CHAPTER 4

CONCLUSION AND DISCUSSION

The primary objective of this study is to generate additional evidence on the calendar anomalies in the Malaysian stock market over the period of January 1992 through June 1999. Among the calendar anomalies investigated in this study are the day-of-the-week effect, the pre-holiday effect, the end-of-the-month effect and the firm size effect.

The findings of this study revealed that there is an existence of the day-of-the-week effect in the finance stocks for the overall period of 1992 to June 1999. The results are consistent with the previous studies that the Monday's returns are significantly negative whilst Friday's returns are significantly positive. In addition, some stocks also indicate significant positive returns on Wednesday.

The sub-period analysis further confirmed whether there is a persistent day-of-the-week effect occurring over the shorter periods of time. The findings of this study has provided the evidence that there existed a day-of-the-week effect during the period of 1994 through 1996, when there was a stable market environment. In contrast, the day-of-the-week effect does not exist in the first sub-period (January 1992 to December 1993) and third sub-period (January 1997 to October 1998). Thus, the evidence clearly shows the day-of-the-week effect did not occur in the rising market or declining market.

This study also presents evidence on the other two calendar anomalies: the pre-holiday effect and the end-of-the-month effect. However, the study indicates that there is no persistence of the pre-holiday and the end-of-the-month effect in the entire sample period. Hence, the theories about the pre-holiday effect and the end-of-the-month effect in the Malaysian stocks market should be reviewed.

This study further examines the relationship between the firm size effect and the calendar anomalies in the Malaysian stock market. In general, the evidence for calendar anomalies is found to be much stronger in small companies. We deduce from the study that a larger proportion of small companies show negative Monday returns and positive Friday returns. Although there is no strong pre-holiday effect and end-of-the-month effect existing in the Malaysian stock market, overall the small companies, however, tend to have higher returns on the day prior to the holiday and on the last trading day of a month than the large companies.

The findings from this study further provide evidence for the day-of-the-week effect when the market environment is taken into consideration. The stock returns are partitioned into either positive or negative returns in order to reflect either a good or bad market environment. The result obtained in this study proves that the day-of-the-week effect does not exist in the good news environment. Monday mean returns are not the lowest and Fridays do not display the highest mean returns.

However, there is strong evidence for the existence of the day-of-the-week effect in a bad news environment, in which the lowest return occurs on Monday compared to other days. Hence, we can deduce that more bad news arrives on Mondays as compared to the other days. The findings confirm that small companies

have larger proportion showing their lowest returns on Mondays in the bad news market environment as compared to large companies.

GARCH methodology is an alternate estimation technique that is used in this study to investigate the hypothesis that the occurrence of the day-of-the-week effect in the Malaysian stock market may be due to changes in stock return volatility. In general, we can summarize that the majority of stocks do not display evidence that the seasonality in their daily returns is due to changes in stock return volatility. However, large companies tend to have large proportion where the seasonality in the daily returns is due to changes in return volatility.

In conclusion, the findings generally concur with previous evidence documented from many countries regarding the market anomalies, such as the day-of-the-week effect. However, the idea about the pre-holiday effect and the end-of-the-month effect in the Malaysian stock market should be reviewed.

With such calendar anomalies existing in the Malaysian stock market, this study may provide some useful guidance for the investors to make their buying decisions on certain stocks in the KLSE. Nevertheless, investors should be conscious that such seasonal patterns do not exist consistently in the stock market.

APPENDIX I: Summary of 30 Finance Stocks and Their Market Capitalization

No	Stock no.	Share	Name	No. of share (mil)	Mkt. Cap. ($mil.) as at 28 June 99
LARGE COMPANIES					
1	1155	MAYBANK	MALAYAN BANKING BHD.	2,304.59	27,424.70
2	1023	COMMERZ	COMMERCE ASSET-HLDG BHD.	780.03	7,176.30
3	1295	PBB	PUBLIC BANK BHD.	2,342.19	6,839.20
4	1015	AMMB	AMMB HOLDINGS BHD.	398.88	3,909.00
5	1333	S. BANK	SOUTHERN BANK BHD.	719.51	2,806.10
6	4898	TA	TA ENTERPRISE BHD.	1,328.47	2,364.70
7	1082	HL CRED	HONG LEONG CREDIT BHD.	447.10	2,347.20
8	5185	AFFIN	AFFIN HOLDINGS BHD.	574.20	2,078.60
9	1309	RHB	RASHID HUSSAIN BHD.	385.77	1,620.20
10	4782	PACIFIC	PACIFIC BANK BHD.	340.93	1,486.50
11	4979	BHL	BAN HIN LEE BANK BHD.	171.19	1,129.80
12	5053	OSK	O.S.K HOLDINGS BHD.	294.05	1,005.70
13	5002	HH BANK	HOCK HUA BANK BHD.	125.31	877.20
14	1198	MAA	M'SIAN ASSURANCE ALLIANCE BHD.	110.98	826.80
15	1228	MBF CAP.	MBf CAPITAL BHD.	782.31	813.60
SMALL COMPANIES					
1	1058	HANCOCK	JOHN HANCOCK LIFE INSURANCE (M) BHD.	201.38	616.20
2	1325	AMANAH	AMANAH CAPITAL PARTNERS BHD.	353.68	558.80
3	1171	MBSB	M'SIAN BUILDING SOCIETY BHD.	337.86	496.60
4	5088	APEX	APEX EQUITY HOLDINGS BHD.	106.68	409.70
5	1139	K'HALL	KILLINGHALL (M) BHD.	147.00	396.90
6	1112	IDRIS	IDRIS HYDRAULIC (M'SIA) BHD.	559.97	372.40
7	1236	MBF HLDG	MBf HOLDINGS BHD.	1,192.44	244.50
8	1163	MBA	M'SIAN BRITISH ASSURANCE BHD.	39.59	227.60
9	5096	KAF	KAF-SEAGROATT & CAMPBELL BHD.	60.00	222.00
10	4936	MALPAC	MALPAC HOLDINGS BHD.	75.00	162.80
11	5045	OMEGA	OMEGA HOLDINGS BHD.	298.95	149.50
12	1252	P'GLOBAL	PANGLOBAL BHD.	140.13	141.50
13	1287	P'GKALE	PENGKALEN HOLDINS BHD.	198.61	116.20
14	4871	PENGCAP.	PENGKALEN CAPITAL BHD.	84.36	36.70
15	1201	MGIC	M'SIAN GENERAL INVESTMENT CORP. BHD.	64.46	29.00

APPENDIX II: KUALA LUMPUR STOCK EXCHANGE COMPOSITE INDEX
(JANUARY 1992 TO JUNE 1999)
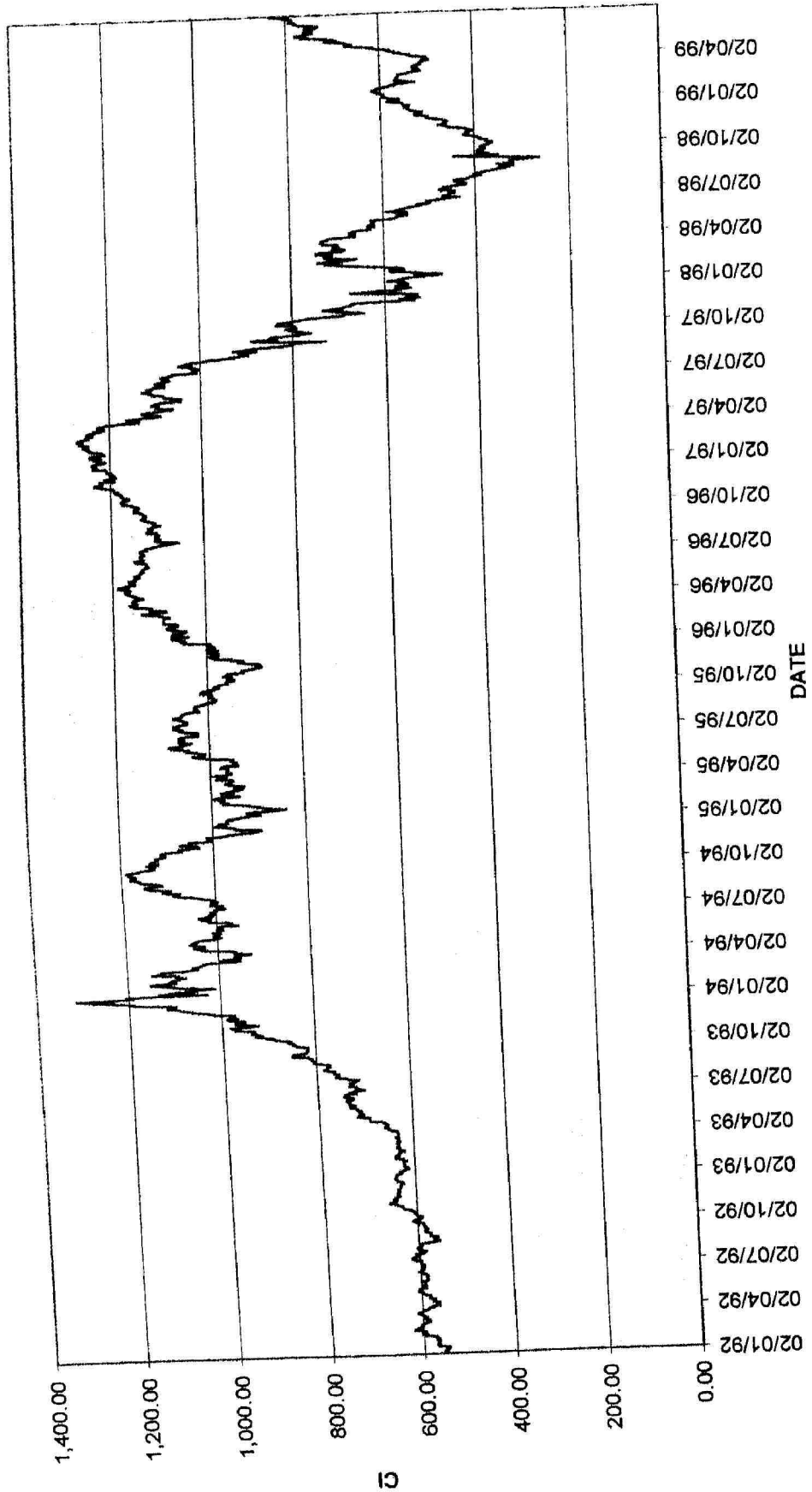
APPENDIX III: List of Stocks and the Adjustment Factors for Capital Changes

Stock	Capital Change	Ex-date	Adjustment Factor
MAA	R/I of 3:4 @ RM1.00	08/06/92	$\frac{1}{7}(4P_{t-1} + 3 \times 1.00)$
RHB	B/I of 1:2	22/10/92	$\frac{2}{3}P_{t-1}$
MGIC	R/I of 1:2 @ RM2.00	23/09/93	$\frac{1}{3}(2P_{t-1} + 1 \times 2.00)$
MAYBANK	B/I of 1:2	15/12/93	$\frac{2}{3}P_{t-1}$
PACIFIC	B/I of 1:5 R/I of 2:5 @ RM3.10	03/08/94	$\frac{1}{8}(5P_{t-1} + 2 \times 3.10)$
APEX	B/I of 1:4 and R/I of 1:1 @ RM 4.00	27/04/94	$\frac{1}{9}(4P_{t-1} + 4 \times 4.00)$
HLCRED	B/I of 1:3 R/I of 1:6 @ RM10.00	05/04/94	$\frac{1}{9}(6P_{t-1} + 1 \times 10.00)$
OMEGA	B/I of 1:4 R/I of 2:5 @ RM3.50	30/06/94	$\frac{1}{33}(20P_{t-1} + 4 \times 3.50)$
P'GLOBAL	R/I of 3:5@RM3.50	09/08/94	$\frac{1}{8}(5P_{t-1} + 3 \times 3.50)$
TA	B/I of 3:2	19/09/94	$\frac{2}{5}P_{t-1}$
KAF	B/I of 1:1	11/8/94	$\frac{1}{2}P_{t-1}$
HANCOCK	B/I of 1:2	19/12/94	$\frac{2}{3}P_{t-1}$
PKALEN	B/I of 2:3	23/01/95	$\frac{3}{5}P_{t-1}$
TA	B/I of 1:1	06/07/95	$\frac{1}{2}P_{t-1}$
MAA	B/I of 1:8	06/11/95	$\frac{8}{9}P_{t-1}$

OSK	B/I of 3:2 R/I of 1:2 @ RM2.50	07/09/95	$\frac{1}{6}\left(2P_{t-1}+1\times 2.50\right)$
MALPAC	B/I of 3:2 R/I of 1:2 @ RM3.00	07/11/95	$\frac{1}{6}\left(2P_{t-1}+1\times 3.00\right)$
K'HALL	B/I of 1:4	18/08/95	$\frac{4}{5}P_{t-1}$
PACIFIC	B/I of 1:2 R/I of 1:2@RM2.75	30/10/95	$\frac{1}{4}\left(2P_{t-1}+1\times 2.75\right)$
SBANK	B/I of 1:2	01/11/96	$\frac{2}{3}P_{t-1}$
BHLBANK	B/I of 1:4 R/I of 1:4@ RM4.50	03/06/96	$\frac{1}{6}\left(4P_{t-1}+1\times 4.50\right)$
PBB	B/I of 1:3	08/07/96	$\frac{3}{4}P_{t-1}$
AMMB	B/I of 1:1	09/08/96	$\frac{1}{2}P_{t-1}$
HANCOCK	B/I of 1:2	20/11/96	$\frac{2}{3}P_{t-1}$
MAA	B/I of 1:10	16/05/97	$\frac{10}{11}P_{t-1}$
COMMERZ	B/I of 1:1 R/I of 1:5 @ RM6.50	29/05/97	$\frac{1}{11}\left(5P_{t-1}+1\times 6.50\right)$
OMEGA	R/I of 1:3 @ RM4.30	06/06/97	$\frac{1}{4}\left(3P_{t-1}+1\times 4.30\right)$
AFFIN	R/I of 1:5 @ RM4.20	06/10/97	$\frac{1}{6}\left(5P_{t-1}+1\times 4.20\right)$
HLCRED	B/I of 1:5 R/I of 1:10 @ RM6.90	17/06/97	$\frac{1}{13}\left(10P_{t-1}+1\times 6.90\right)$
APEX	B/I of 1:1	29/07/97	$\frac{1}{2}P_{t-1}$
OMEGA	B/I of 1:1	29/08/97	$\frac{1}{2}P_{t-1}$
SBANK	B/I of 1:2 R/I of 1:5@RM1.85	14/10/97	$\frac{1}{17}\left(10P_{t-1}+2\times 1.85\right)$

PBB	B/I of 1:5 R/I of 1:5 @ RM1.00	16/12/97	$\frac{1}{7}\left(5P_{t-1} + 1 \times 1.00\right)$
PBB-F	B/I of 1:5 R/I of 1:5 @RM1.14	16/12/97	$\frac{1}{7}\left(5P_{t-1} + 1 \times 1.14\right)$
MAYBANK	B/I of 1:1	29/05/98	$\frac{1}{2}P_{t-1}$
AMANAH	R/I of 1:2 @ RM0.50	27/05/99	$\frac{1}{3}\left(2P_{t-1} + 1 \times 0.50\right)$