

THE INFORMATION CONTENT OF THE PRELIMINARY ANNOUNCEMENT, INTERIM REPORT AND AGM: EVIDENCE FROM THE IRISH STOCK EXCHANGE

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ABSTRACT

This paper explores the price impact of the preliminary announcement, interim report and AGM for companies quoted on the Irish Stock Exchange. We find that such events communicate valuable information to the market. In contrast to extant US- and UK-based research, we find that the market reacts instantaneously to a firm's formal accounting releases and that there are no information interpretation and assimilation delays. Our results have implications for information processing and market efficiency in a small stock market.

INTRODUCTION

Since the seminal work of Ball and Brown (1968), a considerable volume of academic literature has focused on the market impact of firms' formal accounting disclosures. The key events in the corporate calendar are the preliminary announcement (PA), interim report (IR) (quarterly reports in the US context) and the AGM. The weight of the evidence suggests that the preliminary results, interim and quarterly reports all convey value relevant information to the market (Beaver, 1968; Firth, 1981; Morse, 1981, 1982; Brookfield and Morris, 1992; Opong, 1995). Firth (1981) and Rippington and Taffler (1995) conduct the only research on the market impact of the AGM with conflicting results. Firth finds a lack of useful information whilst Rippington and Taffler, in contrast, report a statistically significant price impact¹.

The accounting literature places great emphasis on the information content of a firm's formal accounting releases (Ball and Brown, 1968; Morse, 1981). However, these may not be a timely source of company information and, in addition, what can be reported in this way is only a subset of all value relevant information².

Also, as accounting information is an anticipated news release and thus generates extensive prior search activity (e.g. through the earnings forecasting activities of the sell-side analyst), such accounting releases will only be confirmatory to the extent that they are in line with the outputs of these search processes.

In addition to the timeliness issue, a growing body of research has addressed the value relevance of the information provided by a firm's financial statements. Lev (1989) reports that the earnings response coefficient (ERC) has been progressively declining over time. Francis and Schipper (1999) find that trading strategies based on the sign and magnitude of earnings and on the level and changes in book value have decreased over the period 1952–1994. Lev and Zarowin (1999) attribute their findings of decreased value relevance of firm financial statements to the increased importance of unreported intangible assets and the failure of the financial reporting model to keep pace with the increased rate of change in the business environment.

Very little evidence exists on the value relevance of accounting related events in an Irish context. The only directly relevant study is Cotter (1997)³. Cotter explores the market reaction to the preliminary results and finds average returns increase in the period surrounding the earnings announcement. However, Cotter's sample consists of only 22 companies, some of which are small and thinly traded. In addition, his methodological approach, which measures the price impact by calculating the average return on the event date, is flawed; bad news and good news may potentially cancel each other out in the averaging process, suggesting very little market impact in aggregate, whereas if absolute returns had been employed this potential problem would have been obviated. Finally, Cotter does not consider other key events in the corporate reporting calendar such as the interim results and the AGM.

In this paper we provide the first true test of the valuation impact of the PA in a much under-researched market – the Irish Stock Exchange⁴. In addition, we measure the price impact of the IR and the AGM and compare the relative information content of these three key events⁵.

We find that the IR generates the largest price movements, followed by the AGM and finally the PA. In addition, we report that our results for the AGM may in part be driven by some large event outliers. Interestingly, we find no evidence of significant price movement in the days following the event date. In contrast, extant US and UK research in general points towards abnormal price activity in the days following such announcements (Morse, 1981, 1982; Brookfield and Morris, 1992; Opong, 1995; Rippington and Taffler, 1995). Our results suggest that the Irish market appears to absorb the information content of firms' formal accounting releases more quickly than its UK and US counterparts and we speculate that such results may be driven by the relatively small number of shares quoted on the Irish Stock Exchange.

The remainder of this paper is organised as follows. The next section describes the data set and methodology and this is followed by a presentation of the empirical findings. A summary of the findings and conclusions is provided in the final section.

DATA AND METHODOLOGY

Sample selection

Our final sample consists of 38 companies quoted on the Irish Stock Exchange⁶ over the two years 1999–2000 and meeting the following criteria:

1. Share price data is available for 130 days prior to the PA and 130 days thereafter⁷.
2. Market capitalisation exceeding £80 million on 1 January 1999⁸ (to minimise problems associated with thin trading).

The dates of the PA, IR and AGM were obtained from *The Irish Stock Market Annual*.

METHODOLOGY

We measure the information content of the three events by observing the absolute value of the abnormal return metric. The absolute value is employed rather than the unsigned residual to avoid potentially cancelling out in aggregation positive and negative news⁹. This, as previously mentioned, is a potential problem with Cotter (1997).

A large abnormal return relative to the abnormal return generated on non-event days signifies that the PA, IR or AGM has information content for market participants.

Returns are calculated using log prices, adjusted for dividends as follows:

$$\ln(P_t + D_t) - \ln(P_{t-1}) \quad (1)$$

where:

\ln = natural log

P_t = price in time period t

D_t = dividend in time period t

t = time on a daily basis.

Abnormal return is defined as follows:

$$AR_{i,t} = R_{i,t} - ER_{i,t} \quad (2)$$

where:

$AR_{i,t}$ = the abnormal return associated with firm i on day t

$R_{i,t}$ = actual return for firm i on day t

$ER_{i,t}$ = expected return for firm i on day t .

The expected return generating model is as follows:

$$ER_{i,t} = \alpha_i + \beta_i R_{m,t} \quad (3)$$

where:

$R_{m,t}$ = return on the ISEQ¹⁰ Index on day t

α_i, β_i = estimated parameters.

α and β are estimated for company i by regressing the firm's daily return against the daily return on the market index for a 200-day period, 100 days on either side of the PA (excluding the dates of the IR and AGM). In addition, we performed separate regressions for the 100-day pre- and post-periods relative to the PA. We also reran the model with no intercept term assuming $\beta = 1$ for each share. Our results are invariant to the choice of model chosen. Therefore, in all subsequent analysis we work with the results of the 200-day pooled regression¹¹.

RESULTS

The results of the ranking of our three events are presented in Table 1.

TABLE 1: RANKING OF AVERAGE ABSOLUTE DAILY RETURN RESIDUALS AND 260-DAY AVERAGE AND MEDIAN VALUES

| Rank | Day | AR (%) |
|------|-------|--------------|
| 1 | IR | 3.24 |
| 2 | AGM | 3.15 |
| 3 | PA | 3.10 |
| 15 | PA+1 | 2.49 |
| 66 | IR+1 | 2.01 |
| 152 | AGM+1 | 1.67 |
| | | Average 1.77 |
| | | Median 1.72 |

We find that the IR dominates, generating the highest absolute abnormal return averaged across all firms (3.24 per cent), followed by the AGM (3.15 per cent) and the PA (3.1 per cent). In contrast, Rippington and Taffler (1995) find that the PA dominates, followed by the IR and AGM. Our results are comparable to Chambers and Penman (1984), using US data, who report that on average the IR has a greater price impact than the PA.

It is interesting to note that the AGM generates a greater price impact than the PA. This suggests that the AGM communicates significant new information to the market over and above that contained in the summarised accounts that constitute the PA.

Interestingly, in direct contrast to Rippington and Taffler (1995), we find that the day following the events (i.e. PA+1, IR+1, AGM+1) does not generate significant price activity. Rippington and Taffler argue that such price movements may be attributable to an information spillover effect (equivalent to an information processing delay), or may merely reflect the arrival of information due to its release to the market after the Stock Exchange officially closes. Alternatively, they suggest that the activity may be a combination of both explanations.

To explore the market reaction to our three events in more detail, Tables 2–4 present average absolute return information for the event date and the 10-day period surrounding the event date. We calculate t values using the approach

adopted in Cready and Mynatt (1991): absolute value of a firm's abnormal return minus the average absolute value of the abnormal returns of the firm from the non-event period, all divided by the standard deviation of the firm's absolute values of the abnormal returns from the same non-event period. The event period represents the 260-day trading period excluding the dates of the PA, IR and AGM, and the day immediately following these events.

These results are plotted in Figures 1–3.

TABLE 2: ANALYSIS OF AVERAGE ABSOLUTE RETURN RESIDUALS IN THE 10-DAY PERIOD SURROUNDING THE PRELIMINARY ANNOUNCEMENT

| Day | Average absolute abnormal return (%) | Standard deviation | Cready-Mynatt t-value |
|-----|--------------------------------------|--------------------|-----------------------|
| –5 | 2.48 | 3.11 | 1.68* |
| –4 | 2.71 | 3.28 | 2.07* |
| –3 | 1.92 | 2.24 | 0.46 |
| –2 | 1.50 | 3.03 | –2.13 |
| –1 | 2.44 | 2.76 | 1.68* |
| 0 | 3.10 | 3.58 | 2.25* |
| 1 | 2.49 | 3.98 | 1.11 |
| 2 | 2.11 | 2.24 | 0.98 |
| 3 | 1.70 | 1.33 | 0.53 |
| 4 | 2.20 | 2.30 | 1.31 |
| 5 | 1.77 | 1.36 | 0.92 |

* denotes significant at $\alpha = 0.05$, one tail test

TABLE 3: ANALYSIS OF AVERAGE ABSOLUTE RETURN RESIDUALS IN THE 10-DAY PERIOD SURROUNDING THE AGM

| Day | Average absolute abnormal return (%) | Standard deviation | Cready-Mynatt t-value |
|-----|--------------------------------------|--------------------|-----------------------|
| –5 | 1.60 | 1.58 | –0.77 |
| –4 | 1.80 | 2.21 | 0.15 |
| –3 | 2.02 | 3.44 | 0.53 |
| –2 | 1.57 | 1.73 | –0.54 |
| –1 | 1.77 | 2.11 | 0.21 |
| 0 | 3.15 | 5.59 | 1.68* |
| 1 | 1.67 | 1.36 | 0.58 |
| 2 | 1.94 | 1.78 | 0.72 |
| 3 | 1.76 | 1.60 | 0.05 |
| 4 | 2.37 | 3.06 | 1.61 |
| 5 | 2.47 | 3.21 | 1.60 |

* denotes significant at $\alpha = 0.05$, one tail test

TABLE 4: ANALYSIS OF AVERAGE ABSOLUTE RETURN RESIDUALS IN THE 10-DAY PERIOD SURROUNDING THE INTERIM REPORT

| Day | Average absolute abnormal return (%) | Standard deviation | Cready-Mynatt t-value |
|-----|--------------------------------------|--------------------|-----------------------|
| -5 | 1.68 | 2.55 | -1.12 |
| -4 | 1.43 | 1.38 | -1.11 |
| -3 | 1.83 | 2.61 | -0.28 |
| -2 | 1.89 | 2.92 | 0.12 |
| -1 | 2.26 | 2.81 | 1.00 |
| 0 | 3.24 | 3.54 | 2.90* |
| 1 | 2.01 | 2.56 | 0.37 |
| 2 | 1.68 | 1.64 | 0.03 |
| 3 | 1.17 | 1.14 | -2.41* |
| 4 | 1.94 | 3.34 | 0.47 |
| 5 | 1.56 | 1.42 | -0.61 |

* denotes significant at $\alpha = 0.05$, one tail test

FIGURE 1: ABSOLUTE AVERAGE ABNORMAL RETURNS – PRELIMINARY ANNOUNCEMENT

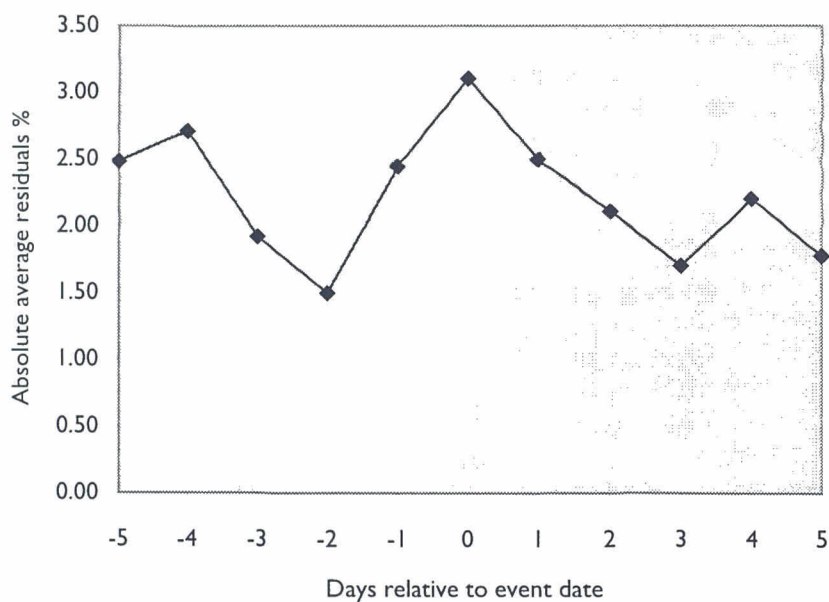


FIGURE 2: ABSOLUTE AVERAGE ABNORMAL RETURNS – INTERIM REPORT

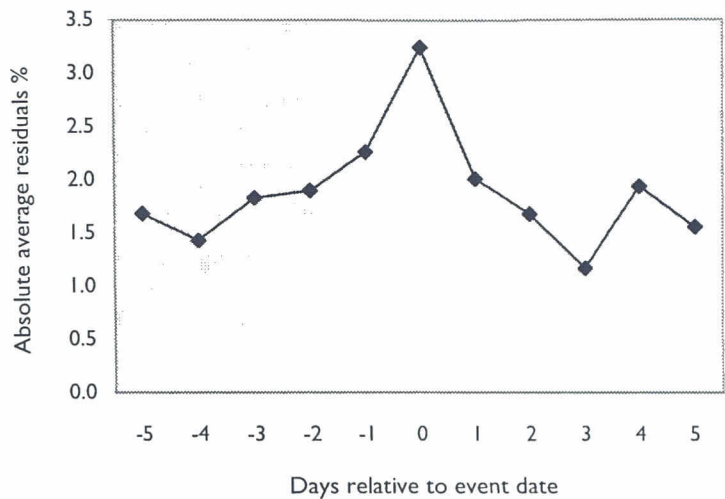
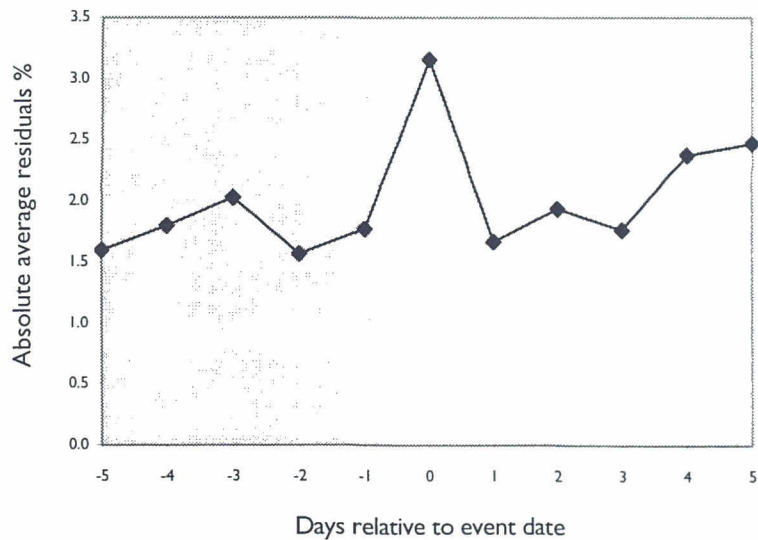


FIGURE 3: ABSOLUTE AVERAGE ABNORMAL RETURNS – AGM



For the preliminary announcement we find evidence of abnormally high price activity on the release date and also on days -5, -4 and -1¹². This is consistent with Rippington and Taffler (1995) and Brookfield and Morris (1992).

We find in relation to the IR no unusual prior price activity. Our results are consistent with Brookfield and Morris (1992) and Morse (1981), but contrast with Opong (1995) and Rippington and Taffler (1995) who report evidence of significant price activity in the days preceding the interim report.

For the AGM we document no significant prior price reaction. This is consistent with Rippington and Taffler (1995).

We find no evidence of abnormally high price activity in the days following the PA, IR and AGM. Such results are inconsistent with extant US and UK research which in general points towards significant price movements following the formal release date, suggestive of information processing and assimilation delays.

Merton (1987), in his model of capital market equilibrium in the absence of complete information, argues that the delay in response to corporate news may be attributable to an informational deficiency arising from the incentives for market participants to gather corporate news. In this context, Atiase (1985) argues that investors have greater incentives to gather information for larger firms, as trading profits are directly proportional to firm size – in other words, knowledge that the equity of a large firm is mispriced by one per cent could be used to generate a larger net trading profit than if a small firm's equity were mispriced by one per cent. As our sample stocks are drawn from the very largest stocks quoted on the Irish Stock Exchange, presumably there are sufficient incentives for investors and the stockbroking industry to gather value relevant information on such stocks. The "informational deficiency" argument should therefore not be a significant issue, which may explain the results.

As an additional test on the validity of the results for the days of the preliminary results, interim results and the AGM, we run a non-parametric test as employed in Opong (1980) of the following form:

$$V_{jt} = |U_{jt}| / U_j \quad (4)$$

where:

$|U_{jt}|$ = the absolute value of the abnormal return for the event day, and

U_j = the mean of $|U_{jt}|$ for the 252 non-event days.

If the event has significant information content, the ratio V_{jt} will be greater than 1.0. We find V_{jt} is greater than 1.0 in excess of 60 per cent of cases for both the preliminary results and the interim results, but is only greater than 1.0 in slightly in excess of 40 per cent of cases for the AGM. This may suggest that our reported results for the AGM may be driven in part by some extreme outliers¹³. It is an interesting speculation as to why this is the case, particularly as our results in this regard are very similar to the reported results of Rippington and Taffler (1995, Table 6). An analysis of the news reporting in the financial press for the subset of AGM events that generate such unusual price activity may shed some light on the matter and would be a worthwhile future research exercise.

In aggregate, our results are not consistent with the argument that the role of a firm's formal financial disclosures is to confirm other more timely information releases. If this argument were empirically supported, then we would find no change in aggregate valuation and thus no price change associated with the respective accounting release. Despite issues related to the lack of timeliness associated with a firm's financial statements, managers' incentives to manage earnings expectations and analysts' and investors' incentives to incur search costs in anticipation of the known accounting release dates, we find that formal accounting releases communicate significant value relevant information to the markets. Our findings demonstrate that, even for the largest stocks quoted on the Irish Stock Exchange, a significant proportion of the information content of such firms' accounting releases is not being anticipated by the market either through earlier information releases or through the activities of the sell-side analyst.

In addition, our results suggest the Irish stock market, in contrast to its US and UK counterparts, is quick to absorb the news content of firms' formal accounting disclosures. We may speculate that such speed of impounding may be attributable to the small size of the Irish market, whereby news may be quickly disseminated, interpreted and a consensus opinion formed expeditiously by market participants.

As a further test of the information content of the PA, IR and AGM, we investigate whether the size of the price activity generated is related to company market capitalisation. The literature suggests that the larger the company, the richer its information environment and the more the incentives there are for information acquisition by investors (Grant, 1980; Atiase, 1985, 1987). This will in turn trigger information acquisition and dissemination by stockbroking analysts and greater reporting of the activities of larger companies by the financial press.

We regress the absolute value of the abnormal returns for each event on company size (ln). The results are reported in Table 5.

TABLE 5: REGRESSION OF EVENT PERIOD ABSOLUTE RETURN ON FIRM SIZE (MARKET CAPITALISATION)

| Event day | Preliminary announcement | AGM | Interim report |
|-------------|--------------------------|---------------------|---------------------|
| t-statistic | -0.00179 (-0.46) | -0.00385 (-0.64) | -0.00229 (-0.60) |

We find, consistent with expectations and prior research, an inverse relationship between firm size and the price reaction to our three events. However, none of the t-statistics are significant at conventional levels. Our results are consistent with Cotter (1997), who also finds no evidence that small companies generate higher risk-adjusted returns than large companies¹⁴.

We may speculate that, given the relatively small number of companies quoted on the Irish Stock Exchange, firms' information environments (in the top 40 or so companies at least) do not differ significantly from one another. In other words, the

stock market may be sufficiently small for the financial press and stockbroking community to gather and disseminate information relatively equally on all such companies. Thus, the incremental search costs associated with stockbroking analysts covering a significant proportion of quoted stocks may be offset by the benefits (such as fees from providing investment advice to clients, trading commissions, past and future investment banking relationships etc.) accruing from more complete coverage.

SUMMARY AND CONCLUSIONS

This study empirically investigates the information content of the preliminary announcement (PA), interim report (IR) and AGM in a relatively unexplored market: the Irish Stock Exchange. Daily share price data for a sample of 38 companies is used. The relationship between company size and the price reaction to the PA, IR and AGM is also addressed.

We find that all three events impart valuable information to the market. When we rank the magnitude of the price activity generated by these events, we find that the IR and the AGM (in that order) dominate the PA. The PA dominating the IR in news content is consistent with the US research of Chambers and Penman (1984), but inconsistent with the reported findings of Rippington and Taffler (1995) using UK data.

The AGM communicates significant new information to the market over and above that contained in the PA based on average absolute returns employing the Cready and Mynatt (1991) t-statistics. However, adopting a non-parametric approach we find that such results are partly driven by AGM event outliers. An interesting topic for future research would be to explore what is driving these outliers by forming a control sample of those AGM events triggering little abnormal price activity and comparing and analysing financial press comment of both subgroups.

We find, in contrast to prior research, little evidence of unusual price activity in the days preceding the IR, PA and AGM. We find this unusual, as accounting information is an anticipated news release and should generate extensive prior search activity. Other information events occur randomly and cannot be predicted in the same way, thus incurring substantial speculative search costs to pre-empt (Kim and Verrecchia, 1991).

Given our unexpected results in this regard, a fruitful area for future research would be to explore whether there was any unusual trading volume activity in the time preceding the formal announcement dates. Price movements reflect changes in the market's consensus expectations generated by a news release (Beaver, 1968), whereas trading volume activity reflects changes in the heterogeneous expectations of individual investors (Karpoff, 1986; Kim and Verrecchia, 1991). Thus, prior information search by a subset of investors may have triggered unusual trading volume activity but very little price activity if a large number of investors were not privy to the information gathered and did not observe that such trades were information based rather than motivated by liquidity factors.

In addition, we find that the market is quick to assimilate the news content of the financial releases, whereas extant research (both UK- and US-based) points toward considerable price activity in the days following the event date. We argue that such results may be explained by the relative market capitalisations of the companies in our sample and the small number of shares quoted on the Irish Stock Market.

Though we find, as expected, an inverse relationship between firm size and the information content of firms' formal accounting disclosures, the results are not statistically significant.

In aggregate, our results suggest that firms' formal financial disclosures – the PA, IR and AGM – are of considerable value to the market. We argue that our results in relation to the speed of information assimilation and the lack of statistical significance associated with firm size may be attributable to the limited number of companies quoted on the Irish Stock Exchange. The market may be small enough for value relevant information to be rapidly disseminated and interpreted by market participants. In addition, given the limited number of quoted companies, size may not be a key determining factor of the market reaction to firms' accounting disclosures.

NOTES

- ¹ However, Firth (1981) uses weekly rather than daily return observations and therefore the immediate price reaction to the AGM is not observable.
- ² Ball and Brown (1968) find that 85 per cent to 90 per cent of the annual earnings announcement is captured prior to the date of its actual release, and conclude that although the annual earnings announcement has value it lacks timeliness.
- ³ O'Connell (1993, 1995) are the only other Irish studies using PA data. However, the focus of both of these studies is not on measuring the price impact of the PA on its release date but rather on exploring whether prices lead/lag earnings using annual return intervals. O'Connell is essentially testing in an Irish context the models of Kothari and Sloan (1992) and Holthausen and Larcker (1992).
- ⁴ The information environment of firms quoted on the Irish Stock Exchange appears, from casual observation at least, to be substantially less rich than that of their US and UK counterparts. For example, there are far fewer sell-side analysts per quoted company than in either the US or the UK. In addition, individual analysts tend to cover more sectors than their US or UK equivalents. Management forecasts are rarely disclosed publicly to the market. The development of the Euro has also meant that managers are diversifying their portfolios internationally and reducing portfolio weights placed in Irish companies, hence reducing the incentives for information gathering by the professional investment community and financial press for a large number of Irish companies. (See also footnote 8).
- ⁵ The only other formal accounting release is the annual report and accounts (ARA). However, we could find no news source (including the Stock Exchange itself) detailing the exact timing of the release of the ARA to the market. In any case, all extant US and UK research points towards a lack of useful information in the ARA for share valuation purposes (Cready and Mynatt, 1991; Rippington and Taffler, 1995).
- ⁶ We exclude companies that had their primary listing on another market, e.g. Diageo and Tesco.

- ⁷ As per Rippington and Taffler (1995), a 260-day trading period is centred on the PA, and where the 260-day trading period contains more than one IR the first is omitted.
- ⁸ This criterion alone excludes in excess of 40 companies from our study. However, thin trading is a particular problem on the Irish Stock Exchange (Murray, 1995). Though £80 million is to a certain extent arbitrary, a cursory examination of share price activity reveals that for companies marginally below this market capitalisation there are a considerable number of days when the share price does not change for days on end. More specifically, for those companies with a market capitalisation less than £80 million the average proportion of days for which there is no price change is 71 per cent of cases (standard deviation = 17.5 per cent; median = 68 per cent). This is prima facie evidence of lack of trading activity. In any case the total market value of the companies so excluded represents less than 5 per cent of the value of the entire Irish Stock Exchange and therefore as a group they are not economically significant.
- ⁹ We use absolute residuals rather than squared residuals as squared residuals give undue weight to outliers. In addition, tests using absolute residuals tend to be more powerful when security returns are not normally distributed (Rippington and Taffler, 1995).
- ¹⁰ The ISEQ index is the value-weighted index of all shares quoted on the Irish Stock Exchange.
- ¹¹ As we are working with daily data and a short event period, more sophisticated return generating models are unlikely to add to our results (Kothari, 2001 § 4.4.1.1).
- ¹² Prior price activity may be attributable to private information acquisition prior to the formal release date, information leakage or a combination of both of these (Morse, 1982).
- ¹³ One such case is Fyffes recording a -32 per cent return on the date of the AGM (20/3/00).
- ¹⁴ Cotter (1997) performs his analysis by comparing the price reaction of a portfolio of five "small" companies to a portfolio of six "large" companies. However, as previously stated, there are potential problems associated with Cotter's return metric. In addition, there is the added problem of drawing inferences from such a small sample size.

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