

Appendix-1: Risk and return characteristics of 122 sample securities and the benchmark market index (CASPI)

Security No.	Security Name	Mean Return (Daily)	Variance	Standard Deviation	Covariance	Beta
	CASPI	0.000213	0.000083	0.009097	0.000083	1.00000
1	BRAC BANK LIMITED	0.000829	0.000428	0.020689	0.000075	0.91146
2	DUTCH-BANGLA BANK LIMITED	0.000797	0.000712	0.026685	0.000054	0.65077
3	EASTERN BANK LIMITED	0.000260	0.000497	0.022284	0.000082	0.99236
4	MERCANTILE BANK LIMITED	0.000090	0.000457	0.021380	0.000104	1.25492
5	MUTUAL TRUST BANK LIMITED	0.000453	0.000637	0.025244	0.000068	0.81607
6	PUBALI BANK LIMITED	0.000110	0.000356	0.018855	0.000072	0.86973
7	RUPALI BANK LIMITED	0.000088	0.001042	0.032280	0.000089	1.06996
8	SHAHJALAL ISLAMI BANK LIMITED	0.000161	0.000411	0.020270	0.000081	0.98365
9	THE CITY BANK LIMITED	0.000099	0.000527	0.022947	0.000123	1.49225
10	TRUST BANK LIMITED	0.000262	0.000551	0.023480	0.000090	1.09105
11	CONFIDENCE CEMENT LIMITED	0.000537	0.000594	0.024365	0.000101	1.21689
12	HEIDELBERG CEMENT BANGLADESH LTD	0.000624	0.000370	0.019246	0.000049	0.59697
13	LAFARGE HOLCIM BANGLADESH LIMITED	0.000570	0.000536	0.023160	0.000093	1.12098
14	M.I. CEMENT FACTORY LTD	0.000086	0.000391	0.019783	0.000094	1.14095
15	MEGHNA CEMENT MILLS LIMITED	0.000321	0.000894	0.029900	0.000096	1.16084
16	MONNO CERAMIC INDUSTRIES LTD	0.001910	0.001395	0.037353	0.000044	0.53504
17	IBBL MUDARABA PERPETUAL BOND	0.000020	0.000122	0.011045	0.000004	0.04812
18	BARAKA POWER LIMITED	0.000134	0.000551	0.023464	0.000117	1.41945
19	JAMUNA OIL COMPANY LIMITED	0.000198	0.000339	0.018424	0.000078	0.93789
20	KHULNA POWER COMPANY LIMITED	0.000302	0.000524	0.022884	0.000097	1.16961
21	LINDE BANGLADESH LIMITED	0.000695	0.000380	0.019499	0.000009	0.11341
22	MEGHNA PETROLEUM LIMITED	0.000497	0.000381	0.019513	0.000084	1.01287
23	MJL BANGLADESH LIMITED	0.000258	0.000389	0.019729	0.000090	1.08464
24	POWER GRID COMPANY OF BANGLADESH LTD	0.000321	0.000543	0.023311	0.000073	0.87953
25	ANWAR GALVANIZING LIMITED	0.001144	0.001170	0.034205	0.000035	0.41869
26	BANGLADESH LAMPS LIMITED	0.000731	0.000965	0.031072	0.000035	0.42436
27	EASTERN CABLES LIMITED	0.001527	0.001151	0.033926	0.000048	0.57948
28	NAVANA CNG LIMITED	0.000125	0.000590	0.024295	0.000117	1.41068
29	QUASEM INDUSTRIES LIMITED	0.000318	0.000817	0.028589	0.000100	1.20355

Security No.	Security Name	Mean Return (Daily)	Variance	Standard Deviation	Covariance	Beta
30	RANGPUR FOUNDRY LTD	0.000942	0.000821	0.028657	0.000021	0.25667
31	SINGER BANGLADESH LIMITED	0.000501	0.000519	0.022784	0.000087	1.05079
32	AGRICULTURAL MARKETING CO LTD	0.000757	0.000607	0.024631	0.000029	0.34564
33	APEX FOODS LIMITED	0.001067	0.001013	0.031828	0.000035	0.42433
34	BANGAS LIMITED	0.001030	0.001168	0.034175	0.000053	0.64554
35	NATIONAL TEA COMPANY LIMITED	0.000301	0.000355	0.018839	0.000005	0.05621
36	OLYMPIC INDUSTRIES LIMITED	0.000812	0.000627	0.025040	0.000097	1.17364
37	RAHIMA FOOD CORPORATION LTD	0.001772	0.001425	0.037745	0.000078	0.93727
38	ASIA INSURANCE LIMITED	0.000081	0.000903	0.030051	0.000093	1.12685
39	ASIA PACIFIC GENERAL INSURANCE CO. LTD.	0.000288	0.001056	0.032491	0.000066	0.79540
40	CITY GENERAL INSURANCE COMPANY LIMITED	0.000004	0.000873	0.029554	0.000096	1.15877
41	CONTINENTAL INSURANCE LIMITED	0.000195	0.001024	0.032007	0.000080	0.96909
42	EASTERN INSURANCE COMPANY LTD	0.000551	0.000976	0.031238	0.000052	0.62756
43	GREEN DELTA INSURANCE COMPANY LIMITED	0.000082	0.001070	0.032706	0.000055	0.66459
44	ISLAMI INSURANCE BANGLADESH LIMITED	0.000111	0.001063	0.032604	0.000050	0.59861
45	MERCANTILE INSURANCE CO.LTD.	0.000379	0.000940	0.030653	0.000077	0.93029
46	NITOL INSURANCE COMPANY LIMITED	0.000021	0.000811	0.028485	0.000019	0.23013
47	NORTHERN GENERAL INSURANCE COMPANY LIMITED	0.000112	0.001134	0.033670	0.000072	0.87447
48	PARAMOUNT INSURANCE CO. LTD	0.000068	0.001093	0.033057	0.000054	0.65448
49	PEOPLES INSURANCE COMPANY LTD	0.000104	0.000894	0.029893	0.000065	0.78156
50	PROVATI INSURANCE COMPANY LIMITED	0.000428	0.001078	0.032836	0.000082	0.98670
51	REPUBLIC INSURANCE COMPANY LTD	0.000137	0.001134	0.033668	0.000079	0.94881
52	SONAR BANGLA INSURANCE LTD.	0.000780	0.001120	0.033463	0.000056	0.67894
53	STANDARD INSURANCE LIMITED	0.000687	0.001565	0.039559	0.000029	0.34811

Security No.	Security Name	Mean Return (Daily)	Variance	Standard Deviation	Covariance	Beta
54	TAKAFUL ISLAMI INSURANCE LIMITED	0.000132	0.000715	0.026747	0.000056	0.67743
55	AGNI SYSTEMS LIMITED	0.000098	0.000663	0.025750	0.000109	1.31685
56	BDCOM ONLINE LIMITED	0.000611	0.000796	0.028206	0.000099	1.19185
57	DAFFODIL COMPUTERS LIMITED	0.000976	0.000877	0.029616	0.000093	1.12950
58	INTECH LIMITED	0.000821	0.001027	0.032052	0.000094	1.13707
59	DELTA BRAC HOUSING FIN. CORPORATION LTD.	0.000704	0.000603	0.024566	0.000062	0.74318
60	IDLC FINANCE LIMITED	0.000214	0.000628	0.025051	0.000115	1.38423
61	IPDC FINANCE LIMITED	0.000702	0.000895	0.029912	0.000102	1.23293
62	ISLAMIC FINANCE & INVESTMENT LTD.	0.000102	0.000770	0.027749	0.000136	1.64512
63	MIDAS FINANCING LIMITED	0.000310	0.001539	0.039236	0.000053	0.63932
64	NATIONAL HOUSING FINANCE & INVESTMENTS LTD	0.000132	0.001141	0.033782	0.000108	1.30124
65	PHOENIX FINANCE & INVESTMENTS	0.000025	0.000873	0.029549	0.000118	1.43064
66	APEX FOOTWEAR LIMITED	0.000750	0.001232	0.035102	0.000027	0.32570
67	APEX TANNERY LIMITED	0.000630	0.000787	0.028058	0.000086	1.03650
68	BATA SHOE COMPANY (BD) LIMITED	0.000776	0.000446	0.021110	0.000021	0.25037
69	LEGACY FOOTWEAR LIMITED	0.001682	0.001448	0.038052	0.000065	0.78655
70	POPULAR LIFE INSURANCE COMPANY LIMITED	0.000205	0.001086	0.032950	0.000018	0.21296
71	PRAGATI LIFE INSURANCE LTD.	0.000336	0.001207	0.034744	-0.000002	-0.02895
72	RUPALI LIFE INSURANCE CO. LTD.	0.000222	0.001094	0.033083	0.000044	0.53553
73	ARAMIT LIMITED	0.000782	0.000894	0.029904	0.000020	0.24299
74	BRITISH AMERICAN TOBACCO BANGLADESH COMPANY LIMITED	0.001336	0.000283	0.016822	0.000017	0.19974
75	JMI SYRINGES & MEDICAL DEVICES LTD.	0.001523	0.001597	0.039960	0.000028	0.34298
76	NATIONAL POLYMER INDUSTRIES LTD	0.000959	0.001059	0.032540	0.000040	0.48676
77	USMANIA GLASS SHEET FACTORY LIMITED	0.000536	0.000931	0.030508	0.000058	0.70624
78	AIBL 1ST ISLAMIC MUTUAL FUND	0.000462	0.000932	0.030528	0.000061	0.73748
79	DBH FIRST MUTUAL FUND	0.000431	0.000634	0.025170	0.000076	0.92266
80	EBL FIRST MUTUAL FUND	0.000188	0.000597	0.024436	0.000069	0.82799

Security No.	Security Name	Mean Return (Daily)	Variance	Standard Deviation	Covariance	Beta
81	EBL NRB MUTUAL FUND	0.000042	0.000669	0.025856	0.000020	0.24171
82	FIRST JANATA BANK MUTUAL FUND	0.000010	0.000513	0.022648	0.000076	0.91677
83	GRAMEEN MF ONE : SCHEME TWO	0.000179	0.000534	0.023101	0.000090	1.09133
84	GREEN DELTA MUTUAL FUND	0.000460	0.000623	0.024965	0.000079	0.95078
85	ICB AMCL 2ND NRB MUTUAL FUND	0.000108	0.000514	0.022681	0.000046	0.55514
86	ICB AMCL 3RD NRB MUTUAL FUND	0.000187	0.000536	0.023148	0.000069	0.83630
87	ICB AMCL SECOND MUTUAL FUND	0.000453	0.000833	0.028861	0.000045	0.54169
88	ICB EMPLOYEES PROVIDENT MUTUAL FUND ONE	0.000258	0.000756	0.027493	0.000063	0.76209
89	IFIC BANK 1ST MUTUAL FUND	0.000009	0.000601	0.024508	0.000070	0.84239
90	IFIL ISLAMIC MUTUAL FUND-1	0.000484	0.000574	0.023953	0.000076	0.91904
91	LR GLOBAL BANGLADESH MF ONE	0.000201	0.000773	0.027803	0.000017	0.20283
92	MBL 1ST MUTUAL FUND	0.000352	0.000684	0.026156	0.000032	0.39210
93	NLI FIRST MUTUAL FUND	0.000474	0.000516	0.022719	0.000018	0.21425
94	PHOENIX FIN. 1ST MUTUAL FUND	0.000354	0.000692	0.026299	0.000059	0.71607
95	PHP FIRST MUTUAL FUND	0.000164	0.000523	0.022875	0.000091	1.09635
96	POPULAR LIFE FIRST MUTUAL FUND	0.000132	0.000575	0.023978	0.000086	1.04414
97	PRIME BANK 1ST ICB AMCL MF	0.000281	0.000602	0.024534	0.000062	0.75260
98	PRIME FINANCE 1ST MUTUAL FUND	0.000353	0.001021	0.031954	0.000072	0.86624
99	RELIANCE ONE THE FIRST SCHEME OF RELIANC	0.000292	0.000702	0.026498	0.000023	0.28253
100	SOUTHEAST BANK 1ST MUTUAL FUND	0.000548	0.000663	0.025744	0.000031	0.36987
101	SINOBANGLA INDUSTRIES LIMITED	0.000697	0.001068	0.032675	0.000075	0.90338
102	ACI FORMULATIONS LIMITED	0.000741	0.000766	0.027678	0.000073	0.88157
103	ADVANCED CHEMICAL INDUSTRIES LTD.	0.000499	0.000499	0.022341	0.000047	0.56282
104	AMBEE PHARMACEUTICALS LIMITED	0.000913	0.000894	0.029900	0.000052	0.62482
105	BERGER PAINTS BANGLADESH LTD	0.001172	0.000617	0.024846	0.000006	0.07404

Security No.	Security Name	Mean Return (Daily)	Variance	Standard Deviation	Covariance	Beta
106	BEXIMCO PHARMACEUTICALS LTD	0.000221	0.000395	0.019867	0.000100	1.21399
107	KOHINOOR CHEMICAL CO (BD) LTD	0.000839	0.000936	0.030593	0.000020	0.24448
108	LIBRA INFUSIONS LIMITED	0.001254	0.001075	0.032791	-0.000003	-0.03954
109	MARICO BANGLADESH LIMITED	0.001186	0.000628	0.025051	0.000012	0.13994
110	ORION INFUSION LIMITED	0.000570	0.000809	0.028443	0.000094	1.13675
111	RECKITT BENCKISER (BANGLADESH) LIMITED	0.001238	0.000527	0.022957	-0.000004	-0.05015
112	SQUARE PHARMACEUTICALS LIMITED	0.000259	0.000228	0.015097	0.000045	0.54614
113	THE IBN SINA PHARMACEUTICALS LTD	0.000857	0.000860	0.029325	0.000040	0.47782
114	EASTERN HOUSING LIMITED	0.000230	0.000568	0.023843	0.000098	1.18722
115	SAMORITA HOSPITAL LIMITED	0.000520	0.001012	0.031813	0.000031	0.36861
116	GRAMEENPHONE LIMITED	0.000645	0.000249	0.015767	0.000072	0.86700
117	ANLIMA YARN DYEING LIMITED	0.000672	0.001032	0.032121	0.000082	0.98745
118	APEX SPINNING & KNITTING MILLS LIMITED	0.000922	0.001338	0.036585	0.000016	0.18908
119	H.R.TEXTILE MILLS LIMITED	0.000838	0.001394	0.037341	0.000075	0.90087
120	MALEK SPINNING MILLS LIMITED	0.000207	0.000657	0.025639	0.000094	1.14015
121	PRIME TEXTILE SPINNING MILLS	0.000508	0.000997	0.031574	0.000096	1.16381
122	SAIHAM TEXTILE MILLS LTD	0.000780	0.000880	0.029671	0.000100	1.21311

Appendix-2: Breakdown of each security's return and risk into firm-specific and market-related part

Security No.	α_i	$\beta_i \bar{R}_m$	\bar{R}_i	σ_{ei}^2	$\beta_i^2 \sigma_m^2$	σ_i^2
1	0.00063473	0.00019454	0.00082927	0.00035928	0.00006875	0.00042803
2	0.00065785	0.00013890	0.00079675	0.00067704	0.00003505	0.00071209
3	0.00004810	0.00021181	0.00025991	0.00041507	0.00008149	0.00049657
4	-0.00017799	0.00026785	0.00008986	0.00032678	0.00013032	0.00045710
5	0.00027926	0.00017418	0.00045344	0.00058216	0.00005511	0.00063727
6	-0.00007546	0.00018563	0.00011017	0.00029291	0.00006260	0.00035551
7	-0.00014067	0.00022837	0.00008770	0.00094726	0.00009474	0.00104199
8	-0.00004869	0.00020995	0.00016126	0.00033079	0.00008007	0.00041086
9	-0.00021962	0.00031850	0.00009888	0.00034230	0.00018428	0.00052657
10	0.00002887	0.00023287	0.00026174	0.00045280	0.00009851	0.00055131
11	0.00027682	0.00025973	0.00053655	0.00047113	0.00012254	0.00059367

Security No.	α_i	$\beta_i \bar{R}_m$	\bar{R}_i	σ_{ei}^2	$\beta_i^2 \sigma_m^2$	σ_i^2
12	0.00049698	0.00012741	0.00062439	0.00034092	0.00002949	0.00037041
13	0.00033086	0.00023926	0.00057012	0.00043238	0.00010399	0.00053637
14	-0.00015786	0.00024352	0.00008566	0.00028366	0.00010773	0.00039138
15	0.00007341	0.00024777	0.00032117	0.00078252	0.00011151	0.00089404
16	0.00179574	0.00011420	0.00190993	0.00137153	0.00002369	0.00139522
17	0.00001016	0.00001027	0.00002043	0.00012180	0.00000019	0.00012200
18	-0.00016924	0.00030296	0.00013372	0.00038384	0.00016674	0.00055057
19	-0.00000175	0.00020018	0.00019843	0.00026664	0.00007279	0.00033943
20	0.00005215	0.00024964	0.00030179	0.00041046	0.00011321	0.00052367
21	0.00067072	0.00002421	0.00069493	0.00037916	0.00000106	0.00038022
22	0.00028092	0.00021619	0.00049711	0.00029586	0.00008490	0.00038076
23	0.00002682	0.00023150	0.00025832	0.00029186	0.00009735	0.00038922
24	0.00013374	0.00018773	0.00032147	0.00047937	0.00006402	0.00054339
25	0.00105499	0.00008936	0.00114435	0.00115549	0.00001451	0.00116999
26	0.00064018	0.00009058	0.00073075	0.00095054	0.00001490	0.00096544
27	0.00140313	0.00012368	0.00152681	0.00112318	0.00002779	0.00115097
28	-0.00017601	0.00030109	0.00012508	0.00042557	0.00016468	0.00059026
29	0.00006070	0.00025688	0.00031759	0.00069748	0.00011987	0.00081736
30	0.00088721	0.00005478	0.00094199	0.00081575	0.00000545	0.00082121
31	0.00027680	0.00022428	0.00050107	0.00042772	0.00009137	0.00051910
32	0.00068332	0.00007377	0.00075710	0.00059679	0.00000989	0.00060668
33	0.00097663	0.00009057	0.00106719	0.00099812	0.00001490	0.00101302
34	0.00089180	0.00013778	0.00102958	0.00113341	0.00003449	0.00116790
35	0.00028893	0.00001200	0.00030092	0.00035463	0.00000026	0.00035489
36	0.00056161	0.00025050	0.00081211	0.00051304	0.00011399	0.00062702
37	0.00157207	0.00020005	0.00177212	0.00135200	0.00007270	0.00142470
38	-0.00015988	0.00024051	0.00008063	0.00079797	0.00010508	0.00090305
39	0.00011851	0.00016977	0.00028827	0.00100332	0.00005236	0.00105568
40	-0.00024321	0.00024733	0.00000412	0.00076231	0.00011112	0.00087343
41	-0.00001193	0.00020684	0.00019491	0.00094672	0.00007772	0.00102444
42	0.00041739	0.00013395	0.00055133	0.00094321	0.00003259	0.00097580
43	-0.00006001	0.00014185	0.00008184	0.00103314	0.00003655	0.00106970
44	-0.00001643	0.00012777	0.00011134	0.00103339	0.00002965	0.00106304
45	0.00017996	0.00019856	0.00037852	0.00086802	0.00007162	0.00093964
46	-0.00002806	0.00004912	0.00002106	0.00080699	0.00000438	0.00081137
47	-0.00007499	0.00018664	0.00011165	0.00107039	0.00006328	0.00113367
48	-0.00007209	0.00013969	0.00006760	0.00105734	0.00003545	0.00109278
49	-0.00006320	0.00016681	0.00010361	0.00084302	0.00005055	0.00089357
50	0.00021714	0.00021060	0.00042774	0.00099766	0.00008057	0.00107823

Security No.	α_i	$\beta_i \bar{R}_m$	\bar{R}_i	σ_{ei}^2	$\beta_i^2 \sigma_m^2$	σ_i^2
51	-0.0006536	0.00020251	0.00013715	0.00105901	0.00007450	0.00113351
52	0.00063506	0.00014491	0.00077997	0.00108161	0.00003815	0.00111976
53	0.00061235	0.00007430	0.00068665	0.00155487	0.00001003	0.00156490
54	-0.00001308	0.00014459	0.00013151	0.00067744	0.00003798	0.00071541
55	-0.00018338	0.00028107	0.00009769	0.00051955	0.00014350	0.00066305
56	0.00035669	0.00025438	0.00061108	0.00067805	0.00011755	0.00079560
57	0.00073524	0.00024108	0.00097632	0.00077155	0.00010557	0.00087713
58	0.00057874	0.00024269	0.00082144	0.00092036	0.00010700	0.00102736
59	0.00054565	0.00015862	0.00070427	0.00055777	0.00004571	0.00060348
60	-0.00008184	0.00029545	0.00021360	0.00046900	0.00015856	0.00062757
61	0.00043889	0.00026315	0.00070204	0.00076892	0.00012579	0.00089472
62	-0.00024884	0.00035113	0.00010229	0.00054605	0.00022397	0.00077002
63	0.00017352	0.00013645	0.00030997	0.00150566	0.00003382	0.00153949
64	-0.00014562	0.00027773	0.00013211	0.00100112	0.00014012	0.00114124
65	-0.00028073	0.00030535	0.00002462	0.00070379	0.00016937	0.00087316
66	0.00068007	0.00006952	0.00074958	0.00122334	0.00000878	0.00123212
67	0.00040915	0.00022123	0.00063038	0.00069837	0.00008891	0.00078727
68	0.00072242	0.00005344	0.00077586	0.00044046	0.00000519	0.00044565
69	0.00151408	0.00016788	0.00168196	0.00139675	0.00005120	0.00144795
70	0.00015931	0.00004545	0.00020476	0.00108193	0.00000375	0.00108569
71	0.00034242	-0.00000618	0.00033624	0.00120710	0.00000007	0.00120717
72	0.00010788	0.00011430	0.00022218	0.00107075	0.00002373	0.00109449
73	0.00073000	0.00005186	0.00078186	0.00088934	0.00000489	0.00089423
74	0.00129347	0.00004263	0.00133611	0.00027967	0.00000330	0.00028297
75	0.00144949	0.00007320	0.00152270	0.00158710	0.00000973	0.00159684
76	0.00085494	0.00010389	0.00095883	0.00103924	0.00001961	0.00105885
77	0.00038554	0.00015074	0.00053628	0.00088944	0.00004128	0.00093072
78	0.00030496	0.00015741	0.00046236	0.00088697	0.00004501	0.00093197
79	0.00023357	0.00019693	0.00043050	0.00056309	0.00007045	0.00063353
80	0.00001140	0.00017672	0.00018812	0.00054037	0.00005673	0.00059710
81	-0.00000971	0.00005159	0.00004188	0.00066367	0.00000483	0.00066851
82	-0.00018522	0.00019567	0.00001045	0.00044336	0.00006955	0.00051291
83	-0.00005383	0.00023293	0.00017910	0.00043509	0.00009856	0.00053365
84	0.00025658	0.00020293	0.00045951	0.00054847	0.00007481	0.00062328
85	-0.00001028	0.00011849	0.00010821	0.00048893	0.00002550	0.00051443
86	0.00000894	0.00017850	0.00018744	0.00047797	0.00005788	0.00053585
87	0.00033699	0.00011562	0.00045261	0.00080869	0.00002428	0.00083297
88	0.00009514	0.00016266	0.00025780	0.00070780	0.00004806	0.00075586
89	-0.00017031	0.00017980	0.00000949	0.00054194	0.00005872	0.00060066

Security No.	α_i	$\beta_i \bar{R}_m$	\bar{R}_i	σ_{ei}^2	$\beta_i^2 \sigma_m^2$	σ_i^2
90	0.00028781	0.00019616	0.00048397	0.00050387	0.00006990	0.00057377
91	0.00015819	0.00004329	0.00020148	0.00076962	0.00000340	0.00077303
92	0.00026842	0.00008369	0.00035211	0.00067143	0.00001272	0.00068415
93	0.00042823	0.00004573	0.00047396	0.00051236	0.00000380	0.00051615
94	0.00020131	0.00015284	0.00035415	0.00064918	0.00004243	0.00069161
95	-0.00007008	0.00023400	0.00016392	0.00042379	0.00009947	0.00052326
96	-0.00009109	0.00022286	0.00013177	0.00048475	0.00009022	0.00057497
97	0.00012021	0.00016063	0.00028085	0.00055504	0.00004687	0.00060191
98	0.00016850	0.00018489	0.00035339	0.00095894	0.00006210	0.00102104
99	0.00023187	0.00006030	0.00029217	0.00069553	0.00000661	0.00070214
100	0.00046922	0.00007894	0.00054817	0.00065144	0.00001132	0.00066276
101	0.00050402	0.00019282	0.00069684	0.00100014	0.00006754	0.00106767
102	0.00055328	0.00018816	0.00074144	0.00070173	0.00006431	0.00076605
103	0.00037914	0.00012013	0.00049927	0.00047290	0.00002621	0.00049912
104	0.00077991	0.00013336	0.00091327	0.00086168	0.00003231	0.00089399
105	0.00115598	0.00001580	0.00117178	0.00061686	0.00000045	0.00061732
106	-0.00003785	0.00025911	0.00022126	0.00027274	0.00012196	0.00039470
107	0.00078671	0.00005218	0.00083889	0.00093101	0.00000495	0.00093595
108	0.00126259	-0.00000844	0.00125415	0.00107514	0.00000013	0.00107527
109	0.00115589	0.00002987	0.00118576	0.00062596	0.00000162	0.00062758
110	0.00032763	0.00024262	0.00057026	0.00070207	0.00010693	0.00080900
111	0.00124917	-0.00001070	0.00123847	0.00052684	0.00000021	0.00052704
112	0.00014241	0.00011657	0.00025898	0.00020322	0.00002468	0.00022791
113	0.00075456	0.00010198	0.00085654	0.00084106	0.00001889	0.00085995
114	-0.00002345	0.00025340	0.00022995	0.00045185	0.00011664	0.00056849
115	0.00044169	0.00007868	0.00052037	0.00100081	0.00001124	0.00101206
116	0.00046021	0.00018505	0.00064526	0.00018641	0.00006220	0.00024861
117	0.00046076	0.00021076	0.00067152	0.00095109	0.00008069	0.00103178
118	0.00088169	0.00004036	0.00092205	0.00133552	0.00000296	0.00133848
119	0.00064616	0.00019228	0.00083844	0.00132720	0.00006716	0.00139436
120	-0.00003605	0.00024335	0.00020731	0.00054979	0.00010758	0.00065736
121	0.00025949	0.00024840	0.00050789	0.00088480	0.00011209	0.00099689
122	0.00052066	0.00025892	0.00077958	0.00075856	0.00012178	0.00088034

Appendix-3: Ranking of securities according to their excess return-to-beta ratio

Rank	Security No.	(\bar{R}_i)	$(\bar{R}_i - R_f)$	β_i	$\frac{\bar{R}_i - R_f}{\beta_i}$
1	105	0.001172	0.001074	0.074037	0.014503
2	109	0.001186	0.001088	0.139937	0.007773

Rank	Security No.	(\bar{R}_i)	$(\bar{R}_i - R_f)$	β_i	$\frac{\bar{R}_i - R_f}{\beta_i}$
3	74	0.001336	0.001238	0.199740	0.006198
4	21	0.000695	0.000597	0.113409	0.005263
5	118	0.000922	0.000824	0.189080	0.004358
6	75	0.001523	0.001425	0.342978	0.004154
7	35	0.000301	0.000203	0.056214	0.003609
8	16	0.001910	0.001812	0.535042	0.003386
9	30	0.000942	0.000844	0.256665	0.003288
10	107	0.000839	0.000741	0.244483	0.003030
11	73	0.000782	0.000684	0.242990	0.002814
12	68	0.000776	0.000678	0.250372	0.002707
13	25	0.001144	0.001046	0.418689	0.002499
14	27	0.001527	0.001429	0.579485	0.002466
15	33	0.001067	0.000969	0.424328	0.002284
16	69	0.001682	0.001584	0.786548	0.002014
17	66	0.000750	0.000652	0.325698	0.002000
18	32	0.000757	0.000659	0.345642	0.001907
19	37	0.001772	0.001674	0.937272	0.001786
20	76	0.000959	0.000861	0.486759	0.001768
21	93	0.000474	0.000376	0.214250	0.001755
22	53	0.000687	0.000589	0.348108	0.001691
23	113	0.000857	0.000758	0.477820	0.001587
24	26	0.000731	0.000633	0.424364	0.001491
25	34	0.001030	0.000932	0.645537	0.001443
26	104	0.000913	0.000815	0.624821	0.001305
27	100	0.000548	0.000450	0.369870	0.001217
28	115	0.000520	0.000422	0.368613	0.001146
29	2	0.000797	0.000699	0.650771	0.001074
30	52	0.000780	0.000682	0.678937	0.001004
31	12	0.000624	0.000526	0.596965	0.000882
32	119	0.000838	0.000740	0.900866	0.000822
33	59	0.000704	0.000606	0.743178	0.000816
34	1	0.000829	0.000731	0.911459	0.000802
35	57	0.000976	0.000878	1.129497	0.000778
36	102	0.000741	0.000643	0.881566	0.000730
37	42	0.000551	0.000453	0.627563	0.000722
38	103	0.000499	0.000401	0.562818	0.000713
39	99	0.000292	0.000194	0.282532	0.000687
40	101	0.000697	0.000599	0.903382	0.000663
41	87	0.000453	0.000355	0.541686	0.000655
42	92	0.000352	0.000254	0.392098	0.000648
43	58	0.000821	0.000723	1.137072	0.000636
44	116	0.000645	0.000547	0.866996	0.000631
45	77	0.000536	0.000438	0.706242	0.000621
46	36	0.000812	0.000714	1.173636	0.000608
47	117	0.000672	0.000573	0.987454	0.000581
48	122	0.000780	0.000682	1.213110	0.000562

Rank	Security No.	(\bar{R}_i)	$(\bar{R}_i - R_f)$	β_i	$\frac{\bar{R}_i - R_f}{\beta_i}$
49	67	0.000630	0.000532	1.036505	0.000514
50	91	0.000201	0.000103	0.202832	0.000510
51	70	0.000205	0.000107	0.212964	0.000501
52	78	0.000462	0.000364	0.737481	0.000494
53	61	0.000702	0.000604	1.232927	0.000490
54	5	0.000453	0.000355	0.816067	0.000435
55	56	0.000611	0.000513	1.191846	0.000430
56	13	0.000570	0.000472	1.120979	0.000421
57	90	0.000484	0.000386	0.919038	0.000420
58	110	0.000570	0.000472	1.136749	0.000415
59	22	0.000497	0.000399	1.012873	0.000394
60	31	0.000501	0.000403	1.050790	0.000384
61	84	0.000460	0.000361	0.950780	0.000380
62	11	0.000537	0.000438	1.216892	0.000360
63	79	0.000431	0.000332	0.922658	0.000360
64	94	0.000354	0.000256	0.716073	0.000358
65	121	0.000508	0.000410	1.163806	0.000352
66	50	0.000428	0.000330	0.986704	0.000334
67	63	0.000310	0.000212	0.639316	0.000331
68	45	0.000379	0.000280	0.930292	0.000301
69	98	0.000353	0.000255	0.866243	0.000295
70	112	0.000259	0.000161	0.546144	0.000295
71	24	0.000321	0.000223	0.879535	0.000254
72	97	0.000281	0.000183	0.752598	0.000243
73	39	0.000288	0.000190	0.795400	0.000239
74	72	0.000222	0.000124	0.535526	0.000232
75	88	0.000258	0.000160	0.762094	0.000210
76	15	0.000321	0.000223	1.160836	0.000192
77	29	0.000318	0.000220	1.203547	0.000182
78	20	0.000302	0.000204	1.169607	0.000174
79	3	0.000260	0.000162	0.992361	0.000163
80	10	0.000262	0.000164	1.091050	0.000150
81	23	0.000258	0.000160	1.084636	0.000148
82	114	0.000230	0.000132	1.187218	0.000111
83	80	0.000188	0.000090	0.827991	0.000109
84	19	0.000198	0.000100	0.937895	0.000107
85	86	0.000187	0.000089	0.836303	0.000107
86	106	0.000221	0.000123	1.213991	0.000101
87	41	0.000195	0.000097	0.969087	0.000100
88	120	0.000207	0.000109	1.140151	0.000096
89	60	0.000214	0.000116	1.384228	0.000083
90	83	0.000179	0.000081	1.091331	0.000074
91	8	0.000161	0.000063	0.983649	0.000064
92	95	0.000164	0.000066	1.096353	0.000060
93	54	0.000132	0.000033	0.677429	0.000049
94	51	0.000137	0.000039	0.948814	0.000041

Rank	Security No.	(\bar{R}_i)	$(\bar{R}_i - R_f)$	β_i	$\frac{\bar{R}_i - R_f}{\beta_i}$
95	96	0.000132	0.000034	1.044137	0.000032
96	64	0.000132	0.000034	1.301243	0.000026
97	18	0.000134	0.000036	1.419451	0.000025
98	44	0.000111	0.000013	0.598606	0.000022
99	28	0.000125	0.000027	1.410683	0.000019
100	85	0.000108	0.000010	0.555138	0.000018
101	47	0.000112	0.000014	0.874467	0.000016
102	6	0.000110	0.000012	0.869728	0.000014
103	49	0.000104	0.000006	0.781558	0.000007
104	62	0.000102	0.000004	1.645123	0.000003
105	9	0.000099	0.000001	1.492253	0.000001
106	55	0.000098	0.000000	1.316853	0.000000
107	4	0.000090	-0.000008	1.254922	-0.000007
108	7	0.000088	-0.000010	1.069956	-0.000010
109	14	0.000086	-0.000012	1.140945	-0.000011
110	38	0.000081	-0.000017	1.126854	-0.000015
111	43	0.000082	-0.000016	0.664594	-0.000024
112	48	0.000068	-0.000030	0.654476	-0.000047
113	65	0.000025	-0.000073	1.430636	-0.000051
114	40	0.000004	-0.000094	1.158770	-0.000081
115	82	0.000010	-0.000088	0.916767	-0.000096
116	89	0.000009	-0.000089	0.842394	-0.000105
117	81	0.000042	-0.000056	0.241711	-0.000232
118	46	0.000021	-0.000077	0.230134	-0.000335
119	17	0.000020	-0.000078	0.048115	-0.001613
120	71	0.000336	0.000238	-0.028954	-0.008226
121	111	0.001238	0.001140	-0.050146	-0.022742
122	108	0.001254	0.001156	-0.039540	-0.029239

Appendix-4: Evaluation of Portfolio Performance

Rank	Security No.	β_i	X_i	$X_i\beta_i$	α_i	$X_i\alpha_i$	σ_{ei}^2	$X_i^2\sigma_{ei}^2$
1	105	0.074037	0.068620	0.005080	0.001156	0.000079	0.000617	0.0000029046
2	109	0.139937	0.065503	0.009166	0.001156	0.000076	0.000626	0.0000026857
3	74	0.199740	0.162689	0.032496	0.001293	0.000210	0.000280	0.0000074022
4	21	0.113409	0.056547	0.006413	0.000671	0.000038	0.000379	0.0000012124
5	118	0.189080	0.021458	0.004057	0.000882	0.000019	0.001336	0.0000006150
6	75	0.342978	0.030926	0.010607	0.001449	0.000045	0.001587	0.0000015180
7	35	0.056214	0.019108	0.001074	0.000289	0.000006	0.000355	0.0000001295
8	16	0.535042	0.043430	0.023237	0.001796	0.000078	0.001372	0.0000025870
9	30	0.256665	0.033746	0.008662	0.000887	0.000030	0.000816	0.0000009290
10	107	0.244483	0.025361	0.006200	0.000787	0.000020	0.000931	0.0000005988
11	73	0.242990	0.023942	0.005818	0.000730	0.000017	0.000889	0.0000005098
12	68	0.250372	0.047292	0.011841	0.000722	0.000034	0.000440	0.0000009851
13	25	0.418689	0.027022	0.011314	0.001055	0.000029	0.001155	0.0000008437
14	27	0.579485	0.037761	0.021882	0.001403	0.000053	0.001123	0.0000016015

Rank	Security No.	β_i	X_i	$X_i\beta_i$	α_i	$X_i\alpha_i$	σ_{ei}^2	$X_i^2\sigma_{ei}^2$
15	33	0.424328	0.027917	0.011846	0.000977	0.000027	0.000998	0.0000007779
16	69	0.786548	0.030677	0.024129	0.001514	0.000046	0.001397	0.0000013145
17	66	0.325698	0.014357	0.004676	0.000680	0.000010	0.001223	0.0000002521
18	32	0.345642	0.028983	0.010018	0.000683	0.000020	0.000597	0.0000005013
19	37	0.937272	0.031230	0.029271	0.001572	0.000049	0.001352	0.0000013186
20	76	0.486759	0.020756	0.010103	0.000855	0.000018	0.001039	0.0000004477
21	93	0.214250	0.018291	0.003919	0.000428	0.000008	0.000512	0.0000001714
22	53	0.348108	0.009202	0.003203	0.000612	0.000006	0.001555	0.0000001317
23	113	0.477820	0.020917	0.009994	0.000755	0.000016	0.000841	0.0000003680
24	26	0.424364	0.014654	0.006218	0.000640	0.000009	0.000951	0.0000002041
25	34	0.645537	0.017564	0.011338	0.000892	0.000016	0.001133	0.0000003497
26	104	0.624821	0.018208	0.011377	0.000780	0.000014	0.000862	0.0000002857
27	100	0.369870	0.012193	0.004510	0.000469	0.000006	0.000651	0.0000000968
28	115	0.368613	0.006822	0.002515	0.000442	0.000003	0.001001	0.0000000466
29	2	0.650771	0.014937	0.009720	0.000658	0.000010	0.000677	0.0000001511
30	52	0.678937	0.007954	0.005400	0.000635	0.000005	0.001082	0.0000000684
31	12	0.596965	0.013290	0.007933	0.000497	0.000007	0.000341	0.0000000602
32	119	0.900866	0.003469	0.003126	0.000646	0.000002	0.001327	0.0000000160
33	59	0.743178	0.006471	0.004809	0.000546	0.000004	0.000558	0.0000000234
34	1	0.911459	0.010907	0.009941	0.000635	0.000007	0.000359	0.0000000427
35	57	1.129497	0.004798	0.005419	0.000735	0.000004	0.000772	0.0000000178
36	102	0.881566	0.001632	0.001439	0.000553	0.000001	0.000702	0.0000000019
37	42	0.627563	0.000657	0.000412	0.000417	0.000000	0.000943	0.0000000004
38	103	0.562818	0.000711	0.000400	0.000379	0.000000	0.000473	0.0000000002
			$\beta_p =$	0.349563	$\alpha_p =$	0.001020	$\sum_{i=1}^N X_i^2 \sigma_{ei}^2 =$	0.0000311702