year.

Sample firms' abnormal announcement returns are calculated as the difference between the sample firms' returns and the firms' expected returns estimated using a market model approach:

$$AR_{it} = R_{it} - \alpha_{it} - \beta_i Rm_t \qquad (1)$$

AR_{it} = the abnormal return in day t for firm i

R_{it} = total return in day t for firm i

Rm_t = market (NZSX All) return in day t

β_i = beta for stock of firm i

Thin trading in the New Zealand stock market, however, creates a non synchronous trading problem in the return data that bias the beta generated from the market model. Consequently, the firm's beta is estimated using an approach suggested by Scholes and Williams (1977). The estimation period of the market model is from -220 to -21 days relative to the announcements. The event window is from day -20 to day +20.

Boehmer, Musumeci and Poulsen (1991) report that when an event causes minor increases in the variance of returns, traditional event study methods too frequently reject the null hypothesis of zero abnormal returns. This problem occurs even when the average abnormal return is statistically insignificant. Therefore, to mitigate the bias due to event-induced heteroskedasticity of the abnormal returns, the test for the significance of the abnormal returns is also adjusted using a method suggested by Boehmer et al. (1991)

2.2.2. The accruals models

We measure total accruals as the difference between earnings and operating cash flows. Computing accruals directly from statements of cash flows is a more precise measure of accruals and avoid measurement errors in estimating accruals using the balance sheet approach (Austin and Bradbury, 1995 and Collins and Hribar, 2002). Earnings are defined as operating income after depreciation but before interest expense, taxes and special items. All variables are deflated by total assets at the beginning of the period.

Kothari, Leone and Wasley (2005) report that the commonly used discretionary accrual models do not control for the performance effects on accruals. High performance firms may report high discretionary accruals that are not attributed to managers' discretion over accruals but to firm performance effects. This is particularly true for increasing dividend firms since these firms are likely to do well. Kothari et al. (2005) also report that the Jones discretionary accrual model with current Return on Assets (ROA_t) included as an additional regressor enhances the reliability of inferences from earnings management research. The ROA adjusted Jones model is:

$$ACC = \alpha_1\left(\frac{1}{A_{t-1}}\right) + \alpha_2\left(\frac{\Delta REV_t}{A_{t-1}}\right) + \alpha_3\left(\frac{PPE_t}{A_{t-1}}\right) + \alpha_4 ROA_t + \phi_t \qquad (2)$$

ACC is total accruals defined as the difference between earnings and cash flows from operations, ΔREV is the change in revenues and PPE is property, plant and equipment. Return on assets (ROA) is measured as earnings before interest and taxes divided by total assets (Bodie, Kane and Marcus, 2002). All variables are scaled by lagged total assets. Nondiscretionary accruals are the fitted values and discretionary accruals are the residuals of the model.

2.2.3. Accruals and future profitability

Prior studies report that current earnings are a significant predictor for one-year ahead earnings (Finger, 1994 and Kim and Kross, 2005). Therefore, we use actual one-year ahead operating earnings as a proxy for future profitability. To assess the association between accruals and future profitability, we sort firms based on changes in dividends, and for each changes (increase, no increase and decrease) in dividends the following regression is estimated:

$$E_{t+1} = \alpha_0 + \beta_1 CF_{it} + \beta_2 ACC_{it} + \beta_3 \frac{B_{it}}{M_{it}} + \varepsilon_{t+1} \qquad (3)$$

E = Operating earnings defined as operating profit after depreciation, scaled by lagged total assets (at t).

CF = Operating cash flows, scaled by lagged total assets (at t-1).

ACC = Total accruals, scaled by lagged total assets (at t-1).

Book to market ratio is included to control for the effect of growth on one-year ahead operating earnings (Smith and Watts, 1992 and Gaver and Gaver, 1993).

To examine the hypothesis that managers use their discretion on accruals to signal future profitability, we separate total accruals into discretionary and nondiscretionary accruals obtained from equation (2):

$$E_{t+1} = \alpha_0 + \beta_1 CF_{it} + \beta_2 NDA_{it} + \beta_3 DA_{it} + \beta_4 \frac{B_{it}}{M_{it}} + \varepsilon_{t+1} \qquad (4)$$

E = Earnings defined as operating profit after depreciation, scaled by lagged total assets.

CF = Operating cash flows, scaled by lagged total assets.

NDA = Nondiscretionary accruals.

DA = Discretionary accruals.

2.3. Data

This study is conducted using non financial firms listed on the New Zealand Stock Exchange from 1992 to 2003. The share price data, financial company reports and the information on earnings and dividend increase announcement dates are obtained from Datastream database, the 2003 Datex financial company report files and the NZX Weekly Diary respectively. During the sample period, we obtained 244 dividend increase announcements. For the analysis of the association between accruals and future profitability, our sample consists of 1,023 firm-year observations.

3. Empirical Results

3.1. Information content on the contemporaneous dividend and earnings announcements.

Table 1 presents daily average abnormal announcements returns for dividend increasing firms and their corresponding t statistics during the event window. Consistent with prior studies and H_1, the New Zealand stock market reacts positively and significantly to these announcements. The average abnormal stock return on the announcement day is 1.66% and significant at 1% level of significance.

[Insert Table 1 Here]

The positive and significant average announcement abnormal return suggests that there is private information released to and priced by the market on the contemporaneous earnings and dividend increase announcements[4].

3.2. The accruals model

Table 2 summarises the statistics of the ROA adjusted Jones model on each changes in dividends. For dividend increasing firms, the adjusted R^2 of the accrual model is the

[4] Unfortunately, the association between the announcement abnormal returns and the discretionary accruals cannot be tested because not all announcements contain enough data to compute accruals.

highest at 95% and all the coefficients on ΔROA, PPE and ROA are statistically significant. The significantly negative coefficient on ROA suggests that the increasing dividend firms have low current profitability but increase dividends and accruals to inform the market about better future operating performance. For dividend maintaining and decreasing firms, almost all coefficients are significant. The adjusted R^2 for dividend maintaining and decreasing firms, however, are lower than that of dividend increasing firms.

[Insert Table 2 Here]

3.3. Accruals and future profitability

The signaling theory of accruals posits that managers use accruals to communicate private information regarding the firm's future profitability. Table 5.3 shows the mean and the median values of the firms' future profitability and the components of current earnings of dividend increasing, maintaining and decreasing firms. On average, future profitability of dividend increasing firms is positive and less variable than those of dividend maintaining and decreasing firms. The mean of future profitability of dividend increasing firms are also large at around 0.14 compared to that of dividend maintaining or dividend decreasing firms. For dividend decreasing firms, future profitability is also positive but smaller at around 0.06. This is probably due to the persistence effect of cash flows which are relatively high in magnitude (0.09). On the contrary, future profitability for dividend maintaining firms is negative. On average, the change in future profitability $\left(\frac{E_{t+1}}{A_t} - \frac{E_t}{A_{t-1}}\right)$ for dividend increasing firms is positive at 0.03. The average changes in future profitability for dividend maintaining, and dividend decreasing firms, however, is negative at -0.05 and -0.03 respectively (untabulated).

[Insert Table 3 Here]

Mean total accruals for dividend increasing firms is positive which is consistent with H_2. The magnitude of the mean is also large at around 0.08. If these positive accruals are

associated to earnings management, these positive accruals should reverse in the following period(s) and reduce future profitability. However, as mentioned in the previous paragraph, the changes of future profitability of these firms are positive. Conversely, for firms that maintain and decrease their dividends, total accruals are, on average, negative.

When managers signal information regarding future profitability through accruals, discretionary accruals must be positive. Table 3 shows that on average, discretionary accruals for firms that increase their dividends are positive. In contrast, the average discretionary accruals for dividend maintaining and dividend decreasing firms are all negative.

Table 4 reports results for the association between future profitability and the components of current earnings according to changes in dividends. Consistent with H_3, Panel A of Table 4 shows that the coefficient on ACC for dividend increasing firms is positive and significantly correlated with future profitability. The adjusted R^2 are relatively high at 16.50%. On the other hand, the coefficients on ACC for dividend maintaining and decreasing firms are not statistically significant.

[Insert Table 4 Here]

Panel B of Table 4 breaks total accruals (ACC) into nondiscretionary and discretionary accruals. The results show that the significantly positive coefficient on ACC for dividend increasing firms in Panel A is attributed to the discretionary part of accruals. The coefficient on DA is significantly positive while the coefficient on NDA is statistically not different from zero.

Bernard and Thomas (1990) report that earnings follow a random walk with a drift. Therefore, it is possible that instead of capturing the hypothesised signalling effect, discretionary accruals capture a post earnings announcement drift effect. To control the earnings drift effect, we proxy the unexpected component of earnings by lagged earnings

(LE)[5] and nondiscretionary income (NDI). Nondiscretionary income is defined as operating cash flows plus nondiscretionary accruals (Subramanyam, 1996). If the positive coefficient on DA on Table 4 is attributed to the post earnings announcement drift effect, NDI and LE should capture the drift effect, and the coefficient on DA should be zero. Thus, the following regression for dividend increasing firms is estimated:

$$E_{t+1} = \alpha_0 + \beta_1 DA_{it} + \beta_2 LE_{it-1} + \beta_3 NDI_{it} + \beta_4 \frac{B_{it}}{M_{it}} + \varepsilon_{t+1} \tag{5}$$

Table 5 reports results on the association between earnings components on future profitability after controlling for the unexpected component of earnings. As expected, the coefficients on NDI and LE are both positively and significantly correlated with future profitability. If dividend increasing firms do not use accruals to signal future profitability, after controlling for the earnings drift and the growth effects, discretionary accruals should not be correlated with future profitability. However, the results as reported on Table 5 show that the coefficient on DA is still significantly positive and the magnitude of the coefficient is greater than that of NDI.

[Insert Table 5 Here]

4. Summary

Our study examines the hypothesis that managers use both accruals and changes in dividends to communicate information regarding firm future profitability. To examine the accrual signaling hypothesis, our study uses New Zealand dividend increasing announcement firm data as the research setting in which managers are likely to signal. We find that, on average, market's reaction to dividend increase announcements is significantly positive confirming our hypothesis that these announcements are a signaling event. Further analysis indicates that total accruals of dividend increasing firms are positively and significantly associated with firm future profitability, while those of

[5] Unavailable lagged earnings data reduces the sample size from 392 to 346 firm year observations.

dividend maintaining and decreasing firms are not. By decomposing total accruals into discretionary and nondiscretionary components, we find that only discretionary accruals of dividend increasing firms are significantly correlated with firm future profitability. The significantly positive association between discretionary accruals of dividend increasing firms and future profitability is robust to the performance, the growth and the earnings drift effects. These results are consistent with the hypothesis that managers use both accruals and changes in dividends to communicate information regarding firm future profitability.

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Table 1
Abnormal return surrounding the contemporaneous earnings and dividends announcements

Day	Mean	Median	% positive	Heteroskedasticity-adjusted t-statistics
-1	0.23%	-0.08%	46	1.23
0	1.66%	0.89%	64	5.66***
1	0.21%	-0.04%	49	1.32
$CAR_{(-1,+1)}$	2.09%	0.83%	64	1.93**

Note: The average abnormal returns are estimated with market model with beta adjusted according to Scholes and Williams (1977). There are 244 announcements from 1992 to 2003. The estimation period is from -220 to -21 days prior to the announcements. t statistics are presented using the heteroskedasticity-adjusted t statistics (Boehmer et al.'s, 1991 approach).

*** significant at 1%; ** significant at 5%.

Table 2
Descriptive statistics of the accrual model

	Intercept	ΔRev	PPE	ROA	Adj. R^2	F test	N
DIV+	-0.045	0.036	0.142	-0.175	94.72%	1849.75	392
	(-0.08)	(15.76)***	(13.97)***	(-11.86)***			
DIV0	4.912	-0.021	0.008	0.720	68.46%	224.15	408
	(0.34)	(-4.51)***	(0.57)	(28.58)***			
DIV-	0.181	0.003	-0.051	0.512	37.10%	34.12	223
	(0.35)	(0.25)	(-6.11)***	(11.67)***			

Note: DIV+, DIV0 and Div- are dividend increasing, dividend maintaining, and dividend decreasing firms respectively. Accruals are computed as earnings before interest and taxes minus operating cash flows, scaled by lagged total assets. Δ REV is the change in total revenues, scaled by lagged total assets. PPE is property, plant and equipment, scaled by lagged total assets. ROA is earnings before interest and taxes scaled by lagged total assets. Nondiscretionary (discretionary) accruals are the fitted values (residuals) of the models. Sample consists of 1,023 firm year observations from 1992 to 2003.

*** significant at 1%

Table 3
Descriptive Statistics of Sample Firms

	DIV+				DIV0				DIV-			
	Mean	Std. Dev.	Median	% positive	Mean	Std. Dev.	Median	% positive	Mean	Std. Dev.	Median	% positive
E_{t+1}	0.139	0.107	0.124	94.90%	-0.073	1.225	0.044	65.93%	0.056	0.409	0.081	86.10%
CF	0.032	1.679	0.105	93.88%	0.022	0.232	0.038	66.91%	0.089	0.085	0.082	89.24%
ACC	0.076	0.624	0.026	71.17%	-0.041	0.330	-0.002	49.51%	-0.006	0.101	0.006	55.61%
DA	0.006	0.140	-0.003	49.23%	-0.034	0.182	-0.034	33.33%	-0.027	0.075	-0.025	34.08%
NDA	0.070	0.609	0.026	71.17%	-0.007	0.276	0.033	66.67%	0.020	0.060	0.017	70.85%

Note: DIV+ is dividend increasing firms. DIV0 is dividend maintaining firms. DIV- is dividend decreasing firms. E_{t+1} is operating earnings, scaled by lagged total assets CF is operating cash flows, scaled by lagged total assets. ACC is total accruals defined as the difference between operating earnings and operating cash flows, scaled by lagged total assets. NDA is nondiscretionary accruals and DA is discretionary accruals. Sample consists of 1,023 firm year observations from 1992 to 2003.

Table 4
The association between future profitability and the components of current earnings based on changes in dividends

Panel A.

	DIV+	DIV0	DIV-
Intercept	0.174	-0.154	0.024
	(20.65)***	(-1.90)*	(0.40)
ACC	0.119	0.183	0.012
	(3.32)***	(1.01)	(0.04)
CF	0.051	1.001	0.432
	(3.80)***	(3.89)***	(1.22)
B/M	-0.054	0.058	-0.006
	(-7.70)***	(1.24)	(-0.18)
Adj. R^2	16.50%	3.50%	-0.49%
F test	26.75	5.92	0.64
N	392	408	223

Panel B.

Intercept	0.182	-0.172	0.011
	(20.58)***	(-2.10)**	(0.18)
CF	0.023	-0.386	0.789
	(1.37)	(-0.43)	(1.52)
NDA	0.040	0.857	-0.446
	(0.87)	(1.89)*	(-0.79)
DA	0.165	-1.343	0.443
	(4.20)***	(-1.40)	(0.82)
B/M	-0.056	0.059	-0.004
	(-8.03)***	(1.27)	(-0.12)
Adj. R^2	17.91%	3.88%	-0.54%
F test	22.32	5.11	0.70
N	392	408	223

Note: DIV+ is dividend increasing firms. DIV0 is dividend maintaining firms. DIV- is dividend decreasing firms. ACC is total accruals measured as the difference between earnings before interest and taxes minus operating cash flows, scaled by lagged total assets. CF is operating cash flows, scaled by lagged total assets. DA is discretionary accruals. NDA is nondiscretionary accruals. B/M is the book to market ratio. Sample consists of 1,023 firm year observations from 1992 to 2003. t statistics are in parentheses.

*** significant at 1%; ** significant at 5%; * significant at 10%.

Table 5
The association between future profitability and the components of current earnings of dividend increasing firms

Intercept	0.137
	(11.46)***
DA	0.091
	(2.36)***
LE	0.280
	(6.10)***
NDI	0.010
	(2.26)**
B/M	-0.047
	(-5.47)***
Adj. R^2	25.63%
F test	30.72
N	346

Note: LE is lagged earnings before interest and taxes, scaled by lagged total assets. NDI is operating cash flows, scaled by lagged total assets plus nondiscretionary accruals. DA is discretionary accruals. B/M is the book to market ratio. Sample consists of 346 firm year observations from 1992 to 2003. t statistics are in parentheses.

*** significant at 1%; ** significant at 5%.