

Executive Share Option Backdating in the UK: Empirical Evidence

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Abstract

Share option schemes provide executives with the option of buying shares in their company at a price fixed on the day the options are granted. Despite the legitimacy of their ostensible purpose, share option grants have been proven to be vulnerable to manipulation. Evidence from the US suggests that managers might, either, retrospectively backdate option grants or use inside information to decrease share prices at the option grant date in order to maximise the value of their share options. Using a sample of 1,926 option grants, the current study follows Lie (2005) and Heron and Lie (2007) to identify whether such manipulation occurs in the UK. There is only limited evidence for four industry groups suggesting manipulation may occur in the UK.

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Introduction

In many countries, share options form an important part of the remuneration packages of company executives. Share options give managers the right to purchase their company's shares on a specified future date at a fixed price which is usually the market price at the time the option is granted. The greater the rise in the company's share price by the time the option can be exercised, the more the holder will gain.

The rationale behind share option grants is to provide a strong incentive for management to engage in behaviour which boosts the company's share price, thus aligning the interests of managers with those of shareholders. However, share option compensation potentially has the reverse effect in that it may encourage opportunistic behaviour aimed at maximising the value of share options by artificially decreasing the exercise price at which share options are granted. As such behaviour would result in unfair wealth transfers from shareholders to managers (in the form of inflated executive compensation), it constitutes an important corporate governance and regulatory issue.

In recent years, empirical studies such as that of Lie (2005) have highlighted the issue of share option manipulation in the USA. In the same period, the US Securities and Exchange Commission (SEC) launched a number of investigations into individual cases of potential share option manipulation. The controversy surrounding executive share option manipulation in the USA has led to the current paper which questions whether similar manipulation exists in respect of executive share options in the UK.

Whilst we find some evidence of share price patterns which suggest managers may be engaged in share option manipulation the extent appears to be considerably less than in the US and tends to be industry related.

The remainder of the paper comprises five sections. Section Two summarises the prior literature on managerial manipulation concerning option grant dates and is followed by a discussion of the data and methodology in Section Three. Section four presents the results. The paper concludes with Section Five.

Previous Literature

US findings show that share prices around the grants of share options to top executives follow an unusual pattern; option grants are frequently dated just before a sharp rise in the share price, and at or near the bottom of a steep dip. Yermack (1997), Aboody and Kaznik (2000), Chauvin and Shenoy (2001), Lie (2005), and Heron and Lie (2007), who identify this pattern, attribute it to managerial opportunistic behaviour, either in the form of backdating or timing.

Share price lows can either reflect market-wide movements in share price, due to unfavourable events, or company specific drops in share price due to negative information being released. As suggested by Lie (2005), managers can use market lows to their advantage by exploiting the time lag between the option grant date and the disclosure of the grant to backdate the award to a day when the company's share price is lower than on the actual grant date (backdating). Lie argues that unless managers have superior knowledge to the market they will be unable to identify

market lows, hence if option grant dates occur at a market low more often than would be randomly expected backdating is likely cause².

As suggested by Yermack (1997) managers may use inside information to their advantage to suppress the share price of their own firm on the grant date. Management may (1) push forward bad news ('bullet dodging') and delay the release of good news or (2) choose an award date after releasing bad news and/or before releasing good news ('spring loading'). These strategies, if successful, would result in company specific lows in share prices. It is possible that a company exhibiting company specific lows at grant dates could also be backdating even if the option grant date does not coincide with a market low but it is not possible to distinguish between backdating and timing strategies. The three types of managerial opportunistic behaviour are illustrated in Figure 1.

There is little UK-based research on opportunistic managerial behaviour in response to share option compensation. Responses from UK executives regarding the US share option scandal of 2006 suggest that managerial abuse of share option compensation is not an issue in the UK due to (1) more stringent UK corporate governance procedures and disclosure requirements (Baker 2006; Lloyd 2007), (2) stock options not forming such a large part of managerial compensation in the UK compared to the US (Baker 2006; Lloyd 2007), and (3) the exercise of the majority of share options being subject to the meeting of certain performance targets, such as growth in earnings per share so as to prevent rewarding management for increases in share price related to general share price movements (Lloyd 2007; Madsen 2007; Worth 2007).

² Lakonishok and Lee (2001), Seyhun (1988 and 1992), Narayanan and Seyhun (2005) present evidences tied to the real ability of some executives to forecast market returns.

According to Conyon and Peck (1998) 95 percent of large UK listed firms follow ‘good practice’ and have remuneration committees mostly made up of outside directors only. US findings, however, suggest that stringent corporate governance and reporting regulations do not necessarily prevent the managerial abuse of share option grants. Lie (2005) reports anecdotal evidence from the US that despite the tightening up of corporate governance regulations by the Sarbanes-Oxley Act, the remuneration committee often ratify a decision made ‘internally’ to award options with a past grant date. Heron and Lie (2006) show, in a US context, that even a two day reporting delay may provide an opportunity for backdating.

Despite comparatively limited tax advantages for share option compensation in the UK, it is widely used and constitutes a considerable component of executive remuneration in the UK (Conyon and Murphy 2002). Evidence suggests that UK firms do not fully comply with share option compensation guidelines and disclosure requirements. Stathopoulos et al. (2004) find that a substantial proportion of companies do not follow ‘good practice’ by either issuing share options to executives with the exercise price of the options set above or below the share price on the grant date or failing to disclose whether they use performance criteria in relation to share option compensation. This suggests that UK managers both have the motivation and the opportunity to engage in opportunistic behaviour regarding share option awards.

Methodology and Data

To identify managerial opportunism in the form of timing and backdating the paper follows Lie (2005) and expected returns are computed using the Fama-French (1993) three factor model. The expected returns are then compared to actual returns to identify abnormal returns.

If managers have used timing strategies to artificially lower their share price at the grant date a pattern of abnormal returns significantly less than zero before the grant date and abnormal returns which are significantly greater than zero following the grant date are expected. Evidence of backdating will be suggested by market lows on the grant date. If both the company and the market experiences low returns, prior to the grant date, it is unlikely that significantly negative abnormal returns will be observed, hence, following Lie (2005), low expected returns around the grant date will be used to test for backdating.

Share option data is extracted from the *Director Deals* database which contains 3,979 grant dates for 1,007 companies. Financial companies and any observations meeting the following criteria are excluded:

1. Details of the option grant were unavailable on *Lexis-Nexis*;
2. share price data were unavailable from 170 days prior to the grant date to 30 days preceding the grant date;
3. Firm size and market-to-book data were unavailable on *Thomson Analytics*.

The resulting sample comprises 1,926 grant dates for 769 companies. The sample period is from the 25th January 2001 to the 1st December 2006. Share and market prices, firm size, and firm market-to-book value data are obtained from *Thomson Analytics*. Table 1 shows the distribution of option grants by year and month. The number of option grants has dramatically increased over the period of analysis but it is possible that the database used has increased its coverage over the period. Companies are normally required to grant options within 42 days following results announcements. Almost 50% of option grants occur between March and June which probably

reflects most companies, in the UK, having an accounting year end on the 31st March or 31st December.

Results

Table 2 does not provide any evidence to support managerial opportunism in the UK as neither the predicted returns nor the abnormal returns are significantly different from zero prior to or preceding the grant date. Figure 2 illustrates the cumulative abnormal returns for the whole sample which are generally above zero for the period -30 to +30 days around the grant date. This is a very different pattern than that reported by Heron and Lie (2007) where a very sharp decline in cumulative abnormal returns is indicated prior to the grant date followed by a very sharp rise. Although there is no evidence to support managerial opportunism when the sample is examined as a whole it might still occur in particular industries. The next part of the paper divides the sample into nine industry groups the distribution of which is shown in Table 3.

The cumulative actual, predicted and abnormal returns are shown for each industry group in Figure 3 for the full 30 days prior to and 30 days following the grant date and in Figure 4 for 35 days prior to and 5 days following the grant date³. The following features appear in the industry graphs:

- The Oil and Gas Industry group appears to have a dip in predicted returns which coincides with the grant date and has a magnitude of -1.83%. Such a pattern in expected returns suggests that backdating might be a possibility.
- The Health Care Industry group has a slight dip in expected returns around the grant date with a magnitude of -0.89% but it is not as marked as for the Oil and Gas Industry group.

³ The tables for these graphs are available from the authors.

- The Utilities Industry Group has a dip in abnormal returns around the grant date but with a magnitude of only -0.26%. Such a pattern, if it is significant suggests managers may be engaged in timing strategies to reduce their share pricing around the grant date.
- The Technology Industry Group displays a similar pattern to the Utilities Industry Group but it is slightly more marked with a magnitude of 0.77%.

Conclusions

Previous US studies provide evidence of managerial opportunism around share option grant dates which is attributed to both backdating and timing of either grants or news releases. This paper examines whether managerial opportunism in either the form of timing or back-dating is prevalent in the UK during the period 2001 to 2006. We find some limited evidence of both strategies in the industry groups.

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Figure 1:

Typology of managerial abuse of share option grants

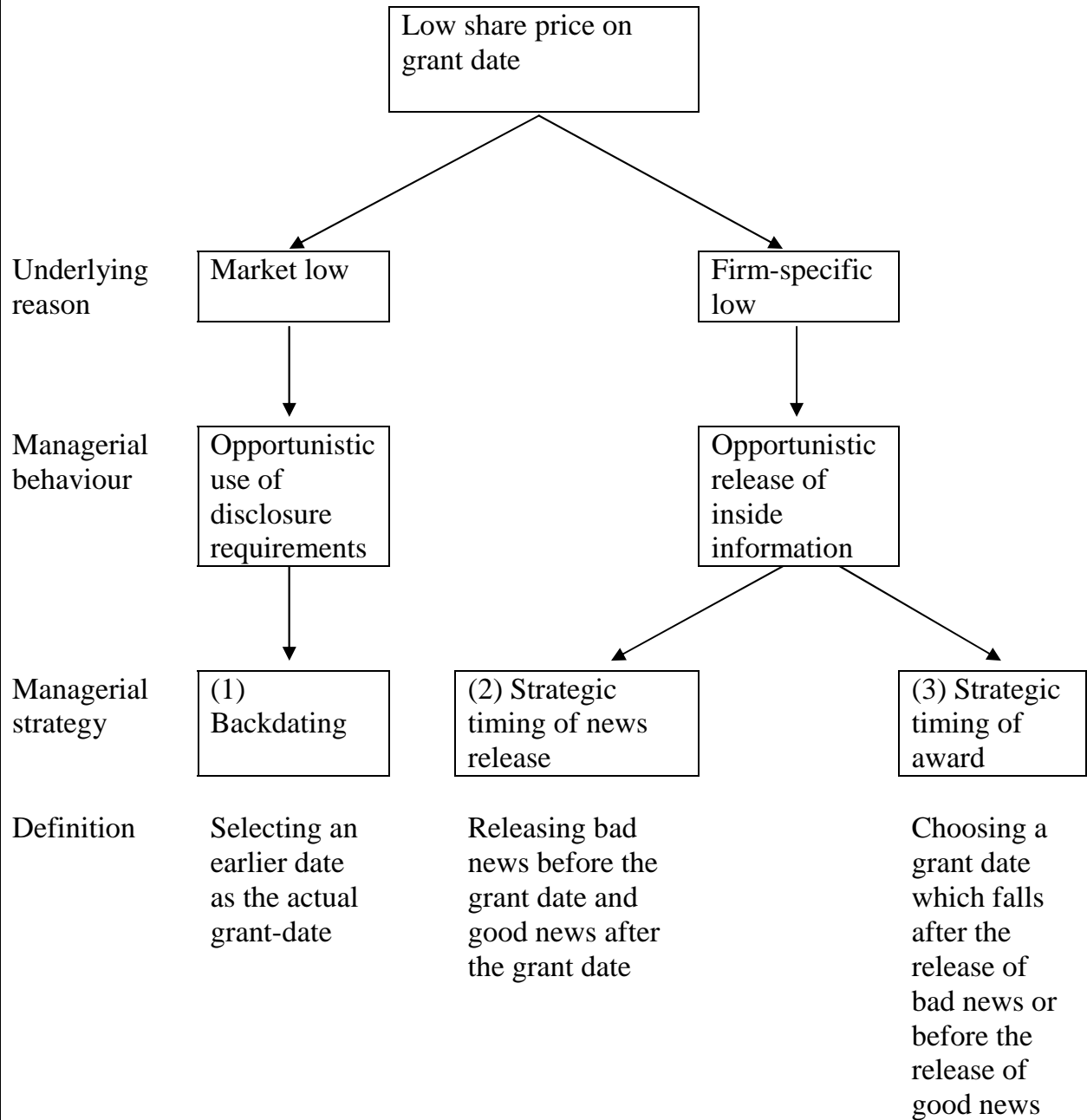


Table 1

Distribution of option grants according to year and month

Year	Number	Percentage	Month	Number	Percentage
2001	68	3.53	January	86	4.47
2002	84	4.36	February	95	4.93
2003	72	3.74	March	267	13.86
2004	269	13.97	April	247	12.82
2005	828	42.99	May	177	9.19
2006	605	31.41	June	217	11.27
			July	198	10.28
			August	96	4.98
			September	116	6.02
			October	140	7.27
			November	128	6.65
			December	159	8.26

Table 2

Expected and abnormal returns 30 days prior to the grant date to 30 days preceding the grant date. Expected returns are computed using the Fama-French 3 factor model and -170 to -70 days prior to the grant date as the estimation period

	Expected Returns	t-statistic	Abnormal Returns	t-statistic
-30	-0.0008	-0.1047	0.0000	-0.0008
-29	0.0006	0.0787	0.0009	0.0379
-28	-0.0004	-0.0483	0.0001	0.0044
-27	0.0006	0.0840	0.0005	0.0196
-26	0.0025	0.3295	0.0003	0.0123
-25	-0.0005	-0.0627	0.0005	0.0230
-24	0.0000	-0.0062	0.0008	0.0352
-23	-0.0005	-0.0665	-0.0001	-0.0027
-22	-0.0007	-0.0874	-0.0001	-0.0051
-21	0.0017	0.2238	0.0012	0.0526
-20	0.0012	0.1615	-0.0004	-0.0186
-19	0.0007	0.0875	0.0006	0.0246
-18	0.0016	0.2085	-0.0001	-0.0022
-17	0.0010	0.1324	-0.0011	-0.0467
-16	0.0006	0.0760	0.0006	0.0253
-15	0.0015	0.1987	-0.0009	-0.0380
-14	0.0004	0.0514	-0.0007	-0.0304
-13	0.0007	0.0885	0.0005	0.0199
-12	-0.0002	-0.0307	-0.0005	-0.0232
-11	0.0008	0.1065	-0.0016	-0.0694
-10	0.0004	0.0573	0.0014	0.0621
-9	0.0011	0.1531	0.0007	0.0303
-8	-0.0009	-0.1233	-0.0007	-0.0282
-7	0.0020	0.2631	0.0012	0.0512
-6	-0.0010	-0.1317	-0.0002	-0.0092
-5	-0.0005	-0.0699	0.0016	0.0671
-4	0.0002	0.0332	0.0003	0.0135
-3	-0.0003	-0.0391	0.0009	0.0377
-2	0.0004	0.0581	0.0006	0.0277
-1	0.0010	0.1289	0.0016	0.0683
0	-0.0001	-0.0168	0.0008	0.0357

	Expected Returns	t-statistics	Abnormal Returns	t-statistics
1	0.0014	0.1906	0.0007	0.0291
2	0.0000	-0.0052	0.0002	0.0075
3	-0.0004	-0.0518	0.0003	0.0131
4	0.0020	0.2686	0.0001	0.0032
5	0.0025	0.3324	0.0004	0.0156
6	0.0001	0.0170	-0.0008	-0.0346
7	0.0002	0.0233	0.0001	0.0041
8	0.0008	0.1048	-0.0018	-0.0795
9	0.0001	0.0067	0.0015	0.0645
10	0.0013	0.1698	-0.0003	-0.0116
11	-0.0003	-0.0399	0.0016	0.0672
12	-0.0001	-0.0081	0.0009	0.0382
13	0.0019	0.2576	0.0000	-0.0011
14	0.0009	0.1164	-0.0019	-0.0814
15	-0.0016	-0.2165	0.0004	0.0170
16	-0.0009	-0.1259	-0.0013	-0.0556
17	0.0007	0.0961	-0.0007	-0.0296
18	0.0003	0.0443	-0.0004	-0.0151
19	0.0013	0.1680	-0.0013	-0.0579
20	0.0018	0.2441	-0.0008	-0.0346
21	0.0011	0.1522	-0.0002	-0.0093
22	0.0006	0.0853	-0.0007	-0.0285
23	0.0003	0.0386	-0.0001	-0.0053
24	0.0020	0.2639	0.0012	0.0509
25	0.0000	0.0050	0.0013	0.0559
26	0.0010	0.1326	0.0002	0.0106
27	0.0020	0.2671	0.0002	0.0097
28	0.0018	0.2420	-0.0015	-0.0661
29	0.0020	0.2606	0.0004	0.0176
30	0.0003	0.0453	-0.0004	-0.0157

Figure 2

Cumulative Actual, Predicted and Abnormal returns around the grant date for the whole sample

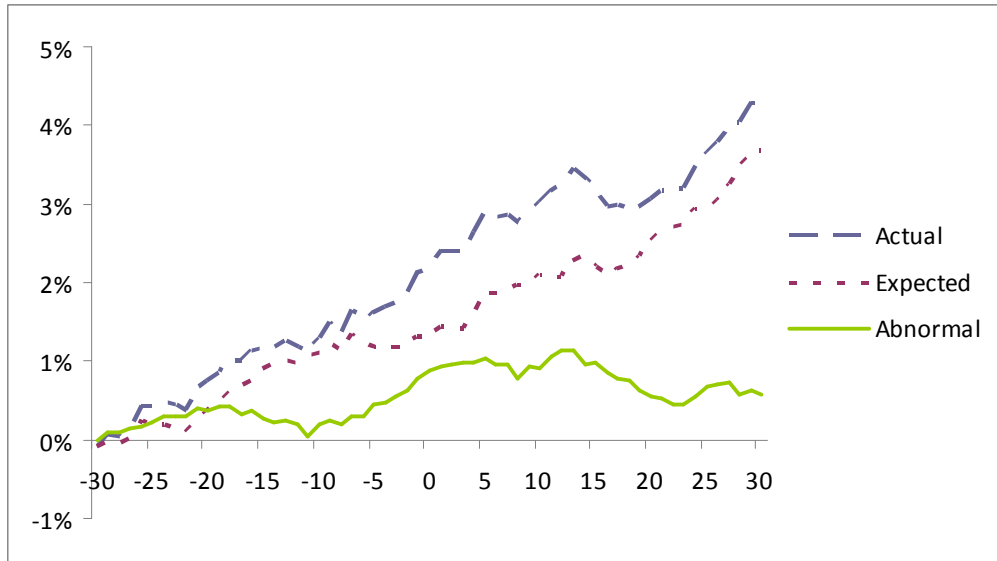
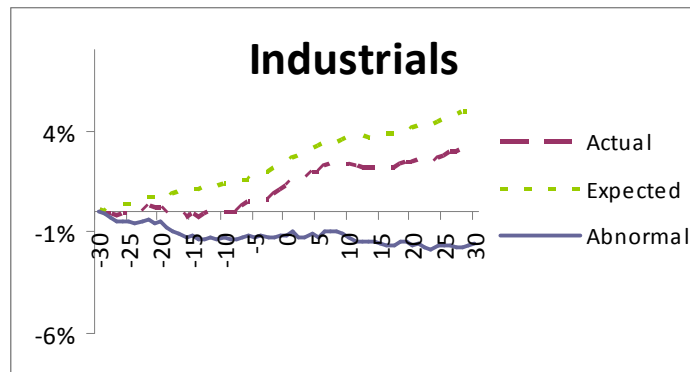
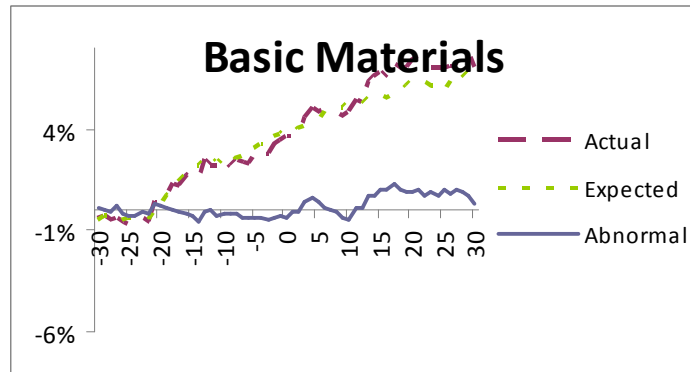
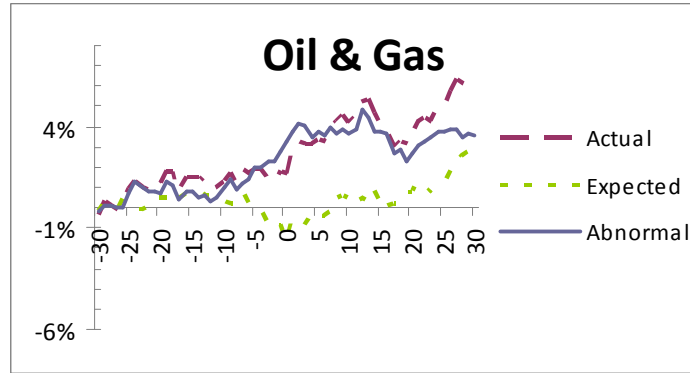


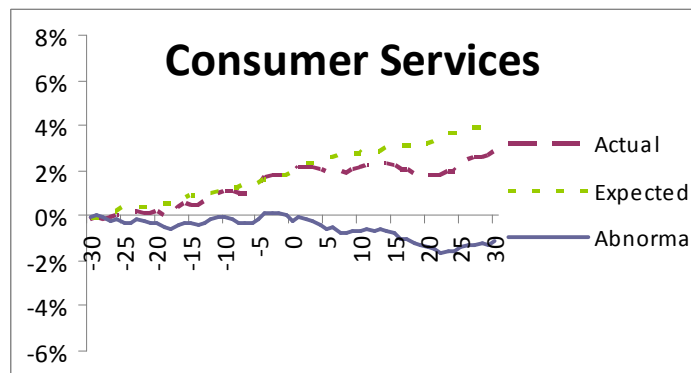
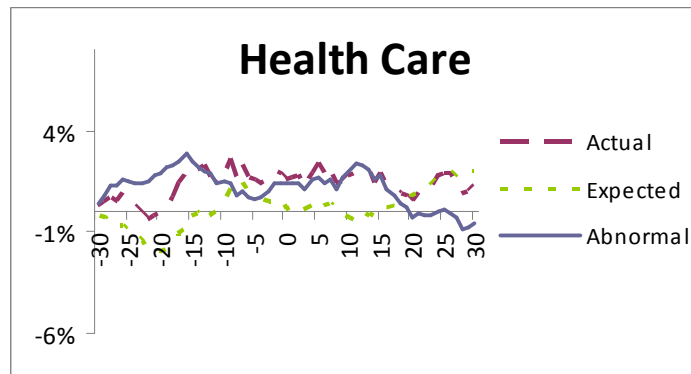
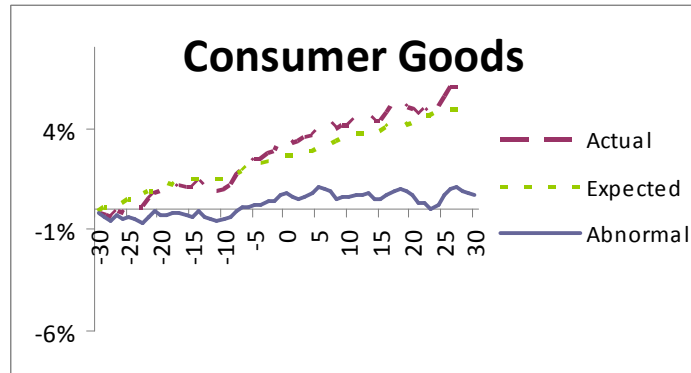
Table 3**Sample by industry group**

Industry	Number	Percentage
Oil & Gas	85	4.41
Basic Materials	135	7.01
Industrials	538	27.93
Consumer Goods	210	10.90
Health Care	147	7.63
Consumer Services	502	26.06
Telecommunications	50	2.60
Utilities	48	2.49
Technology	211	10.96

Figure 3

Charts showing the cumulative actual, predicted and abnormal returns by industry group for 30 days prior to and 30 days following the grant date.





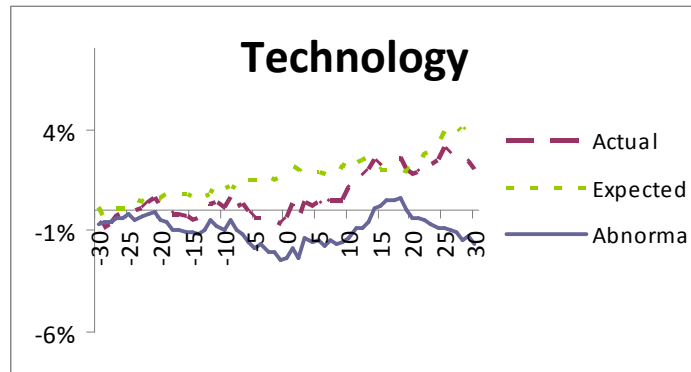
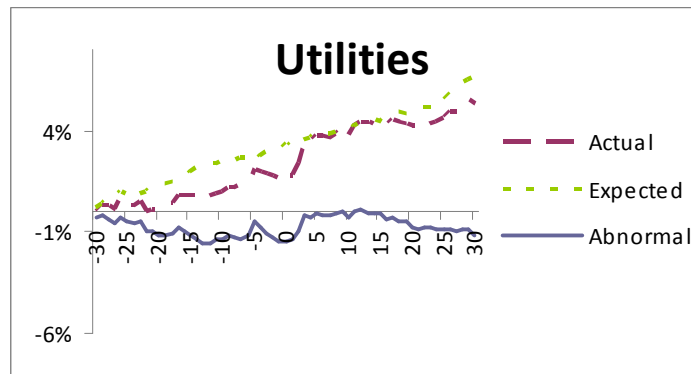
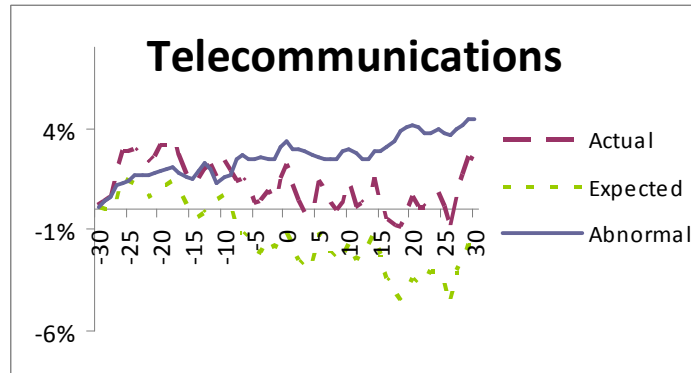


Figure 4

Charts showing the cumulative actual, predicted and abnormal returns by industry group for 5 days prior to and 5 days following the grant date.

