APPENDICES

APPENDICES

Exhibit 1

Collective Data for KLSE Composite Index[23], RAM Listed Bond Index, & RAM-Quantshop MGS Bond Index[24] for the period from April 1996 to May 2001

Year	Month	KLCI	Bond	MGS			
				All	Short	Medium	Long
1996	Apr	1,189.54	97.34	1,072.15	1,121.39	1,077.50	1,058.51
	May	1,141.07	97.72	1,078.18	1,126.52	1,081.26	1,066.34
	Jun	1,136.31	96.63	1,077.09	1,127.28	1,076.85	1,066.89
	Jul	1,068.23	96.90	1,081.32	1,132.53	1,080.88	1,070.97
	Aug	1,118.57	99.56	1,087.35	1,138.31	1,086.85	1,077.21
	Sep	1,135.27	100.89	1,092.86	1,143.71	1,090.53	1,084.32
	Oct	1,168.31	101.53	1,098.77	1,149.79	1,095.57	1,091.06
	Nov	1,226.52	102.14	1,103.34	1,154.27	1,098.64	1,097.14
	Dec	1,237.96	99.73	1,111.11	1,160.46	1,106.04	1,105.97
1997	Jan	1,216.72	101.72	1,118.27	1,167.99	1,111.68	1,114.32
	Feb	1,270.67	102.46	1,124.66	1,174.11	1,117.24	1,121.60
	Mar	1,203.10	95.03	1,129.10	1,179.22	1,123.95	1,123.89
	Apr	1,080.17	93.36	1,133.16	1,183.59	1,127.08	1,128.67
	May	1,104.83	94.26	1,139.20	1,190.07	1,132.72	1,134.94
	Jun	1,077.30	87.88	1,147.48	1,197.12	1,139.45	1,145.10
	Jul	1,012.84	88.05	1,155.47	1,203.00	1,147.22	1,154.24
	Aug	804.40	87.36	1,162.81	1,212.51	1,153.58	1,161.80
	Sep	814.57	99.43	1,167.34	1,218.82	1,158.80	1,165.05
	Oct	664.69	97.98	1,142.39	1,211.13	1,136.23	1,130.79
	Nov	545.44	90.46	1,111.83	1,204.80	1,105.40	1,091.11
	Dec	594.44	92.53	1,132.87	1,225.82	1,130.62	1,108.16
1998	Jan	569.51	95.00	1,132.36	1,226.33	1,126.38	1,110.59
	Feb	745.36	94.24	1,152.30	1,241.90	1,150.85	1,128.15
	Mar	719.52	85.02	1,159.17	1,243.62	1,157.63	1,137.81
	Apr	625.97	87.41	1,151.31	1,233.74	1,146.55	1,133.88
	May	538.24	86.00	1,144.18	1,224.14	1,140.61	1,126.60
	Jun	455.64	85.22	1,143.55	1,226.04	1,139.84	1,124.54
	Jul	402.65	77.59	1,141.09	1,242.00	1,128.88	1,117.65
	Aug	302.91	70.23	1,215.83	1,302.26	1,226.30	1,177.17
	Sep	373.52	72.48	1,216.16	1,300.16	1,213.81	1,193.63
	Oct	405.33	78.87	1,228.93	1,311.66	1,225.90	1,208.01
	Nov	501.47	79.77	1,264.43	1,342.15	1,264.11	1,243.55
	Dec	586.13	78.40	1,279.15	1,351.60	1,273.92	1,266.10

[23] Source: Monthly Statistical Bulletin, Bank Negara Malaysia.
[24] Source: RAM Bond Newsletter, Rating Agency Malaysia Berhad.

Exhibit 1 ***(continue)***

Collective Data for KLSE Composite Index, RAM's Listed Bond Index, & RAM-Quantshop MGS Bond Index for the period from April 1996 to May 2001

Year	Month	KLCI	Bond	MGS			
				All	Short	Medium	Long
1999	Jan	591.55	82.99	1,288.18	1,357.97	1,284.03	1,275.08
	Feb	542.23	84.57	1,303.07	1,373.83	1,301.89	1,285.82
	Mar	502.82	93.12	1,330.79	1,396.37	1,330.04	1,316.08
	Apr	674.96	98.37	1,371.50	1,436.23	1,370.38	1,358.49
	May	743.04	98.73	1,383.15	1,446.11	1,380.91	1,373.15
	Jun	811.10	100.02	1,388.29	1,450.15	1,388.37	1,376.18
	Jul	768.69	100.95	1,378.93	1,447.78	1,376.08	1,365.31
	Aug	767.06	101.55	1,370.28	1,450.52	1,369.70	1,345.25
	Sep	675.45	101.60	1,397.51	1,469.41	1,401.45	1,371.89
	Oct	742.87	89.00	1,418.97	1,481.53	1,423.51	1,399.37
	Nov	734.66	90.19	1,433.14	1,489.49	1,438.29	1,416.60
	Dec	812.33	89.49	1,411.92	1,495.36	1,447.58	1,426.17
2000	Jan	922.10	90.48	1,459.00	1,501.31	1,465.85	1,449.32
	Feb	982.24	89.68	1,469.29	1,509.45	1,476.78	1,460.33
	Mar	974.38	108.62	1,475.11	1,513.25	1,480.90	1,470.15
	Apr	898.35	116.50	1,474.37	1,514.67	1,475.72	1,475.49
	May	911.51	109.69	1,490.86	1,527.44	1,492.52	1,492.52
	Jun	833.37	110.15	1,509.22	1,541.63	1,513.85	1,507.94
	Jul	798.83	110.41	1,519.83	1,542.33	1,526.88	1,521.58
	Aug	795.84	110.01	1,520.31	1,544.34	1,525.31	1,523.83
	Sep	713.51	109.87	1,538.28	1,546.53	1,533.83	1,573.36
	Oct	752.36	110.31	1,558.18	1,569.08	1,553.89	1,590.66
	Nov	729.95	110.97	1,570.89	1,575.63	1,567.23	1,610.41
	Dec	679.64	109.06	1,587.14	1,585.72	1,586.57	1,630.14
2001	Jan	727.73	109.35	1,622.03	1,599.26	1,623.48	1,688.92
	Feb	709.39	110.67	1,654.23	1,610.27	1,657.29	1,745.15
	Mar	647.48	110.68	1,673.29	1,619.82	1,681.31	1,767.27
	Apr	584.50	111.09	1,682.18	1,629.08	1,687.39	1,780.15
	May	572.88	111.38	1,686.70	1,635.06	1,683.29	1,796.16

Exhibit 2

Computed Returns for KLSE Composite Index, RAM's Listed Bond Index, & RAM-Quantshop MGS Bond Index for the Period from April 1996 to May 2001

Year	Month	KLCI (%)	Bond (%)	MGS (%)			
				All	Short	Medium	Long
1996	May	-4.07	0.39	0.56	0.46	0.35	0.74
	Jun	-0.42	-1.12	-0.10	0.07	-0.41	0.05
	Jul	-5.99	0.28	0.39	0.47	0.37	0.38
	Aug	4.71	2.75	0.56	0.51	0.55	0.58
	Sep	1.49	1.34	0.51	0.47	0.34	0.66
	Oct	2.91	0.63	0.54	0.53	0.46	0.62
	Nov	4.98	0.60	0.42	0.39	0.28	0.56
	Dec	0.93	-2.36	0.70	0.54	0.67	0.81
1997	Jan	-1.72	2.00	0.64	0.65	0.51	0.76
	Feb	4.43	0.73	0.57	0.52	0.50	0.65
	Mar	-5.32	-7.25	0.39	0.44	0.60	0.20
	Apr	-10.22	-1.76	0.36	0.37	0.28	0.42
	May	2.28	0.96	0.53	0.55	0.50	0.56
	Jun	-2.49	-6.77	0.73	0.59	0.59	0.89
	Jul	-5.98	0.19	0.70	0.49	0.68	0.80
	Aug	-20.58	-0.78	0.63	0.79	0.55	0.65
	Sep	1.26	13.82	0.39	0.52	0.45	0.28
	Oct	-18.40	-1.46	-2.14	-0.63	-1.95	-2.94
	Nov	-17.94	-7.68	-2.68	-0.52	-2.71	-3.51
	Dec	8.98	2.29	1.89	1.75	2.28	1.56
1998	Jan	-4.19	2.67	-0.05	0.04	-0.38	0.22
	Feb	30.88	-0.80	1.76	1.27	2.17	1.58
	Mar	-3.47	-9.78	0.60	0.14	0.59	0.86
	Apr	-13.00	2.81	-0.68	-0.79	-0.96	-0.35
	May	-14.02	-1.61	-0.62	-0.78	-0.52	-0.64
	Jun	-15.35	-0.91	-0.05	0.16	-0.07	-0.18
	Jul	-11.63	-8.95	-0.22	1.30	-0.96	-0.61
	Aug	-24.77	-9.49	6.55	4.85	8.63	5.32
	Sep	23.31	3.20	0.03	-0.16	-1.02	1.40
	Oct	8.52	8.82	1.05	0.88	1.00	1.20
	Nov	23.72	1.14	2.89	2.32	3.12	2.94
	Dec	16.88	-1.72	1.16	0.70	0.78	1.81

Exhibit 2 (*continue*)

Computed Returns for KLSE Composite Index, RAM's Listed Bond Index, & RAM-Quantshop MGS Bond Index for the Period from April 1996 to May 2001

Year	Month	KLCI (%)	Bond (%)	MGS (%)			
				All	Short	Medium	Long
1999	Jan	0.92	5.85	0.71	0.47	0.79	0.71
	Feb	-8.34	1.90	1.16	1.17	1.39	0.84
	Mar	-7.27	10.11	2.13	1.64	2.16	2.35
	Apr	34.23	5.64	3.06	2.85	3.03	3.22
	May	10.09	0.37	0.85	0.69	0.77	1.08
	Jun	9.16	1.31	0.37	0.28	0.54	0.22
	Jul	-5.23	0.93	-0.67	-0.16	-0.89	-0.79
	Aug	-0.21	0.59	-0.63	0.19	-0.46	-1.47
	Sep	-11.94	0.05	1.99	1.30	2.32	1.98
	Oct	9.98	-12.40	1.54	0.82	1.57	2.00
	Nov	-1.11	1.34	1.00	0.54	1.04	1.23
	Dec	10.57	-0.78	-1.48	0.39	0.65	0.68
2000	Jan	13.51	1.11	3.33	0.40	1.26	1.62
	Feb	6.52	-0.88	0.71	0.54	0.75	0.76
	Mar	-0.80	21.12	0.40	0.25	0.28	0.67
	Apr	-7.80	7.25	-0.05	0.09	-0.35	0.36
	May	1.46	-5.85	1.12	0.84	1.14	1.15
	Jun	-8.57	0.42	1.23	0.93	1.43	1.03
	Jul	-4.14	0.24	0.70	0.05	0.86	0.90
	Aug	-0.37	-0.36	0.03	0.13	-0.10	0.15
	Sep	-10.35	-0.13	1.18	0.14	0.56	3.25
	Oct	5.44	0.40	1.29	1.46	1.31	1.10
	Nov	-2.98	0.60	0.82	0.42	0.86	1.24
	Dec	-6.89	-1.72	1.03	0.64	1.23	1.23
2001	Jan	7.08	0.27	2.20	0.85	2.33	3.61
	Feb	-2.52	1.21	1.99	0.69	2.08	3.33
	Mar	-8.73	0.00	1.15	0.59	1.45	1.27
	Apr	-9.73	0.37	0.53	0.57	0.36	0.73
	May	-1.99	0.27	0.27	0.37	-0.24	0.90

Exhibit 3

Computed Moving Average Standard Deviation of Monthly Rates of Return for 12-Month Calendar Periods from April 1997 to May 2001

Year	Month	KLCI (%)	Bond (%)	MGS (%)			
				All	Short	Medium	Long
1997	Apr	4.87	2.63	0.21	0.14	0.28	0.23
	May	4.81	2.65	0.21	0.14	0.28	0.22
	Jun	4.86	3.25	0.12	0.08	0.13	0.19
	Jul	4.86	3.25	0.12	0.08	0.14	0.19
	Aug	7.33	3.06	0.13	0.11	0.14	0.19
	Sep	7.32	5.26	0.13	0.11	0.13	0.21
	Oct	8.40	5.28	0.79	0.35	0.72	1.04
	Nov	8.72	5.69	1.17	0.45	1.13	1.51
	Dec	9.58	5.74	1.27	0.60	1.30	1.56
1998	Jan	9.52	5.77	1.27	0.61	1.30	1.55
	Feb	14.05	5.76	1.35	0.66	1.43	1.61
	Mar	14.04	6.06	1.35	0.67	1.43	1.62
	Apr	14.19	6.14	1.38	0.76	1.47	1.62
	May	14.36	6.13	1.39	0.82	1.48	1.63
	Jun	14.64	5.82	1.37	0.81	1.47	1.60
	Jul	14.73	6.35	1.35	0.87	1.48	1.58
	Aug	15.14	6.82	2.35	1.59	2.93	2.25
	Sep	17.38	5.12	2.35	1.60	2.97	2.28
	Oct	17.22	6.07	2.22	1.56	2.88	2.06
	Nov	18.05	5.80	2.04	1.58	2.74	1.71
	Dec	18.52	5.72	2.03	1.56	2.72	1.72
1999	Jan	18.44	5.98	2.00	1.54	2.69	1.70
	Feb	16.16	6.04	1.99	1.54	2.67	1.70
	Mar	16.24	6.06	2.01	1.54	2.68	1.74
	Apr	18.79	6.19	1.98	1.51	2.64	1.75
	May	18.18	6.13	1.89	1.39	2.57	1.62
	Jun	17.13	6.09	1.86	1.38	2.54	1.58
	Jul	16.61	5.14	1.90	1.45	2.53	1.60
	Aug	13.62	3.64	1.21	0.95	1.35	1.39
	Sep	14.00	3.75	1.19	0.89	1.26	1.41
	Oct	14.03	5.37	1.20	0.89	1.26	1.43
	Nov	12.97	5.37	1.08	0.80	1.11	1.33
	Dec	12.52	5.33	1.30	0.81	1.12	1.31

Exhibit 3 (continue)

Computed Moving Average Standard Deviation of Monthly Rates of Return for 12-Month Calendar Periods from April 1996 to May 2001

Year	Month	KLCI (%)	Bond (%)	MGS (%)			
				All	Short	Medium	Long
2000	Jan	12.82	5.13	1.48	0.81	1.12	1.32
	Feb	12.17	5.14	1.49	0.81	1.12	1.32
	Mar	11.68	7.45	1.45	0.78	1.08	1.26
	Apr	8.34	7.55	1.30	0.38	0.90	1.04
	May	8.02	7.85	1.30	0.39	0.91	1.04
	Jun	8.21	7.85	1.31	0.41	0.94	1.03
	Jul	8.15	7.86	1.24	0.38	0.79	0.91
	Aug	8.15	7.87	1.18	0.39	0.74	0.59
	Sep	7.94	7.87	1.13	0.31	0.59	0.84
	Oct	7.55	6.68	1.12	0.42	0.56	0.79
	Nov	7.61	6.69	1.12	0.42	0.56	0.79
	Dec	7.10	6.73	0.87	0.42	0.57	0.78
2001	Jan	6.04	6.74	0.61	0.43	0.72	1.06
	Feb	5.45	6.69	0.68	0.44	0.80	1.19
	Mar	5.69	2.89	0.66	0.43	0.78	1.17
	Apr	5.86	1.86	0.58	0.40	0.68	1.14
	May	5.68	0.70	0.63	0.40	0.79	1.15

Exhibit 4

Results of T-Test on Stock-Versus-Bond Returns for the Period from April 1996 to May 2001

T-Test: Two-Sample Assuming Equal Variances

Stock-versus-Bond Returns

	Variable 1 (*Stock Returns*)	*Variable 2* (*Bond Returns*)
Mean	-0.005613138	0.003508761
Variance	0.013207477	0.002705225
Observations	61	61
Pooled Variance	0.007956351	
Hypothesized Mean Difference	0	
Df	120	
t Stat	-0.564778561	
t Critical two-tail	1.979929038	

Stock-versus-MGS Returns

	Variable 1 (*Stock Returns*)	*Variable 2* (*MGS Returns*)
Mean	-0.005613138	0.007536928
Variance	0.013207477	0.000168049
Observations	61	61
Pooled Variance	0.006687763	
Hypothesized Mean Difference	0	
Df	120	
t Stat	-0.888050031	
t Critical two-tail	1.979929038	

Exhibit 5

Results of T-Test on Stock-Versus-Bond Volatility of Returns for the Period from April 1996 to May 2001

T-Test: Two-Sample Assuming Equal Variances

Stock-versus-Bond Volatility of Returns

	Variable 1 (Stock)	*Variable 2 (Bond)*
Mean	0.113541292	0.055396992
Variance	0.002063406	0.000269943
Observations	50	50
Pooled Variance	0.001166674	
Hypothesized Mean Difference	0	
Df	98	
t Stat	8.51142656	
t Critical two-tail	1.984467417	

Stock-versus-MGS Volatility of Returns

	Variable 1 (Stock)	*Variable 2 (MGS)*
Mean	0.113541292	0.012472724
Variance	0.002063406	3.64805E-05
Observations	50	50
Pooled Variance	0.001049943	
Hypothesized Mean Difference	0	
Df	98	
t Stat	15.59564099	
t Critical two-tail	1.984467417	

Exhibit 6

Results of the Regression Analysis of Monthly Returns from April 1996 to May 2001 where the Dependent Variable is Stock Market Returns and Independent Variables are Bond Market Returns and MGS Returns

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.31213777
R Square	0.097429988
Adjusted R Square	0.066306884
Standard Error	0.111048324
Observations	61

ANOVA

	Df	*SS*	*MS*	*F*	*Sig. F*
Regression	2	0.077208259	0.038604129	3.130471435	0.05116183
Residual	58	0.715240354	0.01233173		
Total	60	0.792448613			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	-0.02317091	0.016522445	-1.40239014	0.166128672
X Variable 1 (Bond)	0.456861501	0.275712549	1.657021061	0.10291552
X Variable 2 (MGS)	2.116878109	1.10621818	1.913617176	0.060608548

	Lower 95%	*Upper 95%*
Intercept	-0.05624416	0.009902328
X Variable 1 (Bond)	-0.09503672	1.008759718
X Variable 2 (MGS)	-0.0974565	4.331212721

Exhibit 7

Monthly Fixed Deposit Interest Rates of Finance Companies and their Computed Returns for the Period from April 1996 to May 2001.

Year	Month	FD Rates (%)	Monthly Returns (%)
1996	Apr	7.03	
	May	7.10	1.00
	Jun	7.29	2.68
	Jul	7.32	0.41
	Aug	7.25	-0.96
	Sep	7.25	0.00
	Oct	7.22	-0.41
	Nov	7.24	0.28
	Dec	7.28	0.55
1997	Jan	7.30	0.27
	Feb	7.31	0.14
	Mar	7.32	0.14
	Apr	7.15	-2.32
	May	7.65	6.99
	Jun	7.71	0.78
	Jul	8.53	10.64
	Aug	7.61	-10.79
	Sep	7.72	1.45
	Oct	8.86	14.77
	Nov	9.88	11.51
	Dec	10.33	4.55
1998	Jan	10.68	3.39
	Feb	10.63	-0.47
	Mar	10.80	1.60
	Apr	10.85	0.46
	May	10.84	-0.09
	Jun	10.93	0.83
	Jul	10.86	-0.64
	Aug	9.85	-9.30
	Sep	6.79	-31.07
	Oct	6.64	-2.21
	Nov	6.41	-3.46
	Dec	6.35	-0.94
1999	Jan	6.18	-2.68
	Feb	5.91	-4.37
	Mar	5.69	-3.72
	Apr	4.11	-27.77
	May	3.80	-7.54
	Jun	3.78	-0.53
	Jul	3.77	-0.26
	Aug	3.78	0.27
	Sep	3.77	-0.26
	Oct	3.35	-11.14
	Nov	3.31	-1.19
	Dec	3.34	0.91
2000	Jan	3.31	-0.90
	Feb	3.28	-0.91
	Mar	3.24	-1.22
	Apr	3.23	-0.31
	May	3.22	-0.31
	Jun	3.22	0.00
	Jul	3.47	7.76
	Aug	3.47	0.00
	Sep	3.46	-0.29
	Oct	3.47	0.29
	Nov	3.46	-0.29
	Dec	3.45	-0.29
2001	Jan	3.45	0.00
	Feb	3.45	0.00
	Mar	3.45	0.00
	Apr	3.45	0.00
	May	3.45	0.00

Exhibit 8

Results of the Regression Analysis of Monthly Returns from April 1996 to May 2001 where the Dependent Variable is Stock Market Returns & Independent Variables are Bond Market Returns, MGS Returns, & Fixed Deposit Returns

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.47216408
R Square	0.222938919
Adjusted R Square	0.182040967
Standard Error	0.103938323
Observations	61

ANOVA

	Df	*SS*	*MS*	*F*	*Sig. F*
Regression	3	0.176667637	0.058889212	5.451102308	0.00229782
Residual	57	0.615780976	0.010803175		
Total	60	0.792448613			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	-0.01847815	0.015541722	-1.18893807	0.23939366
X Variable 1 (Bond)	0.370263295	0.25963317	1.42610166	0.159293137
X Variable 2 (MGS)	0.748632133	1.129327359	0.662900909	0.510065916
X Variable 3 (FD)	-0.65729936	0.216628725	-3.03422068	0.003628707

	Lower 95%	*Upper 95%*
Intercept	-0.04959992	0.01264363
X Variable 1 (Bond)	-0.14964338	0.890169972
X Variable 2 (MGS)	-1.51280786	3.010072132
X Variable 3 (FD)	-1.09109108	-0.223507632

Exhibit 9

Result of the Regression Analysis of Market Volatility from April 1996 to May 2001 where the Dependent Variable is Stock Market Volatility and Independent Variables are Bond Market Volatility and MGS Volatility

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9695695
R Square	0.94006501
Adjusted R Square	0.90010836
Standard Error	0.01639659
Observations	6

ANOVA

	Df	*SS*	*MS*	*F*	*Sig. F*
Regression	2	0.01265045	0.006325224	23.5271186	0.01467305?
Residual	3	0.00080654	0.000268848		
Total	5	0.01345699			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.00632064	0.01587495	0.398151975	0.71716013
X Variable 1 (Bond)	-0.0789072	0.34974666	-0.225612551	0.83599882
X Variable 2 (MGS)	8.62363032	1.51551881	5.690216607	0.0107594

	Lower 95%	*Upper 95%*
Intercept	-0.0442006	0.05684186
X Variable 1 (Bond)	-1.1919583	1.03414378
X Variable 2 (MGS)	3.80056855	13.4466921