

Short-Term Contrarian Profits in the Kuwait Stock Market

Omar Gharaibeh¹

¹ Al albayt University, Jordan

Correspondence: Omar Gharaibeh, Al albayt University, Jordan. E-mail: omar_k_gharaibeh@yahoo.com

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Abstract

This paper examines whether there is an existence of a short-term contrarian profits at the firms in Kuwait Stock Exchange (KSE). The role of return seasonality is also investigated. This article documents strong evidence for the short-term contrarian strategy in the Kuwait stock exchange. The result of this study finds that the short-term contrarian profits for the Kuwait market can't be explained by January effect. In spite of whether losers are smaller or larger than winners, there are short-term abnormal profits. Finally, this paper shows a strong symmetry between the winner and loser portfolios.

Keywords: Kuwait Stock Exchange (KSE), short-term contrarian

1. Introduction

In their Japanese study of short-term contrarian strategy, Chang, McLeavey and Rhee (1995) comprehensively investigate the performances of the short-term abnormal returns to contrarian investment strategies. They provide empirical evidence on the short-term contrarian profits in the Japanese stock. They show that January effect is not an important factor in explaining the documented short-term contrarian profits for the Japanese market.

By using the Chang, McLeavey and Rhee's (1995) methodology, this paper aims to investigate whether there is a short-term returns to contrarian investment strategy applied to the Kuwait Stock Exchange (KSE). Within the context, the role of return seasonality effect will be investigated.

The remainder of the paper is arranged as follows. Section 2 reviews the previous results in the literature while Section 3 locates the sources of the data for the present study and discusses the empirical methodology. Section 4 presents the results for both realized and risk-adjusted returns to the zero investment contrarian strategies, the January effect is also investigated as part to the analysis of short-run profitability, while Section 5 concludes the paper.

2. Literature Review

Lo and Mackinlay (1990) investigated whether the profitability of contrarian investment strategies is due to the overreaction hypothesis or not. They resolved the non-synchronous trading or lead-lag effect by examining the magnitudes of cross-trading and index autocorrelation created by a simple but general model of thin trading. Lo and Mackinlay (1990) recognized another potential source of reversals profits. They showed that the profitability of contrarian portfolio strategies is not solely due to overreaction.

Their evidence shows that less than half of the expected profits are related to overreaction because the expected profits are strongly affected by the lead-lag effects on stock prices, especially for size-sorted portfolios. Big companies tend to lead small companies. In other words, returns of larger stocks can be used to predict small company returns, but not vice versa. A delayed stock price reaction to common factors plays an important role in abnormal return, more so than overreaction (Lo & Mackinlay, 1990). However, they found that one of the important tools for exploring the autocorrelation properties of stock returns is the contrarian investment strategy. They also found that the portfolio strategies of buying losers stocks and selling winners stocks can provide positive expected returns if a return on some stocks systematically lead those of others.

Conrad, Kaul and Nimalendran (1990) provided a simple model to evaluate the relative importance of the several elements and to measure the model's ability to clarify the different time-series characteristics of short-term returns. Three elements are related to security returns: bid-ask errors which represent negative autocorrelations, expected returns which represent positive autocorrelations, and a white noise element. Conrad, et al. (1991)

found that a considerable percentage of up to 24% of the variance of security returns is explained by bid-ask errors and time varying expected returns after excluding the unobservable bid-ask errors and expected returns elements of stock returns. In addition, they confirmed the result of Lo and Mackinlay (1990) that the asymmetric lagged cross-correlation is indicated by the expected return elements of large versus small companies.

Kaul and Nimalendran (1990) examined the role of overreaction and bid-ask spread in determining the time-series properties of the short horizon returns of individual securities. A variance ratio test was used to determine the relative magnitudes of errors caused by the bid-ask spread and overreaction in daily stock returns. This method was employed by several studies such as Lo and Mackinlay (1989), Cochrane (1988) and Poterba and Summers (1988). Kaul and Nimalendran (1990) found that the bid-ask spread is a major source of price reversals in the short-run for the NASDAQ companies. On the other hand, they showed that there were positive profits achieved by contrarian strategies and not negative autocorrelation in security returns. This could be caused by a combination of the asymmetric lead-lag relation in returns as well as reversals related to the bid-ask effect. The results showed that there was slight evidence of market overreaction. They also found that over 50% of the daily return variance of smaller-sized companies can be explained by the bid-ask errors.

Jegadeesh (1990) investigated the predictability of monthly stock returns by forming ten portfolios dependent on stock returns predicted using ex ante evaluation of the regression parameters. Jegadeesh (1990) presented strong evidence of stock return predictability. He found that monthly stock returns had significantly positive higher-order serial correlation, especially at longer lag and serial correlation based on twelve months. In addition, he showed that monthly stock returns had significantly negative first-order serial correlation. In other words, he found that a contrarian strategy of selling stocks that performed well over the last month (winners) and buying stocks that performed poorly over the last month (losers) yielded economically significant returns.

Jegadeesh (1990) documented an abnormal stock return of about 2.50 percent per month from selling past month's winners and buying past month's losers over the period extended from 1934 to 1987. This short-term contrarian effect is attributed to illiquidity in the market or price pressure more than overreaction (Jegadeesh, 1990). The predictable patterns of returns on individual securities are considered a pervasive phenomenon since the stock returns in all size-sorted quintiles display qualitatively comparable patterns of serial correlation.

Jegadeesh and Titman (1995) examined whether the lead-lag structure is coupled with investors' delayed reaction to common factors. Therefore, they proposed a new model to allow for the serial covariance of security returns to be analyzed in four elements. The first three are temporary elements caused by inventory imbalance while the fourth element is related to the effect of serial covariance of the bid-ask bounce. Jegadeesh and Titman (1995) confirmed that the overreaction to firm-specific information plays an important role in contrarian profits and this result is consistent with Boudoukh, Richardson and Whitelaw's (1994) findings. Jegadeesh and Titman (1995) provided evidence that the dealers-inventory related market microstructure effect can explain most of the short-horizon return reversals. This result supports some previous studies such as that of Ho and Stoll (1981) who investigate the bid and ask price changes as priced by risk-averse dealers.

Jegadeesh and Titman (1995) also confirm the results of Madhavan and Smidt (1993) that dealers take several days to work down their inventory imbalance. In addition, Jegadeesh and Titman's (1995) results showed that returns based on the bid-ask bounce calculated over the short horizon are less negative than returns calculated over long intervals. There is also an upward-biased spread when serial covariance of returns is calculated over long intervals and a downward-biased spread over short intervals. However, they showed that a small percentage of the short-term contrarian profits can be attributed to the lead-lag effect.

Bacmann and Dubois (1998) examined the profit of a contrarian strategy using monthly returns of an equally weighted portfolio on the French stock market. They find that an increasing hold period leads to higher profits of the standard contrarian strategy, especially when the market is bullish. In addition, Bacmann and Dubois (1998) found that these profits are significant in France but they are less pronounced compared with the US market. They also investigated the lead-lag effect between big and small firms showing that there is no asymmetric reaction to good and bad news which conflicts with the result of McQueen, Pinegar and Thorley (1996). Practically, the empirical decomposition is different from those of Lo and MacKinlay (1990) and Jegadeesh and Titman (1995), since a lot of stocks and the factor loading are time varying (Bacmann & Dubois, 1998). They asserted that overreaction to firm specific information plays an important role in contrarian profits.

Using the methodology of Jegadeesh and Titman's (1995), Antoniou, Galariotis and Spyrou (2003) examined whether the short-term contrarian profit exists for stocks on the London stock exchange. The results challenged the market efficiency theory because they found that negative serial correlation of stock returns predict future returns and also the result cannot be explained by risk. This important result shows that zero-investment

contrarian strategies provide significant profits. They showed that after adjusting for market friction, the contrarian profits are statistically significant, especially for extreme market capitalization portfolios. However, Antoniou, et al., (2003) suggested that concentrating on the largest portfolio to avoid large transaction costs and to maximize liquidity will generate more profit. They found that when employing only frequently traded stocks, the profits of delayed reactions are increased while investor overreaction to firm-specific information is decreased. They supported the result of Jegadeesh and Titman (1995) who state that the overreaction by investors to firm-specific information strongly affects contrarian profits.

Kang, Liu and Ni (2002) examined several short-term reversal strategies in the Chinese stock market and the different sources of abnormal returns. They observed a negative relationship between the Chinese and the US stock market. Lo and Mackinlay's (1990) and Jegadeesh and Titman's (1995) methods were used by Kang et al. (2002) to measure if return reversal exists. They showed that some short-horizon contrarian profits were statistically significant. Additionally, they found that the main source of short-term contrarian profits was overreaction to firm-specific information and this result was consistent with most previous studies in the US, such as Lo and Mackinlay (1990), Boudoukh, Richardson and Whitelaw (1994), and Jegadeesh and Titman (1995). The extreme overreaction is related to the lack of important information on companies, especially small companies, and to the irrational behaviour of individual investors in the stock market. Using value-weighted returns, more than equal-weighted returns, tends to reduce the profitability of the contrarian strategy (Kang et al., 2002). They also showed that the lead-lag structure in the Chinese stock market tends to decline the contrarian profit, result which was inconsistent with most previous studies in the US.

Using the methodology of Jegadeesh and Titman's (1995) and Australian weekly data from Ordinary Index (AOI) during the period 1994 to 2001, Lee, Chan, Faff and Kalev (2003) evaluated the presence and success of the short-term contrarian investment strategy. They showed that short-term contrarian profits are statistically significant when employing either value or equal weighted portfolio formation methodologies for all the combined full and size sorted portfolios. Lee et al. (2002) confirm that the main source of contrarian profits is ascribed to an over-reaction to firm-specific information and to a small percentage of lead-lag effect. They also showed that there is a negative relationship between size and return reversals. They found that the volume trading or seasonality, as well as measurement errors such as bid-ask bounce or risk, cannot fully explain these observed profits. However, once transaction costs were included the short-term contrarian profits vanished.

Pastor and Stambaugh (2001) examined if market wide liquidity has an important role for pricing common stocks. Using a monthly liquidity measure based on order flow they showed that fluctuations in aggregate liquidity is positively related to expected stock returns, even after controlling four other factors: market return, size, book-to-market and momentum. Pastor and Stambaugh (2001) found that liquidity is negatively related to return reversals during the period 1966 to 1999. In other words, lower liquidity has led to substantially higher return reversals. The result of Pastor and Stambaugh (2001) also showed that firm size is positively related to liquidity and negatively related to sensitivities to aggregate liquidity.

Subrahmanyam (2005) investigated the short-horizon reversals by providing a model which includes both behavioral effects and risk-aversion-related inventory phenomena. Using returns measured by the mid-point quote minimizes concerns about bid-ask bounce. He confirmed the result of Jegadeesh (1990) that shows the monthly return reversal effect. Practically, the results showed that reversals in beliefs of financial market agents play a crucial role in monthly reversals. In other words, the returns are highly related to own-return lags rather than to lagged order imbalances.

Avramov, Chordia, and Goyal (2006) demonstrated strong predictability and abnormal returns from a reversal strategy, which incorporates an illiquidity measure. They reported a considerable relationship between short-run contrarian and decrease in stock liquidity. In addition, they confirmed that reversal in weekly and monthly stock returns that have high turnover and low liquidity generate high negative serial correlation, especially to the loser stocks, result that is consistent with Campbell, Grossman and Wang (1993) and Conrad, Hameed and Niden's (1994) findings. While the effect of liquidity on autocorrelation is comparable at monthly and weekly frequencies, the effect of turnover on autocorrelation reverses at weekly frequencies. Price changes based on either exogenous selling pressure or public information are largely identified by trading volume. Avramov et al. (2006) showed that the highest abnormal returns before accounting for transaction cost resulted in lack of liquidity.

Hameed and Mian (2013) re-investigated the short-term reversal phenomenon using stocks grouped by industries since stocks in the same industry may be exposed to comparable changes in the supply and demand. They showed that contrarian strategies within industries provide considerably greater return of about 1.5 percent a

month. The finding confirms that applying adjustments of standard risk factor does not affect the return reversals. In addition, Hameed and Mian (2013) stress that the January effect does not influence the inter-industry reversal because the industry sorting increases the contrarian monthly returns by a significant 0.43 percent for the months of February through December. They reconfirmed that illiquid stocks play a significant role in reversal in addition to stocks that experience a decrease in size and turnover, result consistent with Avramov et al. (2006).

Regarding the previous studies, none of these studies have examined the presence of short-term contrarian effect at the Kuwait firms market. The research in this paper is motivated by the lack of Kuwait research to date into the predictability of Kuwait market and the need to investigate whether there is a short-term contrarian effect in the Kuwait stock exchange.

3. Empirical Methodology and Data

This study examines a 10-year period between December 2004 and April 2014. Monthly returns for KSX-listed firms and for equally weighted market portfolio with dividend reinvestment are drawn from the CRISP Database-Kuwait. Risk-free rate (monthly treasury bills) downloaded from Kuwait central bank. The study commences from December 2004 because the Datastream has a less comprehensive coverage of KSX stocks prior to December 2004. The final sample is composed of 113 monthly returns on each firm.

Beginning with December 2004, the sample firms are sorted in ascending order on the basis of monthly rates of return. 10 portfolios are then formed with an equal-rate of return in each portfolio. The firms with lowest returns are sorted in portfolio one, the next lowest in portfolio two, and so on with the best performers in portfolio ten. The performance of the two extreme portfolios, portfolio one and portfolio ten, are evaluated in the first through the 6 month after the formation of portfolios. Following DeBontd and Thlaer (1985) and Zarowin (1989 and 1990), the two extreme portfolios are employed to investigate the performance of the zero cost (buy loser and sell winner) contrarian strategy in the subsequent holding periods.

Table 1 reports company summary statistics over the period December 2004 to April 2014 for the 182 Kuwait companies, showing the monthly average return, standard deviation, last two columns represent Skewness and Kurtosis. There is a large variation in the mean and standard deviation of returns. Investors holding group, House energy holding, Al-Salam group holding Kuwait investment projects, Mena holding have the largest monthly averages (over 2% per month), while Gulf invest international has the lowest average at -2.29. The 182 Kuwait firms have an average monthly return of 0.12% and an average standard deviation of 11.01%.

Table 1. Descriptive statistics

Firm Names	Returns	S.D.	Skew.	Kurt.
Investors holding group	2.33	30.93	1.47	3.27
House energy holding	2.18	20.35	1.66	5.34
Al-Salam group holding	2.15	24.73	1.81	5.92
Kuwait investment projects	2.07	11.33	0.03	1.45
Mena holding	2.03	27.42	3.05	15.59
Kuwait food company	1.96	11.44	1.78	6.45
1st.dubai for real estate development	1.92	23.48	0.83	2.30
Jazeera airways	1.88	16.04	1.42	6.26
Hits telecom holding	1.82	19.90	1.58	7.70
Gulf petroleum investment	1.70	21.94	1.41	4.08
Contracting & mar. services	1.69	19.60	1.94	7.42
Mabanee	1.65	11.25	0.50	1.79
Educational holding group	1.48	27.40	7.43	68.80
Kuwait holding materials manufacturing	1.48	15.83	1.92	13.36
National ranges company	1.45	24.33	1.88	6.85
United projects group	1.39	11.40	1.68	4.72
Advanced technology	1.36	9.25	1.55	5.10
Alkout industrial .projects	1.32	15.61	7.77	70.58
Burgan bank	1.28	10.17	-0.52	3.57
Equipment holding	1.28	19.60	1.01	1.51
Yiaco medical	1.26	9.56	1.14	3.19
Ahli united bank	1.18	7.75	0.6	1.42

Gulf insurance	1.18	12.45	1.52	13.82
Gulf glass manufacturing	1.03	11.81	-0.24	3.00
Al-Safat investment	1.01	15.14	-0.1	1.73
Safwan trading & contracting company	1.01	13.10	0.84	2.26
Danah alsafat food stuff	0.97	18.42	1.81	7.28
National petroleum services company	0.97	11.89	0.03	1.54
Arab real estate	0.95	19.69	2.00	7.24
Kuwait financial centre	0.95	14.33	0.97	7.91
Portland cement	0.94	12.30	1.09	2.79
Kuwait process plant construction & contracting	0.93	12.50	2.49	11.64
Kuwait finance house	0.93	7.81	-0.07	0.39
National industrials group holding.	0.90	14.70	0.69	1.29
United industries	0.90	15.15	1.09	4.15
Al-Arabi group holding	0.89	13.24	0.57	1.26
National bank of Kuwait	0.88	6.86	0.13	1.29
Nafais holding	0.85	24.17	3.77	19.94
National investments	0.81	18.43	2.61	14.55
Palms agro production	0.81	16.67	0.76	4.78
Al-Ahleia insurance	0.8	9.52	0.73	3.66
Boubyan bank	0.78	9.26	1.46	6.20
Combined group cntg.co.	0.77	10.98	1.7	12.27
International resorts	0.73	19.47	0.94	1.83
Boubyan petrochemical company	0.72	10.45	0.75	5.46
Human soft holding	0.72	9.36	1.38	4.37
National mobile telecommunication	0.67	8.28	1.01	5.25
Al-themar international holding	0.63	10.86	1.76	8.63
Al-tamdeen investment	0.62	15.68	1.88	7.02
Automated systems	0.61	16.12	1.51	7.16
Zain group	0.59	11.01	0.66	3.17
Al-Ahli bank of Kuwait	0.58	7.12	0.65	2.94
Agility public warehousing company	0.57	13.96	0.39	1.22
Villa moda life style	0.57	8.44	4.31	30.11
Hilal cement	0.56	13.01	0.97	5.12
Livestock transaction and trading	0.54	10.77	2.49	12.38
Al-safat tec holding company	0.54	19.83	2.15	8.16
Kuwait cement	0.52	10.01	1.07	5.81
Munshaat real estate projects	0.49	21.51	1.29	2.78
National real estate	0.48	17.76	1.99	8.26
Kuwait Bahrain international exchange company	0.47	15.07	0.96	3.91
Commercial broker of Kuwait	0.44	6.42	0.75	2.09
Al-dar national real estate company	0.41	24.33	1.99	7.08
Coast investment & development company.	0.40	19.24	1.38	3.70
Sokouk holding	0.40	19.50	1.73	4.96
Arkan al-kuwait real estate	0.39	10.04	1.26	6.30
Salhiyah real estate	0.39	9.74	0.54	1.63
Al-mowasat healthcare company	0.38	11.64	1.41	7.29
Al-madina for finance & investment	0.37	17.93	0.91	2.76
First takaful insurance	0.36	16.70	1.08	7.74
Gulf bank of Kuwait	0.36	10.84	-0.57	5.63
Wethaq takaful insurance	0.36	17.79	3.24	22.68
Kuwait international bank	0.35	9.38	0.3	1.73
Shuaiba industrial	0.34	10.08	1.28	6.13
Kuwait foundry	0.28	9.90	1.38	4.19
Kuwait real estate	0.28	13.95	2.14	10.69
Sanam real estate	0.22	15.55	1.53	8.12
Al-mazaya holding	0.21	14.87	0.69	2.58

Kuwait hotels	0.20	11.01	0.13	2.44
National slaughter house	0.19	8.91	3.41	29.4
Real estate asset management company	0.18	8.21	-0.32	2.51
Acico industries	0.15	10.28	0.73	4.24
Mushrif trading & contracting company	0.15	14.92	0.76	1.84
Mena real estate	0.14	17.88	0.75	1.83
Gulf cable & eclectic industrials.	0.13	11.07	1.21	6.49
Union real estate	0.13	9.96	2.23	14.87
Aayan real estate	0.12	14.06	1.38	4.63
Kuwait national cinema	0.12	8.80	0.24	3.95
Kuwait pckg.mats.mnfg.	0.12	8.03	0.30	8.22
Al-massaleh real estate	0.11	13.42	0.90	5.28
Al safat en.holding	0.11	14.51	0.85	2.40
Intl.financial advisors	0.08	21.89	3.04	18.73
United foodstuff industries group	0.08	8.00	0.09	2.95
Alargan international real estate	0.07	13.09	-0.04	3.00
Inde.petroleum group	0.07	7.57	1.14	5.97
Kuwait utd.poultry	0.07	9.07	0.31	2.60
Markaz real estate fund	0.06	3.52	5.76	66.23
Mashaer holding co.	0.05	14.3	0.62	4.42
Credit rating & clln.	0.03	14.00	0.18	4.31
Hayat communications co.	0.01	16.12	1.10	2.97
Kout food group	0.01	9.45	-0.05	0.43
United real estate	0.01	10.96	1.81	8.55
Ifa hotels & resorts	0.00	13.75	1.20	3.97
Kuwait slaughter house	-0.02	7.88	1.21	6.26
Kuwait reinsurance	-0.02	6.50	-0.26	8.24
Ajjal real estate entm.	-0.05	11.86	0.79	1.89
Tamdeen real estate	-0.05	7.01	0.39	0.90
Kuwait resorts	-0.06	13.42	0.71	1.69
Kuwait insurance	-0.07	7.73	0.03	1.16
Kuwait investment	-0.10	10.45	-0.18	2.25
Al-safwa group compnay	-0.13	17.26	2.23	13.36
Arzan investment	-0.14	13.50	-0.09	1.15
Kuwait & gulf link tran.	-0.14	17.94	2.20	9.43
National international holding	-0.16	14.60	2.26	8.94
City group company	-0.16	11.45	0.96	3.37
Eyas for higher & technical education	-0.17	4.15	0.23	4.77
National industries	-0.19	10.53	0.16	2.04
Al-enma a real estate	-0.20	10.44	1.20	5.86
International lsg.& investments	-0.22	11.63	-1.24	10.04
Oula fuel marketing	-0.23	7.77	1.09	2.20
Heavy energy & ship building.	-0.25	11.93	2.50	12.54
Bayan investment	-0.28	18.16	1.17	2.61
Refrigeration industrials	-0.28	9.31	-0.04	3.18
Metal and recycling	-0.32	13.30	0.92	3.35
Warba insurance	-0.34	8.78	0.43	1.48
Securities group	-0.35	10.05	-0.72	7.62
Burgan co.for well drl.	-0.36	10.28	0.24	2.61
Qurain petroch industries	-0.36	9.03	0.57	2.18
National cleaning	-0.36	14.43	0.68	2.53
Kuwait & middle east compmany kscc	-0.36	14.68	3.20	21.06
Future communication	-0.38	10.01	0.99	5.66
Tameer real estate investment	-0.38	13.48	-0.09	2.70
The commercial real estate	-0.40	8.80	0.26	0.07
Commercial facs.	-0.40	6.48	-0.39	2.82

Nat.company for csm. industries	-0.40	15.72	1.78	10.7
Sultan centre food	-0.40	13.84	1.01	2.36
Gulf horizon holding company	-0.42	17.65	3.03	25.66
Aref investment group	-0.43	13.56	1.58	13.14
Ikarus petroleum industrials	-0.43	10.18	-0.36	1.66
Kuwait invest	-0.43	10.82	0.84	3.26
Kuwait pipes industrials & oil services	-0.44	14.75	1.48	4.62
Aqar real estate investments.	-0.45	9.69	0.15	1.13
Al-mal investment	-0.46	22.17	2.66	15.13
Injazzat real estate development	-0.52	12.85	1.76	6.07
Network holding	-0.52	16.26	2.08	14.52
Ekttitab holding	-0.53	20.96	2.88	15.7
Kuwait gypsum manufacturing & Trading	-0.54	11.01	1.20	9.14
Gulf rocks	-0.54	13.32	1.05	10.68
Securities house	-0.55	9.79	-0.56	5.84
Housing finance	-0.61	14.38	1.60	8.45
Privatization holding	-0.61	13.13	0.27	0.25
Mubarrad transport	-0.73	16.71	1.01	4.34
Kipco asset management	-0.75	9.79	0.32	2.78
First investment company	-0.76	9.90	0.62	1.00
Taiba Kuwaiti holding	-0.78	15.23	-0.57	6.71
Al-aman investment company	-0.80	14.92	1.36	4.19
Grand real estate prjs.	-0.83	21.26	3.05	17.29
Noor financial investment	-0.83	14.25	0.03	1.63
Tijara & real estate investment	-0.83	10.43	0.45	1.99
Jeezan holding	-0.84	16.14	0.90	4.21
Soor fuel marketing	-0.91	6.42	0.45	2.15
Al mudon international real estate company	-0.93	12.09	0.33	4.31
Osoul investment	-0.96	10.96	-0.59	3.13
Kuwait syrian holding	-0.99	16.58	1.72	5.26
Gulf franchising holding	-1.04	14.22	1.04	2.40
Salbookh trading	-1.16	14.48	0.80	3.58
Kuwait real estate holding	-1.18	14.67	1.10	3.72
Kuwait cable vision	-1.27	17.12	0.66	4.56
Jeeran holding company	-1.27	13.6	1.02	5.29
Al-deera holding	-1.30	15.94	0.44	1.41
Gulf investment house	-1.30	15.01	1.55	6.55
Aayan lsg.& investment	-1.36	12.56	-0.99	5.55
Industrial investments	-1.4	11.40	-0.11	6.81
The international investor	-1.44	11.68	0.24	2.94
Kuwait commercial markets	-1.46	11.27	0.72	3.14
The investment dar	-1.47	13.52	0.43	18.79
Al-abraj holding	-1.49	13.33	-1.00	8.66
Al-ahleia holding	-1.50	20.21	2.18	12.03
Al-madar finance & investment	-1.50	16.14	-0.05	2.75
Pearl of Kuwait real estate	-1.77	15.42	-0.18	7.69
Kuwait finance & investment company	-2.06	14.16	1.10	9.51
Gulf invest international	-2.29	13.98	0.05	4.45
AVERAGE	0.12	11.01	1.11	7.08

Table 1 reports the descriptive statistics for 182 Kuwait firms used in this research. the abbreviated name of the firm is presented in the first column. 'Returns' is the average monthly firm returns, 'S.D.' are the standard deviation of monthly firm returns, 'Skew' is the average monthly firm returns skewness while the 'Kurt' is the Kurtosis of the average monthly firm returns for the sample over the period December 2004 to April 2014.

4. Results

Section 4.1 provides the findings of the short-term contrarian strategy for Kuwait market. Section 4.2 presents the risk-adjustment regression. Section 4.3 shows further analysis of the performance of winner and loser portfolios.

4.1 Realized Returns

Table 2 provides summary statistics for the winner and loser portfolios. Average monthly firm returns over the 113 observations of portfolios formation, after formation period, the first month losers is superior than winners by 3.12% [= 0.0255- (-0.0057)], with (*t*-stat 4.44), which is statistically significant. These findings confirm the finding documented by Zarowin (1989) for NYSE stocks over a longer study period of 1972 to 1985. To investigate how rapidly the short-term contrarian profits opportunities continue, this study has calculated the difference between the monthly performances of extreme portfolios in the 2, 3, 4, 5 and the 6-month after the formation of the winner and loser portfolios. The differences drop slightly in the subsequent months and they are still significant and positive: 1.67% in month 2, 1.20% in month 3, 1.07% in month 4, 1.14% in month 5. Eventually, the differences are 1.08% in month 6. Meaning that the short-term contrarian profits continue to work and the loser is superior to the winner.

Sine Kato and Schalheim (1985) and Ziemba (1990) find the presence of the January effect in Tokyo stock exchange. Panel B of Table 2 also details the findings during the January month only in Panel B, while Panel C of Table 2 reports the findings of the rest months from February to December. As showed by the findings documented in Panel B and C, there is a January effect during the study period. Clearly, January realized returns of the winner and loser is larger than those in the rest months. After portfolio formation, the first month losers is superior to winners by 4.52% [= 2.24% - (-2.28%)] in January and by 2.98% [= 2.58 - (-0.40%)] in February through December. Although the results suggest that the short-run contrarian strategy works in the Kuwait market, the January effect alone does not explain the observed contrarian profits.

4.2 Risk-Adjusted Returns

The risk-adjusted returns from investment portfolios are evaluated applying the following regression:

$$R_{Zt} = \alpha_Z + \beta_Z \cdot R_{Mt} + \varepsilon_{Zt} \quad (1)$$

Where R_{Zt} = the returns to the investment portfolio = ($R_L - R_W$). R_{Lt} = the return of loser portfolio, R_{Wt} = the return of winner portfolio. R_{Mt} = the MSCI Kuwait market return, and ε_{Zt} are random error terms. The intercept term of equation (1) is Jensen's alpha represents the risk-adjusted returns to the investment strategy over the estimation period. If alpha is statistical significant, then this is evidence of abnormal returns. The slope coefficient is the regression loading corresponding to the market return factor of the model. The one-month T-Bill risk-free rate covering the full sample period from December 2004 to April 2014 is downloaded from Kuwait Central Bank.

Table 3 reports the regression results for extreme portfolios. Jensen's alpha in Panel A refers to losers is superior to winner by a risk-adjusted return of 3.61% per month in the first month after the formation period. The estimates of the slope coefficient propose that the winner portfolio's systematic risk is higher than the loser portfolio's.

Table 2. Realized returns of winner and loser portfolios

	Loser	Winner	Difference	t-statistic	Number of Observations
Panel A. All Months					
Month t = 1	0.0255	-0.0057	0.0312	(4.44)	113
Month t = 2	0.0159	-0.0008	0.0167	(3.08)	113
Month t = 3	0.0135	0.0015	0.0120	(2.62)	113
Month t = 4	0.0115	0.0008	0.0107	(2.79)	113
Month t = 5	0.0105	-0.0009	0.0114	(3.59)	113
Month t = 6	0.0103	-0.0005	0.0108	(4.00)	113
Panel B. January Only					
Month t = 1	0.0224	-0.0228	0.0452	(2.89)	10
Panel C. February through December					
Month t = 1	0.0258	-0.0040	0.0298	(2.98)	103

This table details the average monthly holding period returns for the short-term contrarian strategy. The short-term contrarian strategy for all months (Panel A), the short-term contrarian strategy for January only (Panel B), and the short-term contrarian strategy for February through December (Panel C) applied to KSX firms. winner refers to the portfolio composed of the 10% of firms that have the highest past one-month returns grouped in the Winner portfolio, while loser refers to the portfolio composed of the 10% of firms that have the lowest past one-month returns grouped in the Loser portfolio. The arbitrage portfolio “Difference” is to be held for 1, 2, 3, 4, 5 or 6 months. T-statistics presented in parenthesis are corrected for heteroskedasticity employing the White (2000) test.

As can be showed in Panel C, when the regression is run for February through December months only, the loser is superior to the winners by a statistically significant profit amount of 3.40% even after adjustment for risk. Panel B indicates that the loser still outperform the winner by the largest economically amount of 5.33% with statistical significant (t -stat 2.99). The fact that there is still significant abnormal performance outside January; therefore, the January effect is a factor help in rising short-term contrarian abnormal return opportunities but it can't consider a critical factor in explaining this phenomenon.

Table 3 reveals two main conclusions: Firstly, the short-term contrarian profits are statistically significant after systematic risk is taken into account in Kuwait firm market. Secondly, the January effect can't explain short-term contrarian profits.

4.3 Further Analysis of the Performance of Winner and Loser Portfolios

To test the source of profitability of the short-term contrarian strategy, this paper estimate Jensen's alphas for the winner and loser portfolios, using the following regressions:

$$R_{pt} = \alpha_p + \beta_p \cdot R_{Mt} + \mu_{pt} \quad (2)$$

Where R_{pt} = the adjusted return for winner and loser portfolios = R_L for the loser portfolio or R_W for the Winner portfolio in month t and μ_{pt} are random error terms.

Table 3. Risk-Adjusted returns of the two extreme portfolios

	α_t	β_t	R^2	Number of Observations
Panel A. All Months				
Month t = 1	0.0361 (5.08)	0.0156 (0.16)	0.02%	113
Panel B. January Only				
Month t = 1	0.0533 (2.99)	0.1301 (0.71)	6.83%	10
Panel C. February through December				
Month t = 1	0.0340 (4.44)	0.0867 (0.78)	0.65%	103

This table presents the CAPM regression results for monthly returns of the K=1 holding period for the short-term contrarian strategy. The short-term contrarian strategy for all months (Panel A), the short-term contrarian strategy for January only (Panel B), and the short-term contrarian strategy for February through December (Panel C) applied to KSX firms. The arbitrage portfolio “Difference” is to be held for 1 month. The CAPM regression is as follows: $R_{pt} - R_{ft} = a_p + b_{Rm-Rft}(Rm - R_{ft}) + e_t$, where $R_{pt} - R_{ft}$ is the portfolio's excess return, b_{Rm-Rft} is the market factor represented by the return on the MSCI Kuwait market index. T-statistics presented in parenthesis are corrected for heteroskedasticity employing the White (2000) test.

Table 4 summarizes the results. Jensen's alpha for the loser and winner portfolios are positive in the first month after the portfolio formation. The alpha for the loser portfolio of 0.0266 is larger than the alpha for the winner portfolio in the same month -0.0096. As summarized in Panel B to C, the abnormal profits for the loser portfolio are positive and weakly significant by 4.31% and positive and statistically significant 2.19% per month for the January and for February through December, respectively. On the other hand, the winner portfolio is lower than the loser portfolio in every sup period. The alpha is statistically insignificant 1.02% for the January month, while

1.21% for the non-January months, which is statistically significant.

The source of the short-term contrarian profits is very different between the US and Kuwait markets. Based on US stocks, Zarowin (1989) find that the short-term contrarian strategies are relatively equally division between the long and short positions. On the other hand, there is a strong asymmetry in the performance of the winner and loser portfolios in the Kuwait stock market. Given the persistent over performance of the winner portfolio and the significant abnormal profits observed for the loser portfolio, investors can keep short and long position in the extreme loser and winner portfolios.

Table 4. Risk-Adjusted returns of extreme portfolios

	Loser			Winner		
	α	β	R^2	α	β	R^2
Panel A. All Months						
Month t = 1	0.0266	0.2423	3.8%	-0.0096	0.2267	5.6%
	(3.07)	(2.02)		(-1.46)	(2.48)	
Panel B. January Only						
Month t = 1	0.0431	0.5208	40.2%	-0.0102	0.3907	63.9%
	(1.83)	(2.17)		(-0.94)	(-0.39)	
Panel C. February through December						
Month t = 1	0.0219	0.7550	33.2 %	-0.0121	0.0021	43.2%
	(2.86)	(6.83)		(-2.20)	(8.45)	

This table presents the CAPM regression results for monthly returns of the K=1 holding period for the short-term contrarian strategy. The short-term contrarian strategy for all months (Panel A), the short-term contrarian strategy for January only (Panel B), and the short-term contrarian strategy for February through December (Panel C) applied to KSX firms. winner represents the portfolio composed of the 10% of firms that have the highest past one-month returns grouped in the Winner portfolio, while loser represents the portfolio composed of the 10% of firms that have the lowest past one-month returns grouped in the Loser portfolio. The CAPM regression is as follows: $R_{pt} - R_{ft} = a_p + b_{Rm-Rft}(Rm - Rf_t) + e_i$, where $R_{pt} - R_{ft}$ is the portfolio's excess return, b_{Rm-Rft} is the market factor represented by the return on the MSCI Kuwait market index. T-statistics provided in parenthesis are corrected for heteroskedasticity employing the White (2000) test.

5. Conclusion

This paper reveals strong evidence on the short-term contrarian profits in the Kuwait firm market. While the KSX and NYSE stock markets are different in terms of important aspects, both markets provide significant short-term profits. The characteristics of short-term contrarian profits, however, are different. The main conclusions are driven from this research: Firstly, the short-term contrarian strategy is still profitable after systematic risk is taken into account in Kuwait. Secondly, the short-term contrarian profits can't be attributed to the January effect for the Kuwait market. Thirdly, there is a strong symmetry between the performances of the winner and loser extreme portfolios.

The most important conclusion is that short-term contrarian profits Company regarding January effect can't be explained by January return. This evidence confirms the Zarowin's (1998) finding who shows the same result based on the US market and Chang, McLeavey and Rhee's (1995) finding based on the Japanese market results.

Given to the studies on the short-term contrarian strategies may contribute to our understanding of portfolio investment in the Kuwait stock market. Lo and MacKinlay (1990) proposed that the contrarian profits can be mostly explained by positive lagged cross-autocorrelations across stocks. Conversely, study by Jegadeesh and Titman (1993) finds that the lead-lag structure in stock prices provides minimal percentage of contrarian profits, and they attribute the large percentage of contrarian profit to market overreaction. Such challenges to understand the main reason behind the short-term contrarian profits should be discovered in future research to decide whether Kuwait short-term contrarian abnormal returns are due essentially to a lead-lag structure in stock price or to stock overreaction.

References

- Antoniou, A., Galariotis, E., & Spyrou, S. (2003). *Are contrarian investment strategies profitable in the London Stock Exchange? Where do these profits come from?* EFMA Helsinki: Conference Paper. Retrieved from <http://ssrn.com/doi:10.2139/ssrn.391570>
- Avramov, D., Chordia, T., & Goyal, A. (2006). Liquidity and autocorrelations in individual stock returns. *The Journal of Finance*, 61(5), 2365–2394. <http://dx.doi.org/2310.1111/j.1540-6261.2006.01060.x>
- Bacmann, J. F., & Dubois, M. (1998). Contrarian strategies and cross-autocorrelations in stock returns: Evidence from France. *Working paper (ssrn)*. <http://dx.doi.org/10.2139/ssrn.138176>
- Boudoukh, J., Richardson, M. P., & Whitelaw, R. (1994). A tale of three schools: Insights on autocorrelations of short-horizon stock returns. *Review of Financial Studies*, 7(3), 539–573. <http://dx.doi.org/510.1093/rfs/1097.1093.1539>
- Campbell, J. Y., Grossman, S. J., & Wang, J. (1993). Trading volume and serial correlation in stock returns. *National Bureau of Economic Research*.
- Chang, R. P., McLeavey, D., & Rhee, S. G. (1995). Short-term abnormal returns of the contrarian strategy in the Japanese stock market. *Journal of Business Finance & Accounting*, 22(7), 1035–1048. <http://dx.doi.org/1010.1111/j.1468-5957.1995.tb00892.x>
- Cochrane, J. H. (1988). How big is the random walk in GNP? *The Journal of Political Economy*, 893–920. <http://www.jstor.org/stable/1837240>
- Conrad, J. S., Hameed, A., & Niden, C. (1994). Volume and Autocovariances in Short-Horizon Individual Security Returns. *The Journal of Finance*, 49(4), 1305–1329. <http://dx.doi.org/1310.1111/j.1540-6261.1994.tb02455.x>
- Hameed, A., & Mian, G. (2013). Industries and stock return reversals. *Journal of Financial and Quantitative Analysis* (Forthcoming).
- Ho Hans, R., & Stoll, H. R. (1981). Optimal dealer pricing under transactions and return uncertainty. *Journal of Financial Economics*, 9(1), 47–73.
- Jegadeesh, N. (1990). Evidence of predictable behavior of security returns. *The Journal of Finance*, 45(3), 881–898. <http://dx.doi.org/810.1111/j.1540-6261.1990.tb05110.x>
- Jegadeesh, N., & Titman, S. (1995). Overreaction, delayed reaction, and contrarian profits. *Review of Financial Studies*, 8(4), 973–993. <http://dx.doi.org/910.1093/rfs/1098.1094.1973>
- Kang, J., Liu, M. H., & Ni, S. X. (2002). Contrarian and momentum strategies in the China stock market: 1993–2000. *Pacific-Basin Finance Journal*, 10(3), 243–265. [http://dx.doi.org/210.1016/S0927-1538X\(1002\)00046-X](http://dx.doi.org/210.1016/S0927-1538X(1002)00046-X)
- Kaul, G., & Nimalendran, M. (1990). Price reversals: Bid-ask errors or market overreaction? *Journal of Financial Economics*, 28(1), 67–93. [http://dx.doi.org/10.1016/0304-1405X\(1090\)90048-90045](http://dx.doi.org/10.1016/0304-1405X(1090)90048-90045)
- Lee, D. D., Chan, H., Faff, R. W., & Kalev, P. S. (2003). Short-term contrarian investing—is it profitable?... Yes and No. *Journal of Multinational Financial Management*, 13(4), 385–404. [http://dx.doi.org/310.1016/S1042-1444X\(1003\)00017-00013](http://dx.doi.org/310.1016/S1042-1444X(1003)00017-00013)
- Lo, A. W., & MacKinlay, A. C. (1989). The size and power of the variance ratio test in finite samples: A Monte Carlo investigation. *Journal of Econometrics*, 40(2), 203–238. [http://dx.doi.org/210.1016/0304-4076\(1089\)90083-90083](http://dx.doi.org/210.1016/0304-4076(1089)90083-90083)
- Lo, A. W., & MacKinlay, A. C. (1990). When are contrarian profits due to stock market overreaction? *Review of Financial Studies*, 3(2), 175–205. <http://dx.doi.org/110.1093/rfs/1093.1092.1175>
- Madhavan, A., & Smidt, S. (1993). An analysis of changes in specialist inventories and quotations. *The Journal of Finance*, 48(5), 1595–1628. <http://dx.doi.org/1510.1111/j.1540-6261.1993.tb05122.x>
- McQueen, G., Pinegar, M., & Thorley, S. (1996). Delayed reaction to good news and the cross-autocorrelation of portfolio returns. *The Journal of Finance*, 51(3), 889–919. <http://dx.doi.org/810.1111/j.1540-6261.1996.tb02711.x>
- Pastor, L., & Stambaugh, R. F. (2001). Liquidity risk and expected stock returns. *National Bureau of Economic Research*.

- Poterba, J. M., & Summers, L. H. (1988). Mean Reversion in Stock Prices: Evidence and Implications. *Journal of Financial Economics*, 22, 27–59.
- Subrahmanyam, A. (2005). Distinguishing Between Rationales for Short—Horizon Predictability of Stock Returns. *Financial Review*, 40(1), 11–35. <http://dx.doi.org/10.1111/j.0732-8516.2005.00091.x>

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