“Share price reaction to earnings announcement on the London Stock Exchange”

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I hereby declare that the work submitted is mine and that where I have made use of another’s work, I have attributed the source(s) according to the Regulations set in the Student’s Handbook.

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Abstract

This dissertation was written as part of the MSc in Banking and Finance at the International Hellenic University.

This paper examines the daily abnormal stock returns when companies announce their earnings by using an event study methodology. Earnings announcements release useful information for the stock markets. It was used 130 companies from FTSE 250 Index of London Stock Exchange. Abnormal and cumulative abnormal returns are estimated for particular event windows around companies’ earnings announcements. Abnormal returns were calculated by a Market Model. It was found that significant abnormal price reaction around earnings announcements contain negative information value. The negative abnormal performance indicates that FTSE 250 does not react efficiently for the period 2007-2017. Significant financial events have occurred under this investigation period. Financial crisis and Brexit were the key parts of markets volatility and earnings uncertainty worldwide. Moreover, the aforementioned global events were the main reason for choosing FTSE 250 Index as it offers a reliable representation of British economy. Overall, the results showed no evidence of positive price reaction around announcement date and period, respectively. There is clear evidence that negative abnormal returns are occurred for stocks in London Stock Exchange after the earnings announcements.

Keywords: earnings announcements, abnormal returns, event study methodology, market reaction

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Chapter 1: Introduction

The aim of this dissertation is to interpret and analyze whether stock prices of London Stock Exchange can be affected by corporate profits announcements and if shareholders and future investors of companies can benefit from these announcements. When corporate profits of a company are announced, a significant information is revealed, which can be used to interpret and appraise the market reaction regarding this information. Financial disclosures convey information that can be investigated by an event study, which is a very useful method in how market participants react to new information (Mackinlay, 1997). The examination of an event study started from Dolley (1933), who investigated the price effects of stock splits. Using a ten-year sample of 95 splits it was found that the price increased for 57 splits and decreased for 26 splits. Over the next decades, additional studies have been developed. However, in the late 1960s, the methodology that is used today was established by Ray Ball and Philip Brown (1968) and Eugene Fama et al. (1969).

An event study can examine the impact of stock price by company’s earnings announcement for a specific period. This methodology is useful because it examines any abnormal return that may occur in company’s stock prices after the announcement of its profits. Event studies have been applied to mergers and acquisitions, earnings announcements, issues of new debt or equity (Mackinlay, 1997). Furthermore, they have been applied for law and economic perspective for the measurement of the impact by a change in the regulatory environment on the value of a company (Schwert, 1981).

Various studies mostly in the United States and worldwide are reported with regards to the stock market’s reaction on announcements dates. Academics and financial practitioners for several decades have always argued about information uncertainty regarding companies’ future expectations. Companies’ profits announcements indicate their performance and they have significant impact on the wealth of their shareholders and future investors. The purpose of a corporate profit announcement is to convey information to the market (Kaniel, 2012). Information environment contains all sources of information relevant to assessing the company value (e.g. government, industry, analyst reports, company-specific news in the financial press, published financial statements) and is proxied by the company’s market capitalization (Aleksanyan, 2009). Earnings announcements can be reported by several accounting disclosures such as income statements, cash flow statements, balance sheets and notes to the financial reports. They encompass useful information not only for company’s sales but also information on the investments, the company’s leverage ratio and data on the profit margin of each company.
Around the middle of the 20th century, stock market reaction after corporate profits announcements has been investigated in the academic literature several times at different levels. Investors were interested about the information content of earnings decades ago. The fathers of this research area were Ball and Brown (1968) and Fama et al. (1969) whom observed a delay in stock market’s response to informational value generating from earnings announcement date. Earnings announcements are used to evaluate the level of market efficiency. Although previous studies show the effectiveness of the market, abnormal returns tend to controvert it. Ball and Brown (1968) in their study examined how market reacts to company’s earnings announcements. It was used the Australian market from 1946 to 1966. Unexpected abnormal returns on stocks were observed after earnings disclosures (Beaver, 1968 and Ball and Brown, 1968). The results showed that earnings announcements have a significant effect on stock returns and investors’ behavior. Price movements demonstrate changes of market’s future prospects caused by a news release (Beaver, 1968). Fama et al. (1969) examined how quickly stocks react to the announcements of stock splits using a sample of monthly stock returns from 1926 to 1960. They proposed the event study methodology for measuring how actions and event affect the securities prices. In this study, daily returns, not monthly, are the main focus.

Both researches were the pioneering works of post announcement drift in stock returns, which it was confirmed by various authors some decades later. The drift contains information value of earnings, dividends, stock splits or stock issues announcements (Foster et al., 1984 and Bernard and Thomas, 1989). Several authors, whose studied the abnormal returns using US data, have revealed a post earnings announcement drift (PEAD). Extreme positive (negative) unexpected earnings announced by stocks with cumulative abnormal returns drift upwards (downwards) for an extended period after the announcement. Foster et al. (1984) and Bernard and Thomas (1989,1990) examined the PEAD phenomenon and they were established it as market anomaly. These studies used event study methodology for stock splits and earnings announcements. The result derived from these studies was the efficiency of the market in this publicly available information. This study has been focused on the information value of earnings announcements.

Announcement date is defined as the day when a firm announces its profits or losses. In addition, it is the first date when profits or losses are disclosed to the public. Corporate profit announcements are published on company’s website as well as on databases, which real-time financial market data of each listed company are monitored and analyzed. Anyone has access to company’s reports as soon as they are published.

Many researchers investigated whether stock prices are affected by internal disclosure of corporate profits announcement and interpreted it based on the law rules of their announcement. Kabir and Vermaelen (1996) in their study examined the results of Amsterdam’s Stock Exchange new regulatory law, which forbids company executives buying and selling stock shares of the company they work for. The sample was conducted based on evidence of the reduced volume of transactions after the new regulatory law. The results have shown that before the new legal framework,
executives and directors who trading shares in their company held inside information which could exploit.

Other authors negotiations for those who have internal information a few days before and after announcements of business profits focused on shares trading of those who were internally informed some days before and after companies’ earnings announcements. Particularly, Garfinkel (1997) investigated the effectiveness of this law in the US capital market. It was found that this new law contributed to many shares trading, from those who were internally informed, immediately after the earnings announcements in order to avoid the suspicion of the transactions they were making. Investors react positive or negatively on companies’ stocks. As a result, they increase or decrease the value of each company.

1.1 London Stock Exchange

Founded in 1773, Stock Exchange of Great Britain and Ireland has formed after the merge of regional exchanges in 1973, which later renamed as London Stock Exchange. In 2007, the Exchange merged with the Milan Stock Exchange to form the London Stock Exchange Group. London Stock Exchange is the 6th largest exchange out of the 79 stock exchanges. Companies listed on the London Stock Exchange are approximately 2,500 and are primarily United Kingdom based. US stock markets are top of the list continuing with Japan, China and Netherlands. The market capitalization of the Group is $4.59 trillion and trades shares in Euro.

In United Kingdom, corporate earnings announcements are released semi-annually or annually. Interim financial reports contain significant information about company’s progress within the yearly reporting cycle and help investors predict the outcome of the year for their interest (Opong, 1995). Furthermore, London Stock Exchange requires all listed companies prepare financial report even if it is no legal requirement for them. It was first recommended in 1964 and became a rule in order to all securities listing on the London stock exchange in 1973 (Lunt, 1982).

Company executives are not allowed to be involved on their companies’ shares trading two months before the corporate profit announcement date. Under UK legal and regulatory framework, companies’ directors and executives have the response to inform their company for any transaction they make to their account until the fifth business day. Thus, companies are obligated to inform the Stock Exchange for this transaction at the end of it working day without any delay. Most UK companies are directly controlled by their committee. Committees are directly controlled trading transactions by company executives. If the board allows it, executives can be involved on company’s shares trading. By contrast with the UK legal and regulatory framework, in United States the legislation differs on corporate profit announcements. It is not
defined a specific public period, which refers whether company executives should be traded company share prices.

Corporate profits announcement is official public statement that occurs profits or losses of a company for a specific time period. Usually, these announcements are reported quarterly, semi-annually or annually. Most British listed companies announce their earnings semi-annually. This study aims to examine if these announcements have positive or negative information and impact on the stock price of the company. Consequently, it was examined whether earnings announcements have impacted the value of UK listed firms.

In 2008-2009, a global financial crisis (GFC) is revealed and many financial markets lost substantial value regarding previous years. Banks and sovereign states in Europe added further risk after the sovereign debt crisis (SDC) in 2010. FTSE 100 lost 10% of trading value. According to the European Central Bank, the global economy has witnessed a substantive deepening of trade and financial integration and associated increase in the relevance of spillovers to the domestic economy from shocks in other economies. A recent event of UK, The Brexit, sent waves of shocks across the global financial system. The FTSE 250 Index declined 7%. The liberalization of capital markets helped the increase of interrelation among world economies, which have occurred the drop of other indices such as Dow Jones, NASDAQ, S&P 500 and Germany Dax Index. Several Banks across Europe and USA dropped in value, too (Quaye et al. 2016). The pound sterling decreased to its lowest level in 30 years. These events in this period caused market volatility and earnings uncertainty. Moreover, financial economic research highly increased using event studies to measure the impact of various economic events, such as earnings announcements. Consequently, this research is conducted from the event period 1st of January 2007 to 29th of December 2017.

Figure 1: The UK capital market’s movements during 2007-2017, illustrated by the London Stock Exchange FTSE All-Share Index

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In order to identify the financial effects of earnings announcement in the UK stock market the current study aims to:

- Investigates the market reaction of UK listed firms to the earnings announcement,
- Examine if there are any significant abnormal returns before earnings announcement date,
- Examines the stock price reaction during the event windows period (-10, +10), (-5, +5), (-3, +3), (-1, +1) and (-1, 0), which 0 is the date of the earnings announcement,
- Examines whether there are any changes in the stock prices before or after the announcement date and
- Explains if these changes are positive for the wealth of investors.

It was employed the classical event study methodology using a final sample of 130 listed firms of Financial Time Stock Exchange 250 (FTSE250). FTSE 250 contains medium sized companies and it offers more reliable illustration of UK market than FTSE 100. The total sample consisted of 130 companies and financial data were downloaded during 2007-2017. It was calculated the abnormal returns using the Market Model and cumulated average abnormal returns are used for the event windows. The event study methodology is extensively analyzed in the following chapters. The results of the study propose that there is strong evidence of high information asymmetry. Significant negative abnormal returns were observed both for the short-term and long-term event windows. Surprisingly, the single most striking observation to emerge from the data comparison was the positive abnormal return (0.01 %) at +10 day on the (-10, 10) event window. Stock returns significantly affected by the earnings announcements.

The mentioned objectives were developed in order to accomplish the current research paper, which is structured as follows. In the second section it is provided some brief theoretical background related to the worldwide literature. Section 3 and 4 describes the data used in the study and explains the empirical methodology adopted. Section 5 reports and comments the results of the study using the Market Model. Section 6 offers some concluding discussion and observations of the study results.
Chapter 2: Literature review

Australia, UK and USA, etc. are worldwide developed countries on which the amounts of researches of the subject are extensive. Some preliminary work in the field of event studies was carried out several years ago and the most notably were by Dolley (1933), Beaver (1968), Ball and Brown (1968), Fama et al. (1969), Foster (1984), Brown and Warner (1985), Bernard and Thomas (1989), Mackinlay (1997), Binder (1998) and Kothari (2001).

Mlonzi et al. (2011) and Afergo (2013) conducted studies in Africa, Odabasi (1998) and Lim (2009) in the Middle East. Mallikarjunappa (2004), Manickam et al. (2009), Iqbal (2012), Bharath and Shankar (2012), Mallikarjunappa and Dsouza (2014) and Prakash (2013) conducted studies on Indian Stock Market. Extensive literature is conducted in the United States such as Aharony and Swary (1980), Kaniel (2012) and Asem and Baulkaran (2018). Nonetheless, lesser extent of studies has investigated in United Kingdom and Europe respectively. The event study applied for this research was added to the previous literature by conducting a study on the FTSE 250 on which infrequent investigations have been done to date. This study seeks to extend the existing event study literature on London Stock Exchange.

2.1 Empirical Evidence from US

Aharony and Swary (1980) examined stock returns effect on quarterly earnings and dividend announcements of 149 industrial firms listed on New York Stock Exchange. According to authors, earnings per share are interesting object to investigate, because they provide inside information about firm’s future prospects. Such as dividends, earnings carry useful information and stock prices are affected after a public announcement. It was found that dividend or earnings increase (decrease) announcements reveal positive (negative) abnormal returns around dividend or earnings announcement days. Therefore, they both declared that the results support the semi-strong form of EMH maintaining the efficiency of the market.

Kane et al (1984) in their study investigated the interaction relation between quarterly earnings and dividends announcements. Consistent with the earlier Aharony and Swary’s (1980) and other studies, the results suggest that abnormal dividends and earnings announcements together enhance abnormal stock returns’ appearance. There were statistically significant in relation to the interaction effects with each other. In addition, it was found that the total anomalies of abnormal returns have not been affected by the order of the announcements.
Penman (1984) in his study examined abnormal returns after corporate earnings are announced in New York Stock Exchange. It was observed that investment strategies were prevailed when stock trading was taking place from the day after the announcement regardless of positive or negative surprises creating abnormal returns. The timing of earnings announcements disclosed anomalies. The author noticed that companies tend to publish their earnings announcements on an expected and reliable basis. Remarkableness is the fact that companies tend to publish their earnings announcements earlier than the expected period when they carry good news and later when they have bad news. Furthermore, it was found that abnormal returns were depended by the size of the firm.

Subsequent US research by Kothari (2001) analytically investigated how capital markets and financial statements related to each other. The aim of this research was to help researchers and investors with corporate financial disclosure decisions, capital market investments decisions and accounting standard setting. The author asserts that stock prices underreact to unexpectedly high or low earnings announcements. In a comprehensive review of the literature, positive (negative) earnings shocks forecast positive (negative) abnormal returns. Kothari (2001) believes that abnormal returns can be measured by long-horizon event study (one to five years). Data problems and misleading risk estimations can be following by a long-horizon event study. Short window event study can measure abnormal returns up until one year from the event date. Significant evidence showed the efficiency of capital markets by short window event studies. Capital markets in the short window event study quickly absorb news into prices.

Frazzini and Lamont (2006) in their study investigated stocks traded in the Center for Research in Security Prices (CRSP) over the large period of 1972-2004. They presented that stock prices tend to increase around earnings announcement dates by generating positive abnormal returns. Specifically, stocks with high trading volume earn higher abnormal returns. It was shown that stocks with highest abnormal returns were buying by small individual investors after the announcement dates. The results suggested that some stocks increase their prices around announcement dates by pressuring investors buy them.

Furthermore, in similarity with previous studies, Brandta et al (2008) documented abnormal returns around earnings announcements on the US market. The data have obtained by COMPUSTAT Industrial Quarterly and CRSP databases for all firms consisted earnings, earnings announcement dates and daily stock returns over the period 1987-2004. Strategies are contributing to purchase large amount of earnings by investors. The authors discovered a new aspect to the post earnings announcement drift anomaly. The market underreacts to other information besides the earnings information. It was found that almost half of the stocks with positive (negative) earnings surprises have generated negative (positive) abnormal returns for investors around earnings announcements. Moreover, it was detected that abnormal returns
from Earnings Announcement Return strategy are larger than the Standardized Unexpected Earnings strategy.

Lee and Son (2009) in their study examined if the timing of earnings announcement and management associate with each other. Earnings announcement timing is defined as the number of days between the fiscal year of a company and its earnings announcement date, known as “reporting lead time” (Leventis and Weetman 2004). It was used a data set 10,191 firms listed on the US capital market from 2001 to 2004. High regulated firms such as financial institutions and utility firms were excluded from the final sample. In striking contrast to prior studies, earnings reporting delay was divided into audit report lag and management discretionary lag. Consecutively, the results showed that it is spent more time on auditing by auditors rather than managers. Further examination in this research would help regulators and investors have a clearer and more precise illustration of firm’s behavior.

Recent research by Kaniel et al (2012) examines the daily buying and selling volume by individual investors around earnings announcements during 2000-2003. Consistent with the earlier US evidence of Kaniel et al (2008), the results suggest that there is a positive relation between individual investors and stock returns. Most notably, large positive (negative) abnormal returns have been predicted by individual investor buying (selling) after corporate earnings are announced. Almost half of the returns are conveyed by the internal information. Abnormal returns have been produced by individuals’ liquidity provision role, too.

More recent study reported by Asem and Baulkaran (2018) highlights the sensitivity of price reaction to earnings news on the past and current market states over the period 1982-2010. It was investigated the effects of market continuation and transition on the price reaction. The conclusions of the review showed that abnormal returns differ when the market continues in the same state and when in another state. In advancing markets, the reaction to positive earnings news is stronger when the market continues declining than when it transitions to an advancing state. In declining markets, the reaction to negative earnings news is weaker when the market continues advancing than when it transitions to a declining state. The authors conclude that investors’ reaction is significantly determined by the market dynamics.

### 2.2 Empirical Evidence from Europe

Brookfield and Morris (1992) in their study examined 25 large UK listed companies during 1983-1984. They were chosen randomly in the 101-300 range of The Times 1000, according to the size of turnover. The main reason of this randomly choosing was to avoid the very largest companies, because they are well diversified, and earnings announcements would have a clear impact on their share prices. As noted by Brookfield and Morris (1992), earnings announcements of firms listed on The International Stock Exchange of London contain a significant residual information. Respectively, share prices quickly react on earnings announcements and the outcome of this is the obstruction of the highly abnormal returns.
Pope and Inyangete (1992) in their study used a sample of 1,061 listed firms from London Stock Exchange as well as 268 firms from Unlisted Securities Market (USM) during 1985-1987. The sample was divided into two groups based on the firm’s market capitalization. Firms with market capitalization smaller than €108m were characterized as small and market capitalization larger than €108m to large firms. There was a significantly higher variability of stock returns in announcement weeks than in the preannouncement event. Small firms and USM firms reveal more intense variability increase than large firms. Moreover, differential information content comprises explanatory strength which it cannot be captured only from the size of a firm. The findings of this study indicate that the overall explanatory strength was very low.

Kallunki (1996) investigated stock market’s reaction of Finnish listed companies using alternative risk adjusting methods based on accounting information. The results showed that when the risk estimation method is applied, the drift in stock returns around the earnings announcements is weaker in the long cumulation windows. It is observed that the market is delayed reacting to earnings. This delay in the stock market’s reaction is greater to the negative unexpected earnings than to unexpected earnings. Similarly, Booth et al (1997) provided new information for post earnings announcements drift using the Finnish market. The authors examined unexpected returns during the first days of announcements. Particularly, companies reporting negative earnings surprises had lower unexpected returns than those reporting positive earnings surprises. Consist to previous study, Finland’s drift reacts stronger to the negative than positive earnings surprises. Many markets as Finland react stronger to the negative than positive news.

Odabasi (1998) in his study examined if earnings reports have information value, which changes the market price equilibrium of the Istanbul Stock Exchange. Regrettably, as Odabasi outlined, the research has limitations. The period was short, and the first two years of market data were not subservient due to young market. Nevertheless, abnormal returns were different than zero concluding that earnings announcements provide informational value.

Regarding to the UK stock market, Opong (1995) investigated the information content of interim financial reports and the precise time that the information content in these reports has the most paramount impact. It was used a sample of randomly 100 out of 734 commercial and industrial firms listed on the London Stock Exchange over the period 1983-1987. Strong evidence of the information content of interim financial reports was found. Particularly, interim financial reports provide significant information of investment value on the day they are published. Consequently, it is understandable that price and investor activity are affected by interim reports in the week of their release.

Lonie et al (1996) investigated the earnings and dividends announcements by 620 UK listed companies over one year. Consistent with the earlier US study of Aharony and Swary (1980), Lonie et al (1996) argue that earnings announcements contain important information to managers about the firm’s future prospects when they are published. Companies generated bad announcements had largest negative share price reaction.
Alegria et al (2009) in their study investigated the dispersion of the abnormal returns when firms announce their earnings in the UK stock market from 1984 to 2004. It was found a dispersed abnormal return of share returns on the event date. Furthermore, they found that the normal return non-event dates are three times lower than the abnormal return dispersion on the event date. The results showed that the market reacts efficiency around the event date.

Liu et al (2003) in their study examined the post earnings announcement drift (PEAD) on UK stock market over the period 1988-1998. They found strong evidence that the market is inefficient and there are significant PEAD of UK firms. Moreover, they found evidence supporting previous studies on the USA showing that investors fail to understand the full implications of current earnings for future earnings. Additionally, the drift following earnings announcements shows an unreasonably behavior around next earnings announcement, regardless of firm size.

UK firms listed on London Stock Exchange were employed by the study of Tucker et al. (2013) aiming to test the behavior of the UK capital market. Tucker et al (2013) emphasizes that abnormal returns arise from announcements. They used a sample of 100 UK listed firms between 1992 and 2002 and split them into three size groups. It was randomly chosen 33 firms from the large size group, 33 from the medium size group, respectively, and 34 from the small size group. There was evidence of abnormal returns for more than 8,000 news announcements and they had categorized into 30 different types of announcements. The results revealed that investors benefit from the information provided by corporate events. Specifically, cumulative abnormal returns appeared over a 27-day event window after corporate news announcements, including earnings announcements.

Recent evidence from UK capital market was offered by the study of Odendaal (2014). The author used a sample of 44 listed over the period 2010-2012, which was characterized by information uncertainty. It was examined how market participants in an event study have been affected by the information uncertainty of earnings and the volatility of the market. Certain sectors were statistically significant and abnormal returns were present, particularly consumer goods and consumer services sectors. Nevertheless, the results derived that there were not abnormal returns for the overall sample test. Hence, the author concluded that the study is efficient in the semi-strong form of EMH.

### 2.3 Empirical Evidence from Asia

Su (2003) examined, in a sample of 183 earnings announcements during 1997-1998, the reduction to information content improves investor confidence and the informational efficiency of emerging stock markets. It was used the event study methodology for the Chinese stock market. It was found that domestic A-share investors could not correctly forecasted the changes in earnings and failed to adjust the information for them. Usually, Government officials and managers are the traders in A-shares markets. The results showed abnormal returns when announcing earnings.
for A-share investors. However, the earning changes were predicted better by international B-share investors. The author explains that A-investors react as individuals with short term investment horizon. Conversely, B-investors are institutional investors who understand how to trade in a more precise way the financial information and observed no abnormal announcement day effects compared to A-shares investors.

Mallikarjunappa (2004), Iqbal and Mallikarjunappa (2007), Mallikarjunappa, Iqbal (2012) and Dsouza (2014) reported abnormal returns exposure around the quarterly earnings announcement. It was examined whether the semi-strong form of Efficient Market Hypothesis (EMH) applied to the Indian stock market. The results in all these studies are consistent and showed that the Indian stock market was not efficient in the semi-strong form. They assert that CAARs overcome during the event window and the market does not react immediately to quarterly earnings announcements. Stock prices based on quarterly earnings announcements could generate abnormal profits. According to this market and the specific examined period, investors can earn abnormal profits and benefit from the earnings announcements. Additionally, investors are capable to forecast information content of earnings (Sehgal and Bijoy, 2015).

Manickam et al (2009) in their study concluded that Indian stock market was efficient in the semi-strong form. Quarterly earnings announcement was not supported by important information to the investors during the study period. For the purpose of this study, the Z-statistic model developed by Dodd and Warner (1983) was employed. It uses the standard deviation of abnormal returns.

Alzahrani and Skerratt (2009) explored the Saudi’s capital market efficiency using a sample of 89 traded firms at the Saudi capital market between 2001 and 2007. A serious limitation in markets like Saudi capital market is that there are few or no financial analysts and regulators. For this purpose, the authors examined if the absence of analysts can impact market’s behavior. There was strong evidence that the market underreacts to positive news, especially for the first five days after earnings announcement. Moreover, Saudi capital market overreact to negative news in the first five days. As reported by Alzahrani and Skeratt (2009), the underreaction to positive news and overreaction to negative news are prevented due to the absence of analysts’ forecasts and to the individually dominated market.

Truong (2011) provide a Chinese perspective and examined the earnings surprises after earnings announced and how profitable stock trading is. It was found that abnormal returns exist and investors following strategies against a possible fall on stock prices or benefit from any positive abnormal returns in China.

Bharath and Shankar (2012) in a study involving a sample of 34 companies examined the semi-strong form of market efficiency of Indian stock market. The results showed that price quickly adjusted to the new information during the period examined by the study. In contrast with Mallikarjunappa (2004, 2007, 2014), Sehgal and Bijoy (2015),
and other studies, the market was efficient in the semi-strong form and there were no abnormal returns for investors.

A recent study conducted by Syed and Bajwa (2018) evinced that, Saudi Arabian capital market does not support the semi-strong form of EMH. Significant abnormal returns were found in a sample of 115 listed firms. Furthermore, it was found that bad news lead to market reacts stronger than to good news on announcement date. When negative earnings are occurred a strong post earnings announcement drift is observed due to stock prices’ underreaction to earnings announcements. Particularly, the response for bad news events have been delayed more than for good news events by investors. The study was limited, and authors suggest on furthermore investigation of the subject.

2.4 Empirical Evidence from Africa and Australia

As noted by Lim (2009), there are evidence proving that Middle East and African Stock Exchange follow the weak-form of the efficient market Hypothesis. The author examined the existence of nonlinear serial dependence for all firms listed in these capital markets. The countries comprised for the examination of the study were Egypt, Israel, Jordan, Morocco and South Africa stock markets during the period of 1995-2001. Despite of nonlinearity tests were applied, stock returns still contained nonlinearities interpreting the weak-form of EMH.

Mlonzi et al (2011) investigated the efficiency of the small stock exchange of South Africa (ALtX). They used CAPM model for a sample of 34 listed companies during the study period from 1th January 2009 to 31 December 2009 to measure the abnormal performance. They found that there are significant abnormal returns. When earnings announcements are negative, it is occurred negative abnormal returns. When earnings announcements are positive, it is occurred significant positive abnormal returns. In other words, the market was efficient according to the weak form of market efficiency. When bad financial results occurred, the market reacted negatively to earnings announcements. In a larger sample with larger event period the results would be performed different. In this case, the small capitalized stocks performed poorly during 2009 and that is the reason why the index performed negatively. Investors can get many significant gains from abnormal returns, because this market acts as effective weak form to earnings announcement.

A recent study conducted by Afego (2013) suggests that, the Nigerian Stock Market does not react efficient to the earnings information. A small sample consisted of 16 firms from 2005 to 2008 indicates that abnormal returns exist around earnings announcements. The cumulative abnormal returns that was found twenty days before the earnings release to the public interpret that portion of market’s reaction may have been affected by the executives’ internal information content. Additionally, the changes of Nigerian stock prices nominate that trading should not takes place around earnings announcement dates because negative abnormal returns may likely exist.
Chan et al (2015) investigated the information content of earnings announcements compared to the size of firms listed on Australian Stock Exchange (ASX). It was examined the earnings and returns reaction over short event windows after annual earnings announcements. They split the sample into four firm size categories (large, medium, small and microcap). US stock market is much larger than Australian stock market by plenty of companies of much larger size. Chan et al (2005) were the first researchers who investigated these issues on the ASX. They provide significantly evidence of positively reaction to earnings by large sized firms than medium and small sized firms. Furthermore, the authors argue that this could be due the fact that larger firms may release additional information after annual earnings announcement. In contrast with the earlier US evidence, the results suggest that firm size either does not affect the earnings announcement (three-day window) or is significantly affecting the larger firms (twenty-one-day window).
Chapter 3: Data

The present study is based on FTSE 250 Index and examines the stock prices response to earnings announcements. FTSE 250, which is mainly composed of medium-sized companies, is chosen because it offers a reliable representation of the British economy. Daily adjusted closing prices data were obtained for all firms whose shares were quoted on London Stock Exchange over the period 1 January 2007 to 31 December 2017. Moreover, daily adjusted closing prices data for FTSE All Share market index were downloaded, which it was used to estimate the abnormal returns in Market Model. Both closing prices and earnings announcement were extracted from Bloomberg Database. After searching Bloomberg Database for available data on share prices and earnings announcement for each of the events, the total number of companies relegated from the FTSE250 was 130, respectively. Companies were excluded from the analyzed sample due to missing data points within the period either before or after the announcement and during the event window. Finally, the market index used to estimate the abnormal returns was the FTSE All Share Index, also obtained from Bloomberg Database.

The final sample was composed of 130 companies, which it obtained, respectively, 2,919 final announcements. Additionally, according to the limitations set, every semester we have more than 100 announcements in total for all 130 companies and each company have two or more than two announcements during the period 2007-2017. Figure 2 summarizes the number of earnings announcements for all firms from 2007 to 2017:

Figure 2: Distribution of earnings announcement events of the sample between 2007-2017
Chapter 4: Methodology

According to Binder (1998), event studies are useful because they test if the market reacts efficiently to the new information and explains them in the classical work of Fama et al (1969). Therefore, event studies help to examine what impact the efficiency of the market has on the wealth of a firm. They are used in the fields of finance and economics, from earnings announcements, stock splits, dividend announcements or merger and acquisition studies to the impact of interest rate change on value of a firm. In this research the new information is the earnings announcement. Event study methodology have been applied to numerous researches in the past. Brown and Warner (1985), Mackinlay (1997), Dasilas and Leventis (2011), Mlonzi et al (2011), Mallikarjunappa and Dsouza (2014) and others examined the impact of the new information on stock prices by the event study methodology.

As noted by Mackinlay (1997), the information that is conveyed by financial disclosures can be examined by a very useful method the event study method. As mentioned above, it is a useful method to investigate how market participants react to the information disclosed by companies. Usually this information are the earnings announcements because it shows the efficiency of the market and the information value of a specific type of information disclosure as in this case are the earning announcements.

Mackinlay (1997) discusses that there are available several approaches to calculate normal returns. Statistical models following and depending only from statistical assumptions for the behavior of asset returns. These models are the constant mean return model and the market model, which are simple with good results compared to more sophisticated models. Economics models following and depending from economic arguments such as investors’ behavior. Economic models are depended on statistical assumptions and are calculated more accurate measures of the normal returns using economic restrictions. These models are Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Model (APM). Event studies were used by CAPM since 1970s. However, CAPM stopped applying due to the deviations whose made invalid the restrictions of the model. The results may be sensitive to the specific CAPM restrictions. Market model produced from the CAPM can avoid the sensitivity. Nevertheless, the market model produced from the CAPM is applied in this study.

As Mallikarjunappa and Dsouza (2014) reported, the main methods to examine the abnormal performance are by using mean adjusted model, market adjusted model and market model. This study used the market model. MacKinlay (1997) asserts that in order to estimate the event’s effect abnormal returns must be calculated. There are two common statistical models for abnormal returns. In constant mean return model there is a constant return parameter and a disturbance term with expected value of
zero compared to market model where the normal return is measuring by the return of the security and its market return. According to the author, the return of a given security in the constant mean return model is constant through time. On the other hand, there is a steady linear relation between the security return and the market return in the market model. These models are independent of economic arguments and are interested with the security and investor’s behavior concerning its returns. The benefit for using Market Model is that it is improved over the constant mean return model. Market model eliminates the portion of the return that is connected to the variance in the market’s return. As a result, abnormal return acquires less variance and event effects can be detected easier. Market model depends upon the $R^2$ of the market regression. The variance of the abnormal return is reduced if the $R^2$ is high. The greater the $R^2$ the higher the gain.

This thesis adopted event study methodology. The information content of the disclosures can ideally examine by an event study. Market model requires the event date, event window and estimation window to be identified. The event date is defined as the date that earnings announcement distributed in public.

An event window involves the amount of time that possible abnormal returns may occur. Abnormal returns may occur some days before or after the event, in this case before or after the earnings announcement. In this study, the event windows of earnings announcement that influence the stock prices of firms include ten, five, three and one pre-event trading days, the event day (day 0) and ten, five and three post-event trading days (i.e., $t = -10, ..., 0, ..., +10$). By the same token, one pre-event trading day and the event day (0) event window of earnings announcement is computed. Consequently, 21-day, 11-day, 7-day, 3-day and 2-day event windows are employed by this study.

The estimation window is defined as the period when historical stock prices and stock returns are used to estimate the expected returns. The estimation period of an event study contains some days before the event, which they are not close before and after the event day, on the grounds that at that time stock prices are not affected by this fact. Certainly, it should not be used a period that is far from the event because expected returns may reflect other past events and may constitute bad impartial estimates of expected returns for the examination period. Market model parameters could be estimated over the preannounced estimation window using daily data. The estimation window is estimated 110 daily returns prior to event window (-120, -11). Figure 3 provides the time line of an event study.

Figure 3: Time line for an event study
Market model is employed for the estimation of abnormal returns. It can be extended to multifactor models. Security returns can be explained by adding other factors by the Market Model. However, the explanatory power over the plain market model have little increased by these models. According to Market model, the difference between the actual returns of a company at event day and the stock’s normal return that would be expected in absence of the event generated by the selected market index stand for abnormal returns. In other words, abnormal returns equation is the residual’s regression which captures the deviations of the return on company i on event day t from its normal relationship to the market. The aim of the event study is to identify the security’s abnormal returns around the event date. The equation of abnormal return on company i on event day t is computed as:

\[ AR_{i,t} = e_{i,t} = R_{i,t} - E(R_{i,t}) \]  

Where:
- \( AR_{i,t} \) represents the abnormal return of security i at event day t,
- \( R_{i,t} \) represents the actual return of security i at event day t and
- \( E(R_{i,t}) \) represents the normal expected return of security i at event day t

In finance literature, logarithmic returns are more accurate related to long time periods and they are mostly preferred than individual returns. Investor’s investment, who holds it over a long period time, generates the dollar value of returns using log returns. As a result, the actual ex post return of share i on event day t is calculated as follows:

\[ R_{i,t} = \ln(P_{i,t}) - \ln(P_{i,t-1}) \]  

Where:
- \( P_{i,t} \) refers to the closing price of stock i on day t
- \( P_{i,t-1} \) refers to the closing price of stock i on day t-1

The market model is a statistical single-factor model (Mackinlay 1997), which relates the return of any given security to the return of the market portfolio assuming a stable linear relationship. The expected return of company i is given by the market model as follows:

\[ E(R_{i,t}) = \alpha_i + \beta_i \times (R_{m,t}) + e_{i,t} \]  
\[ E(e_{i,t}) = 0 \quad \text{and} \quad \text{VAR}(e_{i,t}) = \sigma e^2 \]
Where:

\[ \alpha_i \] and \[ \beta_i \] denote the intercept and slope coefficient estimators respectively,
\[ R_{m,t} \] denotes the daily return on FTSE ALL SHARE index at event day \( t \) and
\[ e_{i,t} \] denotes the error term of the stock \( i \) on event day \( t \).

Historical prices and returns of the estimation period helped estimate the \( \alpha_i \) and \( \beta_i \) parameters econometrically by an Ordinary Least Square (OLS) regression. Consequently, the normal or expected return is given by:

\[
E(R_{i,t}) = \hat{\alpha}_i + \hat{\beta}_i \times (R_{m,t})
\]  

(5)

Next step is to calculate the average abnormal returns, which is the average deviation of actual returns of security \( i \) from the expected returns, of the sample of companies for each day of event period. It is used to analyze the information content of bonus issue announcement. The average abnormal returns (AARs) of security \( i \) at event date \( t \) is given by:

\[
AAR_t = \frac{1}{N} \times \sum^{N}_{i=1} AR_{i,t}
\]  

(6)

Where:

\( N \) is the total number of securities
\( i \) is the number of securities in the study
\( t \) is the days surrounding the event-day

Bharath and Shankar (2012) assert that the cumulative average abnormal returns (CAARs) are used to analyze the adjustment of prices to new information. They are calculated using the daily average abnormal returns (AARs) during the event window \((-10, +10)\) as follows:

\[
CAAR_t = \sum^{10}_{t=-10} AAR_{i,t}
\]  

(7)
Where:
\[ t = -10, \ldots, 0, \ldots, +10 \]

### 4.1 Testing Hypothesis

AARs and CAARs are useful for statistical analysis and for the examination whether there is a significant impact (whether positive or negative) of the event on the stock price of a security. A t-test hypothesis is applied using the AARs and CAARs during the event windows to identify whether they significantly differ from zero at 1%, 5% and 10% levels of significance. It is expected that CAARs values are close to zero in an efficient market (Brown and Warner 1980, 1985, Fuller and Farrell, Jr. 1987, Mallikarjunappa 2004 and Iqbal 2007). The null hypothesis of the study assumes that cumulative abnormal returns are equal to zero, which means that there is no significant impact of the earning announcement on the stock price of a security. In other words, there is no significant difference for CAARs, before and after the earnings announcement. The t-statistic for AARs and CAARs as recommended by Brown and Warner (1985) is given by the following equation:

The t-test statistic for AARs:

\[
H_0: t = \frac{\text{AAR}_k}{\sigma(\text{AAR}_k)} = 0, \\
H_1: t = \frac{\text{AAR}_k}{\sigma(\text{AAR}_k)} \neq 0
\]

Where:
- \( \text{AAR}_k \) is the estimated cumulative abnormal return on the event window \( k \)
- \( \sigma(\text{AAR}_k) \) is the estimated standard deviation of cumulative abnormal returns on the event windows \( k = (t_1, t_2) \)

The t-test statistic for CAARs:

\[
H_0: t = \frac{\text{CAAR}_k}{\sigma(\text{CAAR}_k) \sqrt{N}} = 0, \\
H_1: t = \frac{\text{CAAR}_k}{\sigma(\text{CAAR}_k) \sqrt{N}} \neq 0
\]

Where:
- \( \text{CAAR}_k \) is the estimated cumulative average abnormal return on the event window \( k \)
- \( \sigma(\text{CAAR}_k) \) is the estimated standard deviation of cumulative average abnormal returns on the event windows \( k = (t_1, t_2) \)
- \( N \) is the days included in the event window \( k \)
Consistent with the extant literature on this subject, abnormal returns indicate all the effects of a corporate event and the results of this research can explore the effects of the event window.
The main purpose of this study is to examine whether the earnings announcements have significant impact on stock prices. Stock price reactions of FTSE 250 companies’ earnings announcements are investigated for the period 1 January 2007 - 31 December 2017.

This section presents the empirical results of the research divided by the event windows according to the respective methodology. Tables 1, 2, 3, 4 and 5 report the findings associated with the announcement day for each event window. The event windows show the price reaction for the intervals (-10, +10), (-5, +5), (-3, +3), (-1, +1) and (-1, 0) around event day 0. Price reaction is tested relative to the announcement of the corporate earnings. Daily abnormal returns and cumulative abnormal returns of firms listed on London Stock Exchange are estimated applying the market model. The respected values of AARs and CAARs along with their significance at 1%, 5% and 10% levels are analysed for the above sample.

In particular, during the period precede the earnings announcements negative abnormal performance is observed. During the event period AARs were negative for 20 days out of 21 days. Moreover, it can be observed that the abnormal return 10 days after to the announcement day is the only positive (0.01%) and statistically insignificant at all levels abnormal return. AARs were statistically significant at 1%, 5% and 10% level. Regarding the aggregate abnormal activity, cumulative abnormal returns were negative for the whole 21 days during the event window. It is seen that there were not positive returns, except from day +10, during both the pre-announcement period and the post-announcement period. Moreover, the CAARs results were not significant at any significance level (1%, 5% or 10%). Overall, none of these results were statistically significant, which reveals that investors faced losses due to the event. It is noted an average cumulative loss of 1.21% for the entire event period.

Table 1: Average daily abnormal returns and cumulative abnormal returns for the sample of earnings announcements across the event window (-10, 10).

<table>
<thead>
<tr>
<th>DAYS</th>
<th>AARs %</th>
<th>T-Statistic</th>
<th>CAARs %</th>
<th>T-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>-10</td>
<td>-0.07%***</td>
<td>-5.22</td>
<td>-0.07%</td>
<td>-0.01</td>
</tr>
<tr>
<td>-9</td>
<td>-0.07%***</td>
<td>-5.12</td>
<td>-0.13%</td>
<td>-0.02</td>
</tr>
<tr>
<td>-8</td>
<td>-0.07%***</td>
<td>-5.05</td>
<td>-0.19%</td>
<td>-0.03</td>
</tr>
<tr>
<td>-7</td>
<td>-0.07%***</td>
<td>-5.04</td>
<td>-0.26%</td>
<td>-0.04</td>
</tr>
<tr>
<td>-6</td>
<td>-0.07%***</td>
<td>-5.03</td>
<td>-0.32%</td>
<td>-0.05</td>
</tr>
<tr>
<td>-5</td>
<td>-0.07%***</td>
<td>-4.96</td>
<td>-0.38%</td>
<td>-0.06</td>
</tr>
</tbody>
</table>
Table 2 also presents the abnormal results obtained by computing the AARs and CAARs for the entire 11-day event window. Interestingly, negative abnormal performance is observed again. Pre-announcement period of AARs were statistically significant at 1% level. Moreover, on pre-announcement period, event date, +1, +2 and +3 date the results were statistically significant at the 5% and 10% levels respectively. The results of only days +4 and +5 were not statistically significant at 5% level. It should be noted that an average cumulative loss of 0.52% is showed during the entire event period.

Table 2: Average daily abnormal returns and cumulative abnormal returns for the sample of earnings announcements across the event window (-5, 5).

<table>
<thead>
<tr>
<th>DAYS</th>
<th>AARs</th>
<th>T-Statistic</th>
<th>CAARs %</th>
<th>T-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>-5</td>
<td>-0.06%***</td>
<td>-3.05</td>
<td>-0.06%</td>
<td>-0.01</td>
</tr>
<tr>
<td>-4</td>
<td>-0.06%***</td>
<td>-2.97</td>
<td>-0.12%</td>
<td>-0.02</td>
</tr>
<tr>
<td>-3</td>
<td>-0.06%***</td>
<td>-2.91</td>
<td>-0.17%</td>
<td>-0.04</td>
</tr>
<tr>
<td>-2</td>
<td>-0.06%***</td>
<td>-2.86</td>
<td>-0.23%</td>
<td>-0.05</td>
</tr>
<tr>
<td>-1</td>
<td>-0.05%***</td>
<td>-2.69</td>
<td>-0.29%</td>
<td>-0.06</td>
</tr>
<tr>
<td>0</td>
<td>-0.05%***</td>
<td>-2.42</td>
<td>-0.34%</td>
<td>-0.07</td>
</tr>
<tr>
<td>1</td>
<td>-0.04%***</td>
<td>-2.24</td>
<td>-0.39%</td>
<td>-0.08</td>
</tr>
<tr>
<td>2</td>
<td>-0.04%***</td>
<td>-2.09</td>
<td>-0.44%</td>
<td>-0.09</td>
</tr>
<tr>
<td>3</td>
<td>-0.04%***</td>
<td>-1.97</td>
<td>-0.49%</td>
<td>-0.10</td>
</tr>
<tr>
<td>4</td>
<td>-0.04%***</td>
<td>-1.89</td>
<td>-0.54%</td>
<td>-0.11</td>
</tr>
</tbody>
</table>

Note: * indicates a significant difference from zero at the 1% level, ** indicates a significant difference from zero at the 5% level, *** indicates a significant difference from zero at the 10% level.
Table 3 shows the results of a 7-day event window. For each of 7 days in the event window cumulative average abnormal returns (CAARs) are reported. The share price reaction only for average abnormal returns for the entire event period were the only statistical results. Insignificant cumulative abnormal returns are observed for the entire event window. It is noted an average cumulative loss of 0.36% during the 7-day event period.

Table 3: Average daily abnormal returns and cumulative abnormal returns for the sample of earnings announcements across the event window (-3, 3).

<table>
<thead>
<tr>
<th>DAYS</th>
<th>AARs</th>
<th>T-Statistic</th>
<th>CAARs %</th>
<th>T-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>-0.06%</td>
<td>-0.53</td>
<td>-0.06%</td>
<td>-0.04</td>
</tr>
<tr>
<td>-2</td>
<td>-0.06%</td>
<td>-0.51</td>
<td>-0.13%</td>
<td>-0.09</td>
</tr>
<tr>
<td>-1</td>
<td>-0.06%</td>
<td>-0.48</td>
<td>-0.19%</td>
<td>-0.13</td>
</tr>
<tr>
<td>0</td>
<td>-0.05%</td>
<td>-0.41</td>
<td>-0.25%</td>
<td>-0.17</td>
</tr>
<tr>
<td>1</td>
<td>-0.05%</td>
<td>-0.37</td>
<td>-0.31%</td>
<td>-0.21</td>
</tr>
<tr>
<td>2</td>
<td>-0.04%</td>
<td>-0.34</td>
<td>-0.36%</td>
<td>-0.25</td>
</tr>
<tr>
<td>3</td>
<td>-0.04%</td>
<td>-0.30</td>
<td>-0.42%</td>
<td>-0.29</td>
</tr>
</tbody>
</table>

Note: * indicates a significant difference from zero at the 1% level, ** indicates a significant difference from zero at the 5% level, *** indicates a significant difference from zero at the 10% level.

Similarly, table 4 presents significant abnormal results for all levels of significance. With respect to cumulative abnormal returns, the cumulative abnormal activity is insignificant for the (-1, +1) event window. An 0.18% average cumulative loss is tracked.

Table 4: Average daily abnormal returns and cumulative abnormal returns for the sample of earnings announcements across the event window (-1, 1).

<table>
<thead>
<tr>
<th>DAYS</th>
<th>AARs</th>
<th>T-Statistic</th>
<th>CAARs %</th>
<th>T-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>-0.06%</td>
<td>-2.03**, ***</td>
<td>-0.06%</td>
<td>-0.10</td>
</tr>
<tr>
<td>0</td>
<td>-0.06%</td>
<td>-1.91***</td>
<td>-0.12%</td>
<td>-0.19</td>
</tr>
<tr>
<td>1</td>
<td>-0.06%</td>
<td>-1.86***</td>
<td>-0.18%</td>
<td>-0.27</td>
</tr>
</tbody>
</table>

Note: * indicates a significant difference from zero at the 1% level, ** indicates a significant difference from zero at the 5% level, *** indicates a significant difference from zero at the 10% level.
In the same manner, table 5 presents significant abnormal returns for 1%, 5% and 10% levels and the observed cumulative abnormal activity appears to be statistically insignificant. An average cumulative loss of 0.12% is reported for the 2-day event window.

Table 5: Average daily abnormal returns and cumulative abnormal returns for the sample of earnings announcements across the event window (-1, 0).

<table>
<thead>
<tr>
<th>DAYS</th>
<th>AARs</th>
<th>T-Statistic</th>
<th>CAARs %</th>
<th>T-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>-0.06%***</td>
<td>-1.60</td>
<td>-0.06%</td>
<td>-0.13</td>
</tr>
<tr>
<td>0</td>
<td>-0.06%***</td>
<td>-1.47</td>
<td>-0.12%</td>
<td>-0.26</td>
</tr>
</tbody>
</table>

Note: * indicates a significant difference from zero at the 1% level, ** indicates a significant difference from zero at the 5% level, *** indicates a significant difference from zero at the 10% level.

As can be seen, negative reaction for the returns is observed for all event windows. However, the only insignificant positive share price response to earnings announcements was for the 21-day event window and the +10 day respectively. Consequently, the conclusion that is drawn is that on average the London stock market demonstrates a significant negative response to earnings announcements for companies listed on FTSE 250. According to previous literature, the evidence derived from the results is in contrast with the results of previous studies.
Conclusions

In alignment with previous researches, this study intended to examine the stock price reaction to earnings announcements by companies listed on London Stock Exchange. Previous studies mostly focused on FTSE 100 for the examination of earnings announcement effect on stock prices. This study tends to investigate firms with smaller market capitalization as they offer a reliable illustration of the British economy. FTSE 250 contains medium sized companies and the stock is less liquid as compared to FTSE 100. The primary sample was companies selected from the FTSE 250. However, the final sample consisted of 130 UK companies between January 2007 and December 2017, constituting 2,219 final earnings announcements. In an attempt to test for abnormal performance associated with the event windows, the Market Model for normal returns is used.

The global financial crisis of 2008-2009, the sovereign debt crisis of 2010 and the Brexit of 2016 had significant impact on companies’ earnings. Markets crashed due to financial crisis. It is well noticeable throughout the study that these events in this period caused market volatility and earnings uncertainty. FTSE 250 is generating considerable interest in terms of market behavior, as it mentioned above it shows the realistic react of British economy. The earnings uncertainty reflected by information uncertainty is a key part regarding the market behavior. Larger positive or negative reaction to corporate profits results are caused by an uncertain stock market.

Companies earnings announcement exposed at the same time are more likely to estimate abnormal returns for each company, which will be depended due to contemporary correlation of return across companies. This study encompasses different firms with different earnings announcement dates so abnormal returns are less likely to suffer from correlations.

Some preliminary work in the field of event studies was carried out several years ago and the most notably were by Dolley (1933), Beaver (1968), Ball and Brown (1968), Fama et al. (1969), Foster (1984), Brown and Warner (1985), Bernard and Thomas (1989), Mackinlay (1997), Binder (1998) and Kothari (2001). The event study applied for this study was added to the previous literature by conducting a study on the FTSE 250 on which infrequent studies have been done to date.

The effect of an event on stock returns is investigated by the empirical analysis of an event study. The study applies the standard event study methodology in order to calculate the abnormal returns and cumulative abnormal returns some days before the event date, the event date and some days after the event date. Specifically, this study has chosen five different event windows. Short-term event windows as (-1,0), (-1,1), (-3,3), (-5,5) and a long-term event window as (-10,10) are employed. Abnormal return
(AR) is calculated as difference between stock return and market index return. Averaged across number of companies in the sample estimated to form average abnormal return (AAR). Average abnormal return is cumulated for different event windows to obtain cumulative abnormal return (CAAR). T-statistics used to test the hypothesis of CAAR and AAR respectively, equal to zero in an efficient market.

Contrary to expectations, negative market reaction in the days surrounding earnings announcements coincides with a decade, which financial crisis started, and Brexit uncertainty occupied, in general an uncertainty surrounding European economic policies.

Unlike other research carried out in this area, the findings indicate that the AARs are significantly different from zero and negative. Based on the evidence from the sample of companies in this study, therefore, the null hypothesis is rejected, Ho, that average abnormal returns and cumulative average abnormal returns in the period surrounding the event day are zero (0). The negative CAARs around earnings disclosures imply that earnings announcements do convey information value. This information content is used by the market in revaluate stock prices. Continuing negative CAARs after the announcement date suggest that the market failed to adjust the earnings disclosures and significantly negative abnormal returns could be earned by trading on the information containing in the corporate profit announcements.

The study failed to find evidence of efficient adjustment of stock prices around earnings announcements for the sample of companies, as negative abnormal returns continue to stay afloat even after the announcement date. Surprisingly, the single most striking observation to emerge from the data comparison was the positive abnormal return (0.01 %) at +10 day on the (-10, 10) event window.

The test results indicate that stock returns of the companies from FTSE 250 are significantly affected by the earnings announcements. Significant negative change before and after the event date is attended. The findings of this study indicate that UK stock prices, with respect to earnings announcements, follow a pattern in which negative abnormal returns received by trading around earnings announcement dates. Consequently, it is inevitable and understandable that these results are in contradiction with the efficient market hypothesis and refute from previous results reported in the literature, which found the London stock market to be efficient.

Australia, UK and USA, etc. are worldwide developed countries on which the amounts of researches of the subject are extensive. Nevertheless, previous researches have mostly focused on the largest group of UK companies, FTSE 100. Different asset classes respond differently to stock returns with respect to an event. The analysis could possibly have come out differently if FTSE 100 was applied instead of estimating stock price performance for FTSE 250. Moreover, the findings could possibly be consistent with the extent literature and have produced stronger results. Further research should be provided for the medium and small sized companies as they propose a reliable representation of the UK market.


