

AN ASSESSMENT OF THE MARKET REACTION OF UK FIRMS TO A PRIVATE PLACEMENT ANNOUNCEMENT

John Cotter

University of Ulster at Coleraine

ABSTRACT

While considerable attention has been paid to market reaction announcements of public equity issues, only a small amount of research has been devoted to their private placement counterparts. This is surprising given that proceeds from the latter are typically used to finance firms' new investment projects. This paper helps to redress the balance, by applying market model methodology to 78 private equity issue announcements in the UK over the period 1990-1995. Private placement announcements appear to be associated with positive abnormal returns. It is hypothesised that these arise from the unique negotiating structure between management and private clients.

INTRODUCTION

There is a large body of literature covering the market reaction to the announcement of equity issues. This has concentrated on public issues, with the consistent finding that negative abnormal returns are earned around the announcement period. In a review of these studies, Smith (1986) finds, on average, a negative announcement effect of approximately three per cent.

Surprisingly, there has been only a limited number of papers on the market reaction to private placement announcements. While private placements tend to be small, raising funds with a median value of £2.5m, they are a regular feature of corporate financing, with the capital raised being primarily used for new investment projects. They also have the characteristic of involving low issue costs. Interestingly, what

research there is in this area indicates that private placements induce the market to react positively around the announcement period. This effect is hypothesised to arise because of the negotiating process which must take place between management and private placement clients. In these circumstances, the information asymmetry and ownership concentration problems have a necessarily different resolution, relative to a public placement.

4

With the existing work on the impact to private placements announcements being limited to two studies on the US market (Wruck, 1989; and Hertzel and Smith, 1993), and two on the Japanese market (Kato and Schallheim, 1993; and Kang and Stulz, 1996), the present paper extends this area of research by examining a sample of private placement announcements on the UK equity market between 1990 and 1995. In addition to representing the first study to employ UK data, the paper combines adjusted abnormal returns and price discount/premium measures on placement day, to display the full extent of compensation available from private placements. The paper also explores the distinctive institutional frameworks involved in private issue announcements for the US, Japanese and UK equity markets. The different frameworks help to explain the different market reaction findings for data from these markets.

The paper proceeds by examining the theoretical rationale behind the market reaction effects. The data is then described and the statistical methods of testing for abnormal returns, and price reductions at the time of announcements, are discussed. Subsequently the empirical results are presented and conclusions drawn.

ANNOUNCEMENT EFFECTS

There are many ways in which firms can raise finance through an issuing process. Smith (1986), in an examination of different issuing processes, lists five distinct methods. These are the issue of common stock, preferred stock, convertible preferred stock, straight bonds and convertible bonds. It is generally found (Asquith and Mullins, 1986; Mikkelson and Partch, 1986) that the public issue of ordinary shares results in negative returns being recorded.

The findings for the few studies examining private placements indicate positive pricing effects. For the US market, Wruck (1989) and Hertzel and Smith (1993) document positive abnormal returns of 4.4 and 1.7 per cent respectively. Both Kato and Schallheim (1993) and Kang and Stulz (1996) find a positive reaction, of respectively 5 and 3.1 per cent for Japanese private placements. The studies involving private placements offer different explanations for their results. Hertzel and Smith adapt the information asymmetry model as developed by Myers and Majluf (1984) to explain their findings. Wruck suggests that ownership concentration changes reflect positively on equity returns. Both studies recognise that private placements involve a vastly different issuing procedure from public ones.

Information asymmetry

Myers and Majluf's (1984) information asymmetry hypothesis is the most common argument used to justify negative public announcement effects during ordinary share issues. This model assumes that the timing of equity issues, used for financing new investment, is manipulated by managers. Potential investors and management have different levels of information about a firm's value. The argument follows that shares are issued when management feel that the firm is overvalued, thereby improving the possibilities of a successful placement. Accordingly, investors reduce their estimates of a firm's share price and this is reflected in the negative abnormal return performance around these equity placement announcements. The extent of the information asymmetry problem influences the announcement returns, with a large disparity in information resulting in relatively large negative abnormal returns.

On the other hand, private placements allow for the elimination of information asymmetry through the associated negotiating process. Hertzel and Smith (1993) suggest that managers will issue privately to finance new investment if the net present value of an investment opportunity exceeds the costs of informing private investors of the true value of the firm. The private issuing process involves investors being informed of the true value of a firm. The proxy used to determine the extent of costs associated with providing information on a firm's true value is measured by offer price discounts. Similarly, the use of discounts represents the level of compensation paid to potential shareholders for participating in the new issue. Hertzel and Smith argue that negotiations concerning private placements

offer a similar transfer of information between management and investors as that outlined by Myers and Majluf (1984) in their discussion of using mergers as a substitute for new investment expenditure. Merger negotiations allow a firm to transfer positive information about a firm's value. Similarly, favourable information can be conveyed to investors during negotiations in private placements, generating, as a response, upward pressure on prices.

Private placements, in a sense, operate in a similar way to public issues where an underwriter provides certification (Cooney, Kato and Schallheim, 1996). The certification process guarantees the value of the issuing firm in order to improve the chances of a successful placement. Certification gives credence to the issuing process, helping to generate a favourable market response as potential investors are informed of the true value of the firm. In other words, the certification process is used to disseminate price sensitive information in a credible and non-disadvantageous manner. A private placement achieves the same effect as sensitive information is conveyed to potential investors in a manner in which they have belief. Furthermore, the public do not get access to this information, thereby protecting the issuing firm. In comparison, a public issue without certification would not allow management to inform potential investors of the firm's true value in as prudent a manner. For instance, with an uncertified public issue investors may have difficulty believing unsubstantiated reports about firm value from management. Also, detailed information releases may offer advantages to a firm's rivals. Certifications require underwriters spending considerable resources determining a firm's true value as their future reputation depends on it. If underwriters make an incorrect valuation, their reputation may be detrimentally affected resulting in business difficulties.

Ownership concentration

The ownership concentration hypothesis, tested by Masulis and Korwar (1986), relies on agency theory models as developed by Jensen and Meckling (1976). Separation of ownership and control between management and shareholders is the key to agency models. The ownership concentration hypothesis argues that any factor, such as a reduction in the ownership holdings of management or a general decrease in the concentration amongst private shareholders, is likely to increase the

agency problem. This problem reflects negatively on firm value, and consequently share price.

Under a public placement, as Masulis and Korwar (1986) argue, the negative abnormal returns at the time of the issue announcement arise from a decrease in management ownership levels and a high dilution of ownership concentration since there are a large number of share purchasers. Masulis and Korwar's findings indicate that the extent of the negative price reaction during the public share issue announcement period is correlated to the degree of reduction in management's respective shareholdings.

In contrast, under a private placement share ownership concentration generally increases as there are usually a small number of share purchasers buying large blocks. For instance, the average block of shares sold by a private issue represents 19 per cent of a firm's equity voting, and is regularly bought by only one buyer (Wruck, 1989). These increases in ownership concentration levels tend to increase the market value of firms. Shleifer and Vishny (1986) cite three factors which possibly lead to increased firm value under these circumstances. Firstly, increased ownership concentration results in an improvement in the monitoring of management's performance. This is due to the reduction in the information asymmetry problem, as investors obtain more knowledge aiding their decision making processes. Secondly, there is an improvement in a firm's chances of a takeover as the purchasing company is dealing with a few large blockholders. These takeover situations reflect positively on firm value. Thirdly, as new private placements involve an increase in the block of shares held by the largest shareholders (Wruck, 1989; and Hertzel and Smith, 1993), they can increase firm value if it brings management and shareholders' interests closer together, thus reducing the problem of the separation of ownership from control.

The above private placement effects have been tested using US and Japanese data. In the case of research in the Japanese market, while positive abnormal returns are observed, the institutional framework there is different, and thus, the reasoning behind the market reaction to private issues. For the Japanese studies, some of the US explanations for private placement effects are more pronounced, whereas others are not applicable. The ownership structure of Japanese firms has a distinct set up known as Keiretsu. This structure involves a number of firms that are grouped to-

gether by cross ownership of each other's shares, including a controlling bank which provides finance to the members. The Keiretsu members are also linked together, as their economic activities involve trading with each other. For a Keiretsu organisation, a new private issue generally involves further share purchases by other group members. As each firm is interdependent, there is a tendency for high levels of monitoring of each other's management. Thus share purchasing firms are likely to benefit from information obtained through this monitoring process (Kato and Schallheim, 1993), creating positive abnormal returns. In contrast to the US finding, the Keiretsu form of organisation does not generally result in a possibility of wealth inducing takeovers for Japanese equities (Kato and Schallheim, 1993). For the US market, takeovers increase the value of a firm's shares as the bidding firm has to overcompensate shareholders who are initially reluctant to sell their shares. However, under the Keiretsu form of organisational structure, the possibility of hostile takeovers is diminished as the shares are generally bought by fellow group members, and the benefits of takeovers to shareholders under private placements do not apply in Japan.

DATA DESCRIPTION

The sample period ran from January 1, 1990 to 31 December, 1995. Announcement information for firms quoted on the London Stock Exchange was obtained from a search in Extel, which looked for such characteristics as private issues and private placements. From this, over 300 pieces of data were obtained. A restricted sample of 78 private share issues was used for empirical testing. The final set of private placements excluded equity issues where:

- The announcement date and/or other information about the issuing process was not clearly identified;
- The issue price was not included, thus preventing calculation of issue discounts/premiums; and
- There was a simultaneous issue of other financing instruments, such as loan notes.

Key characteristics of the data are given in **Tables 1 and 2**. **Table 1** records the reasons for placements, the spread of placements over the sample period, their frequency for each firm and the amounts of funds raised. Usually, UK firms announce the share issue and the investment project (with costs and financing) details simultaneously. It is interesting to note that the most common reason offered by firms for private

placements was to raise finance for investment purposes. This ties in with Myers and Majluf's (1984) model which only considered placements used to raise finance to fund new projects. There was a relatively even spread of the timing of the issues, but a majority occurred in the second half of the period of analysis. This reflects a relative lack of confidence in equity markets during the early 1990s which coincided with a severe recession. It was generally the case that a firm issued only once during the period of analysis. There were only two firms involved in more than one private placement.

Table 1: Descriptive Statistics for 78 Private Placements**Panel A: Incidence of Reasons Offered for Placements**

Reasons	No. of Placements
Investment Funding	41
Working Capital	17
Reduce Debt	6
Mixture	8
None	6

Panel B: Year and Respective Placement Numbers

Year	No. of Placements
1990	10
1991	8
1992	14
1993	17
1994	17
1995	12

Panel C: Frequency of Placement by each Firm

Frequency	No. of Firms
1	73
2	1
3	1

Panel D: Proceeds from Private Placements

Year	Mean £m's	Median £m's	Minimum £m's	Maximum £m's
1990-1995	13.20	2.50	0.08	175.00
1990	8.72	1.39	0.22	72.22
1991	16.05	4.82	1.23	80.40
1992	10.72	3.09	0.08	80.00
1993	8.75	1.18	0.18	55.00
1994	17.30	3.35	0.16	175.00
1995	19.83	2.90	0.20	134.90

Average proceeds from private placements were around £13m. There was, however, significant variation, with a concentration on small issues, and relatively few large ones. Hence the distribution of the funds raised was skewed to the right, with the mean value being much greater than the median value. **Table 2** records the frequency of placements by industry classification. The sample represented firms from 26 SEC classifications, with the highest frequencies recorded for the Distributors and Media classifications.

Table 2: Frequency of Placement by Industry Classification

SEC ⁽ⁱ⁾ Classification	Frequency
Building + Construction	3
Building Material + Merchant	4
Distributors	7
Diversified Industrials	2
Engineering	5
Electronic and Electrical Equipment	4
Extractive	5
Food Manufacturers	2
Health Care	4
Insurance	2
Leisure and Hotels	5
Media	6
Others ⁽ⁱⁱ⁾	8
Printing, Paper + Packaging	3

SEC ⁽ⁱ⁾ Classification	Frequency
Property	5
Pharmaceuticals	2
Retailers – Food	2
Retailers – General	4
Support Services	5

Notes

⁽ⁱ⁾ SEC — Stock Exchange Code.

⁽ⁱⁱ⁾ Others includes 8 different industry classifications.

METHODOLOGY

Estimating abnormal returns

The most common event study methodology applies the market model to calculate abnormal returns. This is followed in the present study. In estimating abnormal returns the market model is expressed as:

$$R_{ij} = \alpha + \beta(R_{mj}) + e_{ij} \quad [1]$$

where e_{ij} is the residual for each private share issue on day j ;

R_{ij} is the return for the firm involved on each private share issue on day j ;

R_{mj} is the return on the FTSE All Share Index on day j ; and

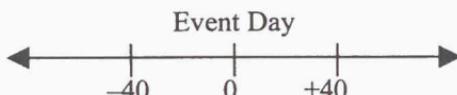
α and β are the parameters of the market model for each private issue.

An issue arising in event studies is the relative power of the incorporated methodology. Three approaches have been commonly used. These are the mean adjusted, market adjusted, and market models. Brown and Warner (1985) assess these models for performance under different characteristics of an event study. Their results accept the hypothesis that the three methods are of similar power in detecting abnormal returns. The only variation of this result is where there is event day clustering. In this case, the mean adjusted model is out-performed by the other two models in their ability to reject a null hypothesis of no abnormal performance when it is true. As event date clustering does not occur in the present study, the three models are similarly well specified. The choice of the market model over the other two approaches is based

on examining previous private placement studies on the effects of private placement announcements. Of the four American and Japanese studies on the announcement effect, they all used one approach only, with the market model being most common.

The market model parameters are estimated using a pre-event period of 120 days. An adjustment for thin trading is made by applying the Scholes-Williams (1977) technique. This overcomes the problem of infrequent trading which may lead to beta estimates that are biased downwards and inconsistent (Strong, 1992). The adjusted beta coefficient is obtained from regressing the return on a security against the market index as well as its lead and lag values. The test period used to examine for abnormal returns is broken up into three time phases. These include the day of the announcement, plus windows of 40 days before and after this. The window prior to the announcement day is examined for possible leakages of information which may have caused abnormal returns. The post announcement window reveals whether changes in firm value are permanent or transitory. The breakdown of the test period is shown in **Figure 1**.

Figure 1: Test Period



A share priced by the market model has an expected zero residual. Abnormal returns occur if non-zero residuals persistently exist for a specific period of time across a number of equities. The ordinary least squares estimates of α and β are used to calculate the abnormal returns, $AR_{i,t}$, as follows:

$$AR_{i,t} = (R_{i,t}) - [\alpha + \beta(R_{m,t})] \quad [2]$$

Equation [2] estimated for individual abnormal returns ($AR_{i,t}$) are averaged across firms for each event day in the test period, in order to produce the average residuals (AR_i). Cumulating the AR over a certain period yields the Cumulative Abnormal Return (CAR), where:

$$CAR_t = \frac{1}{T} \sum_{t=1}^T AR_t \quad [3]$$

with T = number of average residuals in the test period.

For both the abnormal and cumulative abnormal return measures a null hypothesis is tested that each day of the testing period displays values that are insignificantly different from zero. For instance, the following null hypothesis is tested for each daily AR value:

$$H_o : AR_t = 0$$

against the alternative:

$$H_a : AR_t \neq 0$$

The t-statistic employed by Brown and Warner (1985), and Corrado and Zivney (1992), is used and given as:

$$t = \frac{AR_t}{\sigma_{AR}} \quad [4]$$

where σ_{AR} is the standard deviation of the AR distribution for 120 days during the estimation period.

Discounts/Premiums

When a private placement announcement is made the resulting abnormal returns calculations include two distinct effects. Firstly, the market responds to the information as a signal about the intrinsic change in the net present value of the firm. Secondly, there is a pure price discount effect. This arises because private placements often include compensation to shareholders in the form of an issue price discount. The discount is automatically incorporated in the abnormal return, since private placings in the UK involve the simultaneous announcement and issue of shares.

In order to account for the above pricing effect, discount adjusted abnormal returns are calculated which isolate the information effect of the announcement. Thus the influence of price discounts are removed so that the information effect of the announcement is isolated. The technique applied is a variation of that suggested by Kato and Schallheim (1993), based on the original methodology of Bradley and Wakeman (1983). It is given as:

$$AR_{adj} = [1/(1 - \delta)]AR - [\delta/(1 - \delta)]Disc \quad [5]$$

where AR is the abnormal return on the announcement day, δ is the block size, and Disc is the price discount¹ associated with the placement.

Block size is a relative measure of the private placement as a proportion of outstanding shares. The estimates of premiums and discounts are examined across the period of analysis, and are obtained from equation [6].

$$\frac{\text{Market Price} - \text{Issue Price}}{\text{Market Price}} \quad [6]$$

Market prices are obtained from the day before the issue announcement closing reading. This equation generates positive values when a discount is offered, negative values when a premium is charged, and zero when shares are issued at par.

The methodology used here has generated two distinct reactions to private placements. These are the announcement effect, measured by the discount adjusted abnormal returns, and the issuing price effect, measured by the calculation of discounts/premiums. By combining discount adjusted abnormal returns over the announcement period and issuing price effects, one obtains a full description of the compensation package offered to investors for a private placement.

EMPIRICAL RESULTS

Abnormal results

Table 3 contains the abnormal returns (AR) and t-statistics for all 78 share issues during the test period. A preliminary analysis suggests that the proportion of positive abnormal returns is greater than negative ones. Using a non-parametric Wilcoxon signed rank test, it is found that a significant proportion of the sample's abnormal returns are positive, thereby rejecting the hypothesis that the market model residuals are described by a random distribution. The arguments for these positive private announcement effects have been outlined in the theoretical framework presented earlier. A possible argument for negative investor reactions to new placements comes under the heading of ownership concentration. Here the problem of separation of ownership from control can be extenuated if there is a decrease in the ownership holdings of management, or in the concentration amongst private shareholders. This problem reflects negatively on firm value, and consequently share price.

Table 3 also indicates that the hypothesis that private placements produce significantly positive abnormal returns, as they are announced, is accepted. This concurs with US and Japanese findings for similar studies on the New York and Tokyo Stock Exchanges. The announcement day abnormal returns are positive, almost one per cent, and statistically significant at the five per cent level. The abnormal returns are probably biased downwards, since it is common for firms to make vague statements in relation to share issues some time prior to the actual announcement date. While these statements do not usually detail the timetable of the issuing process, they tend to reduce the surprise of an issue, and in essence its effect on the reaction of the market. Statistically significant abnormal returns at the five per cent level do not occur frequently during the rest of the test period. In fact, no other days are statistically significant prior to the announcement, and there are only two days significant after the announcement.

Table 3: Abnormal Returns around Private Placement Announcements

Day	Abnormal Returns (%AR)	T Test
-20	0.10	0.30
-19	0.17	0.50
-18	0.13	0.40
-17	-0.41	-1.25
-16	0.50	1.50
-15	0.10	0.29
-14	-0.44	-1.31
-13	0.38	1.15
-12	-0.42	-1.27
-11	-0.14	-0.41
-10	-0.03	-0.09
-9	0.18	0.53
-8	-0.17	-0.50
-7	0.19	0.57
-6	-0.21	-0.65
-5	-0.29	-0.88
-4	-0.08	0.24
-3	-0.11	-0.32
-2	-0.10	-0.29
-1	-0.20	-0.61
0	0.89	2.68 [†]
1	0.00	0.00
2	-0.11	-0.32
3	-0.34	-1.02
4	-0.09	-0.27
5	0.04	0.12
6	-0.22	-0.67
7	-0.04	-0.14
8	0.06	0.19
9	-0.19	-0.56

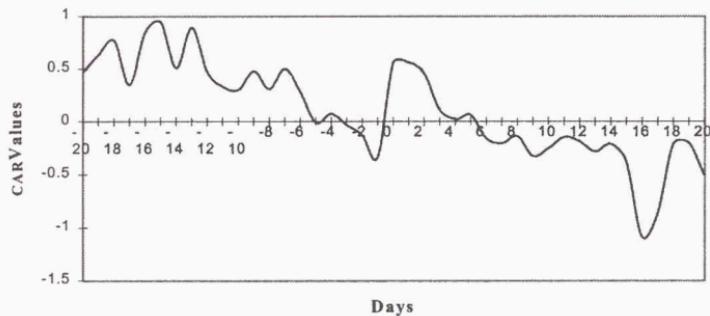
Day	Abnormal Returns (%AR)	T Test
10	0.07	0.22
11	0.10	0.31
12	-0.08	-0.12
13	-0.04	-0.28
14	0.07	0.21
15	-0.16	-0.50
16	-0.71	-2.12 [†]
17	0.22	0.65
18	0.65	1.96 [†]
19	0.01	0.03
20	-0.31	0.93
Proportion Positive ⁽ⁱ⁾		0.68 [†]

Notes

The symbol [†] indicates significant at the 5% level.

⁽ⁱ⁾ A non-parametric Wilcoxon signed ranks test statistic is used.

The cumulative abnormal return (CAR) values, involving the announcement day, and twenty days on either side of it, are shown in **Figure 2**. CAR values are generally positive, but decreasing, in the period before the announcement day. There is no clear pattern after the announcement day, with CAR values changing from positive to negative, and vice-versa, over a couple of days. The biggest change in CARs for the full period is positive, and occurs on the announcement day. This indicates that the stock market has responded positively to the new private placements.

Figure 2: CARs Around Private Placements

A detailed analysis of average CARs for different time frames around the test period is shown in **Table 4**. As one moves further away from the private placement announcements, there is a reduction in the estimated CARs. For instance, in the pre-announcement period, (-40, -20), the t-statistic is highly insignificant (0.06) in comparison to the two day period around the announcement (1.34). The day of the announcement is the only period in **Table 4** which records CARs which are significant at the five per cent level.

Table 4: Cumulative Abnormal Returns around Private Placement Announcements

Days	(-10, -1)	(0)	(0, 1)	(1, 20)	(-40, 6)	(-40, 40)
Mean % CARs	-0.07	0.89	0.44	-0.05	0.00	-0.02
T Values	-0.20	2.68 [†]	1.34	-0.16	0.01	-0.07

Note

The symbol [†] indicates significant at the 5% level.

It should be noted, from both **Figure 2** and **Table 4**, that while abnormal performance exists for the day of an announcement, the market responds rapidly to the new information, thereby eliminating abnormal returns very quickly. Within six days of the placement announcement, CARs are again negligible (see **Table 4**). Also there is no support of a

continuous positive reaction over the full window period as the CARs are insignificantly different from zero. Thus, the announcement of private placements does not permanently change firm value, but rather has an effect on the day of the announcement.

Premiums/Discounts

As it was generally the case that a private placement involved a simultaneous announcement and issue, the extent of discounts/premiums can be determined by comparing the issue and market price at the time of issue. **Table 5** details the values that private placements were issued at in relation to their market price. Discounts were normally offered to potential investors across the full period of analysis. In the sample study, there were only seven cases involving a premium being charged. The average discount was over four per cent, with only 1991 displaying negligible compensation to potential investors. Average discounts remained relatively constant, especially between 1992 and 1995. Individual discounts offered were quite large although normally subject to a limit. Unless there are exceptional circumstances, private placements in the UK are not permitted to involve price reductions of more than 10 per cent (London Stock Exchange Listing Rules, 1996, Section 4.8). No such restrictions apply in the US and Japanese markets, and this factor helps to explain why Hertzel and Smith (1993) and Kato and Schallheim (1993) found respective discounts of 20 per cent and 12 per cent.

Table 5: Percentage Discount Levels, Block Sizes and Adjusted Abnormal Returns

Year	Mean	Median	Minimum	Maximum
1990-1995	4.38	4.01	-20.00 ⁽ⁱ⁾	34.43
1990	7.86	4.88	2.05	34.43
1991	0.39	3.82	-20.00 ⁽ⁱ⁾	12.34
1992	5.65	3.95	1.23	22.22
1993	3.73	3.51	-3.38 ⁽ⁱ⁾	20.00
1994	4.53	4.11	-7.50 ⁽ⁱ⁾	29.17
1995	4.96	5.88	-17.65 ⁽ⁱ⁾	20.00
% Block 1990-1995	8.25	4.70	0.70	63.30
% Adjusted AR	0.82 ⁽ⁱⁱ⁾	0.85 ⁽ⁱⁱⁱ⁾	—	—

Notes

- (i) Shares issued at a premium.
- (ii) Based on mean block and discount values.
- (iii) Based on median block and discount values.

Another factor influencing the high level of discounts on offer in the US is the different types of shares that are placed privately. In Hertzel and Smith's (1993) study, the ordinary shares issued came under two different classifications, registered and unregistered. For unregistered shares, investors have strict resale restrictions imposed, such as being unable to sell the stock for a minimum period of two years. On the UK and Japanese stock markets, such restrictions do not apply. For this reason, holders of US stock were given relatively large compensation for the strict guidelines they had to follow.

Another reason for a discount being offered is the placement size. Hertzel and Smith (1993) found that for large placements the level of discounts was small, with the reverse for small placements. The present study confirms their findings. For large placements, in the UK, there tended to be a small discount offered. Whereas, small size placements were linked to relatively large discounts.

Table 5 also examines the central measures of block size for this UK sample of issues. This variable is required to determine the adjusted abnormal returns after removing the discount pricing effect as in equation [5]. The discount adjusted abnormal returns were positive on the announcement day and remain close to one per cent. The adjusted values were only slightly lower than the unadjusted values, and hence the pricing effect of offering a discount had little effect on the market model estimates of abnormal returns.

Finally, discounts and discount adjusted abnormal return performance are combined in **Table 6** to give a complete description of the gains made by shareholders from private equity placements. These are an accumulation of the discount adjusted abnormal returns and the price discounts for the full period of analysis. In addition, annual discounts are added to the corresponding adjusted abnormal returns to provide a description of investor compensation for yearly sub-periods. The average gain made by investors on the day of a private placement was over five per cent. Shareholders enjoyed gains on a consistent basis, with no

year involving negative compensation. The highest average compensation was paid in 1990 and the lowest in 1991.

Table 6: Compensation to Shareholders for Private Placements

Year	Mean (%)	Median (%)
1990-1995	5.20	4.86
1990	9.38	6.50
1991	2.49	6.06
1992	6.16	4.49
1993	4.18	3.96
1994	4.39	3.96
1995	7.50	8.53

CONCLUSIONS

This study has examined the compensation offered to investors during private placements. A two pronged approach was taken. Firstly, the information content of the issue announcement was calculated using a market model based on discount adjusted abnormal returns. Secondly, the role of issue price discounts/premiums was determined. These two factors were combined to reflect the overall compensation package offered to investors at the time of private placement announcements.

In the UK market, private placements are interpreted positively in a similar vein to previous research on the US and Japanese markets. The value of firms, measured by adjusted abnormal returns, increases by almost one per cent on the announcement day. Purchasing investors, on average, are also offered share discounts of over four per cent on the issue day. The overall effect indicates that investors benefit from private placements, by more than five per cent on average. The explanations given for positive abnormal returns during private share issue announcements are an adaptation of the information asymmetry and ownership concentration hypotheses, as applied to the unique negotiating structure of private placements. Public issues, in comparison, are associated with negative abnormal performance at the announcement period.

In a comparison of this paper's results with studies for US and Japanese markets, differences in the extent of the positive market reactions may be explained by the differing institutional frameworks which are associated with the respective markets. For instance, Japanese findings may be affected by the characteristics of the Keiretsu organisation. Also, for the US, the use of registered and unregistered ordinary shares in private placements, as well as a firm's ability to offer unlimited discounts, distinguish UK and US market reactions. An interesting area for further research would be to examine data which has a similar time frame for the US, Japanese and UK stock exchanges, in order to further explore the topic of private placement announcements.

ACKNOWLEDGEMENTS

This paper has benefited from the helpful comments of delegates at the Irish Accounting and Finance 10th Annual Conference. A special thanks is also due to the constructive points made by two referees, as well as Henri Servaes (University of North Carolina). All views expressed in the article are the sole responsibility of the author.

NOTES

¹ Private placements usually involve a discount rather than a premium being offered to investors, and equation [5] is based on this general finding.

REFERENCES

Asquith, P. and Mullins, D.W. (1986). 'Equity Issues and Stock Price Dilution', *Journal of Financial Economics*, Vol. 15, pp. 61-89.

Bradley, M. and Wakeman, L.M. (1983). 'The Wealth Effects of Targeted Share Repurchases', *Journal of Financial Economics*, Vol. 11, pp. 301-328.

Brown, S.J., and Warner, J.B. (1985). 'Using Daily Stock Returns: The Case of Event Studies', *Journal of Financial Economics*, Vol. 14, pp. 3-31.

Cooney, J.W., Kato, K. and Schallheim, J.S. (1996). 'Does the Role of Underwriter Explain a Positive Stock Price Reaction to the

Announcement of Seasoned Equity Issues in Japan?', *European Finance Association's 23rd Annual Meeting*, August.

Corrado, C.J. and Zivney, T.L. (1992). 'The Specification and Power in Event Study Hypothesis Tests Using Daily Stock Returns', *Journal of Financial and Quantitative Analysis*, Vol. 27, pp. 465-478.

Hertzel, M. and Smith, R.L. (1993). 'Market Discounts and Shareholder Gains for Placing Equity Privately', *Journal of Finance*, Vol. 48, pp. 459-485.

Jensen, M.C. and Meckling, W.H. (1976). 'Theory of the Firm: Managerial Behavior, Agency Costs and Capital Structure', *Journal of Financial Economics*, Vol. 3, pp. 305-360.

Kang, J. and Stulz, R.M. (1996). 'How Different is Japanese Corporate Finance? An Investigation of the Information Content of New Issues', *The Review of Financial Studies*, Vol. 9, pp. 109-139.

Kato, K. and Schallheim, J.S. (1993). 'Private Equity Financings in Japan and Corporate Grouping (Keiretsu)', *Pacific-Basin Finance Journal*, Vol. 1, pp. 287-307.

London Stock Exchange (1996). *Listing Rules*.

Masulis, R.W. and Korwar, A.N. (1986). 'Seasoned Equity Offerings — An Empirical Investigation', *Journal of Financial Economics*, Vol. 15, pp. 91-118.

Mikkelsen, W.H. and Partch, M.M. (1986). 'Valuation Effects of Security Offerings and the Issuance Process', *Journal of Financial Economics*, Vol. 15, pp. 31-60.

Myers, S. and Majluf, N. (1984). 'Corporate Investment and Financing Decisions When Firms Have Information that Investors do not Have', *Journal of Financial Economics*, Vol. 13, pp. 187-221.

Scholes, M. and Williams, J. (1977). 'Estimating Betas from Nonsynchronous Data', *Journal of Financial Economics*, Vol. 5, pp. 309-327.

Shleifer, A. and Vishny, R. (1986). 'Large Shareholders and Corporate Control', *Journal of Political Economy*, Vol. 95, pp. 461-488.

Smith, C.W. (1986). 'Investment Banking and the Capital Acquisition Process', *Journal of Financial Economics*, Vol. 15, pp. 3-29.

Strong, N. (1992). 'Modelling Abnormal Returns: A Review Article', *Journal of Business Finance and Accounting*, Vol. 19, pp. 533-553.

Wruck, K. H. (1989). 'Equity Ownership Concentration and Firm Value: Evidence from Private Equity Financing', *Journal of Financial Economics*, Vol. 23, pp. 3-28.