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**AN EMPIRICAL INVESTIGATION OF UK STOCK MARKET  
REACTION TO DIVIDEND ANNOUNCEMENTS IN A COMPLEX  
SIGNALLING SETTING**

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A THESIS SUBMITTED TO THE UNIVERSITY OF DUNDEE IN  
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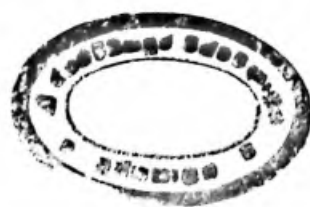
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**TO MY BELOVED FAMILY**

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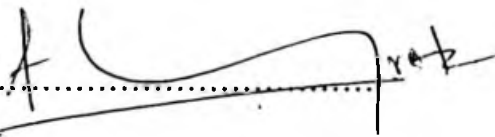
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DECLARATION

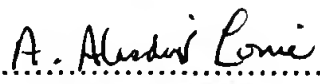
I hereby declare that I am the author of this thesis; that the work of which this thesis is a record has been done by myself, and that it has not previously been accepted for a higher degree.

Signed: 

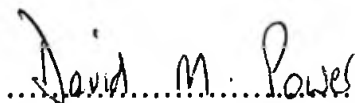
Mr. G. Abeyratna

CERTIFICATE

We certify that G. Abeyratna has worked the equivalent of nine terms on this research, and that the conditions of the relevant ordinance and regulations have been fulfilled.

Signed: 

Mr. A. Alasdair Lonie



Dr. David M. Power

**ABSTRACT**

This dissertation examines the impact of the dividend announcement on the share prices of a large sample of UK firms within a multiple signal setting. The dividend announcement is viewed as simply one among many signals which are emitted by firms to convey new information about company performance to outside investors.

The analysis takes place (i) at the time of the dividend announcement and (ii) over a longer time span, including six months before and nine months after the dividend announcement date. The investigation uses a battery of tests which included (a) an event study test based on abnormal returns, (b) a regression-based test which directly examines the data for evidence of interaction between the dividends and earnings news, (c) an analysis of variance (ANOVA) test on the mean values of the accounting ratios of the different groups of companies and (d) a simultaneous-equation approach which attempts to model interdependency between a firm's dividend, financing and investment policies.

The main findings indicate that (i) investors appear to react as though dividends convey useful information to the market, (ii) the market reaction is strongest when the dividends and earnings signals corroborate one another, (iii) the different dividend-earnings groups in the sample exhibit distinctive patterns in their financial accounting profiles in the years before the dividend announcement and (iv) the firms in the sample do not seem to choose their dividend policy independently of all other strategic decisions but instead appear to take account of their investment needs and fund-raising potential when deciding what dividend to pay.



CHAPTER I  
INTRODUCTION

In an uncertain economic environment characterised by informational asymmetry the announcement of changes in corporate strategies and financial policies are nowadays often regarded as signals emitted by company management which have to be interpreted by outside investors. Since the documented evidence suggests that these announcements convey private information possessed by corporate insiders to the market, numerous signalling models have been developed to explain the accompanying share price reaction to such announcements<sup>1</sup>. However, in well-functioning, advanced capital markets it has become a common practice for the directors of companies to make a number of decisions - (a) about capital spending and capital structure, (b) about dividend payout and the management of earnings, and (c) about purchases of shares in their own company - which, when they become known, are analysed as signs of the present health of the company and also as portents of its future performance. The publishing of information about these decisions is therefore analogous to the release of a variety of different signals (sometimes simultaneously), making it difficult for investors to decode complex messages contained in mixed signals and to disentangle relevant information conveyed by the individual decisions. Improvements in the accessibility of company data together with improved econometric techniques have made problems of how best to interpret such information less formidable; the signalling literature of modern finance increasingly uses advanced statistical models to analyse the joint effect of a variety of different signals on the share values of companies.

The impact of complex signals on share values has been scrutinised in a number of

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<sup>1</sup>Bhattacharya (1979, 1980), John and Williams (1985), Miller and Rock (1985), Ambarish, John and Williams (1987), Ofer and Thakor (1987) provide signalling models for dividend announcements. Myers and Majluf (1984), Miller and Rock (1985), and Ambarish, John and Williams (1987) provide signalling explanations of equity issue announcement effects. See Ross (1977) and John (1987) for signalling explanations of documented evidence on leverage changing transaction announcements. Also, see Trueman (1986) and Ambarish, John and Williams (1987) for signalling explanations of the security price reactions to announcement of new capital expenditure and Leland and Pyle (1977), Vermaelen (1984) and Ofer and Thakor (1987) for signalling models for the announcement effect of share repurchases announcements.

recent US and Australian articles and a new strand of the signalling literature - based upon *interactive signals* - has rapidly developed. The major problem addressed in this study is whether the dividend and earnings signals are interactive when announced jointly; this problem was formally addressed by Kane, Lee and Marcus (1984) using US data. Arguing that investors tend to give more credence to the consistent signals of dividend and earnings which are released at about the same time, the authors examined the dependence of the marginal information contained in one signal on the content of the other and documented convincing evidence for the existence of a corroboration effect between jointly announced dividend and earnings news. Their regression-based analytical technique has influenced a later *interactive signalling* study by Easton (1991), who analysed Australian data and reported very similar results to those of Kane, Lee and Marcus.

The general flow of information from company management to the stock market participants in the UK provides an excellent opportunity for researchers to test for evidence of interaction between the dividend announcement and other firm-specific announcements because UK dividends are almost invariably announced simultaneously with information about corporate earnings and often also about other important events such as capital expenditure, new issues, business restructuring plans, refinancing packages and changes in top management personnel. However, analyses of the impact of dividend announcements on share values in a complex signalling setting are difficult to find in this country. The principal investigation of the impact of dividend announcements on UK share prices at the time of writing is a comprehensive unpublished paper by Paul Marsh (1993). This study encompassed the entire population of UK quoted companies with the exception of investment trusts; it focused on 5778 dividend events where announcement dates were identifiable for the period between January 1989 and April 1992. Marsh followed the approach adopted by the various

US studies and categorised dividend events into five groups on the basis of the magnitude and direction of the change in dividend; he investigated (a) dividend omissions (338 events), (b) dividend cuts (416 events), (c) maintained dividends (1979 events), (d) modest dividend increases of less than 25 per cent (2003 events) and (e) large dividend increases of greater than 25 per cent (1042 events). The rich and varied results of this study in general confirmed the findings of US investigations of different facets of the informational role of a single signal - the dividend - to a remarkable degree.

Paul Marsh's paper became available to the author of this dissertation after the greater part of the empirical work of the study had been completed. It was therefore not possible to avoid a certain amount of overlap between the methodological approach to the data of this investigation and that of Marsh, for the aims of the two investigations - although not their scope - were quite similar. It may be helpful to mention some of the differences between the two studies. First, Marsh's study covered the period from January 1989 to April 1992 - a period of 40 months compared with the period of 6 months for which data are analysed in this dissertation (January - June 1991). The time period analysed by Marsh generated 5778 usable interim and final dividend events. In the present study the sample period yielded only 620 events of annual dividend announcements. Second, in gathering his sample Marsh accessed the London Business School Share Price Database (LSPD) which records all dividends paid by companies together with the amounts, ex-div dates, payment dates and supplies information about whether a particular dividend was interim, final or special in character. This facility was not available to the writer; the dividend and earnings events of this study were gathered manually from the *Financial Times* newspapers and EXTEL information cards. Again, time constraints prevented the enlargement of the sample size; instead the writer chose to use the time available for empirical work subsequent to the