Is There Day-of-the-week Effect in the Malaysian Stock Market?

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ABSTRACT

This paper looks at the issue of day-of-the-week effect in the case of the Malaysian stock market, which is an emerging stock market in the Asia-Pacific region. The study covers a period between January 1989 and December 1993, using all major indices of the KLSE. Overall, there seems to be an abnormally high return on Fridays, and a low return on Monday, a pattern quite consistent with markets in the West. However, from statistical point of view, this phenomenon is not significant, i.e., the Malaysian stock market is still efficient in the weak sense of the efficient market hypothesis. Our results are in contradiction with those of an earlier study by Md. Nasir and Mohamed (1987) which was conducted before the split between the KLSE and SES, but in line with the results of a more recent study by Clare, Ibrahim and Thomas (1998) which find that the day-of-the-week effect disappears after the implementation of the new settlement procedure, called Fixed Delivery and Settlement System (FDSS) beginning in January 1990.

ABSTRAK

Kertas ini meneliti isu kesan hari-dalam-minggu di pasaran saham Malaysia, yang merupakan sebuah pasaran yang sedang membangun di rantau Asia Pasifik. Kajian ini meliputi tempoh masa antara Januari 1989 dan Disember 1993, dengan menggunakan kesemua indeks utama BSKL. Secara keseluruhannya, didapati seperti ada pulangan abnormal yang tinggi pada hari Jumaat, dan pulangan rendah pada hari Isnin, iaitu suatu corak yang agak konsisten dengan pasaran-pasaran di Barat. Walau bagaimanapun, secara statistik, fenomenon ini tidaklah signifikan, iaitu, pasaran saham Malaysia masih cekap dari segi hipotesis pasaran cekap bentuk lemah. Keputusan kajian ini adalah bertentangan dengan penemuan kajian yang lebih awal oleh Md. Nasir dan Mohamed (1987), yang dibuat sebelum berpisahnya BSKL dengan Pasaran Saham Singapura. Walaupun begitu, hasil kajian ini adalah selari dengan hasil sebuah kajian yang lebih terkini oleh Clare, Ibrahim dan Thomas (1998), yang mendapati bahawa kesan hari-dalam-minggu lenyap selepas diperkenal kaedah penyelesaian yang baru, yang dikenali sebagai Sistem Penyelesaian dan Penghantaran Tetap, yang mula beroperasi pada bulan Januari 1990.

INTRODUCTION

Studies on the day-of-the-week effect in the developed stock markets of the world have shown the existence of a particular pattern of stock returns according to the day of the week. In particular, it has been shown that the average returns on Mondays were significantly negative, and this phenomenon is known as *Monday effect*. On the other hand, the average returns on Fridays were abnormally high, and so the term *weekend effect* was coined.

Studies by Cross (1973), French (1980), Gibbons and Hess (1981), and Keim and Stambaugh (1984) documented the significantly negative average stock returns on Mondays using U.S. stock market indices. French (1980), for example, studied the daily return on the Standard and Poor's composite portfolio of the 500 largest firms on the *NYSE* over a period between 1953 and 1977. He found that the average returns on Mondays were significantly negative during each of the five year sub-periods and for the overall period. Keim and Stambaugh (1984) doubled the length of period as examined by French (1980). They found consistent negative Monday returns throughout the 55 year period. Jaffe and Westerfield (1985) found similar phenomenon in the markets of Japan, Australia, Canada and United Kingdom, eventhough those markets exhibit different patterns in at least one aspect, i.e., Japanese and Australian markets seem to generate lower returns on Tuesday, as opposed to the Monday effects found in Canadian and U.S. markets. Another study on the Canadian market by Bishara (1989), for the period between January 1968 and March 1987, found that the average return for Monday was significantly negative and that for Friday was significantly positive. In addition, there was an increasing magnitude of a higher Friday positive mean return and Monday negative mean return, which was detected growing in importance over time.

Jaffe, Westerfield and Ma (1989) studied the markets on the U.S., Canada, Australia and Japan, and found that abnormally low returns on Monday seem to follow stock market declines. In fact, the Monday effect, according to them, virtually disappears when the market has previously risen. Also, in five of the size data sets, the Monday return is found to be significantly higher when the return over the previous week is above average. Before this, Cross (1973), Keim and Stambaugh (1984), and Jaffe and Westerfield (1985) pointed out that Monday return is positively correlated with the previous Friday return.

Lee, Pettit and Swankoski (1990) studied the day-of-the-week effect on the markets of Hong Kong, Japan, Korea, Singapore, Taiwan and the U.S., between January 1980 and December 1988. They found that returns were negative on Mondays in all markets but Korea and Taiwan. However, the negative Monday returns in Hong Kong, Japan and Singapore were of a lower magnitude than what was experienced in the U.S. Tuesday returns were negative in Japan, Korea and Singapore. Wednesday and Friday returns ranked

first and second in order of magnitude for the five weekdays, respectively, in all countries except Taiwan and the U.S. For the U.S. market, the highest return was on Friday followed by Wednesday.

Dubois and Lauvet (1996) examined the day-of-the-week effect for eleven indices from nine countries during 1969-1992 period, and found that returns are lower at the beginning of the week (but not necessarily on Monday) for the full period. However, the anomaly seems to disappear for the most recent period in the USA. In the case of European countries, Hong Kong and Toronto, nevertheless, the effect is still strong.

A recent study by Chang, Pinegar and Ravichandran (1998) considered the joint influence of contemporaneous and lagged responses to macroeconomics news in explaining US day-of-the-week effect. Macroeconomics news is measured by movements in large firms stock prices. The average response of smaller stocks to these movements is abnormally high on Mondays especially in down market. However, after corrections for these asymmetries are made, the US day-of-the-week effect weakens substantially for most size-ranked portfolios in most of the 6 approximately equal subperiods between 1962 and 1992. The findings suggest that seasonals in processing macroeconomics news account for much of the day-of-the-week effect in equity returns.

In the case of the Malaysian stock market, Md. Nasir and Mohamed (1987), employing New Straits Times Industrial index for a period from July 1975 to December 1985, found the lowest mean return on Tuesday, the highest mean return on Friday, and significant negative returns on Monday and Tuesday. A more recent study by Clare, Ibrahim and Thomas (1998), employing only the KLSE Composite Index from 1983 to 1993, found a marginally significant negative Monday effect and a significant positive Wednesday and Thursday effect for the whole period. They believe that the most likely cause for the seasonal effects documented between 1983 and 1993, can be traced to the pre-1990 settlement procedures on the Kuala Lumpur Stock Exchange (KLSE), since it is found that after this date nearly all of the seasonal variation in daily stock returns disappears.

The purpose of this paper is to examine the existence of the day-of-the-week effect in the Malaysian stock market, especially after the split between the Kuala Lumpur Stock Exchange (KLSE) and the Stock Exchange of Singapore (SES) beginning in January 1990, and the establishment of the new settlement procedures, also beginning in January 1990. Our study differs from the previous study on the Malaysian stock market by Md. Nasir and Mohamed (1987) in various ways: (1) our study covers a period following the split between the KLSE and the SES; (2) we employ all the main sectoral indices of the KLSE, plus the newly established indices of Emas and Second Board; and (3) we employ more statistical tests.

With regard to the study by Clare, Ibrahim and Thomas (1998), our study differs from theirs in terms of: (1) the period of our study which cover mainly

the period of the new settlement procedures, called the Fixed Delivery and Settlement System (FDSS) which has been in operation since January 1990; and (2) employment of more indices. It should be noted here that before the introduction of the FDSS, there used to be a trading period system whereby a seller had up to Wednesday of the following week to deliver the share certificate, whereas with the FDSS, a selling client must deliver the share certificate to his broker by 12:30 pm on the fourth market day after the date of the transaction, i.e., day t+4 (see Yong (1995), pp.146-147, for further discussion on this issue).

DATA AND METHODOLOGY

The daily returns based on the KLSE Composite index, the Second Board index and the major sectoral indices of the KLSE, namely KLSE industrials, KLSE Finance, KLSE Tins, KLSE Properties and KLSE Plantations, from January 1989 to December 1993 were used in this study. For the Emas index, the data are from October 1991 (the month this index was introduced) to December 1993, and for the Second Board index the data are from February 1991 (the beginning of the index) to December 1993. The KLSE Composite index comprises of 85 blue-chip stocks (during the period of the study) of all sectors of the KLSE Main Board, the Emas index comprises of all stocks (over 300 of them) traded on the Main Board of the KLSE, the Second Board index comprises of all stocks traded on the Second Board of the KLSE, the KLSE Industrial consists of 30 industrial blue-chip stocks, and other indices consist of all stocks listed in their respective sectors. All these indices are value-weighted.

The daily return is computed as

$$[(I_{j,t}) - I_{j,t-1})/I_{j,t-1}] * 100\%$$

where, $I_{j,t}$ is index j on day t, and $I_{j,t-1}$ is index j on day t-1.

If there is no trading (usually due to holiday) on any given day, then the return on that day is dropped from our computation, i.e., considered as missing value. In this case, the return for the day following the holiday is computed based on the previously available trading day.

Specifically, the following hypotheses are tested:

1. the average return for each day is significantly different from zero.
2. all average daily returns are equal.
3. all daily standard deviations are equal.
4. the average return for Monday or Friday is significantly different from the average return for other days.

5. there is a significant correlation between the negative return of Friday and the return on the following Monday.

The first hypothesis is meant to find a particular day or days which exhibit abnormal positive or negative returns. For this purpose, a t-test is performed. The second hypothesis is meant to find out whether, *in general*, there exists a pattern in the day of the week returns. This hypothesis is tested using an F-test. The Scheffe technique of multiple comparison is also used to further investigate the results of the F-test, i.e., if the F-test indicates the existence of unequal returns among some of days, then the Scheffe technique can be used to identify which pairs of days are significantly diferent in terms of their average returns.

The F-test for multiple comparison is more strict then the t-test in its decision to reject the null hypothesis of no difference in means (see Norusis (1983), p. 111, for further discussion). Day-of-the-week effect is an anomaly of the weak form of the efficient market hypothesis (EMH) which says that movements in stock returns should be random, i.e., the existence of the day-of-the-week effect contradicts the EMH. However, one should understand that the EMH is a general concept, and therefore, a more general test such as the F-test is somewhat more appropriate to test the validity of the hypothesis.

The third hypothesis looks at the issue of inter-day volatility. To explore this issue, the Brown-Forsythe modified Levene test for homogeneity of variances is applied. The Brown-Forsythe modified Levene test statistic is given by

$$F = \frac{[\sum_{j=1}^{c} n_j (\overline{w}_j - \overline{w}_{..})^2]/[c-1]}{[\sum_{j=1}^{c} \sum_{i=1}^{n_j} (w_{ij} - \overline{w}_j)^2]/[n-c]}$$

where, $w_{ij} = |Y_{ij} - \hat{m}|_j$ is the absolute difference between the ith observation in the jth group and the sample median of that jth group,

$$\overline{w}_j = \sum_{i=1}^{n} w_{ij}/n_j$$ in the mean of the absulute differences in group j,

and $$\overline{w}_{..} = \sum_{j=1}^{c} \sum_{i=1}^{n_j} w_{ij}/n$$ is the overall mean common to all the absolute differences.

The F-statistic is distributed $F_{c-1, n-c}$ under the null hypothesis of no differences in variance. Actually, the standard F-test for variance equality is not robust to departures from normality in the data (Layard 1973). Connover et. al. (1981) evaluated more than 50 procedures for testing the homogeneity of variance hypothesis and concluded that a Brown-Forsythe (1974) modification of the Levene (1960) test is among the most powerful and robust to violations in the assumption of normality.

For the fourth hypothesis, our main purpose is to find out whether the return on Friday is abnormally the highest compared to other days. At the same time, we would like to know whether the Monday return is significantly different from any other day. Again, in this case, a t-test is used. Finally, the fifth hypothesis is meant to find out whether a negative return on Friday will have an adverse effect on the following Monday return, a contention put forth by Jaffe, Westerfield and Ma (1989), eventhough they actually contended that low return on Monday follows the stock market decline the previous week, i.e., they relate the low return on Monday with the previous week's market decline, whereas in our study we relate Monday return with the negative return on the previous Friday.

FINDINGS

The average return for each day and its corresponding standard deviation are shown in Table 1. Negative Monday returns are detected in the Kuala Lumpur Stock Exchange (KLSE) Composite, the KLSE tins, and the KLSE Plantations. Also, negative return occurs on Tuesday for the KLSE Industrials, a finding consistent with that of Md. Nasir and Mohamed (1987), who used the New Straits Times Industrial Index, whereas in our study we use the KLSE Industrial index. Friday returns seem to be the highest compared to other days for all the indices, except for the Emas index, where the highest return is on Monday, followed by Thursday and Friday. In general, Wednesday seems to register the second highest return, except for the Emas index, Composite index, Industrial index and Finance index, where their returns on Thursday are higher than returns on Wednesday. In general, the lowest returns seem to occur on Monday, except for the Emas, Industrials, Finance and the Second Board indices.

In terms of volatility of returns, the highest standard deviations occur on Monday for Composite, Industrials, Finance, Properties, Tins and Plantations indices. For the Emas index, the highest standard deviation occurs on Tuesday, whereas for the Second Board it occurs on Wednesday. Fridays register the lowest standard deviation for the Composite, Industrials, Properties, Tin, and Plantations indices. For the Emas index, the lowest standard deviation takes place on Wednesday. For the Finance index, the lowest

TABLE 1. Mean (percent) and standard deviation (percent)
for each day of the week

Index	Monday	Tuesday	Wednesday	Thursday	Friday	All Days
Composite	-0.064	0.096	0.143*	0.166*	0.190**	0.106
	(1.535)	(1.137)	(0.953)	(1.115)	(0.878)	(1.148)
Industrials	0.006	-0.014	0.097	0.134*	0.212**	0.087
	(1.357)	(1.024)	(0.974)	(1.067)	(0.886)	(1.075)
Finance	0.054	0.033	0.137	0.218**	0.258**	0.140
	(1.763)	(1.155)	(1.252)	(1.249)	(1.254)	(1.353)
Properties	0.002	0.015	0.208*	0.174	0.263**	0.132
	(1.998)	(1.398)	(1.570)	(1.593)	(1.312)	(1.596)
Tins	-0.040	0.170	0.209	0.163	0.216*	0.144
	(2.129)	(1.973)	(1.969)	(1.884)	(1.550)	(1.910)
Plantations	-0.062	0.031	0.163	0.149	0.196**	0.096
	(1.607)	(1.146)	(1.401)	(1.256)	(0.974)	(1.297)
Emas	0.281**	0.103	0.047	0.192**	0.189**	0.163
	(0.756)	(0.876)	(0.697)	(0.789)	(0.714)	(0.771)
Second Board	0.058	0.042	0.238	0.161	0.383**	0.177
	(1.449)	(1.457)	(1.603)	(1.289)	(1.416)	(1.448)

Notes: * Significant at the 5 per cent level.
** Significant at the 1 per cent level.

standard deviation is on Tuesday, and for the Second Board index, it occurs on Thursday.

As also indicated in Table 1, the returns on Fridays are significantly different from zero for all the indices. For the Emas index, the returns for Monday and Thursday are also significantly different from zero. Except for the Emas index, the returns on Monday are not significantly different from zero for all the indices. The returns on Tuesday are not significantly different from zero for all the indices. On Thursday, the significant returns occur in 4 out of 8 indices and on Wednesday, the significant returns occur in 2 out of the 8 indices. In general, we can say that the abnormally highest returns take place on Friday followed by Thursday. The returns on Monday and Tuesday are generally low.

We conducted an F-test to determine whether all average daily returns are equal. According to Norusis (1983, p. 111), a significant F-statistic

indicates that the population means are probably unequal without pinpointing where the differences are. Therefore, the Scheffe test, which is a multiple comparison procedure, is used to identify which population means are different from each other. This procedure sets up more stringent criteria for declaring differences significant than does the usual t-test. Snedecor and Cochran (1967), according to Norusis (1983), pointed out that there is a problem when t-test is used to test all possible pairs of means, i.e., when many comparisons are made, some will appear to be significant even when all population means are equal. For example, with five groups there are ten possible comparisons between pairs of means, and when all population means are equal, the probability that at least one of the ten observed significance levels will be less than 0.05 is about 0.29. Based on the problem cited above, we choose an F-test rather than the usual t-test for testing the existence of a general pattern in the daily returns. The results of the F-test are shown in Table 2. As indicated by the P-values, none of the indices show significant overall difference in terms of their average daily returns at the 5 per cent level. The Scheffe test also confirm the findings of the F-test at the 5 per cent level of significance.

Looking back at Table 1, we can see that, in general, the highest standard deviations are on Monday, and the lowest on Friday. Emas index consistently produces the lowest standard deviations, and Tins index is the most volatile. Table 3 shows the results of the Brown-Forsythe modified Levene test. The results indicate that all variances are not equal across week-days, for all the indices. Actually, the findings are consistent with the variance ratios (between the largest variance and the smallest variance) shown in the table, which are significantly greater than unity. Actually, we also run other tests for homogeneity of variance. These tests are the Cochran C and the Bartlett-Box

TABLE 2. Analysis of variance for overall difference in average returns among weekdays

Index	MS Between)*	MS (Within)**	F-Statistic @	P-Value
Composite	1.1044	1.3159	0.8393	0.5002
Industrials	2.2447	1.1536	1.9459	0.1005
Finance	2.4743	1.8298	1.3522	0.2484
Properties	3.5904	2.5376	1.4149	0.2267
Tins	3.0939	3.6351	0.8511	0.4928
Plantations	3.2316	1.6713	1.9336	0.1025
Emas	1.2300	0.5912	2.0805	0.0816
Second Board	3.0048	2.0919	1.4364	0.2201

Notes: * Mean Square (Between) or Mean Square Regression.
** Mean Square (Within) or Mean Square Error.
@ MS (Between) divided by MS (Within).

TABLE 3. Results of the Brown-Forsythe modified Levene test (F-stat) for equality of variance

Index	Variance Ratio*	F-Stat	P-Value
Composite	3.058	42.829**	0.00
Industrials	2.339	24.223**	0.00
Finance	2.323	13.765**	0.00
Properties	2.312	9.648**	0.00
Tins	1.964	7.627**	0.00
Plantations	2.790	19.158**	0.00
Emas	1.577	7.126**	0.00
Second Board	1.547	19.441**	0.00

Notes: * Variance ratio between largest variance and smallest variance.
       ** Significant at the 1 per cent level.

tests for equity of variances, and the results are shown in the Appendix. Based on these tests, only the Second Board index exhibits equality of variances at the 5 per cent level of significance for both tests. For the Emas index, both tests show equality of variances at the 1 per cent level of significance. For other indices, both tests indicate a significant difference in their variances.

The results of the independent t-test for comparing the mean returns between Monday or Friday and other weekdays are shown in Table 4. As we can see, the returns on Monday are not significantly different from the returns on Tuesday for all the indices. In fact, in almost all instances, returns on Monday are not significantly different from the returns on other days at the 1 per cent level of significance, except the return between Monday and Wednesday for the Emas index. The results are in fact consistent with the F-test shown in Table 2. However, putting the level of significance aside, based on the values of the t-statistic, in general, it seems that the largest mean differences are between Monday and Friday.

Returns on Friday are not significantly different from all the other days for all the indices at the 1 per cent level of significance, except the return between Friday and Tuesday for the Industrial index. Based on the t-statistics, in general, the smallest differences in mean returns are between Friday and Thursday.

Table 5 shows the correlations between the return on Monday and the previous Friday's return when return on Fridays is negative. Except for the Emas index, all correlations are significant at the 1 per cent level. The results are consistent with the notion put forth by Jaffe, Westerfidld and Ma (1989) and also by Jaffe and Westerfield (1985), i.e., the existence of Monday effect in the Malaysian stock market, as in the case of U.S., Canadian Australian and Japanese stock markets. Emas index does not show significant correlation

TABLE 4. T-statistics for independent t-test between the mean return on Monday (or Friday) and the mean return on other weekdays

Index	Monday's return compared with				Fridays return compared with			
	Tue	Wed	Thu	Fri	Mon	Tue	Wed	Thu
Composite	-0.60	-1.07	-1.21	-1.49	1.49	1.03	0.54*	0.24
	(0.548)	(0.286)	(0.277)	(0.138)	(0.138)	(0.304)	(0.589)	(0.812)
Industrials	0.20	-0.88	-1.20	-2.04	2.04	2.68	1.39*	0.89
	(0.845)	(0.379)	(0.231)	(0.042)	(0.042)	(0.008)	(0.164)	(0.374)
Finance	0.18	-0.61	-1.22	-1.48	1.48	2.10*	1.06*	0.31*
	(0.856)	(0.540)	(0.221)	(0.140)	(0.140)	(0.037)	(0.291)	(0.755)
Properties	-0.09	-1.31	-1.09	-1.76	1.76	2.08*	0.43	0.70
	(0.928)	(0.191)	(0.278)	(0.079)	(0.079)	(0.038)	(0.665)	(0.486)
Tin	-1.16*	-1.39*	-1.15*	-1.70	1.70	0.43	0.17	0.49
	(0.245)	(0.166)	(0.249)	(0.089)	(0.089)	(0.669)	(0.864)	(0.566)
Plantations	-0.70	-1.71	-1.67	-2.31	2.31	1.97	0.40	0.57
	(0.485)	(0.088)	(0.095)	(0.22)	(0.022)	(0.50)	(0.689)	(0.566)
Emas	1.89*	2.80*	1.00*	1.09*	-1.09*	0.93*	0.175*	-0.04*
	(0.059)	(0.005)	(0.318)	(0.276)	(0.276)	(0.351)	(0.082)	(0.967)
Second Board	0.10*	-1.03*	-0.66*	-1.98*	1.98*	2.07*	0.84*	1.43*
	(0.921)	(0.305)	(0.511)	(0.049)	(0.049)	(0.039)	(0.404)	(0.154)

Notes: P-value are shown in the parentheses.
* Using pooled variance estimate.

TABLE 5. Correlation between return on Monday and the previous week Fridays return when return on Friday is negative

Index	Mean return on Monday (per cent)	Number of observations	Correlation
Composite	-0.064	98	0.3483*
Industrials	0.006	97	0.3342*
Finance	0.054	105	0.2407*
Properties	0.002	111	0.3490*
Tin	-0.040	126	0.2265*
Plantations	-0.062	114	0.2805*
Emas	0.281	43	0.0619
Second Board	0.058	61	0.4933*

Note: * Significant at the 1 per cent level.

perhaps due to its abnormally high return on Monday which is an abnormality compared to other indices.

CONCLUSION AND IMPLICATION

In this paper we examine the issue of day-of-the-week effect in the case of the Malaysian stock market. Overall, we find that there seems to be an abnormally high return on Fridays, and a low return on Mondays, a pattern quite consistent with the markets in the West. However, after running a few statistical tests, we find that this phenomenon proved to be insignificant. Our findings are in contradiction with those of Md. Nasir and Mohamed (1987) which was conducted before the split between the KLSE and the SES. On the other hand, our results seem somewhat in line with the findings of the study by Clare, Ibrahim and Thomas (1998) that the seasonal variation in daily stock returns disappears after the introduction of the new settlement procedures, i.e., the FDSS, in 1990. This means that the Malaysian stock market has become more efficient (in the week sense of the EMH) after the introduction of FDSS. The settlement procedures as an explanation to the existence of the day-of-the-week effect has been discussed by Hawawini and Keim (1995), for example. Our results indicate that the KLSE is efficient in the weak sense.

Eventhough our study shows day-of-the-week effect phenomenon is not that significant in the Malaysian stock market, further investigation can still be carried out on a number of areas especially when our study is still only preliminary. Future research can look at subsample patterns of the day-of-the-week effect other than industry sectors, as in the case of our study. The day-of-the-week effect can be further studied on particular segments in the market and time. For example, is there day-of-the-week effect in January versus non-January, small versus large stocks, liquid versus illiquid stocks, and first-half versus last-half months (Wang, Li & Erickson (1997))? A much longer time period of study can also be chosen.

There seems to be significant correlations between negative Friday returns and Monday returns across sectors, except for the Emas sector. Yong (1994) has shown that, using regression analysis and Granger causality test, Fridays performance of the US market, and to a lesser degree the Saturday's performance of the Japanese market, do influence the Mondays performance of the Malaysian market. Perhaps the end-of-the-week performances of these advanced markets which influence the Mondays performance of the Malaysian stock market. Further research can still be carried out in this area, i.e., finding factors that might explain this seemingly significant correlation between negative Friday returns and Monday returns. We can only postulate that a negative Friday's return can possibly lead to a pessimistic view on the part of the investors' view on the Monday's return.

Is there a size effect related to the day-of-the-week effect in our study? As mentioned in the data and methodology section of our paper stocks listed on the Second Board (represented by the KLSE Second Board Index) are those of small companies, and stocks listed on the Main Board (represented by the Emas Index) are those of big companies. The results of the F-test for both are insignificant which means that size has no influence on the existence of the day-of-the-week effect.

In some cases, we find that the results of our tests on the Emas Index are different from other indices, which we believe need some clarifications. In the Emas index, the stocks are a combination of both blue chips and lower liner stocks (stocks of smaller yet riskier companies) since this index comprises of all stock traded on the Main Board of the KLSE. Other indices are comprised of mainly selected stocks or commonly known as blue chips, i.e., stocks of big and stable companies. We believe that the difference in results, more or less, is due to this factor.

What is the significance of this kind of study to a practitioner or to an investor in the market? For one thing, the findings of this study seem to reinforce the idea of an efficient market even in a small and emerging stock market, like the Malaysian stock market, which means that it is quite difficult for an investor to make an abnormal return in the Malaysian stock market because the movements in the stock returns are random. However, if we look at the results more closely, there seems to be ways for us to avoid from losing money, especially when we know that the negative returns on Friday do have some influence on Mondays' performances.

APPENDIX 1. Results of equality of variance tests using
Cochran C and Bartlett Box F-tests

Index	Cochran C	P-Value	Bartlett-Box F	P-Value
Composite	0.3586	0.000	25.413	0.000
Industrials	0.3191	0.000	13.937	0.000
Finance	0.3400	0.000	16.037	0.000
Properties	0.3149	0.000	14.036	0.000
Tin	0.2494	0.007	7.798	0.000
Plantations	0.3093	0.000	19.355	0.000
Emas	0.2593	0.016	2.530	0.039
Second Board	0.2457	0.082	1.821	0.122

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