INFORMATION SIGNALLING AND AGENCY THEORY IN A SAMPLE OF DIVIDEND-INITIATING COMPANIES

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ABSTRACT

This paper examines the market reaction, earnings performance and role of agency theory for a sample of dividend-initiating companies on the London Stock Exchange. In line with previous research, the evidence is consistent with the notion that dividend-initiation announcements convey positive information to the market but, contrary to the predictions of signalling models, finds little evidence to support superior earnings performance post-initiation. With respect to agency cost effects, the paper finds that the stock market reaction to dividend-initiation announcements is greater for non-institutionally-controlled companies, lending support to the Easterbrook (1984) and Roseff (1982) agency theory explanation of dividend policy.

INTRODUCTION

The role of dividends has long been perceived as one of the most perplexing issues in corporate finance. Since Miller and Modigliani (1961) defined dividend policy as irrelevant in the context of firm valuation, academic researchers have sought to explain why corporations pay dividends. More than three decades of work has produced a number of theories which provide partial explanations of corporate dividend policy.

One theory that has received wide acceptance is the Information Theory of Dividends. First developed by Miller and Modigliani (1961), the theory argues that corporate managers are better informed about a corporation's future profitability and investment opportunities than outside

investors. Accordingly, managers use changes in their corporate policy, such as dividend payments, to convey this inside information on a firm's future performance to outside investors.

Although well expounded in the literature, the information theory has continued to attract considerable interest and debate, primarily because several contentious issues remain unresolved. Among these is the central issue of what type of information management signal (or hope to signal) via dividend policy. Recent empirical research by Born, Moser and Officer (1988), for example, questions whether dividends do in fact convey information on a firm's future earnings performance. There is also the issue of why dividends are chosen to convey 'inside' information.

This paper represents a preliminary attempt to extend the analysis of the dividend decision, by examining dividend 'initiations' amongst a sample of companies listed on the London Stock Exchange. While dividend initiations have formed an important part of US research (Asquith and Mullins, 1983; Dielman and Oppenheimer, 1984; Healy and Palepu, 1988; John and Lang, 1991), little attention has been given to this issue in the UK. This is surprising since, once adopted, the dividend decision effectively binds a company to future payments. In addition to checking for the link between dividend announcements and subsequent earnings performance, the paper attempts to incorporate aspects of agency theory via an assessment of the impact of institutional versus non-institutional shareholdings.

The paper proceeds with a brief review of information theory. This is followed by a discussion of inconsistencies, with respect to dividend announcements and future earnings performance, revealed in a number of recent empirical studies. The arguments for including an agency theory effect in terms of institutional versus non-institutional shareholdings are then presented. The sample and basic data are discussed, and the empirical results presented.

THE INFORMATION THEORY OF DIVIDENDS

The development of the Information Theory of Dividends is founded in the Miller and Modigliani (1961) valuation model. In line with their dividend irrelevancy proposition, Modigliani and Miller (MM) show

that dividend policy, whether expressed as a payout ratio, amount, or yield, has no effect on the value of the firm. In their original model, the value of the firm V_t is expressed as a function of the discount rate r, the level of investments I_t, the level of profits, Π_t, and the market value of the company in the next period V_{t+1}, such that:

$$(1) \qquad V_t = [\ (1/(1+r)\ ][\ V_{t+1} + \Pi_t - I_t\ ]$$

Provided the firm's investment decisions are given, and assuming perfect capital markets, dividend policy does not affect firm value. Shareholders can freely declare their own dividends without recourse to the firm and the firm can freely raise the necessary funds via external capital markets. The value of the firm is independent of its dividend policy.

The MM dividend irrelevancy proposition was, and has continued to be, controversial[1]. While dividend payments under their valuation model are irrelevant, the stock price reaction widely reported around the dividend announcement date suggests that dividends have value which their model has not recognized. Consistent with the MM paper (1961), Miller (1988) argues that the price reactions to dividend announcements are a direct result of information asymmetry problems. Specifically, the stock price reaction to dividends reflects a failure in one of the key assumptions of the original MM model, namely that 'inside managers and outside investors alike have the same information about the firm's (future) cash flow' (p. 105). Instead, information is held 'asymmetrically': inside managers have access to information on the firm's future prospects not yet fully available or appreciated by outside investors[2]. Shareholders recognize this and, accordingly, management's revised dividend payments (or other financial transactions) are interpreted as management signalling their expectations of future earnings performance, substantiated by cash.

In subsequent years, the information theory gained wide acceptance. First, it appeared to resolve much of the debate concerning why stock prices react in a systematic and predictable way to changes in dividend policy. Empirical studies[3] appeared to show consistently that announcements of dividend increases, dividend maintenance or dividend initiations lead to significant stock price increases and that announcements of dividend reductions or omissions lead to significant stock price falls. In each case, the stock price reaction was explained under the in-

formation theory as a result of 'good' or 'bad' news on a firm's future earnings performance. Second, the idea that dividends acted as a surrogate for future earnings, as outlined by Miller, was consistent with studies on how corporations determined dividend policy[4]. Finally, the development of signalling models by, amongst others, John and Williams (1985) and Miller and Rock (1985) formally recognized why financial policy decisions, such as dividends, could be used by management to convey inside information to the market[5]. Miller and Rock's (1985) cashflow-signalling model, for example, holds that managers with higher-than-average expected earnings use dividends to signal this information to shareholders. Therefore, companies will initiate dividends immediately prior to an expected increase in corporate earnings.

SIGNALLING INCONSISTENCIES

The information signalling theory has by no means fully resolved the dividend debate. Easterbrook (1984) argues that the payment of dividends is a costly means of signalling because of the higher fixed charges and reduced financial flexibility imposed in maintaining future dividend payments. Thus the choice of dividends as a signalling vehicle is still not fully understood. This latter issue is becoming increasingly important in the context of recent empirical evidence and the fact that, under certain conditions, the information theory leads to conflicting outcomes. Standard signalling theory assumes that the managerial motive for signalling is to correct mispricing as a result of asymmetric information on a firm's future earnings performance. Miller and Rock (1985) cite two cases where the standard information theory is susceptible to misinterpretation. In one example, a company faces a high cost of external financing, has substantial profitable investment opportunities, but has limited cash available. One solution is to reduce dividends to help fund new investments. Thus a reduction in dividends should lead to an expected increase in the stock price reflecting the increase in the net worth of the firm. Alternatively, an increase in dividends, under certain conditions, may be interpreted as bad news and lead to a fall in the stock price[6]. Other studies that point to inconsistencies are: Penman (1983), Woolridge and Ghosh (1988), Healy and Palepu (1988), Born et al. (1988), and Maquieira, Megginson and Lipson (1995).

Woolridge and Ghosh (1988) examine the case of dividend cuts/omissions and subsequent earnings performance. Under the stan-

dard theory, a dividend reduction/cut should signal a decline in subsequent earnings performance. In their study, dividend cuts are divided into three categories, where the dividend announcement is accompanied by:

(i) a simultaneous announcement of a decline in earnings,
(ii) a prior announcement of earnings decline, or
(iii) a simultaneous announcement of higher earnings or new investment opportunities.

In line with previous results, they find that the stock price reaction across all three categories is negative[7]. The results from category (iii) companies clearly suggest that the negative signalling effect associated with dividend cuts is sufficiently strong to offset any positive signals associated with new investments or higher earnings announcements. Contrary to theory, earnings grew for the two years following the dividend reduction. Median quarterly earnings grew by 44.5 per cent and 23 per cent in the two years following the announcement. If dividends signal information on future earnings performance, earnings should decline, not rise, after the announcement.

Similarly, US research by Healy and Palepu (1988) has examined changes in annual earnings related to dividend initiations and omissions. Initiating firms, in the year of announcement, and in each of the subsequent two years, report a mean increase in earnings of 5.5 per cent, 2.2 per cent and 3.5 per cent respectively. The earnings increases in years 3 and 4 are insignificant. In the case of omitting firms, earnings decline prior to, and in, the year of the announcement, but rise thereafter. In years 1 and 2 omitting firms have earnings increases, even after adjusting for industry performance. The mean adjusted standardised earnings changes are 6.13 per cent and 5.89 per cent in years 1 and 2. Born et al. (1988) and Maquieira et al. (1995) find no consistent long-term relationship between initiation announcements and post-announcement earnings growth. In the latter study, earnings increases for initiating companies were significantly higher in one of the two years examined. In contrast, Barber and Castanias (1992), examining cross-sectional variation in dividend and non-dividend-initiating companies, provide evidence consistent with the information signalling theory of dividends[8].

In the context of information theory, the above evidence questions the assumption that changes in dividend policy convey information on fu-

ture earnings performance. Studies suggest that the relationship (between dividend policy and subsequent earnings) exists, at most, for two years following the announcement. This evidence is surprising, given the literature on how firms determine dividend policy. As Born et al. (1988) argue, the evidence suggests either that dividends represent a poor signal or that market responses to changes in dividend policy are best characterised by systematic overreaction and myopic behaviour. Specifically:

> ... the market reaction to dividend policy changes is far more complex than most signalling models envision. If managers set dividend policy in accordance with their expectation for future performance, the evidence suggests that their expectations are not very accurate ... (indeed) such findings lead one to question the assumption that managers have an information advantage over the market, which is the foundation of nearly all signalling models (p. 62, 1988).

In summary, these findings pose a number of serious questions. Aside from methodological and model misspecification problems, they suggest, on balance, that the information link between dividends and future earnings performance is tentative. Event studies typically reported a positive abnormal return on and around 'good news' dividend events, attributing the stock price reaction to some unmeasured real economic gain – specifically increases in earnings performance. Recent evidence has increasingly cast doubt on this. If management determine dividend policy based on their expectations of future earnings growth, the stock price reaction to such announcements should be accompanied either by earnings growth or some other measure of performance. To the extent that this does not occur, it questions both the dividend/signalling theory and the idea that management consider long-term future earnings performance in determining current dividend policy.

DIVIDEND ANNOUNCEMENTS AND SHAREHOLDER OWNERSHIP

The Information Theory of Dividends was initially based on the assumption that managers are perfect agents for shareholders and act to maximize shareholder wealth. According to Jensen and Meckling (1976), the separation of ownership and control suggests that managers

are imperfect agents, since the interests of management may diverge from those of shareholders[9]. Recent literature has begun to examine how ownership affects management behaviour and firm performance – for example, Leech and Leahy (1991). The assumption here is that if ownership is widely dispersed, there is no individual or group with sufficient control or power to enforce the profit-maximization rule. Research by Brickley, Lease and Smith (1988) shows that individual shareholders who own a small fraction of outstanding shares have fewer incentives to participate in the decision-making process (voting) since they are unlikely to affect the outcome. Similarly they have no incentive to monitor management, since any resulting gains will be shared in proportion to the shares they hold. Where ownership is more concentrated in the hands of a few large shareholders, a greater interest in monitoring management and obtaining firm-specific information occurs, since owning large blocks of shares will generate greater benefits. Large institutional shareholders, who own large holdings in specific companies, are better positioned to see that management maximise firm value.

The view that ownership structure influences management behaviour, and therefore agency costs, raises two interesting issues. First, how institutional investors affect the market reaction to dividend announcements and, second, the role of ownership structure on firm performance. (The role of ownership on company performance is a separate issue and will not be specifically addressed in this paper.) If, as suggested under the signalling hypothesis, management have superior information and release such information to outside investors via a change in dividend policy, what is the impact in the case of institutional versus non-institutionally-controlled companies? Given the increasing evidence that links ownership structure with management behaviour, does the market response to such information releases differ depending on whether the company has major institutional shareholders?

A primary hypothesis would be that dividend initiations would have more surprise value for non-institutionally-controlled, compared to institutionally-controlled, companies. In other words, the agency and dividend-signalling models imply that when a company announces a dividend initiation, the greater the institutional shareholdings, the less surprise value in the announcement. This conjecture is based on the premise that there is an inverse relationship between institutional (block) ownership concentration and information asymmetry and/or

agency costs. Where shareholder ownership is more dispersed, individual shareholders engage in less monitoring and therefore information released via a dividend announcement has more unexpected value. In contrast, to the extent that large institutional shareholders have closer links with management, greater monitoring of management occurs and the dividend signal has less surprise value.

THE SAMPLE

Basic Data

To investigate the above issues, this study initially examined 50 London listed companies, over the period 1988-91, which initiated a dividend (that is, paid a dividend for the first time). In line with previous research (Healy and Palepu, 1988), dividend initiations are defined as the first dividend paid during the life of the company, or a resumption after a 10-year period. A dividend initiation in this study is defined as the first regular cash dividend payment by a company after it has gone public.

The *Quality of Markets Quarterly* was used to obtain the names of newly-listed companies. Dividend announcement details were obtained from *FTExtel*. From the initial sample, companies were excluded if:

(i) they previously traded on the USM or Third Market and paid a cash dividend,
(ii) a special dividend was initially paid, or
(iii) the dividend announcement date could not be correctly identified.

FTExtel records dividend announcements from 1989 onwards. Announcements before 1989 are available from the *Financial Times Citation Index* and *Investors Chronicle*. Relying on the financial press to obtain dividend announcements is problematic. The financial press are not obliged to report company announcements but do so at the request of companies and/or for a fee. Consequently, because of potential bias, the need to correctly identify the announcement date, and the desire to avoid contemporaneous announcements, the sample was reduced to 30 companies. In the case of contemporaneous announcements, companies were excluded that had major confounding events, such as a merger, an acquisition or a stock split in the two weeks surrounding the dividend announcement.

The following information was obtained for each company from *FTExtel*:

(i) dividend initiation announcement date (the date when news of the forthcoming dividend became public),

(ii) stock prices, 15 days before and 15 days after the announcement date, and

(iii) reported earnings per share (before extraordinary items and discontinued operations) for the year prior to the announcement and four years subsequently, adjusted for rights issues etc.

The fiscal-year earnings announced immediately prior to the dividend initiation date are defined as earnings for year -1. Year 0 earnings are earnings for the year of the announcement. Earnings in the subsequent three years are similarly defined. Given that dividend announcements occur throughout the fiscal year, and that some companies use different year-ends, earnings in year 0 are defined, following Healy and Palepu (1988), as reported fiscal-year-ending earnings per share in the period after the announcement took place. **Appendix 1** reports descriptive statistics for the sample.

Hypotheses

Three issues are addressed:

- first, the market reaction to dividend announcements, in an attempt to assess whether dividend initiations convey information,
- second, whether subsequent earnings changes are related to the information releases, and
- third, the role of share ownership on the market reaction to such announcements.

In examining the announcement effect of dividends, two important points must be highlighted. First, the problem associated with expected and unexpected dividend announcements. If dividend announcements convey information and the market is efficient, it is unexpected rather than expected changes in dividends that are important in revising market expectations on the value of the firm (Mann, 1989). This problem is alleviated by focusing on companies that are newly listed and initiate a dividend for the first time since the dividend is largely unexpected[10].

Second, in the UK and Ireland, companies typically make dividend announcements concurrently with announcements of interim or annual results. This can cause problems since it is difficult to isolate the announcement effect of dividends from earnings and vice versa. Therefore, for UK-based studies (Marsh, 1992; Balachandran, Cadle and Theobald, 1995), testing for the information content of dividend announcements is a joint test with earnings announcements. Although Miller and Rock (1985) argue that, under certain conditions, dividend and earnings announcements can serve as perfect substitutes, empirical work by Pettit (1972), Aharony and Swary (1980) and Kane, Lee and Marcus (1984) found that dividends and earnings are not perfect substitutes, with the stock price reaction to joint announcements being significantly greater than the reaction to a single announcement.

Share Ownership

The standard approach used to test for the owner/control impact is to employ an appropriate concentration measure, taking account of the number and size distribution of shareholdings. In the present case, however, following discussions with a number of stockbrokers, it was decided to differentiate the companies in the sample on the basis of the primary method they used to raise equity (for example, a placing or an offer for sale/introduction). The implicit assumption is that a placing identifies a company as being dominated by institutional shareholders. An offer for sale is likely to reduce significantly the proportion of institutional holdings and is less likely to be preferred by a company dominated by institutional shareholders.

The arguments for this approach can be summarized as follows. Under the ISE rules governing a company going public, companies have several choices: a placing, an introduction or an offer for sale. The method of flotation (or going public) is governed primarily on a cost basis. However, the method of 'listing' chosen by a firm has direct implications on the shareholder spread. It is, for example, difficult for private investors to get shares in a company that comes to the market through a placing. Here shares are offered to the public selectively, typically to investing institutions and private clients with no widespread advertising undertaken; consequently, shareholder spread is more limited. By contrast, offers for sale are more accessible to individual shareholders and usually involve extensive advertising in the national press, inviting sub-

scriptions both from institutional investors and private individuals. In the case of introductions, a company's shares are already widely held, usually at least 25 per cent in public ownership, and the company simply obtains a quoted price.

Consistent with information signalling, the argument is that by choosing a particular method of raising equity, a company is making an explicit decision on how it wishes to handle the agency problem and is actively conveying that information to the market. (A measure of shareholder concentration is unlikely to convey the initial management signal.) Thus the level of dividend initiation can be partly seen as a subsequent signal confirming the initial signal in respect of agency costs, with varying surprise values, as argued previously. Consequently, to examine the role of agency theory on the market response to dividend announcements, firms are divided into two groups: companies listed through placing and companies listed through an offer for sale or introduction.

EMPIRICAL RESULTS

Market reaction to dividend initiations

The magnitude of stock price adjustment to dividend initiations is measured by employing a standard event time methodology. The security specific parameters of the market model are estimated by ordinary least squares using 60 daily returns, beginning with the event day t = -76 and ending with event day t = -16. The return on security $_j$, for period $_t$, R_{jt}, is:

$$(2) \qquad R_{jt} = \alpha_j + \beta_j(R_{mt}) + \varepsilon_{jt}$$

where α_j and β_j are the estimated coefficients for security $_j$, R_{mt} is the return on the market index for period $_t$ and ε_{jt} is the estimated abnormal return on security $_j$ for period $_t$, associated with the event.

The abnormal returns are estimated for dividend-initiating companies for 30 days surrounding the announcement date. Both the FTSE 100 and the FTSE All Share Indices are used as market proxies. Although both indices are closely correlated, previous research has shown that dividend-initiating companies tend to be small, implying a size effect. Therefore the FTSE All Share Index, which as a broader index includes

small capitalization stocks, is a more appropriate benchmark for this study.

The Scholes and Williams (1977) approach is employed to adjust the market model estimates for thin trading, using the percentage of days over which there is no price change. According to Murray (1995), this method is superior to that of Dimson (1979), since it allows for thinness in the index and is preferable to Dimson and Marsh (1983), since no information is required on the actual timing of the trade. In this paper, the Scholes-Williams beta is obtained by regressing the security return for each day against the current, lagged and lead values of the market index for that day.

Figure 1 reports the mean risk-adjusted market reaction to dividend initiation announcements over a 30-day window, from t = - 15 to t = +15.

The immediate effect of the dividend announcements can be clearly seen. For event days surrounding the announcement date, no discernable pattern exists.

Table 1 lists the day 0 and two-day (t = -1,0) average excess return for the sample.

The abnormal return on the day of the announcement (t = 0) is 1.77 per cent for the FTSE 100 Index and 1.19 per cent for the FTSE All Share Index. Both are significantly different from zero at the 1 per cent level. The cumulative abnormal returns (CARs) for the two-day period surrounding the announcement are 1.98 per cent and 1.16 per cent respectively. Both are significantly different from zero at the 1 per cent level.

It is clear from **Figure 1** that the risk-adjusted abnormal returns, prior and post the announcement date, are comparable for both indices. However, there is some evidence of a size effect. The reported excess return on the announcement date is 0.58 per cent lower using the FTSE All Share Index, suggesting that this index provides a more appropriate benchmark.

Figure 1: Dividend initiations announcement effects

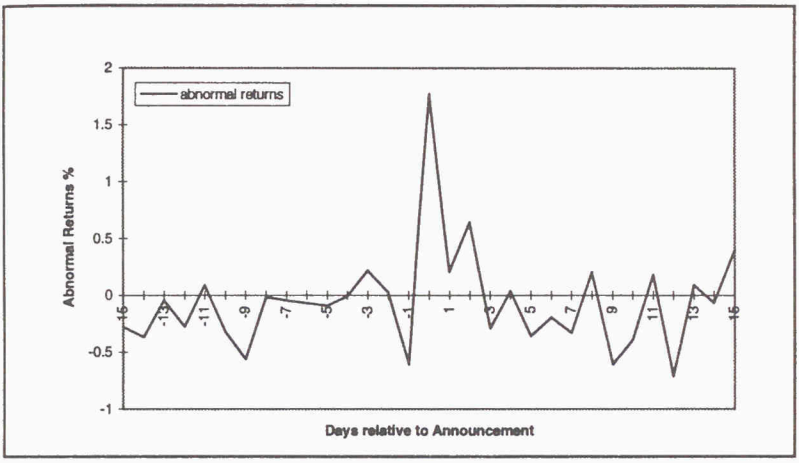


Table 1: Average excess stock returns

Announcement	Abnormal Return (per cent) based on:			
	FTSE 100		FTSE All Share	
	Return	t-value	Return	t-value
Day 0	1.77	(3.81)*	1.19	(3.33)*
Day -1 to Day 0	1.98	(6.11)*	1.16	(4.55)*

* Significant at the 1 per cent level.

The reported excess returns on and around the announcement day are consistent with the dividend signalling hypothesis and the results of Asquith and Mullins (1983), Dielman and Oppenheimer (1984), Born et al. (1988), Healy and Palepu (1988), Barber and Castanias (1992) and Maquieira et al. (1995). Dividend initiations, even after controlling for the size effect, convey significant positive information to the market.

The Corrado (1989) test, which, according to Maquieira et al. (1995), is better specified than the standard t-statistic for small samples, was also calculated. As a non-parametric test, it involves ranking each security's

excess return. This is then subtracted from the average rank and divided by the standard deviation[11]. Using this approach, abnormal returns on the announcement day and the two-day window based on the FTSE 100 were significant at the 1 per cent level[12]. The t-statistics are 4.24 and 5.97 respectively.

The pre- and post-announcement market responses show no discernable trends and are not significantly different from zero. The market appears to respond efficiently and quickly to the announcement of dividend initiations.

One possible explanation for the above results focuses on the joint dividend/earnings announcement. Given that dividend and earnings announcements occur almost simultaneously, is the market reaction documented above simply picking up an 'interaction' effect? Studies by Penman (1983) and Kalay and Lowenstein (1985) suggest that management, by announcing dividends and earnings simultaneously, can influence returns. Specifically, this US-based research suggests that management tend to release earnings and dividend signals together when they believe that there is a strong relationship between them and that any negative impact on returns will be minimized by the joint announcements. Both Kane, Lee and Marcus (1984) and Opong (1996) support the notion of an interaction effect[13].

Accepting that dividend and earnings announcements effects are interrelated, are the current paper's results simply picking up the net effect of the joint dividend/earnings announcement? Further empirical research, involving constructing portfolios based on the dividend and earnings announcements, would help resolve this issue. In terms of this study, the companies examined are new listings. The dividend and earnings announcements are therefore initial public announcements and can be regarded as unexpected. While recognising that controlling for an interaction effect should ideally be tested for, with the small sample size it has not proved possible to separate earning and dividend announcements sufficiently. Consequently, the results can be interpreted as evidence that dividend-initiation announcements accompanied by earnings are associated with significant abnormal returns.

Ownership concentration

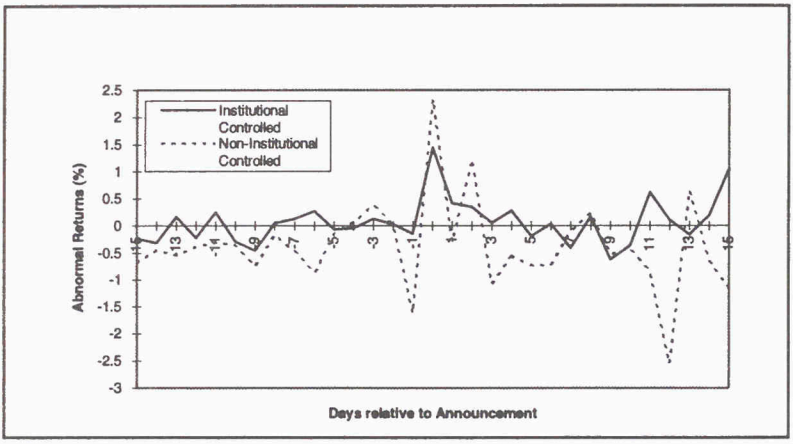
Figure 2 shows different market responses based on ownership concentration type. Non-institutionally-controlled companies appear to experience a larger announcement day effect than institutionally-controlled companies.

Non-institutionally-controlled companies experience an excess return on the announcement day, (t=0) of 2.34 per cent, compared with 1.45 per cent for institutionally-controlled companies (the t-statistics are 2.78 and 3.4 respectively). The difference between both mean abnormal returns is statistically significant from zero at the 1 per cent level. These results are consistent with the notion that dividend announcements convey more information when ownership is more widely dispersed and therefore agency costs and asymmetric information greater. This is of course conditional on the assumption that the ownership structure proxy used in this paper provides a reasonable measure of agency costs.

Earnings changes surrounding dividend initiations

The above findings support the dividend/signalling hypothesis that dividend announcements convey new information to the market. Abnormal returns on and around the announcement date are consistent with the notion that new information is released onto the market via the dividend announcement. In terms of the type of information signalled, one interpretation, in line with Lintner (1956), is that dividends represent management's assessment of the company's future performance. Accordingly, the market response to the dividend announcement is indicative of the firm's subsequent earnings.

Figure 2: Market response to dividend initiations among institutional and non-institutional controlled companies



To examine whether firms that initiate dividends show systematic subsequent earnings increases, earnings changes for the year of the announcements (year 0) and the three subsequent years are calculated. To control for firm size, earnings changes are standardised and expressed as a percentage of the stock price at the fiscal year-end. The change in earnings for each company $_j$, in year $_t$, ΔE_{jt}, is defined as:

$$(3) \qquad \Delta E_{jt} = (E_{jt} - E_{jt-1}) / P_{jt}$$

where E_{jt} is earnings per share before extraordinary items and discontinued operations.

In line with previous studies, industry-adjusted standardised earnings changes for the sample of companies were also computed. Industry-adjusted earnings changes were computed for each company and year as the difference between the firm's standardised earnings change in that year and standardised earnings changes for all firms in the industry in that year.

Table 2 reports the standardised earnings changes and industry-adjusted standardised earnings changes for dividend-initiating companies for year 0 to year 3.

Table 2: Standardised and industry-adjusted earnings changes

Year in relation to dividend initiation announcement	Mean standardised earnings changes		Mean industry-adjusted earnings changes	
	per cent	t-statistic	per cent	t-statistic
0	3.08	2.25*	3.74	1.59**
1	–0.79	0.47	–0.53	0.179
2	0.22	1.57**	1.30	0.147
3	–1.74	0.84	–0.18	0.933

* Significant at the 5 per cent level

** Significant at the 10 per cent level

Mean standardised company earnings changes for initiating companies are 3.08 per cent in year 0, the year the dividend initiation was announced, and are statistically significant at the 5 per cent level. In years 1 to 3, the standardised earnings changes are positive and significant in only one year, with firms experiencing negative earnings growth in two of the years subsequent to the initiation. For industry-adjusted standardised earnings changes, earnings changes in year 0 are 3.74 per cent and significantly different from zero at the 10 per cent level. For the subsequent three years, earnings changes are not significantly different from zero.

Two points are noteworthy here. First, companies that initiate dividends experience significant positive earnings growth in the year of the announcements. These findings are consistent with Healy and Palepu (1988), Born et al. (1988) and Barber and Castanias (1992). These earnings changes cannot be explained by industry-wide factors. Second, there is no evidence of superior industry-adjusted earnings growth in the post-announcement period. Mean earnings changes are not significantly different from zero in the three years subsequent to the announcement. This suggests that, on average, the abnormal returns on the announcement dates are not indicative of a continuation of significant earnings growth. These findings are consistent with Maquieira et al. (1995).

These results question the underlying conjecture that dividend-initiations signal information on a company's future earnings performance. Thus, contrary to signalling models, this study finds little evidence that dividend-initiations are consistent with significant superior earnings performance.

SUMMARY AND SUGGESTIONS FOR FUTURE RESEARCH

In this paper, the market reaction to dividend-initiation announcements, company performance and the role of institutional versus non-institutional shareholders was examined. In line with previous research, the results are consistent with the notion that dividend-initiation announcements convey information to the market and that companies that initiate a dividend experience significant earnings growth in the year of the announcement but not in subsequent years.

The role of institutional shareholders was also examined, leading to the conclusion that the market reaction to dividend announcements is greater for non-institutionally-controlled companies. This result can be interpreted as being consistent with the Easterbrook (1984), Roseff (1982) and Jensen, Solberg and Zorn (1992) agency cost explanations of dividend policy.

The above results must, however, be interpreted with care. First, the sample size is small. For the above results to be substantiated further, a larger sample is required. Second, abnormal returns on and around the dividend announcement date are traditionally interpreted in terms of subsequent earnings performance. However, no evidence is found in this study to support this. These findings appear anomalous and create uncertainty over the issue of what information is conveyed via a dividend initiation.

A separate but related issue for future research concerns evidence of underpricing in initial public offerings. Ritter (1984) finds that, on average, new issues experience underpricing, with reoccurring patterns of significant underpricing being followed by lower initial returns and thus less underpricing. The question arises of how this would affect abnormal returns on and around the announcement date and, in particular, whether a post-announcement estimation period would provide a better estimate of 'normal' trading behaviour.

Finally, to the extent that signalling theory cannot fully explain the stock market reaction to dividend announcements, further research on the role of ownership and other financial policy decisions around event days will be necessary. Jensen and Johnson (1995) report that, in the case of dividend cuts, firm-specific characteristics can better explain the stock price reaction to such announcements. Specifically, dividend cuts occur at the end of the firm's financial decline and mark the beginning of corporate restructuring. Furthermore, contrary to traditional signalling theory, research shows that initiating companies are successful companies that have reached maturity and generate more cashflow than is required to support growth. This would appear to be consistent with the results presented in this paper. However, to the extent that little detailed examination of dividend initiations exists, the above issues require further investigation.

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NOTES

1 The conventional thinking was that investors preferred dividends over capital gains and therefore that management could maintain stock prices by paying a high dividend.

2 According to Franke (1987), information is not evenly distributed across economic agents, with inside managers receiving information in more detail and earlier than outside investors.

3 These are largely event-based studies including, for example, Pettit (1972), Charest (1978), Asquith and Mullins (1983), Brickley (1983), Eades et al. (1985), Healy and Palepu (1988) and Marsh (1992).

4 The main study here is Lintner (1956).

5 All signalling models are based on the notion that dividends signal information on future performance. In Bhattacharya (1979), divi-

dends signal the profitability of productive assets. John and Williams (1985) define the signal in terms of the firms' investment cashflows. Furthermore, less profitable companies will not signal since it is too costly in terms of foregone investments/costs of raising external funds.

6 The assumption here is that the company has only limited profitable investment opportunities, and pays out the excess funds to shareholders. In this case, an increase in dividends signals reduced investment opportunities and therefore lower future earnings, so that the stock price should fall.

7 The average negative return for category (1) companies was slightly greater than for category (2) and (3) companies with, for example, the average return during the three-day announcement period being -8.7%, -5.33% and -5.16% respectively.

8 See also John and Lang (1991) who report negative excess returns where insider dealing occurs prior to dividend initiations.

9 Managerial discretion to pursue goals other than profit maximisation including sales growth, management rewards and risk avoidance are most frequently suggested. Furthermore, an implicit assumption here is that the market for corporate control and managerial labour markets are imperfect.

10 Asquith and Mullins (1983) argue that analysing dividend initiations mitigates the problems of specifying dividend expectations, since these are likely to be unanticipated.

11 Brown and Warner (1985, p. 24) find that non-parametric sign and signed rank tests, although not affected by variance shifts, are significantly affected by skewness in the cross-sectional distribution of daily excess returns.

12 Note that, given the equivalence of results using the FTSE 100 and FTSE All Share Index, it was felt that calculating the Corrado test using the latter index would not have added significantly to the interpretation of the results.

13 Opong (1996) reports an interaction effect between preliminary annual dividend and earnings reports.

APPENDIX 1: DESCRIPTIVE STATISTICS OF DIVIDEND-INITIATING COMPANIES, 1989-1991

Table A.1: Size Range of Companies

Market Value of Equity £m	No of Companies
0 - 50	14
51 - 100	3
101 - 200	5
201+	8

Table A.2: Method of Stock Market Listing and Announcement Dates

Method of Listing	No of Companies Listed	Dividend announced within:	No of Companies Announcing Dividend
Introduction	10	**0-4 months**	15
Offer for Sale	9	**5-6 months**	10
Placing	11	**7-12 months**	5
Total	**30**	**Total**	**30**

Table A.3: Industry Classifications

Industry SEC*	Number of Companies
Building Materials & Merchants	6
Building & Construction	2
Distributors	2
Electronic, Electric & Equipment	1
Engineering	1
Food Producer	2
Healthcare	2
Household	1
Leisure Hotels	1
Media	3
Obsolete	1
Paper, Packing & Print	1
Pharmaceutical	1
Retailer (general)	5
Textiles & Apparel	1

* Stock Exchange Code

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