RESULTS AND INTERPRETATIONS

4.1   STOCK PRICES

The average monthly prices for every stock of LMECs and FMECs for five years (1995-1999) are provided in Appendix 4 and Appendix 5. Table 1 shows the average monthly prices for Local Majority Equity Companies (LMECs), Foreign Majority Equity Companies (FMECs) and the monthly values for KLCI between January 1995 and December 1999. The period of this study was divided into two sub periods, which is from January 1995 to July 1997 and from July 1997 to December 1999. The first period is called "before crisis" and the later is called "during crisis". Month 0 is July 1997. The month of July is considered as the beginning of the crisis in Malaysia based on Patel and Sarkar (1998) definition.

The KLCI monthly values in Table 1 are also presented in Figure 1(A). The Figure exhibits that the KLCI had stable movement before the crisis period. However, the stock prices started to show a steep downtrend after July 1997(month 0). According to Economic Report 1997/98, the stock market in Malaysia started to have a downtrend in July 1997 as the KLCI fell below 1000 points (By referring to Table 1, the KLCI fell to 908.59 in August 1997). In September 4, 1997, KLCI touched it lowest level since 20 April 1993 to 675.15 points. Malaysian government announced certain measures for economic recovery like cutting two percent of government expenditure and increasing the use of local good in privatized projects. The government announcement improved the market sentiment and the KLSE rebounded at the end of September 1997 (month 2 at 812.86 points). However, when the crisis deepened in the region, the Malaysian market dropped again. The government set up the National Economics Action Council to find the solution of the crisis.

Month -	Period	LMECs	FMECs	KLCI
Jan-95	-30	10.62	10.80	927.26
Feb-95	-29	11.19	11.61	936.75
Mar-95	-28	10.95	11.63	981.95
Apr-95	-27	10.81	11.47	966.38
May-95	-26	10.81	11.68	1000.19
Jun-95	-25	11.10	11.88	1042.38
Jul-95	-24	10.94	12.16	1043.03
Aug-95	-23	10.80	12.43	1037.49
Sep-95	-22	10.65	11.70	1007.78
Oct-95	-21	10.50	11.48	979.16
Nov-95	-20	10.56	11.54	954.12
Dec-95	-19	10.57	11.95	973.32
Jan-96	-18	10.79	12.41	1025.07
Feb-96	-17	10.70	12.53	1071.95
Mar-96	-16	11.09	13.11	1116.89
Apr-96	-15	12.60	15.30	1169.23
May-96	-14	12.47	14.06	1166.63
Jun-96	-13	12.45	14.11	1138.05
Jul-96	-12	13.35	15.32	1102.02
Aug-96	-11	13.63	16.16	1092.98
Sep-96	-10	13.50	15.59	1126.24
Oct-96	-9	13.48	16.18	1152.07
Nov-96	-8	13.64	16.07	1197.44
Dec-96	-7	13.41	15.88	1232.52
Jan-97	-6	13.26	15.72	1227.34
Feb-97	-5	13.84	15.94	1243.70
Mar-97	-4	13.98	16.01	1236.89
Apr-97	-3	13.08	15.62	1141.64
May-97	-2	12.81	14.85	1092.50
Jun-97	-1	12.79	14.65	1092.43
Jul-97	0	12.34	13.96	1045.07
Aug-97	1	10.65	14.14	908.59
Sep-97	2	9.20	13.22	812.86
Oct-97	3	8.10	10.21	737.78
Nov-97	4	7.27	10.35	608.85
Dec-97	5	4.57	7.67	565.78
Jan-98	6	5.10	8.31	580.29
Feb-98	7	7.01	8.87	695.73
Mar-98	8	5.90	9.19	732.57
Apr-98	9	6.06	9.05	672.09
May-98	10	5.86	8.63	581.74
Jun-98	11	5.54	8.34	496.62
Jul-98	12	3.53	6.65	428.69
Aug-98	13	2.81	4.78	353.16
Sep-98	14	4.24	6.18	334.14
Oct-98	15	4.36	5.72	389.01
Nov-98	16	5.54	8.13	453.81
Dec-98	17	5.24	7.36	543.56
Jan-99	18	5.04	7.50	584.20
Feb-99	19	4.82	6.74	566.85
Mar-99	20	4.37	5.82	521.86
Apr-99	21	4.88	7.07	588.94
May-99	22	5.66	7.89	709.41
Jun-99	23	6.75	8.51	776.90
Jul-99	24	5.85	8.32	794.20
Aug-99	25	5.77	7.82	767.99
Sep-99	26	5.48	7.63	720.73
Oct-99	27	5.61	7.71	709.43
Nov-99	28	5.58	7.57	737.38
Dec-99	29	5.91	7.87	773.59

TABLE 1

THE AVERAGE MONTHLY PRICES OF LOCAL MAJORITY EQUITY COMPANIES (LMECs), FOREIGN MAJORITY EQUITY COMPANIES (FMECs) AND THE MONTHLY VALUES OF KLCI : JAN 1995 - DEC 1999.

FIGURE 1 (A)
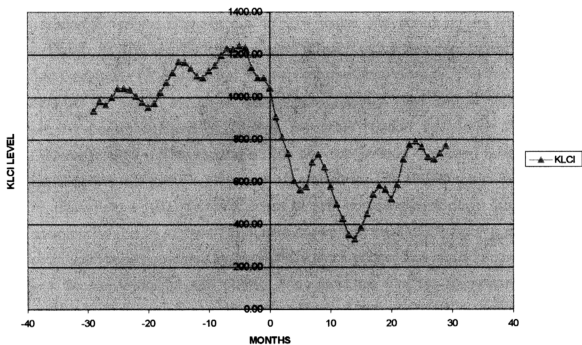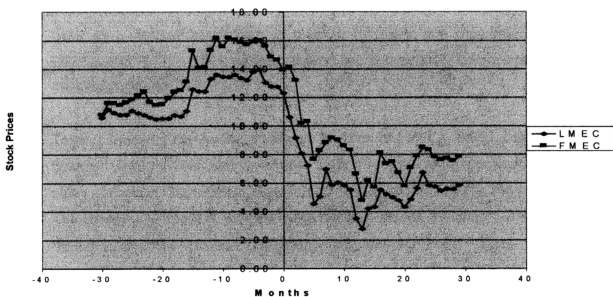THE MONTHLY VALUES OF KUALA LUMPUR COMPOSITE INDEX(KLCI)

FIGURE 1 (B)
THE AVERAGE MONTHLY PRICES FOR STOCK OF LMECs AS COMPARED TO FMECs.

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On September 1, 1998, the capital controls were introduced. The KLSE bounced back again (begin at month 14) and the market tended to show a positive movement.

The stock prices in Table 1 and Figure 1 (B) for LMECs and FMECs were adjusted for capital changes due to right issues and bonus issues (Refer to Appendix 3). The stock price movement of each group between January 1995 and December 1999 is divided into two different time periods. The first period denoted by "before the crisis" period from January 1995 to July 1997. The second period denoted by "during the crisis" period from July 1997 to December 1999. The separation into two sub periods has been taken as a result of financial crisis in Malaysia that started at July 1997 (the month-period 0). From Figure 1(B), the stock prices of both portfolios went down during the crisis period (begin at month 0). It also shows that the LMECs stock prices are more volatile as compared to the FMECs stock prices. The result is consistent with Brooks, Faff and Ariff (1996). They identified that the Malaysian share market is a volatile share market (at the end 1994, the KLSE had 478 listed firms, of which only three were non-Malaysian firms).

4.2   STOCK RETURNS

The stock returns of LMECs and FMECs were analyzed in order to see the performance of each portfolio and to test the hypotheses of the study. KLCI is used as a market benchmark in order to compare the movement of the LMECs and FMECs stock prices between two sub periods, before and during the financial crisis.

Table 2 presents the Average Monthly Returns of LMECs, FMECs and KLCI between January 1995 and December 1999. From the table, the period of the study is divided into two sub periods and month of July 1997 is the month 0. The twenty-nine months with the negative sign before the month 0 is called "before the crisis" period. The twenty-nine months from August 1997 to December 1999 is called "during the crisis" period. The ends of average

monthly returns for every stock of LMECs and FMECs for five years (1995-1999) are provided in Appendix 6 and Appendix 7. Table 2 also presents the cumulative average returns (CAR) for both LMECs and FMECs and KLCI.

The monthly LMECs stock return, FMECs stock return and the market return before and during financial crisis are illustrated in Figure 2. While Figure 3 portrays the cumulative average returns (CAR). The average return for twenty-nine months before the crisis and twenty-nine months during the crisis were plotted. Before the crisis period, it showed that all groups had stable returns. The LMECs and FMECs performed better as compared to the market performance.

However, the market started to show a decline at July 1997(month 0). Figure 2 shows a decline in average returns for both LMECs and FMECs portfolios for the beginning of two months during the crisis. The stock returns for all groups were volatile during the crisis. The stock return of LMECs and FMECs were affected and under performed the market. Both portfolios exhibited their stock lost a huge amount of value. Based on stock price in Appendix 4 and 5, the study found that majority companies experienced drop during the crisis.

The crisis affected the LMECs and FMECs more than the market after one month of the crisis. The Figure 2 clearly shows those LMECs and FMECs under performed the market. However, after 5 months of crisis, both LMECs and FMECs portfolios tended to follow the market performance. The return of LMECs and FMECs started to increase after the capital controls were imposed in September 1998.

TABLE 2
THE AVERAGE MONTHLY RETURNS AND CAR FOR LOCAL MAJORITY EQUITY COMPANIES (LMECs), FOREIGN MAJORITY EQUITY COMPANIES (FMECs) AND KLCI : JAN 1995 - DEC 1999.

Month -	Period	LMECs	CAR	FMECs	CAR	KLCI	CAR
Feb-95	-29	9.76	9.76	12.48	12.48	1.02	1.02
Mar-95	-28	-1.68	8.08	1.17	13.65	4.83	5.85
Apr-95	-27	-5.81	2.27	-5.27	8.38	-1.59	4.26
May-95	-26	4.29	6.56	6.97	15.35	3.50	7.76
Jun-95	-25	3.48	10.04	2.73	18.08	4.22	11.98
Jul-95	-24	3.41	13.45	3.79	21.87	0.06	12.04
Aug-95	-23	-2.44	11.01	-0.08	21.79	-0.53	11.51
Sep-95	-22	-3.87	7.14	-3.92	17.87	-2.86	8.65
Oct-95	-21	-6.52	0.62	-5.71	12.16	-2.84	5.81
Nov-95	-20	-5.41	-4.79	0.69	12.85	-2.56	3.25
Dec-95	-19	6.02	1.23	3.32	16.17	2.01	5.26
Jan-96	-18	13.78	15.01	7.08	23.25	5.32	10.58
Feb-96	-17	-1.07	13.94	1.58	24.83	4.57	15.15
Mar-96	-16	8.45	22.39	7.84	32.67	4.19	19.34
Apr-96	-15	13.66	36.05	14.53	47.20	4.69	24.03
May-96	-14	-4.05	32.00	-11.10	36.10	-0.22	23.81
Jun-96	-13	0.47	32.47	0.18	36.28	-2.45	21.36
Jul-96	-12	-2.30	30.17	-2.56	33.72	-3.17	18.19
Aug-96	-11	7.08	37.25	5.85	39.57	-0.82	17.37
Sep-96	-10	1.01	38.26	0.43	40.00	3.04	20.41
Oct-96	-9	1.67	39.93	-0.11	39.89	2.29	22.70
Nov-96	-8	3.07	43.00	0.43	40.32	3.94	26.64
Dec-96	-7	-1.21	41.79	-1.51	38.81	2.93	29.57
Jan-97	-6	2.33	44.12	1.42	40.23	-0.42	29.15
Feb-97	-5	9.94	54.06	5.01	45.24	1.33	30.48
Mar-97	-4	0.41	54.47	-5.35	39.89	-0.55	29.93
Apr-97	-3	-10.73	43.74	-9.14	30.75	-7.70	22.23
May-97	-2	-2.40	41.34	-0.77	29.98	-4.30	17.93
Jun-97	-1	-3.95	37.39	-1.83	28.15	-0.01	17.92
Jul-97	0	-5.82	31.57	-2.56	25.59	-4.33	13.59
Aug-97	1	-28.64	2.93	-19.14	6.45	-13.06	0.53
Sep-97	2	5.14	8.07	4.04	10.49	-10.54	-10.01
Oct-97	3	-21.77	-13.70	-22.22	-11.73	-9.24	-19.25
Nov-97	4	-24.22	-37.92	-16.75	-28.48	-17.47	-36.72
Dec-97	5	-18.67	-56.59	-6.17	-34.65	-7.07	-43.79
Jan-98	6	1.51	-55.08	-1.35	-36.00	2.56	-41.23
Feb-98	7	52.55	-2.53	26.06	-9.94	19.89	-21.34
Mar-98	8	-8.55	-11.08	1.90	-8.04	5.29	-16.05
Apr-98	9	-19.54	-30.62	-6.90	-14.94	-8.26	-24.31
May-98	10	-9.29	-39.91	-10.92	-25.86	-13.44	-37.75
Jun-98	11	-13.68	-53.59	-8.83	-34.69	-14.63	-52.38
Jul-98	12	-15.21	-68.80	-9.99	-44.68	-13.68	-66.06
Aug-98	13	-15.80	-84.60	-13.82	-58.50	-17.62	-83.68
Sep-98	14	37.00	-47.60	15.24	-43.26	-5.39	-89.07
Oct-98	15	7.72	-39.88	2.99	-40.27	16.42	-72.65
Nov-98	16	44.95	5.07	31.38	-8.89	16.66	-55.99
Dec-98	17	-4.49	0.58	-2.30	-11.19	19.78	-36.21
Jan-99	18	0.46	1.04	7.02	-4.17	7.48	-28.73
Feb-99	19	-11.20	-10.16	-9.72	-13.89	-2.97	-31.70
Mar-99	20	-14.02	-24.18	-6.63	-20.52	-7.94	-39.64
Apr-99	21	39.53	15.35	20.31	-0.21	12.85	-26.79
May-99	22	5.93	21.28	10.20	9.99	20.46	-6.33
Jun-99	23	38.60	59.88	13.26	23.25	9.51	3.18
Jul-99	24	-2.70	57.18	-4.55	18.70	2.23	5.41
Aug-99	25	0.08	57.26	-1.14	17.56	-3.30	2.11
Sep-99	26	-11.61	45.65	-7.27	10.29	-6.15	-4.04
Oct-99	27	3.84	49.49	0.60	10.89	-1.57	-5.61
Nov-99	28	-5.13	44.36	-2.04	8.85	3.94	-1.67
Dec-99	29	11.70	56.06	8.07	16.92	4.91	3.24

Note : CAR = Cumulative Average Returns

FIGURE 2
THE AVERAGE MONTHLY RETURNS OF LOCAL MAJORITY EQUITY COMPANIES (LMECs) AND FOREIGN
MAJORITY EQUITY COMPANIES (FMECs) AS COMPARED TO KLCI RETURNS.

The data of this figure was obtained from Table 2. The 0 point is the month of July,1997.
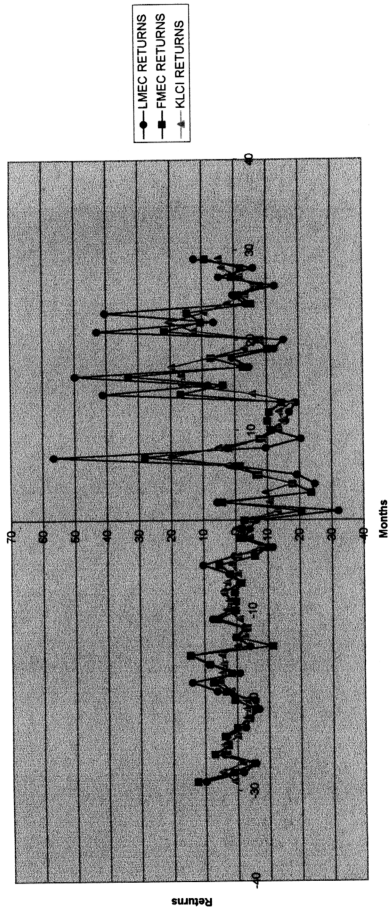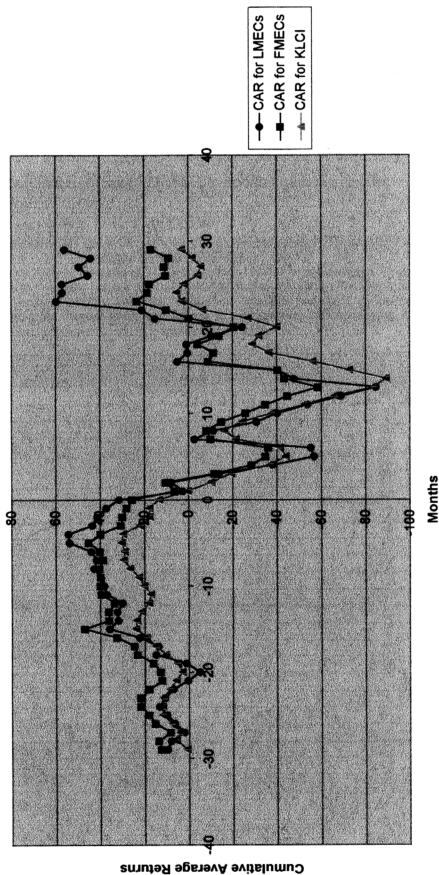
FIGURE 3

THE CUMULATIVE AVERAGE MONTHLY RETURNS (CAR) OF LOCAL MAJORITY EQUITY COMPANIES (LMECs) AND FOREIGN MAJORITY EQUITY COMPANIES (FMECs) AS COMPARED TO CUMULATIVE AVERAGE RETURNS OF KLCI.

The data for this figure was obtained from Table 2.

4.3 DESCRIPTIVE ANALYSIS

Table 3 (A) below shows the description of monthly average returns for each sample of LMECs. For overall period of study, it is reported that majority companies had positive returns and only four companies under-performed the market. In "before crisis" period, only one company reported a negative return even though eight of them were under-performed in the market. While "during the crisis" period, it seems that LMECs were more affected by the crisis. This was due to the fact that eight out of 21 LMECs reported negative returns.

TABLE 3(A)
THE AVERAGE MONTHLY RETURNS FOR LOCAL MAJORITY EQUITY COMPANIES (LMECs)

The Average Monthly Returns for each of 21 samples from LMECs was calculated. This table presented the average monthly returns for the whole period of the study: Feb 1995 to Dec 1999.The average monthly returns was also divided into two sub periods, i. e. before the crisis and during the crisis. The negative sign means that a company had a negative return. The table includes the KLCI return to act as a market benchmark.

NO.	NAME OF COMPANY	PERIOD OF STUDY	BEFORE CRISIS	DURING CRISIS
		(FEB 1995 - DEC 1999)	(FEB 1995 - JUNE 1997)	(JULY 1997 -DEC 1999)
1	YEE LEE	0.03	1.10	-1.00
2	MAMEE	0.34	1.08	-0.39
3	T'WINDS	0.26	0.48	0.06
4	KFC	-0.64	-2.27	0.95
5	CHOC	1.65	0.44	2.83
6	FFM	0.55	0.95	0.17
7	GADEK	1.18	2.18	0.22
8	COSWAY	2.72	3.34	2.12
9	ANGKASA	0.38	1.55	-0.76
10	GOPENG	2.25	2.02	2.47
11	AMSTEEL	0.00	0.45	-0.43
12	SUNTECH	0.13	1.89	-1.57
13	HUME	-0.18	1.11	-1.43
14	MBM R	1.54	0.93	2.13
15	S BAGAN	0.39	0.81	-0.02
16	SOP	0.53	1.59	-0.49
17	SAPURA	0.42	0.45	0.40
18	CREST	2.34	0.35	4.26
19	P GAS	0.46	0.41	0.51
20	HICOM	0.73	0.31	1.14
21	PRK CORP	4.85	7.90	1.91
	AV.RETURNS	0.95	1.29	0.62
	KLCI	0.06	0.62	-0.49

The data in Table 3(A) were subsequently used to test the hypothesis one as below.

Hypothesis 1

H_o = $R_{\text{LMECs Before Crisis}}$ = $R_{\text{LMECs During Crisis}}$

H_1 = $R_{\text{LMECs Before crisis}}$ ≠ $R_{\text{LMECs During Crisis}}$

The results of the t-statistics test is presented in Table 3 (B).

TABLE 3(B)
THE RESULTS OF THE T-TEST ASSUMING EQUAL VARIANCES
FOR AVERAGE MONTHLY RETURNS OF THE LOCAL MAJORITY
EQUITY COMPANIES (LMECs).

The results showed the performance of LMECs before and during the crisis period. The data from the table 3 (A) for the period before and during the crisis was tested by using the t-statistic test. This study tests the hypothesis that the return of LMECs before crisis is unequal with the return of LMECs during the crisis. The Ho was accepted as the result shown insignificant difference at 5 % level for two sub-periods.

	LMECs PORTFOLIO	
	Before Crisis	*During Crisis*
Mean	1.2890	0.6229
Variance	3.4204	2.3079
Observations	21	21
Pooled Variance	2.8641	
Hypothesized Mean Difference	0	
df	40	
t Stat	1.2755	
P(T<=t) one-tail	0.1047	
t Critical one-tail	1.6839	
P(T<=t) two-tail	0.2095	
t Critical two-tail	2.0218	

Based on the results in Table 3(B), it seems that there was no significant difference in LMECs for both two periods. The null hypothesis (Ho) cannot be rejected as the t-test showed insignificant results. The mean score indicated that the LMECs had a positive return of 1.2890 before the crisis and also a

positive return of 0.6229 during the crisis. It indicated that the return of the LMECs was less affected because of the crisis.

To examine the performance of FMECs, the study analyzed the stock returns of FMECs as shown in Table 4(A). By referring to the table, seven out of 21 FMECs companies showed a negative return over the period of study. "Before the crisis", only three companies showed negative returns but six of them under-performed the market. However, the performance of foreign companies were badly affected during the crisis period with 15 out of 21 having negative returns.

TABLE 4(A)
THE AVERAGE MONTHLY RETURNS FOR FOREIGN MAJORITY EQUITY COMPANIES (FMECs).

The Average Monthly Returns for each of 21 samples from FMECs was calculated. This table presented the average monthly returns for the whole period of the study: Feb 1995 to Dec 1999.The average monthly returns was also divided into two sub periods, i. e. before the crisis and during the crisis. The table includes the KLCI return to act as a market benchmark. The negative sign means that a company had a negative return.

NO.	NAME OF COMPANY	PERIOD OF STUDY	BEFORE CRISIS	DURING CRISIS
		(FEB 1995 - DEC 1999)	(FEB 1995 - JUNE 1997)	(JULY 1997 -DEC 1999)
1	AJI	-0.24	0.83	-1.28
2	D BABY	0.14	1.40	-1.09
3	GUINNESS	0.66	1.47	-0.12
4	NESTLE	0.49	1.00	0.00
5	YHS	-0.41	0.81	-1.60
6	MTC	0.95	-0.27	2.12
7	DNP	0.14	-0.09	0.37
8	M'SHITA	0.21	0.56	-0.14
9	KIG	0.26	0.74	-0.21
10	K SENG	0.14	0.82	-0.51
11	MCEMENT	0.98	1.36	0.62
12	NYLEX	1.15	1.68	0.63
13	TASEK	-0.66	1.09	-2.36
14	DIETHELM	-0.71	0.35	-1.74
15	KLUANG	0.72	1.71	-0.23
16	NSOP	0.44	1.87	-0.94
17	ALCOM	0.22	0.93	-0.47
18	ESSO	-1.04	-0.30	-1.75
19	SHELL	-0.5	0.32	-1.28
20	MOX	1.00	2.27	-0.23
21	FORMOSA	2.09	1.82	2.35
	AV.RETURNS	0.29	0.97	-0.37
	KLCI	0.06	0.62	-0.49

In order to further explain the results that shown in the Table 4 (A), the t-statistical technique was used to test hypothesis two of the study.

Hypothesis 2

H_o = $R_{FMECs\ Before\ Crisis}$ = $R_{FMECs\ During\ Crisis}$

H_1 = $R_{FMECs\ Before\ crisis}$ ≠ $R_{FMECs\ During\ Crisis}$

The t-test result is as presented in Table 4(B).

TABLE 4(B)
THE RESULTS OF THE T-TEST ASSUMING EQUAL VARIANCES FOR
AVERAGE MONTHLY RETURNS OF THE FOREIGN MAJORITY EQUITY
COMPANIES (FMECs).
The results showed the performance of FMECs before and during the crisis period.
The data from the Table 4 (A) were used in order to test the hypothesis that the
return of FMECs before the crisis is not equal with the return of FMECs during the
crisis. The H1 was accepted as the result showed a significant difference for two sub-periods.

FMECs PORTFOLIO

	Before Crisis	During Crisis
Mean	0.9700	-0.3743
Variance	0.5124	1.4113
Observations	21	21
Pooled Variance	0.9619	
Hypothesized Mean Difference	0	
df	40	
t Stat	4.4415	
P(T<=t) one-tail	0.0000	
t Critical one-tail	1.6839	
P(T<=t) two-tail	0.0000	
t Critical two-tail	2.0211	

The results in Table 4(B) revealed that, there was a highly significant difference at p=0.0000 in FMECs portfolio before and during the crisis period. The t-test showed a very significant result. As such, the null hypothesis (Ho)

was rejected, as the alpha is less than 0.05. The mean score shows a positive return before the crisis at 0.9700 percent, while a negative return during the crisis at 0.3743 percent. This is a reduction of 1.39 percent of drop in returns. The results explained that FMECs companies performed better before the crisis period but the return performances of FMECs were badly affected during the crisis.

In order to compare the return performance between LMECs and FMECs before the crisis, the hypothesis three was developed.

Hypothesis 3

H_o = $R_{\text{LMECs Before Crisis}}$ = $R_{\text{FMECs Before Crisis}}$

H_1 = $R_{\text{LMECs Before crisis}}$ ≠ $R_{\text{FMECs Before Crisis}}$

Table 5 on the next page showed the results of the t-test assuming equal variances. The null hypothesis cannot be rejected at 5 percent level. This means that there was no difference in return performance between LMECs and FMECs before the crisis. However, the fact that it was surprising that the mean returns of LMECs were larger than the mean returns of FMECs. This might be due to fact that the samples of this study were too small to generate viable result on the impact of the two groups of companies.

TABLE 5
T-TEST RESULTS ON AVERAGE MONTHLY RETURNS BETWEEN LOCAL
MAJORITY EQUITY COMPANIES (LMECs) AND FOREIGN MAJORITY
EQUITY COMPANIES (FMECs) BEFORE THE FINANCIAL CRISIS.

The results showed the performance of LMECs and FMECs before the crisis
period. This study tests the hypothesis that the return of LMECs before crisis
is not equal with the return of FMECs before the crisis. The Ho that the return
performance of LMECs and FMECs are equal before the crisis was accepted
as the result shown insignificant difference between the return performance of
LMECs and FMECs.

	LMECs PORTFOLIO	FMECs PORTFOLIO
Mean	1.289	0.97
Variance	3.4204	0.5124
Observations	21	21
Pooled Variance	1.9664	
Hypothesized Mean Difference	0	
df	40	
t Stat	0.7373	
P(T<=t) one-tail	0.2326	
t Critical one-tail	1.6839	
P(T<=t) two-tail	0.4653	
t Critical two-tail	2.0211	

The return performance between LMECs and FMECs during the crisis was
also compared in order to test hypothesis four of the study.

Hypothesis 4

H_o = $R_{\text{LMECs During Crisis}}$ = $R_{\text{FMECs During Crisis}}$

H_1 = $R_{\text{LMECs During crisis}}$ ≠ $R_{\text{FMECs During Crisis}}$

Table 6 below showed a significant result at 5 percent level. There was a significant difference in return performance between these two groups during the crisis. The FMECs were badly affected during the crisis as the result showed that they had a negative return of –0.3743. In contrast, the LMECs had positive mean returns of 0.6229. It indicated that the performance of LMECs was better than FMECs. The result slightly contradict Phang (1998) who in the study revealed that the local companies were less able to compete with foreign companies in terms of market accessibility and size of capital. Phang (1998) also found that, in general the foreign companies were better in performance than the local companies.

TABLE 6
T-TEST RESULTS ON AVERAGE MONTHLY RETURNS BETWEEN LOCAL MAJORITY EQUITY COMPANIES (LMECs) AND FOREIGN MAJORITY EQUITY COMPANIES (FMECs) DURING THE FINANCIAL CRISIS.

The results showed the performance of LMECs and FMECs during the crisis period. The H1 was accepted as the result shown significant difference between the return performance of LMECs and FMECs.The LMECs performed better than FMECs during the crisis.

	LMECs PORTFOLIO	FMECs PORTFOLIO
Mean	0.6229	-0.3743
Variance	2.3079	1.41132
Observations	21	21
Pooled Variance	1.8596	
Hypothesized Mean Difference	0	
df	40	
t Stat	2.3694	
P(T<=t) one-tail	0.0114	
t Critical one-tail	1.6839	
P(T<=t) two-tail	0.0227	
t Critical two-tail	2.0211	

In this study, the wealth impact of the crisis was defined as the differences between average monthly returns before the crisis and during the crisis. In order to see the degree of impact in return performance of each portfolio due to the crisis, the study calculated the stock returns during the crisis minus the stock return before the crisis for both the LMECs and FMECs samples. The statistical data are shown in Table 7(A).

TABLE 7 (A)
THE STATISTICS OF AVERAGE MONTHLY RETURNS DIFFERENCES FOR LOCAL MAJORITY EQUITY COMPANIES (LMECs) AND FOREIGN MAJORITY EQUITY COMPANIES (FMECs) DUE TO THE CRISIS.

The Average Monthly Returns for each of 21 samples from LMECs portfolios before the crisis was deducted from the average monthly returns during the crisis. The same step was also done for the FMECs portfolios. The stock returns of LMECs were compared to the stock returns of FMECs. The negative sign means that a company had a bad performance due to the crisis period. Again, the KLCI average return was included to act as a market benchmark.

NO.	LMECs PORTFOLIO	RETURNS DC - RETURNS BC	FMECs PORTFOLIO	RETURNS DC - RETURNS BC
1	YEE LEE	-2.10	AJI	-2.11
2	MAMEE	-1.47	D BABY	-2.49
3	T'WINDS	-0.42	GUINNESS	-1.59
4	KFC	3.22	NESTLE	-1.00
5	CHOC	2.39	YHS	-2.41
6	FFM	-0.78	MTC	2.39
7	GADEK	-1.96	DNP	0.46
8	COSWAY	-1.22	M'SHITA	-0.70
9	ANGKASA	-2.31	KIG	-0.95
10	GOPENG	0.45	K SENG	-1.33
11	AMSTEEL	-0.88	MCEMENT	-0.74
12	SUNTECH	-3.46	NYLEX	-1.05
13	HUME	-2.54	TASEK	-3.45
14	MBM R	1.20	DIETHELM	-2.09
15	S BAGAN	-0.83	KLUANG	-1.94
16	SOP	-2.08	NSOP	-2.81
17	SAPURA	-0.05	ALCOM	-1.40
18	CREST	3.91	ESSO	-1.45
19	P GAS	0.10	SHELL	-1.60
20	HICOM	0.83	MOX	-2.50
21	PRK CORP	-5.99	FORMOSA	0.53
	AVERAGE	-0.67	AVERAGE	-1.34
	KLCI	-1.11	KLCI	-1.11

Based on results in Table 7(A) on the previous page, 14 companies from the LMECs group showed negative sign. Due to the financial crisis, this study indicated that 14 out of 21 companies from LMECs performed badly due to the crisis. Whereas, from FMECs portfolio, there were 18 companies affected. The result showed evidence that both portfolios experienced drop in return performance due to the financial crisis but FMECs was more seriously affected. Table 7(B) exhibited the results of the t-test assuming equal variances. This t-test was conducted based on statistical data in Table 7(A) in order to test the Hypothesis 5.

Hypothesis 5

H_0 = $R_{\text{LMECs During - LMECs Before Crisis}}$ = $R_{\text{FMECs During - FMECs Before Crisis}}$

H_1 = $R_{\text{LMECs During - LMECs Before Crisis}}$ ≠ $R_{\text{FMECs During - FMECs Before Crisis}}$

TABLE 7(B)
T-TEST RESULTS ON AVERAGE MONTHLY RETURNS DIFFERENCES BETWEEN LOCAL MAJORITY EQUITY COMPANIES (LMECs) AND FOREIGN MAJORITY EQUITY COMPANIES (FMECs) DUE TO THE FINANCIAL CRISIS.

The results showed the performance of LMECs and FMECs due to the crisis period. The data from the table 7 (A) was tested t 5 percent significant level by using the t-statistic test assuming equal variances. The Ho that the performance of LMECs and FMECs are equal was accepted as the result shown insignificant difference between the return performance of these two groups. However, the FMECs had larger impact in return performance as compared to LMECs. This is due to the FMECs had larger mean return differences than LMECs.

	LMECs PORTFOLIO	FMECs PORTFOLIO
Mean	-0.6662	-1.3443
Variance	5.1254	1.6929
Observations	21	21
Pooled Variance	3.4091	
Hypothesized Mean Difference	0	
df	40	
t Stat	1.1900	
P(T<=t) one-tail	0.1205	
t Critical one-tail	1.6839	
P(T<=t) two-tail	0.2410	
t Critical two-tail	2.0211	

The study displayed unexpected result as the t-test in Table 7(B) indicated insignificant result at 5 percent significant level. It was only significant at 12 percent level. Generally, there was no difference in return performance between both portfolios due to the financial crisis. The results showed that both groups' return performance had an impact due to the crisis. However, the FMECs had larger differences in return performance as compared to the LMECs.

According to mean return differences, the LMECs had −0.6662 while the FMECs had −1.3443. It was explained that the FMECs had larger impact of the crisis. It also indicated that the performance of LMECs was better than the FMECs.

4.4   EVENT STUDY RESULTS

The event study was conducted in order to see the abnormal return due to the financial crisis by using monthly return and daily return.

4.4.1 MONTHLY RETURN

The event study looked at three months prior to the crisis and 28 months during the crisis. The month of August, 1997 was chosen as the event month because of the KLCI dropped by 20.6 percent in August 1997.This was the lowest points in the KLSE for the year 1997.

The study presented the abnormal return, cumulative abnormal return (CAR) and Z-test for the LMECs and FMECs in Table 8 and Table 9 respectively. The following Figure 4 portrayed the results of CAR for LMECs and FMECs.

There was a significant impact on the LMECs monthly stock returns on the event month, August 1997 as exhibited in Table 8. The Z-score shows a very significant result on months 0 (August 1997). The average abnormal return on Month 0 is -27.8709 percent. This result implied that on average the LMECs

lost 27 percent of their firm value on the event month, August 1997. It was not so surprising since majority LMECs experienced a tremendous drop in August 1997 as shown in Appendix 6.

The largest abnormal return occurred on Month 6 (February 1998), at 49.6697 percent. The Z-statistic test reported a very significant result. It indicated that there was a difference between the market and the LMECs portfolio returns on that month. It showed that on average the LMECs gain approximately 50 percent of the firm value on the Month 6 (February 1998). This is due to the announcement by Malaysian central bank to restrict loans to property and stocks to overcome the crisis.

TABLE 8
THE RESULTS OF THE CAR AND Z-TEST FOR THE LOCAL MAJORITY EQUITY COMPANIES (LMECs) FROM THE PERIOD OF MAY 1997 TO DECEMBER 1999 (MONTH –3 TO MONTH 28).

Month	AR	VAR(AR)	Z-VALUE	CAR	VAR(CAR)	Z-VALUE
-3	-1.4941	6.3893	-0.5911	-1.4941	6.3893	-0.5911
-2	-4.4873	6.2432	-1.7959	-5.9814	13.1513	-1.6494
-1	-5.111	6.3911	-2.0217*	-11.0924	20.8335	-2.4302*
0	-27.8709	7.3393	-10.2878**	-38.9633	31.3449	-6.9594**
1	9.0951	6.9758	3.4436**	-29.8682	43.4428	-4.5316**
2	-20.6735	6.817	-7.9181**	-50.5417	56.786	-6.707**
3	-19.0617	8.1503	-6.6769**	-69.6034	77.4528	-7.9088**
4	-16.9085	6.5953	-6.584**	-86.5119	93.174	-8.9625**
5	-0.7472	6.2566	-0.2987	-87.2592	101.7486	-8.6506**
6	49.6697	8.315	17.225**	-37.5895	98.8661	-3.7804**
7	-11.506	6.3534	-4.5648**	-49.0955	107.2771	-4.7401**
8	-17.8235	6.7098	-6.8808**	-66.919	124.0641	-6.0079**
9	-6.5663	7.4008	-2.4137*	-73.4852	146.2932	-6.0756**
10	-10.9399	7.6026	-3.9676**	-84.4251	172.4769	-6.4284**
11	-12.4891	7.4396	-4.5788**	-96.9141	200.757	-6.8399**
12	-13.1881	8.1805	-4.611**	-110.1022	237.175	-7.1493**
13	42.8925	6.4593	16.8767**	-67.2097	259.5966	-4.1714**
14	2.4539	7.6275	0.8885	-64.7558	252.912	-4.0719**
15	44.1028	7.6705	15.9241**	-20.653	249.2173	-1.3083
16	-11.3733	8.2895	-3.9502**	-32.0263	246.1339	-2.0414*
17	-1.9598	6.4918	-0.7692	-33.9861	256.3409	-2.1227*
18	-11.498	6.3214	-4.5732**	-45.4841	275.49	-2.7404*
19	-12.8161	6.6774	-4.9597**	-58.3002	299.7155	-3.3676**
20	38.379	7.0653	14.4387**	-19.9212	306.4975	-1.1379
21	-0.6897	8.4391	-0.2374	-20.611	310.8074	-1.1691
22	37.0878	6.6703	14.3602**	16.4769	324.3566	0.9149
23	-4.4433	6.2505	-1.7773	12.0336	342.1832	0.6505
24	1.3069	6.3363	0.5192	13.3405	363.0511	0.7001
25	-10.6921	6.5171	-4.1883**	2.6484	386.1707	0.1348
26	5.0772	6.2719	2.0273*	7.7256	407.4461	0.3827
27	-7.4167	6.2947	-2.9561**	0.3089	425.9757	0.015
28	10.6122	6.3346	4.2164**	10.9211	444.5793	0.518

Note : *, **, significant at the 5% and 1% level respectively

TABLE 9
THE RESULTS OF THE CAR AND Z-TEST FOR THE FOREIGN MAJORITY
EQUITY COMPANIES (FMECs) FROM THE PERIOD OF MAY 1997 TO
DECEMBER 1999 (MONTH –3 TO MONTH 28).

| Months	AR	VAR(AR)	Z-VALUE	CAR	VAR(CAR)	Z-VALUE
-3	-0.082	7.3067	-0.0304	-0.082	7.3067	-0.0304
-2	-2.4368	7.1198	-0.9132	-2.5189	15.005	-0.6503
-1	-1.6789	7.309	-0.621	-4.1978	23.7952	-0.8605
0	-16.7523	8.5216	-5.7387**	-20.95	36.1186	-3.4859**
1	7.0263	8.0567	2.4754*	-13.9237	50.3862	-1.9616*
2	-20.9989	7.8536	-7.4931**	-34.9226	66.1612	-4.2934**
3	-12.664	9.5588	-4.0961**	-47.5867	91.2177	-4.9825**
4	-4.6208	7.5702	-1.6794	-52.2074	109.864	-4.9809**
5	-2.7297	7.1369	-1.0218	-54.9371	119.2855	-5.03
6	21.2094	9.7695	6.7857**	-33.7277	113.9693	-3.1593**
7	-0.1423	7.2607	-0.0528	-33.87	123.0116	-3.0538**
8	-5.407	7.7165	-1.9465	-39.2771	142.6811	-3.2882**
9	-7.364	8.6003	-2.5111*	-46.6411	169.2254	-3.5854**
10	-5.8266	8.8584	-1.9577*	-52.4677	200.7425	-3.7032**
11	-6.5659	8.6499	-2.2325*	-59.0336	234.8555	-3.8521**
12	-9.23	9.5974	-2.9794**	-68.2636	279.2914	-4.0847**
13	18.156	7.3962	6.676**	-50.1076	305.7419	-2.8657*
14	-2.2241	8.8903	-0.7459	-52.3317	294.8833	-3.0475**
15	27.2503	8.9452	9.1112**	-25.0815	287.7634	-1.4785
16	-9.5692	9.7369	-3.0667**	-34.6507	281.3403	-2.0658*
17	4.5337	7.4378	1.6624	-30.117	291.8296	-1.763
18	-9.7592	7.2198	-3.6321**	-39.8762	313.6699	-2.2515*
19	-4.8989	7.6751	-1.7683	-44.7751	341.9175	-2.4215*
20	17.1405	8.1712	5.9962**	-27.6347	347.7715	-1.4819
21	3.4288	9.9282	1.0882	-24.2058	350.3788	-1.2932
22	11.1655	7.666	4.0327**	-13.0403	364.7174	-0.6828
23	-6.3788	7.1292	-2.389*	-19.4191	384.4413	-0.9904
24	-0.4472	7.2389	-0.1662	-19.8663	407.97	-0.9836
25	-6.5719	7.4702	-2.4045*	-26.4381	434.2933	-1.2686
26	0.7958	7.1566	0.2975	-25.6423	458.173	-1.198
27	-3.7749	7.1857	-1.4082	-29.4172	478.4561	-1.3449
28	7.0373	7.2367	2.616*	-22.38	498.7488	-1.0021

Note : *, **, significant at the 5% and 1% level respectively

Table 9 displayed the abnormal return results for the FMECs portfolio. The abnormality occurred on Month 0 (August 1997) since the Z-score showed a very significant result at -5.7387 (significant at the one percent level). The average abnormal return on Month 0 is -16.7523 percent. This result explained that on average the FMECs lost 17 percent of their firm value on the event month, August 1997. In this month, majority FMECs experienced drops in returns as shown in Appendix 7.

The largest abnormal return occurred on Month 15 (November 1998), at 27.2503 percent. The Z-statistic test reported a significant result at 9.1112. The result indicates that there were larger differences in return performance between the FMECs portfolio and the market during Month 15 (November 1998). It showed that on average the FMECs gained 27 percent of the firm value on the Month 15, November 1998.

Figure 4 on the next page, plots the CAR for both portfolios from three calendar months prior to thirteen calendar months after the event. The 0 point is the month of August 1997 (month 0). Prior three months before the crisis, both LMECs and FMECs showed the downtrend movement. CAR for LMECs and FMECs had a very steep decrease in the first five months during the crisis period. However, CAR for LMECs and FMECs rised up at -37.6 percent and -33.7 percent respectively on the month 6. Both groups showed the upward movement since the Malaysian central bank restricted loans to property and stocks to overcome the crisis. However, the return dropped again as the crisis deepened. When the capital control was introduced in September 1998, both LMECs and FMECs tended to show positive movements.
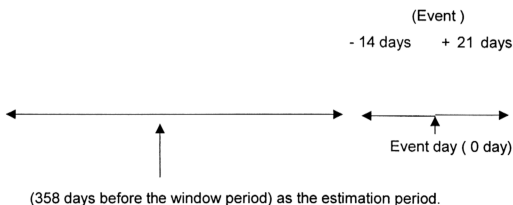
FIGURE 4
COMPARISON OF CUMULATIVE ABNORMAL RETURNS (CAR FOR LMECs AND CUMULATIVE ABNORMAL RETURNS (CAR) FOR FMECs

MONTHS

CUMULATIVE ABNORMAL RETURNS (CAR)

CAR for LMECs
CAR for FMECs
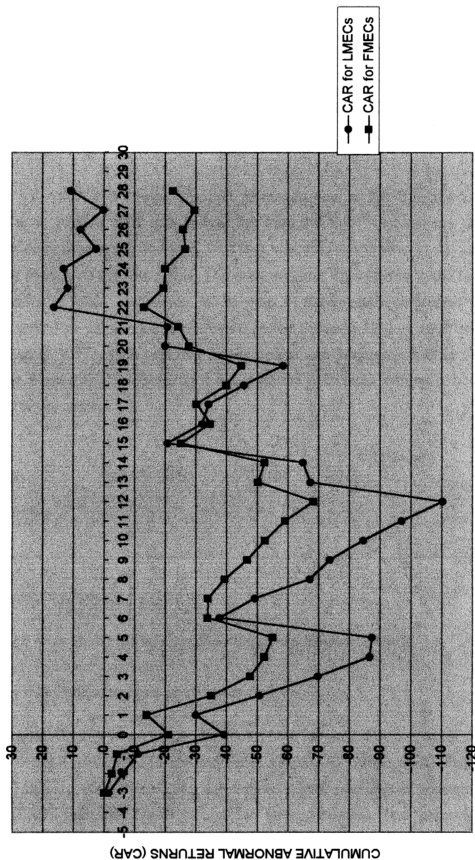
4.4.2 DAILY RETURN

The event study was also conducted by using the daily return in order to see whether any abnormalities existed during the event period due to the financial crisis.

Until 24 July 1997, the Ringgit dropped 38-months low of 2.650 to the US Dollar. On 11 August 1997, the Ringgit fell from 2.6 to 2.7 against the US Dollar, as compared to the previous day. That was the reason why 11 August 1997 was chosen as the event date. The date was also chosed due to the fact that majority of listed companies felt a drop in their return compared to previous day. This study chosed the event period between 22 July 1997 and 10 September 1997, which was two weeks before and three weeks after the event day. Please refer to Appendix 8 and 9 for the daily stock returns of both portfolios under studied.

(Event)

- 14 days   + 21 days

Event day (0 day)

(358 days before the window period) as the estimation period.

The study event period defined as t = -14 to t = 21.

The outcome of the event study for both LMECs and FMECs were as revealed in the Table 10 (page 50) and Table 11(page 52) respectively. Table 10 and Table 11 also present the abnormal returns, cumulative abnormal returns (CAR) and the Z-test results for both portfolios. The graph of cumulative abnormal returns for LMECs and FMECs were as detailed in Figure 5 (page 54).

TABLE 10
THE LOCAL MAJORITY EQUITY COMPANIES (LMECS) ABNORMAL RETURN OVER 36 DAYS OF THE FINANCIAL CRISIS.

DAY	AR	VAR(AR)	Z-VALUE	CAR	VAR(CAR)	Z-VALUE
-14	1.0505	0.4660	1.5388	1.0505	0.4660	1.5388
-13	0.0221	0.4697	0.0322	1.0726	0.9363	1.1084
-12	1.4241	0.4678	2.0821*	2.4966	1.4140	2.0995
-11	0.9772	0.4660	1.4315	3.4738	1.8854	2.5299
-10	-0.3678	0.4676	-0.5378	3.1061	2.3576	2.0229
-9	-0.2384	0.4658	-0.3492	2.8677	2.8380	1.7023
-8	0.2289	0.4663	0.3352	3.0966	3.3191	1.6997
-7	-0.0426	0.4677	-0.0622	3.0541	3.8050	1.5657
-6	-0.0241	0.4672	-0.0352	3.0300	4.2970	1.4617
-5	-0.3840	0.4745	-0.5574	2.6460	4.8096	1.2065
-4	-0.0824	0.4837	-0.1184	2.5636	5.3649	1.1068
-3	-0.9775	0.4665	-1.4312	1.5861	5.8453	0.6560
-2	0.5858	0.4750	0.8499	2.1718	6.4055	0.8581
-1	-0.5801	0.4660	-0.8498	1.5917	6.8948	0.6062
0	-1.2338	0.4819	-1.7774	0.3579	7.5040	0.1307
1	-2.9503	0.4661	-4.3214**	-2.5924	8.0316	-0.9148
2	-0.3267	0.4684	-0.4774	-2.9192	8.4936	-1.0016
3	-0.0584	0.4676	-0.0854	-2.9775	8.9707	-0.9941
4	0.4481	0.4669	0.6558	-2.5295	9.5161	-0.8200
5	-0.5382	0.4821	-0.7751	-3.0677	10.1627	-0.9623
6	-1.3095	0.4662	-1.9178	-4.3772	10.6594	-1.3407
7	-0.8818	0.5051	-1.2407	-5.2589	11.0095	-1.5849
8	2.1946	0.4730	3.1910**	-3.0643	11.6024	-0.8996
9	-1.5782	0.4660	-2.3119*	-4.6426	12.1479	-1.3320
10	-0.4527	0.4740	-0.6576	-5.0953	12.7699	-1.4259
11	-0.4076	0.4811	-0.5877	-5.5029	13.4538	-1.5003
12	-1.4927	0.4670	-2.1843*	-6.9956	14.0416	-1.8669
13	-5.1268	0.4932	-7.3006 **	-12.1225	14.8408	-3.1467
14	-5.5127	0.4671	-8.0662**	-17.6351	15.4500	-4.4866
15	2.2220	0.4657	3.2560**	-15.4131	15.9954	-3.8538
16	0.9728	0.5152	1.3553	-14.4403	16.9936	-3.5030
17	-1.6502	0.4762	-2.3913	-16.0905	17.7862	-3.8153
18	0.6066	0.7058	0.7220	-15.4839	17.3846	-3.7136
19	7.9195	0.5444	10.7334**	-7.5644	17.6112	-1.8025
20	4.3761	0.4674	6.4007**	-3.1883	18.1366	-0.7487
21	-0.3489	0.4785	-0.5043	-3.5372	18.8060	-0.8157

Note : *, **, significant at the 5% and 1% level respectively

The results for the LMECs portfolios, consisting of 19 companies[2] are provided in Table 10. Please refer to Appendix 8 for the stock return data of LMECs. There was insignificant impact on the LMECs daily stock returns on the Day 0(11 August 1997). Thus, no abnormalities occurred on that day. The reason being majority LMECs tended to follow the market performance on the crisis date.

However, the result of LMECs showed a very significant impact on the first day (Day 1) after the event day. The average abnormal return on that day was –2.9503 percent with a Z-score of –4.3214 (significant at the one percent level). The result showed that on average the LMECs lost about three percent of the firm value on the day 1 after the event day.

On the Day 8, the average abnormal returns and the Z-score was 2.1946 and 3.1910 respectively, which was significant at the five percent level. The result explained that there were differences in performance between LMECs and the market on Day 8. This result also indicated that on average the LMECs gain about 2.0 percent of the firm value on the Day 8. Day 8 is on August 21, 1997. This was due to the IMF approved a US$3.9 billion credit for Thailand to make the package now totals of US$16.7 billion on the previous day, i.e. August 20.[3] Prior to the event day, there was a significance difference on Day –12 with the Z score 2.0821.

The largest single day's abnormal returns occurred on Day 19, at 7.9195 percent. The Z-statistic test reported a very significant result. It indicated that there was a difference in performance of the LMECs group on that day. The result also reported that on Day 19, the LMECs gained by eight percent compared to previous day. The stock return increased because of the announcement by the government to delay major construction projects in Malaysia.

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[2] Two companies were excluded from the 21 samples in the event study. This was because the companies showed mostly 0 return during the event period between 22 July 1997 and 10 September 1997.

[3] The following day, (August 23), Malaysian Prime Minister blamed US financier George Soros for leading the attack on East Asian currencies.

TABLE 11
THE FOREIGN MAJORITY EQUITY COMPANIES (FMECS) ABNORMAL RETURN OVER 36 DAYS OF THE FINANCIAL CRISIS.

DAY	AR	VAR(AR)	Z-VALUE	CAR	VAR(CAR)	Z-VALUE
-14	0.4676	0.5187	0.6493	0.4676	0.5187	0.6493
-13	-0.4465	0.5233	-0.6172	0.0212	1.0425	0.0207
-12	0.6490	0.5210	0.8991	0.6701	1.5750	0.5340
-11	0.4423	0.5187	0.6141	1.1124	2.0993	0.7678
-10	0.4720	0.5208	0.6541	1.5845	2.6244	0.9781
-9	-0.0711	0.5185	-0.0988	1.5134	3.1592	0.8514
-8	0.2548	0.5192	0.3537	1.7682	3.6945	0.9199
-7	0.7103	0.5209	0.9842	2.4786	4.2355	1.2043
-6	0.0985	0.5202	0.1366	2.5771	4.7835	1.1783
-5	0.4877	0.5292	0.6704	3.0648	5.3566	1.3242
-4	0.3511	0.5405	0.4775	3.4158	5.9818	1.3966
-3	-0.5277	0.5194	-0.7322	2.8881	6.5146	1.1316
-2	0.3523	0.5298	0.4840	3.2404	7.1451	1.2123
-1	-0.0331	0.5188	-0.0460	3.2073	7.6883	1.1567
0	-0.2374	0.5382	-0.3236	2.9699	8.3783	1.0260
1	-1.0919	0.5189	-1.5158	1.8780	8.9678	0.6271
2	-0.2836	0.5217	-0.3926	1.5944	9.4765	0.5179
3	-0.1909	0.5207	-0.2645	1.4036	10.0034	0.4438
4	0.8092	0.5199	1.1222	2.2128	10.6138	0.6792
5	-0.2457	0.5386	-0.3348	1.9670	11.3481	0.5839
6	-0.6079	0.5190	-0.8439	1.3591	11.8981	0.3940
7	-1.2443	0.5668	-1.6528	0.1148	12.2677	0.0328
8	1.5875	0.5274	2.1861*	1.7023	12.9352	0.4733
9	-0.4106	0.5188	-0.5701	1.2917	13.5440	0.3510
10	-0.0716	0.5285	-0.0985	1.2201	14.2465	0.3232
11	0.6411	0.5373	0.8746	1.8612	15.0247	0.4802
12	-1.3531	0.5200	-1.8764	0.5081	15.6847	0.1283
13	-4.0662	0.5521	-5.4726**	-3.5582	16.6037	-0.8732
14	-3.1722	0.5201	-4.3988**	-6.7304	17.2892	-1.6187
15	1.5353	0.5184	2.1323*	-5.1951	17.8960	-1.2281
16	0.6073	0.5791	0.7981	-4.5878	19.0585	-1.0509
17	-0.9761	0.5313	-1.3392	-5.5639	19.9681	-1.2451
18	1.2643	0.8132	1.4020	-4.2996	19.4114	-0.9759
19	2.9891	0.6150	3.8115**	-1.3105	19.6255	-0.2958
20	2.0134	0.5205	2.7907**	0.7029	20.2061	0.1564
21	-0.2368	0.5341	-0.3240	0.4662	20.9633	0.1018

Note : *, **, significant at the 5% and 1% level respectively

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Table 11 displays the results for the FMECs, consisting of 19 companies[4]. Similarly, the Z-test showed insignificant impact on the daily stock price returns on the crisis date. Thus there were no abnormalities on the event day (Day 0), even though the majority of the companies felt a stock return drop.

However, the FMECs portfolio experienced an abnormal return of 1.5875 on the day 8 after the event day. The Z-test showed a significant result at five percent level. The result of FMECs portfolio explained a gain of about 1.58 percent of the firm value on Day 8. It means that, there was a difference in terms of performance of FMECs portfolio as compared to the market.

The largest significant result appeared 13 days after the event. The difference was reported on Day 13 at –5.4726. The abnormal returns were –4.0662 percent. This figure explained that FMECs group returns dropped by 4.0662 percent as compared to the previous day. On August 28, 1997(Day 13), the Malaysian Government had imposed restrictions on short selling of KLSE index linked counters. Most of the listed companies dropped in stock returns on that day.

Prior to the event day, for this portfolio, there is no evidence of price build-up.

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[4] Two companies were excluded from the 21 samples in the event study. This was because the companies showed mostly 0 return during the event period between 22 July 1997 and 10 September 1997.

Figure 5
Comparison Between Cumulative Abnormal Returns (CAR) for LMECs and FMECs Groups.
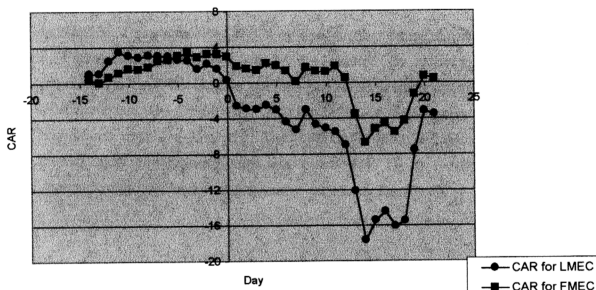
From the Figure 5, it is clearly shown that CAR for both LMECs and FMECs were positive prior to the event day. After the event day, the LMECs showed a drop in movement and the CAR started to record negative return. While the FMECs also showed a slight drop but the returns were still positive until the Day 12 when it started to become negative. Both groups showed greater drop in return begin on Day 12 to Day 14. During the time, which is on August 28, 1997 Malaysian Government imposed restriction on short selling of KLSE index linked counters. However, when announcement were made that several major construction projects were delayed on September 4, the returns of both portfolios tended to show an upward trend.

From the results of this event study, the conclusions that can be made that any event affected the market will influence the LMECs' return greater than FMECs' return. As an example, when the government announced the delays of several construction projects, the abnormal return of FMECs had slightly increased from 1.2643 percent to 2.9891 percent as compared to previous day (these figures were referred to Day 19 as compared to Day 18 in Table

11). Whereas, the abnormal return of LMECs increased to the highest level of 7.9195 percent as compared to the previous day at 0.6066 percent (the figures were referred to Day 19 as compared to Day 18 in Table 10).

In addition, it seemed that LMECs tended to react faster than FMECs if there was any occurrence which affects the market. By referring to Figure 5, although the CAR for LMECs portfolio started to show a negative movement after the event day (Day 0), the CAR for FMECs portfolio were still in positive movement until the Day 12. The LMECs tended to follow the market performance contiguously after the event day. As a result, the LMECs seemed to feel the impact of financial crisis earlier than FMECs.