Earnings Surprises and Abnormal Returns in a Thinly Traded Market: Evidence from Kuwait Stock Market

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Abstract

This paper strives to examine the effects of earnings surprises on stock prices in an emerging market, the Kuwait stock market. The paper uses earnings surprise data (positive and negative earnings announcements) from financial years 2010 to 2013 as the main event. The results confirm a statistically significant abnormal return around the earnings announcements, which indicates a significant effect of earnings announcements on stock prices. Furthermore, the results illustrate that the majority of the abnormal returns occur just after the actual earnings announcement itself, which points out to a no significant insider trading in Kuwait stock market, as far as the results are concerned. These results also indicate a significant negative abnormal return in the case of negative earnings surprise announcements, especially those that persist from day 5 to day 10 after the earnings announcements.

Keywords: Earnings Announcements, Stock Returns, Market Efficiency, CAPM, ROI

I.   Introduction

Stock market efficiency[1] has been captivating the interests of both academicians and regulators since the work of Fama (1970). The evidence of a voluminous research has been somewhat mixed as well as controversial due to different markets, different time periods, and different methodologies. Stock prices are constantly influenced by numerous events such as earnings and dividend announcements, takeover bids, share splits, announcement of bonus, rights issue, and initial public offerings. Upon announcements, positive or negative stock price reactions instantaneously transpire, which indicates unambiguous market efficiency. These stock price reactions have been measured using the popular event study approach where the movement in stock prices around the event dates is analysed to determine if the event in question had an effect on stock prices. This paper will therefore undertake an event study to determine the effect of earnings announcements in the Kuwait stock market on stock prices for stocks that are listed in the Kuwait stock market.

The properties of Kuwait stock market (KSE) have been analysed recently and compared to other international stock markets by a number of researchers. For example, Butler et al. (1992) examined the efficiency of KSE and document a competitive auction stock exchange system. Al-loughani (1995) also asserts a non-random walk of the behaviour of the stock returns in KSE. KSE has gone through many statutory and institutional changes, which matched the common "boom-bust" scenarios that occur in any other stock market. As the official KSE was established in 1984, a new era for stock trading in Kuwait has emerged. However, many business commentators assert that some key traders and insiders have dominated stock trading, especially before 1990. In addition, KSE has been characterized by irregularity in trades and price formation process. Many attentive efforts by regulators are carried out to improve the investment environment, which eventually should positively influence the efficiency of KSE. The literature of developed markets indicates that the tremendous market breadth and depth, the number of skilled market participants, more liquidity, high price sensitivity, more skilled equity analysts all contribute to an efficient price

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[1] See Summers (1986) for an overview of the prevailing literature on market efficiency tests and their results

discovery. The evidence from developing markets, however, tends to be mixed as some markets tend to show weak or semi-strong form efficiency, but many emerging markets show little evidence of efficiency. Causes vary, from illiquid markets, high level of asymmetric information, high transaction costs, and more uninformed or noise traders.

For the case of Kuwait**,** studies conducted by Abraham et al. (2002) and Abdmoulah (2010) yield mixed results with respect to the market efficiency of Kuwait stock market. This paper strives to complete the literature of this topic.

II.   Literature Review and Hypothesis Development

Numerous studies have been published on investigating whether stock prices really incorporate all types of information as set by Fama (1970). However, most of the earlier studies on the effects of earnings announcements were, for the most part, conducted on the developed stock markets, being an active traded market. Results from emerging markets, or more thinly traded markets, would show a greater likelihood of departure from market efficiency as information in these markets tends to be less complete. Consequently, the smaller number of investors means that a more knowledgeable investor may have better opportunities of obtaining arbitrage profits in these markets.

Event study methodology proves to be a reliable method to measure the instantaneous effect of an event on stock prices[2]. The fundamental concept underlying the event study methodology is to separate the price changes in security that are due to market effects from price changes in security that are induced by the event in question. The literature is voluminous of various types of event studies with respect to events such as dividend announcements, earnings announcements, takeover bids and share splits, as all constitute "new information" that, should be reflected in revised stock prices.

Abraham et al. (2002) document a mixed support for weak-form efficiency in the Kuwait stock market, even though they alert that the standard tests of market efficiency may be biased towards efficiency due to the thinly traded nature of Kuwait stock market. Abdmoulah (2010) employs an updated econometric technique to test the effects of reform measures taken by governments in the Gulf Cooperation Council (GCC) countries. He finds, in the case of Kuwait, that there was poor evidence of weak-form efficiency. This might mean that the proposed reform measures (at that time) were ineffective.

Lagoarde-Segot and Lucey (2008) enumerate a variety of reasons why stock prices do not reflect instantaneous reaction to events. These include, but not limited to, market illiquidity, low market competition (gives rise to dominant players), lack of information in the market (reduces transparency), and structural and institutional factors such as fragmented markets or political uncertainty.

Ball (1978) found that there were significant abnormal earnings immediately after quarterly earnings were announced and hypothesized that these were caused not by market inefficiency but by deficiencies in the capital asset pricing model. Watts (1978), however, found that the presence of transactions costs could account for a significant number of these deviations from predicted prices (assuming market efficiency) and that the abnormal returns could not be explained by deficiencies in the asset-pricing model. Aharony and Swary (1980) conducted

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[2] O'Leary and Konchitchki (2011) document that the event study approach was first used by Dolley's published work in 1930

an early event study on the relationship between earnings and dividend announcements and found that earnings and dividend announcements both provided useful information that were reflected in the abnormal returns, but that abnormal returns declined quickly after the event, which suggests a lack of evidence that the results show a violation of semi-strong form efficiency.

Pyemo (2011) carried out an event study to determine the effect of earnings announcements in the Nigerian stock exchange, and his findings indicate that there were significant abnormal returns on stock prices around the time when earnings are announced. This suggests that earnings announcements are comprised of value-relevant information. In addition, his documents that the significant reactions to earnings announcements start 20 days before the earnings announcement dates, which is an indicator of the possible presence of insider trading. Sponholtz (2005) carried out a similar study on the Danish stock market and his findings indicate that there are significant reactions to earnings announcements within the period surrounding the earnings announcement dates, and these reactions continue for several days after the announcements have been made, indicating a presence of information leakage. Wang and Phet (2012) carried out an event study on the effect of earnings announcements on stock prices in the Nordic stock market using a sample of 40 most liquid stocks in the Virtual OMX Nordic exchange in order to avoid the effects of thin trading. Their findings indicate that there were some stock reactions during the event window, which was 17 days long even though such reaction was not significant. Their evidence indicates that positive earnings announcements might lead to a longer reaction in the stock market compared to negative earnings announcements such as profit warnings and losses. Based on the fact that the reaction was not significant, they conclude that earnings announcements in the Nordic stock market had no impact on the stock prices and, as such, could not fully reflect changes in the stock market.

Mlonzi, Kruger and Nthoesane (2011) investigate the effect of earnings announcements on stock prices in Johannesburg stock exchange. Their findings show that there is significant negative reaction in share prices around the earnings announcement date, especially during recessionary periods. Their findings show that during a non-recessionary period, investors can make abnormal gains by investing in the market, an aspect that is not possible during the recessionary periods.

According to Al-Qenae et al (2002), there is a significant reaction in stock prices around earnings announcement dates in Kuwait stock exchange, which provides evidence to the fact that investors can use earnings information to make abnormal profits.

Shubiri (2010) show that there is a significant positive impact on stock prices if positive earnings announcements in the Kuwait stock exchange are announced after the negative dividend announcements, and that the market would react negatively when positive dividends announcements are made after the negative earnings are announced.

In addition to the above studies, there is another line of research relates to the post-earnings-announcement drift (PEAD), which is usually applied when earnings announcements are investigated in the context of their effects on firm performance. Ball and Brown (1968) first documented the PEAD when they noticed that periods of abnormal returns, that follow an earnings surprise have been announced, tend to be persistent in a manner that seems to contradict the EMH. In their event study using information from financial statements, Ball and Brown (1968) found that changes in the accounting income figures accounted for

approximately half of the net effect of all the information available to investors in the 12 months that preceded the release of the accounting information. In the month of release, the accounting information accounted for approximately 20 percent of the value of all information. Ball and Brown (1968) explained that other information also tended to be released in the same month of earnings announcement, and thus much of this information has already been reflected in the stock price. Ball and Brown (1968) also document that the estimated cumulative abnormal returns (CARs) tended to drift in both directions for a prolonged period: upwards in the case of a good earnings surprise and downwards in the case of a bad earnings surprise. In a follow-up research into the length of the PEAD using information from FTSE 100 stocks. Foster et al. (1984) found that the drift in abnormal returns could persist for up to 60 days after a quarterly earnings announcement.

There has also been research to examine why the PEAD exists and why it is so persistent. Bernard and Thomas (1989) explained that there were two possible reasons for the PEAD. Firstly, it might be possible that market participants tend to underreact to earnings surprise which leads to the stock prices adjusting slower to an earnings surprise than would be expected in a strictly EMH world. The second explanation is that the CAPM framework occasionally leads to wrong estimates of abnormal returns and the fail to adjust the raw returns for the appropriate amount of risk. Bernard and Thomas' (1989) conclusion was that the problems with the CAPM were of secondary importance and that much of the PEAD was caused by an under reaction to the earnings surprise announcement.

Mendenhall (2004) concludes that the PEAD was caused by an under reaction to the earnings surprise announcement. The presence of the PEAD presents an arbitrage opportunity to some sophisticated arbitrageurs[3]. According to Mendenhall (2004), this reflects the fact that arbitrageurs are unable to eliminate all risks involved in trades that are required to achieve arbitrage. When investigating the relationship between the remaining arbitrage risk and the PEAD, Mendenhall (2004) found that the only explanation for the positive relationship between arbitrage risk and PEAD was caused by investor under reaction.

The majority of the above literature indicates that there is a positive relationship between earnings announcements and stock prices although the significance of these reactions is dependent on various situations experienced in the market. Again, it is evident that little attention has been bestowed to the effect of earnings announcements on stock prices in Kuwait stock exchange. This study represents significant addition to the literature based on this ground.

Based on the previous literature, the null hypothesis is that CAR = Zero (or insignificant) in day 1 after the announcement day, and/or significant abnormal returns before the announcement day. On the other hand, the alternative hypothesis is that CAR $\neq$ 0 (or significant) in day 1 after the announcement and *NO* significant abnormal returns before the announcement day.

III.   Data

This study investigates the effect of earnings surprises on share price returns using data from shares listed on the Kuwait stock exchange. This study uses the standard definition of an earnings surprise such as the one used in Bartov et al. (2002), so that an earnings surprise is

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[3] For instance, if there is a positive earnings surprise, an arbitrageur might be able to borrow funds at a lower interest rate, and then buys and holds equity in the company that experienced a positive earnings surprise. When the expected positive abnormal returns come, the arbitrageur can then sell the holdings for a risk-free profit

said to occur if the reported earnings announcement for a particular period differs from the consensus expected earnings for the same period. More formally,

$$ES_t = Earnings_t – E\ (Earnings_t)$$

where ES_t represents the earnings surprise for time t, $Earnings_t$ is the reported earnings figure for time t (for the purposes of this study, net income will be used), and $E(Earnings_t)$ represents the consensus estimates for earnings at time t. Based on this definition, a positive earnings surprise is said to occur if the reported earnings figure exceeds the consensus earnings estimate in a period, while a negative earnings surprise occurs when reported earnings is less than consensus earnings.

Earnings surprise data is obtained from Bloomberg and reflects the difference between annual net income figures and estimated net income figures from all the analysts covered in the Bloomberg database. This data is collected for the financial years 2010 to 2013. Due to the illiquid nature of the stocks traded on the Kuwait stock market, some companies were excluded from the study due to incomplete trading data (for instance, no shares traded over a period of several weeks or months). This resulted in a total of 69 separate earnings surprise events. The thinly traded nature of stocks on the Kuwait stock market also meant that there were a number of trading days in the companies that remained in the sample for which there was zero volume. Thus, there was no data recorded in the Bloomberg database. For these stocks, this study uses the trade-to-trade model described in Maynes and Rumsey (1993) wherein returns are calculated only from trading day to trading day. Thus, if a stock trades on day 1 and does not trade until day 5, we calculate daily return as the change in price from day 1 to day 5 while ignoring the intervening period.

IV.   Methodology

This paper investigates whether traded stocks on the Kuwait stock market adjust to new information that should be quickly reflected in the earnings surprise. To examine the effects of an earnings surprise on stock prices, the change in the stock price is tracked around the period in which the annual earnings were announced. This follows the method developed by Campbell et al. (1997) in which an event (the earnings announcement) is defined. An estimation window is developed for which the parameters to be used in calculating the expected returns are estimated using the CAPM framework. The event window is defined as the period that is specifically tested for abnormal returns. The estimation window for the purposes of this study is from -120 days to -4 days before the announcement. During this period, both the daily stock prices and daily index values (a capitalization-weighted index is employed due to its statistical properties) are collected for each day to calculate returns on Kuwait stock market, while closing index values are collected daily. Stock and index returns are calculated on a daily basis and are defined as follows:

$$R_t = (P_t\ /P_{t-1}) – 1$$

where R_t refers to the return for the stock (or index) on day t, P_t is the price of the same stock (or index) on day t, and P_{t-1} is the price of the stock (or index) on day t - 1. Data collected from days -121 to -4 before the announcement will therefore yield the daily returns from days -120 to -4 before the announcement.

The data collected in the estimation window is used to calculate the expected return for the stock. The expected return is calculated using the standard capital asset pricing model (CAPM) described in Sharpe (1964). Thus,

$$E(R_i)\ R_f + B(E(R_m) - R_f)$$

where $E(R_i)$ is the expected return for stock i, R_f is the risk-free rate, $E(R_m)$ is the expected return on the market m. This equation can be simplified to the following:

$$E(R_i) = \alpha + B(E(R_m) - R_f) + \varepsilon$$

where α represents the excess return of the stock over that of the market, and ε represents the error in estimation. It is assumed that the estimation error is zero (Eckbo, 2011).

There are two methods commonly used to calculate abnormal returns. The buy-and-hold abnormal return (BHAR) model, which assumes that the stocks, or portfolio of stocks, are bought and held over an entire return and then calculates the abnormal returns that are due to the investor by adopting this investment strategy (Loughran and Vijh, 1997). The definition of the BHAR is given by formula below:

$$BHAR = \prod_{t=1}^{T}(1 + R_{i,t}) - \prod_{t=1}^{T}(1 + R_{m,t})$$

where $R_{i,t}$ is the return on stock i for day t and $R_{m,t}$ is the return on market m for day t. The BHAR is thus the difference in accumulated returns between security i and market index m, with the assumption that the investor buys and holds the security at the start of the estimation window until the end of the event window.

Due to some issues raised in the literature with respect to BHAR (new listing bias, positive Skewness, and rebalancing bias; see for example Barber and Lyon (1997 and Fama, 1998), the cumulative abnormal return (CAR) model of Fama (1998) is also employed in this study. The CAR model begins by defining an abnormal returns for a security i at period t ($Ar_{i,t}$) as the difference between the realised return and the expected return (estimated by the market model) at time t. This can take either a positive abnormal return where realised return exceeds expected return or a negative abnormal return in which expected return exceeds realised return. Thus, we define

$$AR_{i,t} = \varepsilon_{i,t} = r_{i,t} - E(r_i|r_{M,t})$$

where $\varepsilon_{i,t}$ is the abnormal return for security i at time t, $r_{i,t}$ is the actual return for security i at time t, and $E(r_i|r_{M,t})$ represents the expected return for security i at time t given that the actual return of the market index M at time t is provided by $r_{M,t}$.

Having defined the abnormal return, the CAR is simply:

$$CAR_i = \sum_{t=1}^{T} \varepsilon_{i,t}$$

In essence, the CAR is simply the sum of abnormal returns for every company and period included in the sample.

Following the calculation of the CAR or BHAR, Student's *t*-test is performed to test if the CAR or BHAR figure is distinct from 0 in a statistically significant manner. The *t*-test statistic is defined as follows:

$$t = \frac{\sum_{t=1}^{T} AR_t}{T}$$

For the purposes of this study, we reject the null hypothesis of AR ≠ 0 at the 5% significance level.

Due to the thinly traded nature of the Kuwait stock market, with a significant number of companies showing zero volume for prolonged periods – days, weeks, and months, those companies that show no trading for many weeks or months are excluded from the sample. For the remaining companies, the trade-to-trade model of Maynes and Rumsey (1993) is employed, whereby returns are calculated from one trading day, in which there is data, to the next trading day, in which there is data, skipping the trading days where no data can be found.

V.   Results and Analysis

For the purpose of the study, the pooled sample of companies is split into two distinct samples to represent those companies who have positive earnings surprise and those companies who have negative earnings surprise. Of the 69 company-years investigated in this study, 47 (68.1%) showed negative earnings surprises while the remaining 22 (31.9%) showed positive earnings surprises. The results of the performance of stocks for the pre-event and post-event of positive earnings surprises as well as negative earnings surprise of the earnings announcement are shown in the table 1 below.

Table 1: **Performance of Stocks before and on the Earnings Announcement for the Positive Sample**

	Positive Earning surprise								
Day	AAR	t-test	Prob.	CAR	t-test	Prob.	BHAR	t-test	Prob.
-3	0.0004	0.1500	0.88	0.0004	0.1500	0.88	0.0064	1.3480	0.18
-2	0.0041	0.8428	0.40	0.0046	0.7481	0.45	0.0115	1.6760	0.09
-1	-0.0024	-0.6121	0.54	0.0021	0.3123	0.75	0.0018	0.3037	0.76
0	0.0073	1.2360	0.22						

CARs and BHARs are calculated using a weighted index. * denotes significance at the 5% level, ** denotes significance at the 1% level.

Results in table 4 show that there are no significant abnormal returns during the period before the earnings announcement for the positive sample of the average abnormal return in both CAR and BHAR. This indicates the inexistence of the information leakage in the pre-announcement period. In order to test the instantaneous effect of earnings announcement on stock prices, table 2 shows that it would not be possible for investors to experience superior risk-adjusted returns by investing after the announcement, especially given the normal transaction cost.

Table 2: Performance of Stocks after the Earnings Announcement for the positive sample

	Positive Earning surprise								
Day	AAR	t-test	Prob.	CAR	t-test	Prob.	BHAR	t-test	Prob.
1	0.0102	2.2151*	0.03	0.0102	2.2151*	0.03	0.0096	1.9443*	0.05
2	0.0033	0.9949	0.32	0.0135	2.1703*	0.03	0.0173	2.419**	0.01
3	-0.0035	-0.7489	0.45	0.0100	1.3032	0.19	0.0143	1.7312	0.08
4	-0.0001	-0.0269	0.98	0.0098	1.0654	0.29	0.0094	1.0329	0.30
5	-0.0040	-0.6704	0.50	0.0059	0.5535	0.58	0.0067	0.6856	0.49
6	0.0053	1.4826	0.14	0.0112	0.8489	0.40	0.0157	1.1845	0.24
7	-0.0070	-1.4631	0.14	0.0041	0.3366	0.74	0.0062	0.4161	0.68
8	0.0010	0.1835	0.85	0.0051	0.4167	0.68	0.0057	0.3868	0.70
9	-0.0037	-0.8399	0.40	0.0014	0.1672	0.87	-0.0006	-0.0431	0.97
10	0.0020	0.6240	0.53	0.0034	0.2774	0.78	-0.0021	-0.1468	0.88

CARs and BHARs are calculated using a weighted index. * denotes significance at the 5% level, ** denotes significance at the 1% level.

That is, the results in table 2 show collectively an immediate response of stock returns to the earning announcement event, given that there is a statistically significant effect that starts at day 1, just after the announcement day. However, the significant effect extends to the second day, which does not conform to the predictions of EMH of Fama (1970) (as well as other similar studies). That is, when the CAR is used as the abnormal returns measure, there is a significant positive earnings surprise in both days 1 and 2 of the post-announcement period of the actual earnings. In the case of BHAR, there were also proportional significant positive abnormal returns in both days 1 and 2. This is a kind of drift in the effect, and hence some informed investors might have the chance to earn abnormal returns.

Table 3: Performance of Stocks before and on the Earnings Announcement for the Negative Sample

	Negative Earning surprise								
Day	AAR	t-test	Prob.	CAR	t-test	Prob.	BHAR	t-test	Prob.
-3	0.0004	0.1303	0.90	0.0004	0.1303	0.90	0.0046	1.3052	0.19
-2	-0.0075	-1.8458	0.06	-0.0071	-1.5274	0.13	-0.0001	-0.0217	0.98
-1	0.0020	0.8272	0.41	-0.0051	-1.1074	0.27	0.0008	0.1443	0.89
0	0.0027	1.5275	0.13						

CARs and BHARs are calculated using a weighted index. * denotes significance at the 5% level, ** denotes significance at the 1% level.

Table 3 indicates, similar to the results in Table 4, that there is no evidence of significant abnormal returns before the announcement of the negative earnings surprise for both CAR and BHAR, which means there is no information leakage. Testing the information leakage is the main reason for splitting the surprise to pre- and post-event. Surprisingly, and since we have a negative surprise, the table shows in day zero, although statistically insignificant, that there exists some positive returns. This could be explained on many grounds. This might be due to inaccuracy in capturing the appropriate expected return, or the market is not efficient, since in inefficient markets, such information is not absorbed at the event day and it takes many days to adjust to the new equilibrium level. Therefore, the reaction is fluctuated; hence, a positive return exists in our negative sample. Another explanation is market mispricing due

to some positive feedback trading (Hong and Stein, 1999). Also, the incompleteness or imperfection of the information most likely results in delays in stock price logical changes. Table 4 shows the results of the performance of stocks after the announcement day for the negative sample. The table shows no significant abnormal returns just after the announcement day, which supports the no-leakage conjecture. In addition, and one that is unlikely to be considered a feature of an informationally efficient semi-strong market, there exists, surprisingly, some negative earnings announcement effect on stock price on days 5, 6, 8, 9, and 10, which is considered a small encouraging result as far as market efficiency is concerned.

Table 4: Performance of Stocks after Earnings Announcement for the Negative Sample

Day	Negative Earning surprise								
	AAR	t-test	Prob.	CAR	t-test	Prob.	BHAR	t-test	Prob.
1	-0.0033	-1.3356	0.18	-0.0033	-1.3356	0.18	-0.0004	-0.1553	0.88
2	0.0022	0.9592	0.34	-0.0011	-0.4625	0.64	0.0035	1.2595	0.21
3	0.0007	0.2245	0.82	-0.0004	-0.0945	0.92	0.0049	0.9930	0.32
4	-0.0069	-2.2421*	0.02	-0.0072	-1.4369	0.15	-0.0046	-0.8164	0.41
5	-0.0036	-1.3127	0.19	-0.0109	-1.8918*	0.05	-0.0057	-1.0021	0.32
6	-0.0028	-0.9445	0.34	-0.0137	-1.9085*	0.05	-0.0052	-0.7422	0.46
7	0.0025	1.0695	0.28	-0.0111	-1.4254	0.15	-0.0001	-0.0143	0.99
8	-0.0060	-1.5883	0.11	-0.0171	-1.9601*	0.05	-0.0066	-0.8759	0.38
9	-0.0038	-1.1350	0.26	-0.0210	-2.1122*	0.03	-0.0108	-1.2666	0.21
10	-0.0047	-1.0795	0.28	-0.0256	-1.9389*	0.05	-0.0142	-1.2675	0.21

CARs and BHARs are calculated using a weighted index. * denotes significance at the 5% level, ** denotes significance at the 1% level.

That is, given that there is no instantaneous and rapid effect in CARs on day 1, there seems to be leakage of information to the market. That is, investors seem to interact with the negative news about earnings, and the results are statistically significant. This might be explained in terms of some possible delay in information processing. Moreover, in light of what local market commentators say about the local investor's immediate reaction to the *negative* news, local investors believe that if prices go down, they would wait several days before selling their stocks in the hope that the negative trend would reverse. When BHAR was used as the measure of abnormal returns, there were no significant negative abnormal returns at the 5% significance level. The noise trading behaviour followed by many investors might have its effect on the contradictory and surprising results. An alternative explanation for the delayed reaction to the negative news is that most of the investors in the Kuwait Stock Market are individual and marginal investors, not institutional investors who are expected to have more rational investment behaviour. Other reasons extend to the nonexistence of a market maker, which causes illiquidity in the stock; hence, there is no continuity in the price spectrum. Furthermore, the government owns high percentage in the most prominent and big firms in KSE, which exerts its negative effects on stock liquidity and performance in downturn markets.

An interesting result is also found in this study with respect to CAR calculations. It seems that there are persistent abnormal returns after the earnings announcement between days [+5, +10] for the negative sample (with exception of day 7). This indicates that the post-earnings-announcement drift (PEAD) phenomenon is present in the KSE, which is a feature of an

inefficient market. In addition, the rules and regulations, investor consciousness and investment styles, and involved institutions all have their impact on the results of this study A further consideration of the results found in this study reveals that there are certain complications relating to the market as being semi-strong inefficient. This is because the evidence shows no price adjustment just before the announcement of the earnings surprise, which indicates no significant insider trading activity in the market. While this by itself is not full evidence of market efficiency, the finding that positive earnings surprises only lead to abnormal returns 2 days after the earnings announcement support market inefficiency. In addition, the negative earnings surprises that lead to persistent abnormal returns throughout day 5 to day 10, with exception of day 7, suggest an incomplete processing of information with respect to the earnings announcement. In other words, that might be based on the nature of the uniformed investors' mentality in the Kuwait stock market.

The characteristics of the stocks traded on the Kuwait stock exchange suggest that the obtained results are not unexpected. The Kuwait stock market is an emerging and thinly traded market, and our investigation of the time series of stock prices made when preparing this study found that there were some stocks that exhibited zero trades over prolonged periods of time, i.e. several weeks or even several months in extreme cases. While some efforts have been made to "clean up" the results by removing these stocks from the sample, the remaining stocks were still somewhat thinly traded with zero traded volumes in several trading days. This was anticipated at the start of the study, given the large number of studies that have found the Kuwait stock exchange to be particularly thinly traded (Butler and Malaikah, 1992; Al-loughani, 1995; Lagoarde-Segot and Lucey, 2008). The research evidence is therefore mixed, with only two studies, (Butler and Malaikah, 1992; Abdmoulah, 2010) suggesting that the Kuwait stock market exhibits weak-form efficiency, while this study concludes that the Kuwait stock market shows semi-strong form inefficiency.

The preparation of the time series data for investigation also revealed other problems in the Kuwait stock market, e.g. the lack of available information with which earnings surprise figures could be calculated. Of the approximately 180 companies that are listed on the Kuwait stock exchange, only 32 of the companies had been adequately covered by analysts for calculating consensus earnings and earnings surprise figures to a reasonable degree of accuracy. This compares poorly with developed western stock markets and some other emerging markets in which practically 100% of publicly traded companies are sufficiently covered by analysts who continuously publish their reports on earnings surprise. This might suggest that there is some form of information asymmetries (as is the case in the developed markets) in the Kuwait stock market, as information about company earnings or prospects is not properly disseminated to all market participants.

VI.   Conclusion

The results of the earnings announcement indicate that there are significant abnormal returns after the announcement of earnings in the Kuwait stock market. This might indicate that the announcement of earnings has a statistically significant influence on the value of companies, a result that might be in agreement with the findings of Pyemo (2011), Sponholtz (2005), Mlonzi, Kruger and Nthoesane (2011), Al-Qenae, Li and Wearing (2002) - all of whom found a statistically significant positive effect on share prices whenever earnings are announced. However, the results of the earnings announcements show that the Kuwait stock market does not exhibit market efficiency even though the earnings surprises tend to occur after the actual earnings announcement day. However, the effect of these announcements extends to more than one day. It must be avowed that the timing of the return adjustment in

the Kuwait stock market differs a little from the implications of Fama's original work in 1970, which asserts that the return adjustment in an efficient market should, and logically, occur just after the end of the announcement day, and for one day only. Whereas, as to the case in the Kuwait stock market, there seems to be some persistence in the return adjustment after the announcement day for several days. This might be because information manipulation comes with a lag of about one trading day due to the dominance of the individual investment activity, as affirmed by one famous market commentator.

In the case of negative earnings surprises, negative abnormal returns were found after the earnings announcement from day 5 to day 10, with the exception of day 7. There seems to be a delay in the information processing by investors for some reason, which is a feature of inefficient markets.

These results should be interpreted with caution. The EMH theory states that for the market to be semi-strong efficient, the new information release has to be incorporated into the stock price immediately (CAR are significant) only on day 1. Since we have significant CAR in more than one day, this indicates a drift in abnormal returns, which means investors, can gain abnormal returns.

The above analysis therefore provides evidence in support of the null hypothesis (H_0), and as such, the alternative hypothesis should be rejected. This suggests that the Kuwait stock market is not an efficient market, at least as far as the analysis is concerned.

As the main purpose of this study is to determine the effect of earnings surprises on stock prices in the Kuwait stock market, various parties may benefit from such a study. To the investor seeking to invest in Kuwait stock market, the study provides insights as to the amount of investment in information needed to have a satisfying rate of return. To companies' management teams as it helps them understand the implication of the information they release into the market as well as seeing whether such information is reflected in the companies' stock prices so that they can better assess how to make their stocks attractive to investors in the market. To regulatory authorities as it helps them understand the real effects of information released into the market so as to develop measures aimed at eliminating certain vices in the market such as insider trading. To the academicians as this study provides reference points that future researchers can use to further their understanding on this topic.

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