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## APPENDIX A – SUMMARY OF RETURNS AND EXCESS

### RETURNS OF INVESTMENTS

#### 1. Returns of Stocks and Option Investments summarized per year

The following list of tables contain the returns summarized per year

Table A: Summary of Returns for Securities for 2008

<b>Year</b>	2008
<b>no of investments</b>	262

<b>Stock</b>	<b>SPEN</b>					
<b>Investment Strategy</b>		<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS		-36.91	39.81	-1.42	127	135
CALL OPTIONS STRATEGY 1		-5.201	37.66	5.062	109	153
CALL OPTIONS STRATEGY 2		-99.92	1003	45.68	101	161
CALL OPTONS STRATEGY 3		-6.207	104	8.567	108	154
PUT OPTIONS STRATEGY 1		-1.227	37.8	11.15	223	39
PUT OPTIONS STRATEGY 2		-99.99	2779	450.7	123	139
PUT OPTONS STRATEGY 3		-6.111	280.7	48.91	128	134

<b>Stock</b>	<b>DFCC</b>					
<b>Investment Strategy</b>		<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS		-47.75	28.22	-10.77	70	188
CALL OPTIONS STRATEGY 1		-7.107	20.55	-2.99	26	236
CALL OPTIONS STRATEGY 2		-99.99	150.3	-90.4	8	254
CALL OPTONS STRATEGY 3		-6.269	18.89	-5	14	248
PUT OPTIONS STRATEGY 1		-3.336	43.16	12.08	227	35
PUT OPTIONS STRATEGY 2		-99.99	1524	233.9	156	106
PUT OPTONS STRATEGY 3		-6.117	155.9	27.36	173	89

<b>Stock</b>	<b>JKH</b>					
<b>Investment Strategy</b>		<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS		-42.53	29.00	-14.16	39	223
CALL OPTIONS STRATEGY 1		-5.66	23.12	-1.91	15	247
CALL OPTIONS STRATEGY 2		-99.99	214.8	-84.1	7	255
CALL OPTONS STRATEGY 3		-6.283	25.32	-4.37	8	254
PUT OPTIONS STRATEGY 1		-1.616	36.95	12.87	243	19
PUT OPTIONS STRATEGY 2		-99.99	1230	300.4	213	49
PUT OPTONS STRATEGY 3		-6.117	126.7	34	221	41



Table B: Summary of Returns for Indices for 2008

Index	ASPI				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-4.22	10.44	-0.25	47	215
CALL OPTIONS STRATEGY 2	-99.83	188.9	-81.5	23	239
CALL OPTONS STRATEGY 3	-6.01	22.6	-3.56	34	228
PUT OPTIONS STRATEGY 1	0.0109	31.28	11.11	262	0
PUT OPTIONS STRATEGY 2	-99.85	11632	1769	180	82
PUT OPTONS STRATEGY 3	-6.03	1164	180	189	73

Index	S&PSL				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-4.226	5.105	-1.35	16	246
CALL OPTIONS STRATEGY 2	-99.88	-21.6	-95.8	0	262
CALL OPTONS STRATEGY 3	-6.158	1.723	-5.15	10	252
PUT OPTIONS STRATEGY 1	-0.263	32.61	12.34	255	7
PUT OPTIONS STRATEGY 2	-99.91	9785	1627	201	61
PUT OPTONS STRATEGY 3	-6.067	980.2	166.2	218	44

Table C: Summary of Returns for Securities for 2009

<b>Year</b>	2009
<b>no of investments</b>	261

<b>Stock</b>	<b>SPEN</b>					
<b>Investment Strategy</b>		<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS		-18.57	105.4	42.72	230	31
CALL OPTIONS STRATEGY 1		-8.523	96.18	36.09	219	42
CALL OPTIONS STRATEGY 2		-99.93	1342	385	214	47
CALL OPTONS STRATEGY 3		-7.774	135.7	40.24	219	42
PUT OPTIONS STRATEGY 1		-7.101	17.41	-3.69	31	230
PUT OPTIONS STRATEGY 2		-99.97	309.3	-90.4	3	258
PUT OPTONS STRATEGY 3		-8.277	34.47	-6.19	16	245

<b>Stock</b>	<b>DFCC</b>					
<b>Investment Strategy</b>		<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS		-6.95	124.93	27.70	254	7
CALL OPTIONS STRATEGY 1		-11.51	115	20.19	210	51
CALL OPTIONS STRATEGY 2		-99.97	910.7	170.1	179	82
CALL OPTONS STRATEGY 3		-7.894	94.01	19.61	196	65
PUT OPTIONS STRATEGY 1		-8.239	0.493	-4.68	3	258
PUT OPTIONS STRATEGY 2		-99.99	55.78	-97.2	0	261
PUT OPTONS STRATEGY 3		-8.364	3.39	-7.01	0	261

<b>Stock</b>	<b>JKH</b>					
<b>Investment Strategy</b>		<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS		-11.36	140.45	37.32	253	8
CALL OPTIONS STRATEGY 1		-9.248	132.1	30.28	216	45
CALL OPTIONS STRATEGY 2		-99.98	1258	343.3	198	63
CALL OPTONS STRATEGY 3		-7.584	128.5	36.9	207	54
PUT OPTIONS STRATEGY 1		-7.173	7.571	-3.64	5	256
PUT OPTIONS STRATEGY 2		-99.99	27.62	-94.5	2	259
PUT OPTONS STRATEGY 3		-8.347	6.534	-6.75	2	259

Table D: Summary of Returns for Indices for 2009

Index	ASPI				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-4.433	62.12	20.08	244	17
CALL OPTIONS STRATEGY 2	-99.55	2314	549.8	227	34
CALL OPTONS STRATEGY 3	-5.684	225.2	55.78	238	23
PUT OPTIONS STRATEGY 1	-1.797	3.636	-0.29	83	178
PUT OPTIONS STRATEGY 2	-99.93	-46.37	-97.5	0	261
PUT OPTONS STRATEGY 3	-7.922	-0.857	-6.71	0	261

Index	S&PSL				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-6.095	59.7	18.14	245	16
CALL OPTIONS STRATEGY 2	-99.71	1177	312.5	220	41
CALL OPTONS STRATEGY 3	-6.021	119.6	33.02	231	30
PUT OPTIONS STRATEGY 1	-2.827	5.112	-1.26	23	238
PUT OPTIONS STRATEGY 2	-99.93	-13.25	-98.8	0	261
PUT OPTONS STRATEGY 3	-8.109	2.405	-6.93	1	260



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Table E: Summary of Returns for Securities for 2010

<b>Year</b>	2010
<b>no of investments</b>	262

<b>Stock</b>	<b>SPEN</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-22.58	102.9	26.01	177	84
CALL OPTIONS STRATEGY 1	-9.908	98.54	20.78	160	101
CALL OPTIONS STRATEGY 2	-99.98	3819	368.9	158	103
CALL OPTONS STRATEGY 3	-8.389	374.8	37.15	158	103
PUT OPTIONS STRATEGY 1	-8.16	14.74	-3.34	38	223
PUT OPTIONS STRATEGY 2	-99.96	156.4	-78.7	20	241
PUT OPTONS STRATEGY 3	-8.352	15.79	-5.84	23	238

<b>Stock</b>	<b>DFCC</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-55.89	369.99	38.98	218	43
CALL OPTIONS STRATEGY 1	-37	363.6	30.16	218	43
CALL OPTIONS STRATEGY 2	-99.89	5470	690.9	217	44
CALL OPTONS STRATEGY 3	-8.279	545.2	70.47	217	44
PUT OPTIONS STRATEGY 1	-35.18	49.68	-7.88	3	258
PUT OPTIONS STRATEGY 2	-99.98	726.2	-87.9	3	258
PUT OPTONS STRATEGY 3	-8.347	18.2	-6.93	3	258

<b>Stock</b>	<b>JKH</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-15.87	72.47	19.97	194	67
CALL OPTIONS STRATEGY 1	-10.26	69.24	14.78	163	98
CALL OPTIONS STRATEGY 2	-99.97	3391	376.2	158	103
CALL OPTONS STRATEGY 3	-8.351	340.1	39.27	158	103
PUT OPTIONS STRATEGY 1	-8.638	12.56	-2.86	38	223
PUT OPTIONS STRATEGY 2	-99.99	281.4	-76.7	18	243
PUT OPTONS STRATEGY 3	-8.361	29.66	-5.88	23	238

Table F: Summary of Returns for Indices for 2010

Index	ASPI				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-2.394	48.88	17.48	242	19
CALL OPTIONS STRATEGY 2	-99.47	11736	1944	227	34
CALL OPTONS STRATEGY 3	-6.785	1162	192.5	230	31
PUT OPTIONS STRATEGY 1	-1.317	4.405	-0.28	27	234
PUT OPTIONS STRATEGY 2	-99.87	57.16	-89.1	3	258
PUT OPTONS STRATEGY 3	-7.989	6.102	-6.43	5	256

Index	S&PSL				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-3.151	42.62	11.7	224	37
CALL OPTIONS STRATEGY 2	-99.62	4494	699.2	188	73
CALL OPTONS STRATEGY 3	-8.192	447.9	70.42	195	66
PUT OPTIONS STRATEGY 1	-2.117	4.88	-0.87	15	246
PUT OPTIONS STRATEGY 2	-99.88	61.49	-93.6	2	259
PUT OPTONS STRATEGY 3	-8.335	6.928	-7.16	5	256



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Table G: Summary of Returns for Securities for 2011

<b>Year</b>	2011
<b>no of investments</b>	260

<b>Stock</b>	<b>SPEN</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-24.91	10.55	-9.7	24	236
CALL OPTIONS STRATEGY 1	-5.459	6.312	-3.56	13	247
CALL OPTIONS STRATEGY 2	-99.99	51.21	-90	1	259
CALL OPTONS STRATEGY 3	-8.41	6.881	-7.33	2	258
PUT OPTIONS STRATEGY 1	-2.873	19.55	7.543	236	24
PUT OPTIONS STRATEGY 2	-99.99	631.8	160.7	221	39
PUT OPTONS STRATEGY 3	-8.202	64.65	17.66	224	36

<b>Stock</b>	<b>DFCC</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-25.75	3.02	-12.91	6	254
CALL OPTIONS STRATEGY 1	-36.5	0.696	-6.91	2	258
CALL OPTIONS STRATEGY 2	-99.99	-58.17	-97.4	0	260
CALL OPTONS STRATEGY 3	-8.417	-3.878	-8.05	0	260
PUT OPTIONS STRATEGY 1	-34.73	20.78	5.825	231	29
PUT OPTIONS STRATEGY 2	-99.77	816.4	228.4	215	45
PUT OPTONS STRATEGY 3	-18.06	83.01	24.44	216	44

<b>Stock</b>	<b>JKH</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-25.26	21.12	-4.50	79	181
CALL OPTIONS STRATEGY 1	-5.487	16.83	-1.99	48	212
CALL OPTIONS STRATEGY 2	-99.98	319.1	-62.9	32	228
CALL OPTONS STRATEGY 3	-8.393	33.74	-4.62	42	218
PUT OPTIONS STRATEGY 1	-3.012	21.76	4.929	195	65
PUT OPTIONS STRATEGY 2	-99.99	702.7	83.9	141	119
PUT OPTONS STRATEGY 3	-8.382	71.77	9.983	142	118

Table H: Summary of Returns for Indices for 2011

Index	ASPI				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-2.208	20.06	3.121	83	177
CALL OPTIONS STRATEGY 2	-99.72	3352	212.5	76	184
CALL OPTONS STRATEGY 3	-7.935	327.2	22.29	78	182
PUT OPTIONS STRATEGY 1	-1.061	10.82	3.37	175	85
PUT OPTIONS STRATEGY 2	-99.53	3731	273.6	135	125
PUT OPTONS STRATEGY 3	-7.495	368	28.14	144	116

Index	S&PSL				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-2.83	2.898	-1.84	14	246
CALL OPTIONS STRATEGY 2	-99.84	-12.21	-95.4	0	260
CALL OPTONS STRATEGY 3	-8.061	0.261	-7.29	1	259
PUT OPTIONS STRATEGY 1	-0.855	12.41	5.288	246	14
PUT OPTIONS STRATEGY 2	-99.93	2157	328.6	220	40
PUT OPTONS STRATEGY 3	-8.275	215.9	33.68	227	33



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Table I: Summary of Returns for Securities for 2012

<b>Year</b>	2012
<b>no of investments</b>	196

<b>Stock</b>	<b>SPEN</b>					
<b>Investment Strategy</b>		<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS		-13.09	22.53	3.085	96	100
CALL OPTIONS STRATEGY 1		-5.688	19.04	0.797	66	130
CALL OPTIONS STRATEGY 2		-99.99	421.5	-17.3	57	139
CALL OPTONS STRATEGY 3		-8.028	44.53	0.699	59	137
PUT OPTIONS STRATEGY 1		-3.253	11.54	1.194	92	104
PUT OPTIONS STRATEGY 2		-99.98	249.4	-38.2	51	145
PUT OPTONS STRATEGY 3		-8.03	27.45	-1.4	73	123

<b>Stock</b>	<b>DFCC</b>					
<b>Investment Strategy</b>		<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS		-13.82	18.30	1.64	108	88
CALL OPTIONS STRATEGY 1		-4.006	14.49	1.017	89	107
CALL OPTIONS STRATEGY 2		-99.99	292.7	-23.4	57	139
CALL OPTONS STRATEGY 3		-7.999	31.31	0.082	67	129
PUT OPTIONS STRATEGY 1		-1.656	12.54	2.569	97	99
PUT OPTIONS STRATEGY 2		-79.56	358.6	6.386	68	128
PUT OPTONS STRATEGY 3		-5.998	38.37	3.055	74	122

<b>Stock</b>	<b>JKH</b>					
<b>Investment Strategy</b>		<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS		-14.75	30.59	7.34	129	67
CALL OPTIONS STRATEGY 1		-4.542	26.33	5.804	118	78
CALL OPTIONS STRATEGY 2		-99.98	559.8	76.88	98	98
CALL OPTONS STRATEGY 3		-7.756	57.73	10.09	105	91
PUT OPTIONS STRATEGY 1		-2.53	13.89	1.516	70	126
PUT OPTIONS STRATEGY 2		-99.99	483.7	-19.6	46	150
PUT OPTONS STRATEGY 3		-8.033	50.93	0.467	57	139



Table J: Summary of Returns for Indices for 2012

Index	ASPI				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-1.24	17.44	3.343	78	118
CALL OPTIONS STRATEGY 2	-99.75	593.7	40.37	60	136
CALL OPTONS STRATEGY 3	-7.065	57.6	6.374	65	131
PUT OPTIONS STRATEGY 1	-0.125	7.798	3.311	184	12
PUT OPTIONS STRATEGY 2	-99.83	448.3	42.7	102	94
PUT OPTONS STRATEGY 3	-7.079	45.05	6.335	113	83

Index	S&PSL				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-2.662	11.06	1.055	80	116
CALL OPTIONS STRATEGY 2	-99.76	480.7	-15.5	55	141
CALL OPTONS STRATEGY 3	-7.242	49.48	1.115	59	137
PUT OPTIONS STRATEGY 1	-0.708	10.61	3.415	175	21
PUT OPTIONS STRATEGY 2	-99.77	914	41.22	83	113
PUT OPTONS STRATEGY 3	-7.86	93.21	6.451	91	105



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## 2. Excess Returns of Option Investments

The following list of tables contain the returns summarized per year

Table K: Summary of Excess Returns for Securities for 2008

<b>Year</b>	2008
<b>no of investments</b>	262

Stock	SPEN				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	-42.03	35.9	-5.96	111	151
CALL OPTIONS STRATEGY 1	-104.7	999.3	41.23	101	161
CALL OPTIONS STRATEGY 2	-104.7	999.3	41.23	101	161
CALL OPTONS STRATEGY 3	-104.7	999.3	41.23	101	161
PUT OPTIONS STRATEGY 1	-105.3	2775	446.3	123	139
PUT OPTIONS STRATEGY 2	-105.3	2775	446.3	123	139
PUT OPTONS STRATEGY 3	-105.3	2775	446.3	123	139

Stock	DFCC				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	-52.06	23.97	-15.29	44	218
CALL OPTIONS STRATEGY 1	-105.3	146	-94.9	8	254
CALL OPTIONS STRATEGY 2	-105.3	146	-94.9	8	254
CALL OPTONS STRATEGY 3	-105.3	146	-94.9	8	254
PUT OPTIONS STRATEGY 1	-104.3	1520	228.9	156	106
PUT OPTIONS STRATEGY 2	-104.3	1520	228.9	156	106
PUT OPTONS STRATEGY 3	-104.3	1520	228.9	156	106

Stock	JKH				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	-47.08	24.67	-18.71	17	245
CALL OPTIONS STRATEGY 1	-105	210.5	-88.9	7	255
CALL OPTIONS STRATEGY 2	-105	210.5	-88.9	7	255
CALL OPTONS STRATEGY 3	-105	210.5	-88.9	7	255
PUT OPTIONS STRATEGY 1	-104.3	1225	294.2	212	50
PUT OPTIONS STRATEGY 2	-104.3	1225	294.2	212	50
PUT OPTONS STRATEGY 3	-104.3	1225	294.2	212	50

Table L: Summary of Excess Returns for Indices for 2008

Index	ASPI				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-105.3	184.9	-86.6	20	242
CALL OPTIONS STRATEGY 2	-105.3	184.9	-86.6	20	242
CALL OPTONS STRATEGY 3	-105.3	184.9	-86.6	20	242
PUT OPTIONS STRATEGY 1	-104.3	11632	1765	176	86
PUT OPTIONS STRATEGY 2	-104.3	11632	1765	176	86
PUT OPTONS STRATEGY 3	-104.3	11632	1765	176	86

Index	S&PSL				
Investment Strategy	MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS	NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1	-105.3	-25.94	-101	0	262
CALL OPTIONS STRATEGY 2	-105.3	-25.94	-101	0	262
CALL OPTONS STRATEGY 3	-105.3	-25.94	-101	0	262
PUT OPTIONS STRATEGY 1	-104.3	9782	1622	201	61
PUT OPTIONS STRATEGY 2	-104.3	9782	1622	201	61
PUT OPTONS STRATEGY 3	-104.3	9782	1622	201	61



Table M: Summary of Excess Returns for Securities for 2009

<b>Year</b>	2009
<b>no of investments</b>	261

<b>Stock</b>	<b>SPEN</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-23.08	102.6	40.57	225	36
CALL OPTIONS STRATEGY 1	-104.3	1341	383	213	48
CALL OPTIONS STRATEGY 2	-104.3	1341	383	213	48
CALL OPTONS STRATEGY 3	-104.3	1341	383	213	48
PUT OPTIONS STRATEGY 1	-104.3	305.4	-93.5	2	259
PUT OPTIONS STRATEGY 2	-104.3	305.4	-93.5	2	259
PUT OPTONS STRATEGY 3	-104.3	305.4	-93.5	2	259

<b>Stock</b>	<b>DFCC</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-11.02	121.76	24.85	238	23
CALL OPTIONS STRATEGY 1	-104.2	907.3	167.2	177	84
CALL OPTIONS STRATEGY 2	-104.2	907.3	167.2	177	84
CALL OPTONS STRATEGY 3	-104.2	907.3	167.2	177	84
PUT OPTIONS STRATEGY 1	-104.3	-60.98	-100	0	261
PUT OPTIONS STRATEGY 2	-104.3	-60.98	-100	0	261
PUT OPTONS STRATEGY 3	-104.3	-60.98	-100	0	261

<b>Stock</b>	<b>JKH</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-15.66	136.92	34.50	248	13
CALL OPTIONS STRATEGY 1	-104.2	1255	340.5	196	65
CALL OPTIONS STRATEGY 2	-104.2	1255	340.5	196	65
CALL OPTONS STRATEGY 3	-104.2	1255	340.5	196	65
PUT OPTIONS STRATEGY 1	-104.3	23.42	-97.6	2	259
PUT OPTIONS STRATEGY 2	-104.3	23.42	-97.6	2	259
PUT OPTONS STRATEGY 3	-104.3	23.42	-97.6	2	259

Table N: Summary of Excess Returns for Indices for 2009

Index	ASPI					
Investment Strategy		MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS		NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1		-104.3	2324	549.1	227	34
CALL OPTIONS STRATEGY 2		-104.3	2324	549.1	227	34
CALL OPTONS STRATEGY 3		-104.3	2324	549.1	227	34
PUT OPTIONS STRATEGY 1		-104.3	-50.71	-101	0	261
PUT OPTIONS STRATEGY 2		-104.3	-50.71	-101	0	261
PUT OPTONS STRATEGY 3		-104.3	-50.71	-101	0	261

Index	S&PSL					
Investment Strategy		MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS		NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1		-104.3	1175	310.5	220	41
CALL OPTIONS STRATEGY 2		-104.3	1175	310.5	220	41
CALL OPTONS STRATEGY 3		-104.3	1175	310.5	220	41
PUT OPTIONS STRATEGY 1		-104.3	-17.41	-102	0	261
PUT OPTIONS STRATEGY 2		-104.3	-17.41	-102	0	261
PUT OPTONS STRATEGY 3		-104.3	-17.41	-102	0	261



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Table O: Summary of Excess Returns for Securities for 2010

<b>Year</b>	2010
<b>no of investments</b>	261

<b>Stock</b>	<b>SPEN</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-25.16	110.9	25.62	171	90
CALL OPTIONS STRATEGY 1	-101.9	3823	368.6	158	103
CALL OPTIONS STRATEGY 2	-101.9	3823	368.6	158	103
CALL OPTONS STRATEGY 3	-101.9	3823	368.6	158	103
PUT OPTIONS STRATEGY 1	-102.1	155.9	-80.9	19	242
PUT OPTIONS STRATEGY 2	-102.1	155.9	-80.9	19	242
PUT OPTONS STRATEGY 3	-102.1	155.9	-80.9	19	242

<b>Stock</b>	<b>DFCC</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-58.86	375.42	37.53	218	43
CALL OPTIONS STRATEGY 1	-101.8	5470	689.3	217	44
CALL OPTIONS STRATEGY 2	-101.8	5470	689.3	217	44
CALL OPTONS STRATEGY 3	-101.8	5470	689.3	217	44
PUT OPTIONS STRATEGY 1	-102	725.5	-90.1	3	258
PUT OPTIONS STRATEGY 2	-102	725.5	-90.1	3	258
PUT OPTONS STRATEGY 3	-102	725.5	-90.1	3	258

<b>Stock</b>	<b>JKH</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-17.75	71.63	18.20	184	77
CALL OPTIONS STRATEGY 1	-102.1	3390	374.3	158	103
CALL OPTIONS STRATEGY 2	-102.1	3390	374.3	158	103
CALL OPTONS STRATEGY 3	-102.1	3390	374.3	158	103
PUT OPTIONS STRATEGY 1	-102.1	279.9	-78.8	18	243
PUT OPTIONS STRATEGY 2	-102.1	279.9	-78.8	18	243
PUT OPTONS STRATEGY 3	-102.1	279.9	-78.8	18	243

Table P: Summary of Excess Returns for Indices for 2010

Index	ASPI					
Investment Strategy		MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS		NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1		-101.8	11743	1947	227	34
CALL OPTIONS STRATEGY 2		-101.8	11743	1947	227	34
CALL OPTONS STRATEGY 3		-101.8	11743	1947	227	34
PUT OPTIONS STRATEGY 1		-102.1	56.12	-91.9	3	258
PUT OPTIONS STRATEGY 2		-102.1	56.12	-91.9	3	258
PUT OPTONS STRATEGY 3		-102.1	56.12	-91.9	3	258

Index	S&PSL					
Investment Strategy		MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS		NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1		-101.8	4503	698.7	188	73
CALL OPTIONS STRATEGY 2		-101.8	4503	698.7	188	73
CALL OPTONS STRATEGY 3		-101.8	4503	698.7	188	73
PUT OPTIONS STRATEGY 1		-102.1	60.27	-96.1	2	259
PUT OPTIONS STRATEGY 2		-102.1	60.27	-96.1	2	259
PUT OPTONS STRATEGY 3		-102.1	60.27	-96.1	2	259



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Table Q: Summary of Excess Returns for Securities for 2011

<b>Year</b>	2011
<b>no of investments</b>	260

<b>Stock</b>	<b>SPEN</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-26.85	8.594	-11.6	23	237
CALL OPTIONS STRATEGY 1	-102.2	49.26	-91.9	1	259
CALL OPTIONS STRATEGY 2	-102.2	49.26	-91.9	1	259
CALL OPTONS STRATEGY 3	-102.2	49.26	-91.9	1	259
PUT OPTIONS STRATEGY 1	-102.1	629.8	158.7	221	39
PUT OPTIONS STRATEGY 2	-102.1	629.8	158.7	221	39
PUT OPTONS STRATEGY 3	-102.1	629.8	158.7	221	39

<b>Stock</b>	<b>DFCC</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-27.59	0.88	-14.83	2	258
CALL OPTIONS STRATEGY 1	-102.2	-60.32	-99.3	0	260
CALL OPTIONS STRATEGY 2	-102.2	-60.32	-99.3	0	260
CALL OPTONS STRATEGY 3	-102.2	-60.32	-99.3	0	260
PUT OPTIONS STRATEGY 1	-101.8	814.8	226.3	214	46
PUT OPTIONS STRATEGY 2	-101.8	814.8	226.3	214	46
PUT OPTONS STRATEGY 3	-101.8	814.8	226.3	214	46

<b>Stock</b>	<b>JKH</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-27.52	19.02	-6.38	53	207
CALL OPTIONS STRATEGY 1	-102	317	-64.8	32	228
CALL OPTIONS STRATEGY 2	-102	317	-64.8	32	228
CALL OPTONS STRATEGY 3	-102	317	-64.8	32	228
PUT OPTIONS STRATEGY 1	-102.2	701.1	81.86	139	121
PUT OPTIONS STRATEGY 2	-102.2	701.1	81.86	139	121
PUT OPTONS STRATEGY 3	-102.2	701.1	81.86	139	121



Table R: Summary of Excess Returns for Indices for 2011

Index	ASPI					
Investment Strategy		MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS		NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1		-102.2	3358	211.3	76	184
CALL OPTIONS STRATEGY 2		-102.2	3358	211.3	76	184
CALL OPTONS STRATEGY 3		-102.2	3358	211.3	76	184
PUT OPTIONS STRATEGY 1		-101.8	3733	272.5	133	127
PUT OPTIONS STRATEGY 2		-101.8	3733	272.5	133	127
PUT OPTONS STRATEGY 3		-101.8	3733	272.5	133	127

Index	S&PSL					
Investment Strategy		MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS		NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1		-102.2	-13.72	-98	0	260
CALL OPTIONS STRATEGY 2		-102.2	-13.72	-98	0	260
CALL OPTONS STRATEGY 3		-102.2	-13.72	-98	0	260
PUT OPTIONS STRATEGY 1		-101.8	2157	327.5	219	41
PUT OPTIONS STRATEGY 2		-101.8	2157	327.5	219	41
PUT OPTONS STRATEGY 3		-101.8	2157	327.5	219	41



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Table S: Summary of Excess Returns for Securities for 2012

<b>Year</b>	2012
<b>no of investments</b>	196

<b>Stock</b>	<b>SPEN</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-15.98	19.95	0.403	75	121
CALL OPTIONS STRATEGY 1	-103	418.8	-20.1	57	139
CALL OPTIONS STRATEGY 2	-103	418.8	-20.1	57	139
CALL OPTONS STRATEGY 3	-103	418.8	-20.1	57	139
PUT OPTIONS STRATEGY 1	-102.3	246.6	-41.4	45	151
PUT OPTIONS STRATEGY 2	-102.3	246.6	-41.4	45	151
PUT OPTONS STRATEGY 3	-102.3	246.6	-41.4	45	151

<b>Stock</b>	<b>DFCC</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-16.69	15.97	-1.05	93	103
CALL OPTIONS STRATEGY 1	-103	290.5	-26.2	57	139
CALL OPTIONS STRATEGY 2	-103	290.5	-26.2	57	139
CALL OPTONS STRATEGY 3	-103	290.5	-26.2	57	139
PUT OPTIONS STRATEGY 1	-82.84	355.1	3.069	67	129
PUT OPTIONS STRATEGY 2	-82.84	355.1	3.069	67	129
PUT OPTONS STRATEGY 3	-82.84	355.1	3.069	67	129

<b>Stock</b>	<b>JKH</b>				
<b>Investment Strategy</b>	<b>MIN</b>	<b>MAX</b>	<b>AVG</b>	<b>(+) Returns</b>	<b>(-) Returns</b>
STOCKS	-18.01	28.80	4.67	122	74
CALL OPTIONS STRATEGY 1	-103	557.8	74.22	98	78
CALL OPTIONS STRATEGY 2	-103	557.8	74.22	98	98
CALL OPTONS STRATEGY 3	-103	557.8	74.22	98	98
PUT OPTIONS STRATEGY 1	-102.9	480.9	-22.6	46	150
PUT OPTIONS STRATEGY 2	-102.9	480.9	-22.6	46	150
PUT OPTONS STRATEGY 3	-102.9	480.9	-22.6	46	150

Table T: Summary of Excess Returns for Indices for 2012

Index	ASPI					
Investment Strategy		MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS		NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1		-103	594.7	37.32	60	136
CALL OPTIONS STRATEGY 2		-103	594.7	37.32	60	136
CALL OPTONS STRATEGY 3		-103	594.7	37.32	60	136
PUT OPTIONS STRATEGY 1		-102.9	449.5	40.49	102	94
PUT OPTIONS STRATEGY 2		-102.9	449.5	40.49	102	94
PUT OPTONS STRATEGY 3		-102.9	449.5	40.49	102	94

Index	S&PSL					
Investment Strategy		MIN	MAX	AVG	(+) Returns	(-) Returns
STOCKS		NA	NA	NA	NA	NA
CALL OPTIONS STRATEGY 1		-103	479.7	-18.4	55	141
CALL OPTIONS STRATEGY 2		-103	479.7	-18.4	55	141
CALL OPTONS STRATEGY 3		-103	479.7	-18.4	55	141
PUT OPTIONS STRATEGY 1		-102.3	912.1	38.37	83	113
PUT OPTIONS STRATEGY 2		-102.3	912.1	38.37	83	113
PUT OPTONS STRATEGY 3		-102.3	912.1	38.37	83	113



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## APPENDIX B – GRAPHS PLOTTED TO ANALYZE RETURNS

Since data across 5 years have been used for this analysis, graphs were plotted with the observations to identify patterns and carry out comparisons. The graphs in this section were drawn with the following series

1. MIN (minimum) return per year
2. MAX (maximum) return per year
3. AVG (average) return per year

The graphs plotted using the calculated returns are displayed in the pages that follow. The graphs are plotted for stocks (Base Case), equity options and index options.



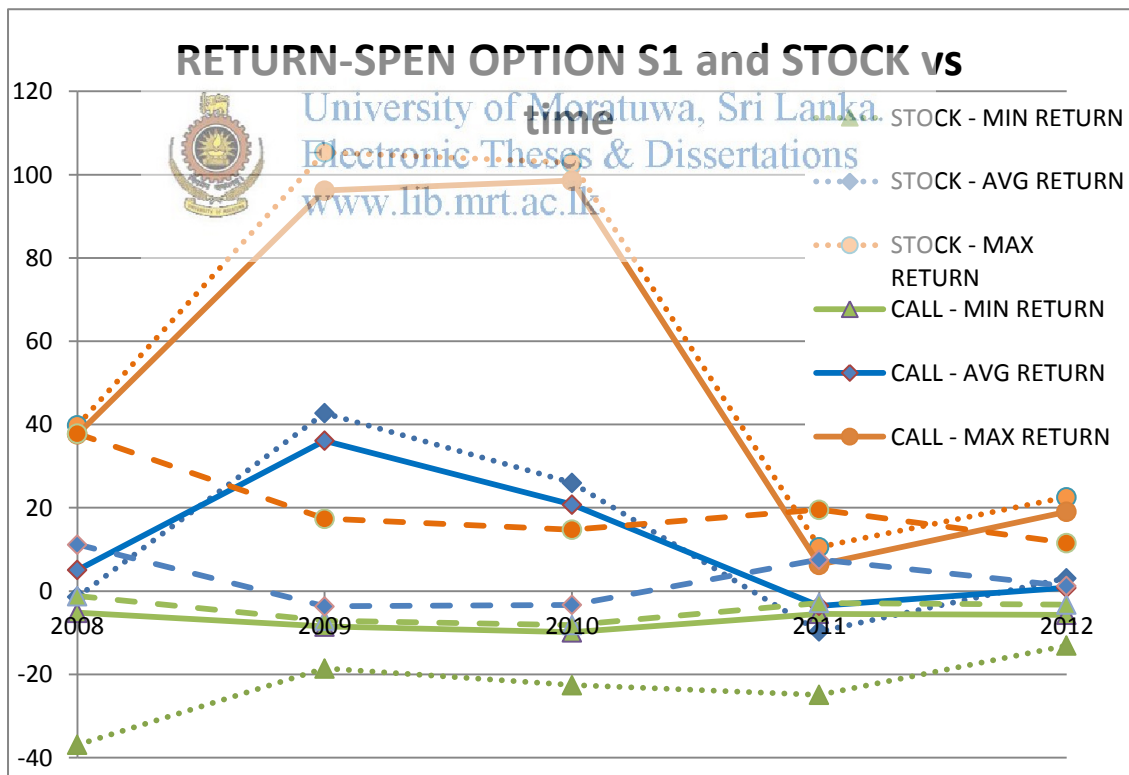
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1) Graph A: Return - SPEN option S1 and Stock vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for SPEN. This graph plots the returns from strategy 1 as an alternative to buying stocks.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- The returns from stock investments are also plotted in the same graph to observe the returns from the alternative option investment.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



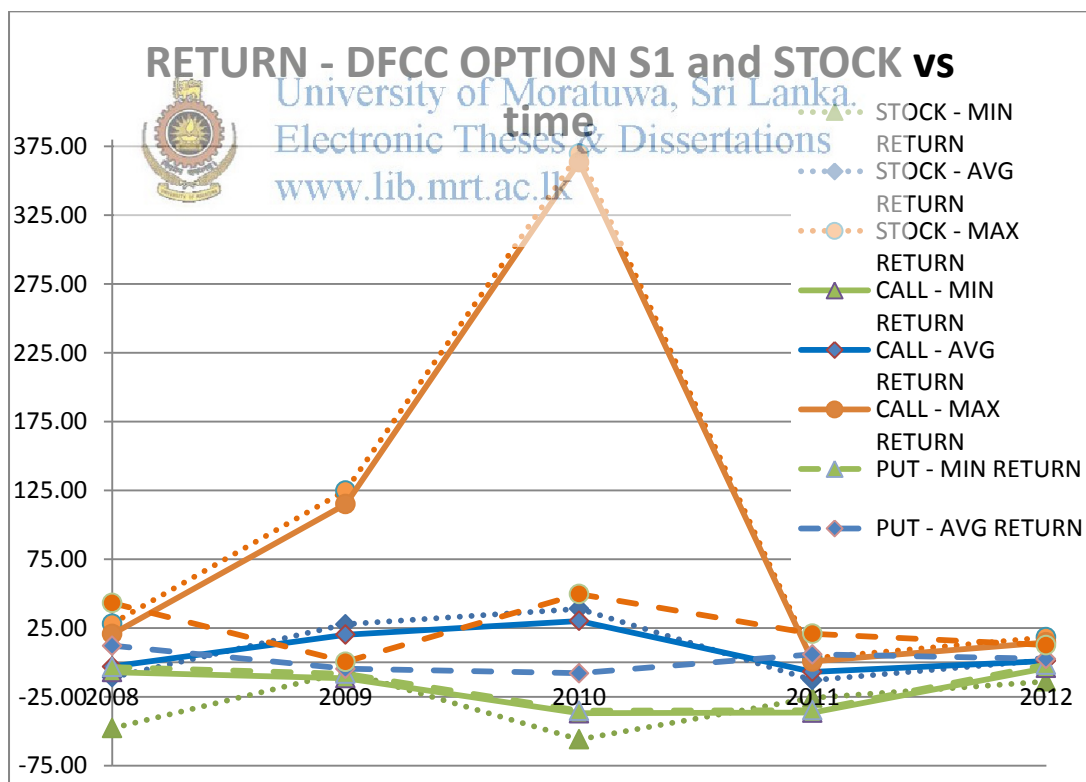
Graph A: Return SPEN option S1 and Stock vs Time

2) Graph B: Return - DFCC option S1 and Stock vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for DFCC. This graph plots the returns from strategy 1 as an alternative to buying stocks..
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- The returns from stock investments are also plotted in the same graph to observe the returns from the alternative option investment.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



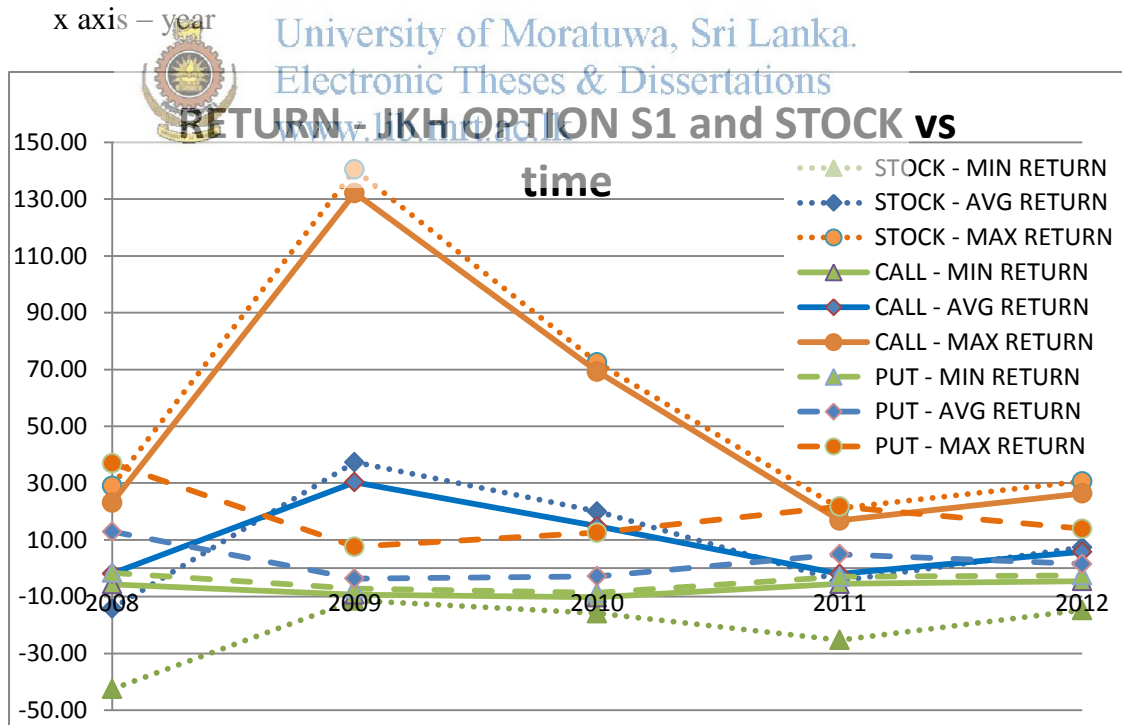
Graph B: Return DFCC option S1 and Stock vs Time

### 3) Graph C: Return - JKH option S1 and Stock vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for JKH. This graph plots the returns from strategy 1 as an alternative to buying stocks.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- The returns from stock investments are also plotted in the same graph to observe the returns from the alternative option investment.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



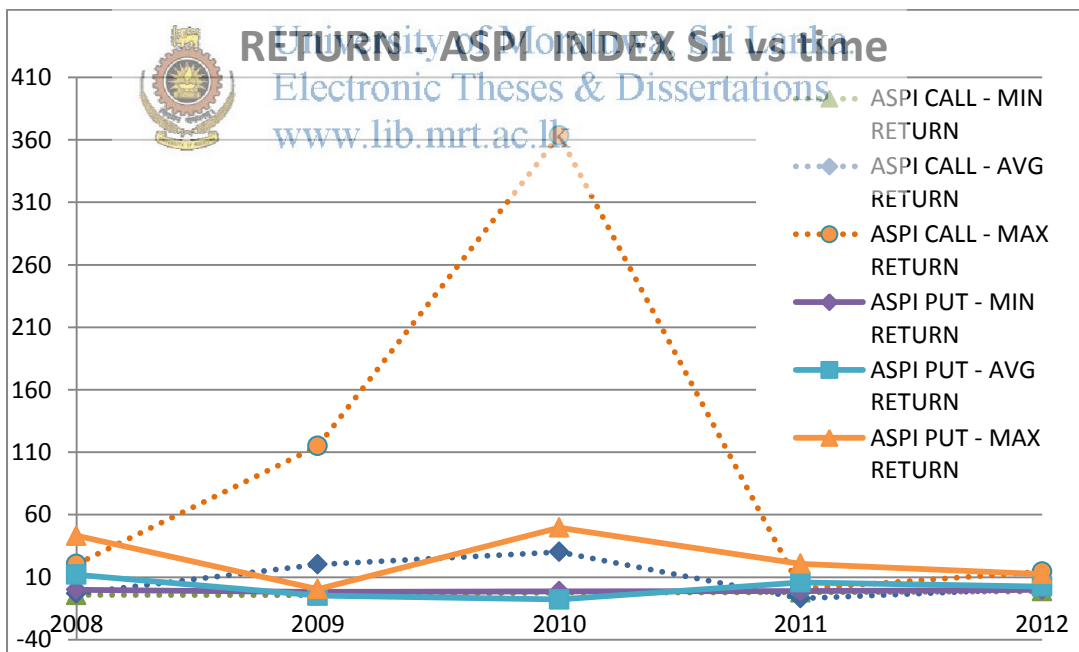
Graph C: Return JKH option S1 and Stock vs Time

#### 4) Graph D: Return – ASPI Index S1 vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for the ASPI index to observe the returns made from strategy 1.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



Graph D: Return – ASPI Index S1 vs Time

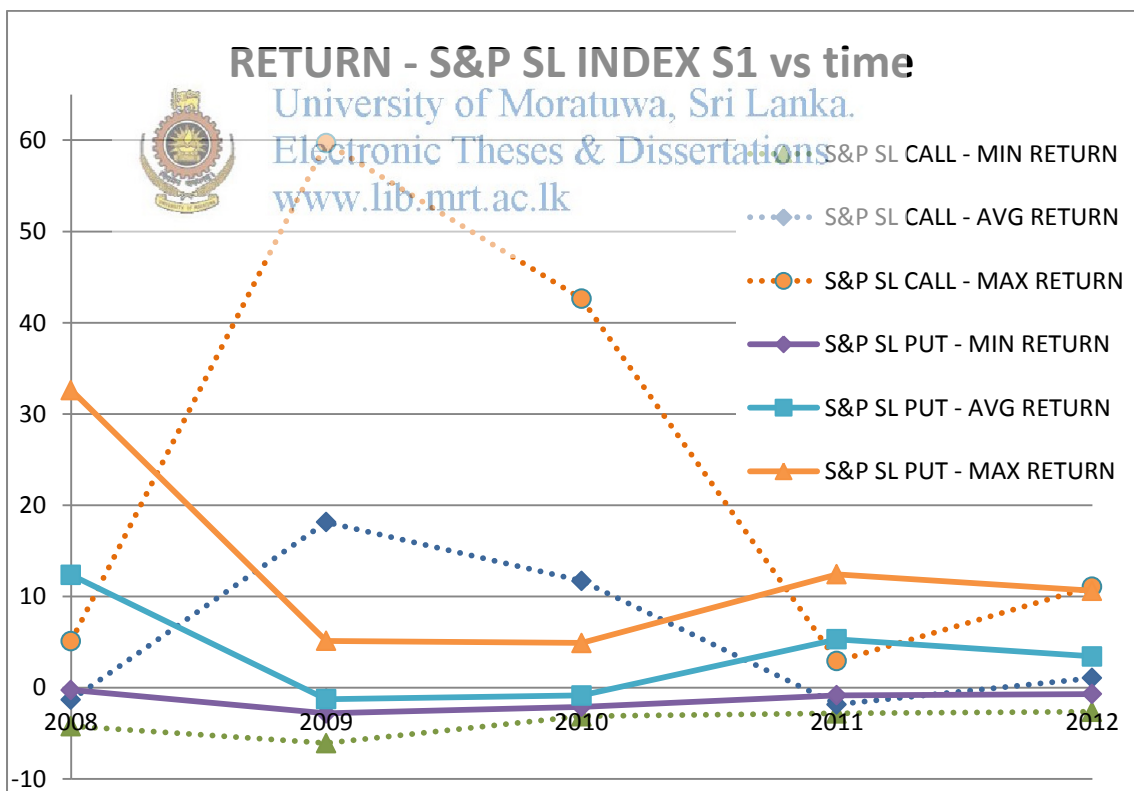


5) Graph E: Return – S&P SL Index S1 vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for the S&P SL index to observe the returns made from strategy 1.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



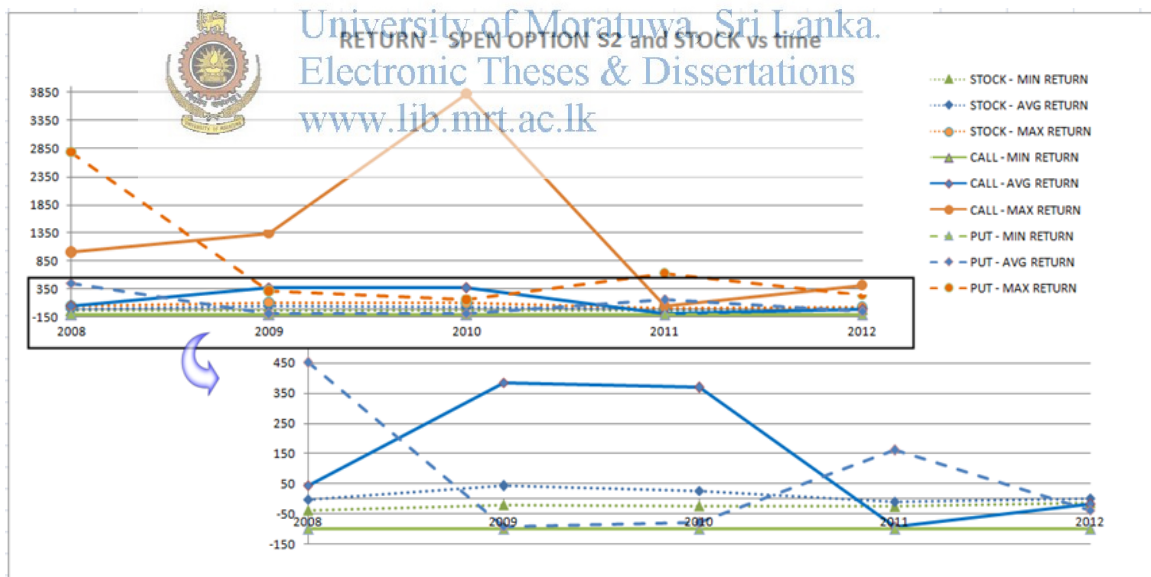
Graph E: Return – S&P SL Index S1 vs Time

6) Graph F: Return - SPEN option S2 and Stock vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for SPEN. This graph plots the returns from strategy 2 as an alternative to buying stocks.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- The returns from stock investments are also plotted in the same graph to observe the returns from the alternative option investment.
- Return percentages will include gains made from options as well as the very small risk free investments if available. (there may be a small amount of the investment money left since the options are only bought in multiples of 100)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year

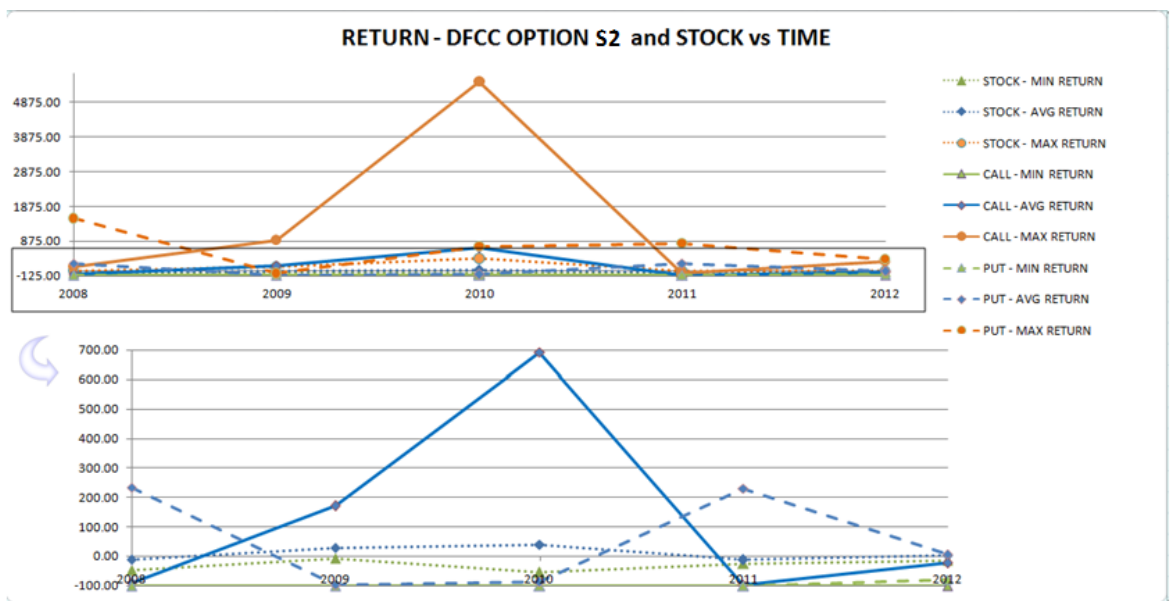


Graph F: Return SPEN option S2 and Stock vs Time

7) Graph G: Return - DFCC option S2 and Stock vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for DFCC. This graph plots the returns from strategy 2 as an alternative to buying stocks.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- The returns from stock investments are also plotted in the same graph to observe the returns from the alternative option investment.
- Return percentages will include gains made from options as well as the very small risk free investments if available. (there may be a small amount of the investment money left since the options are only bought in multiples of 100)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments  
 x axis – year

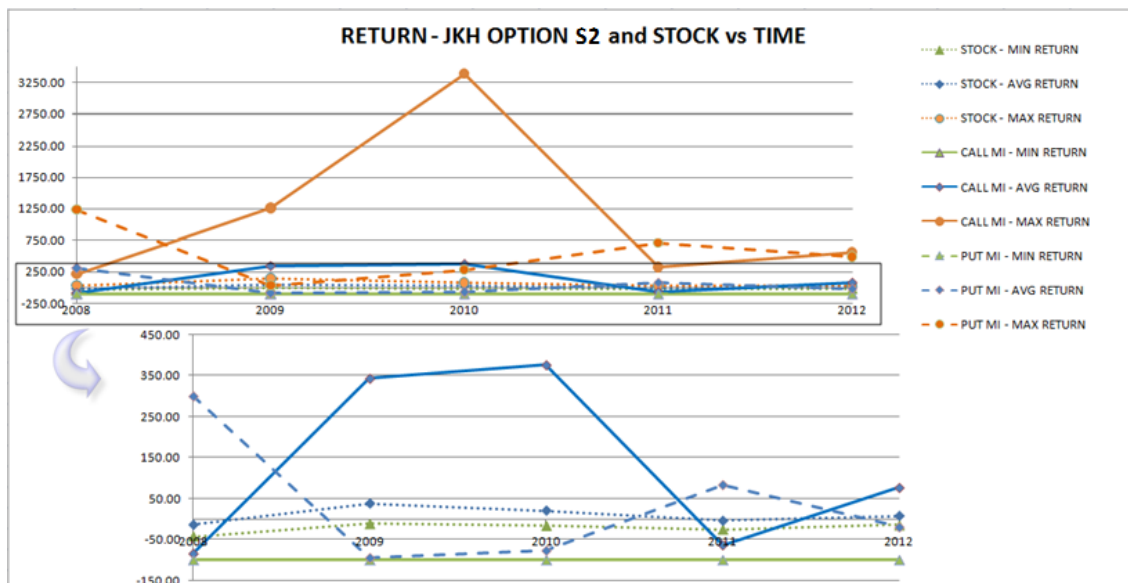


Graph G: Return DFCC option S2 and Stock vs Time

8) Graph H: Return - JKH option S2 and Stock vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for JKH. This graph plots the returns from strategy 2 as an alternative to buying stocks.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- The returns from stock investments are also plotted in the same graph to observe the returns from the alternative option investment.
- Return percentages will include gains made from options as well as the very small risk free investments if available. (there may be a small amount of the investment money left since the options are only bought in multiples of 100)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments  
 x axis – year



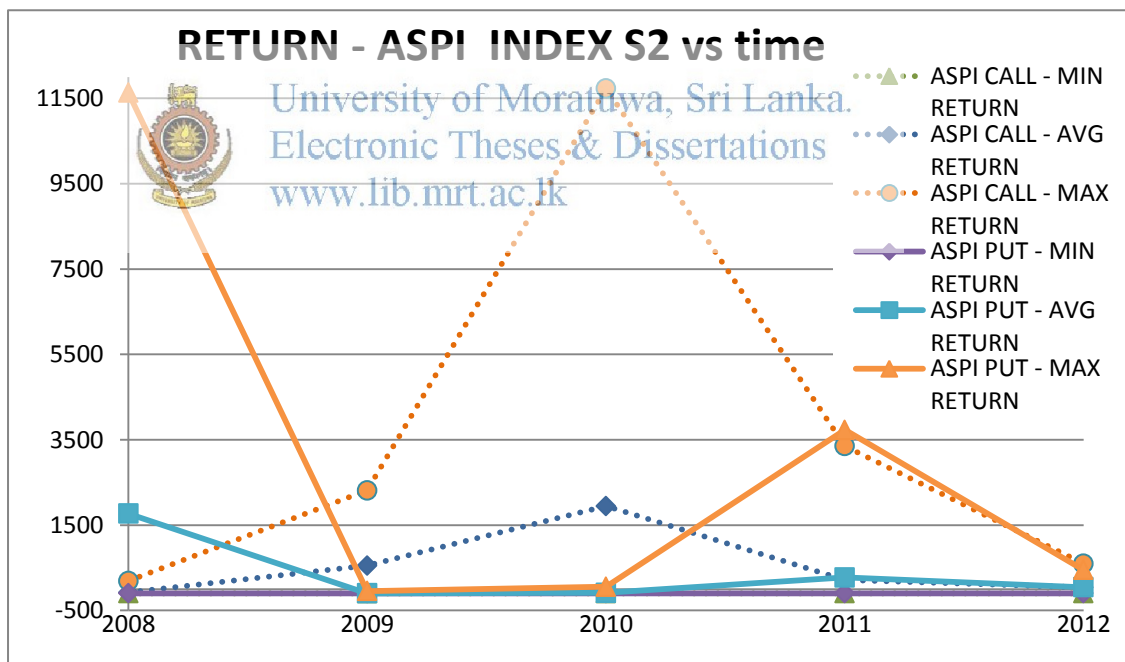
Graph H: Return JKH option S2 and Stock vs Time

9) Graph I: Return – ASPI Index S2 vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for the ASPI index to observe the returns made from strategy 2.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



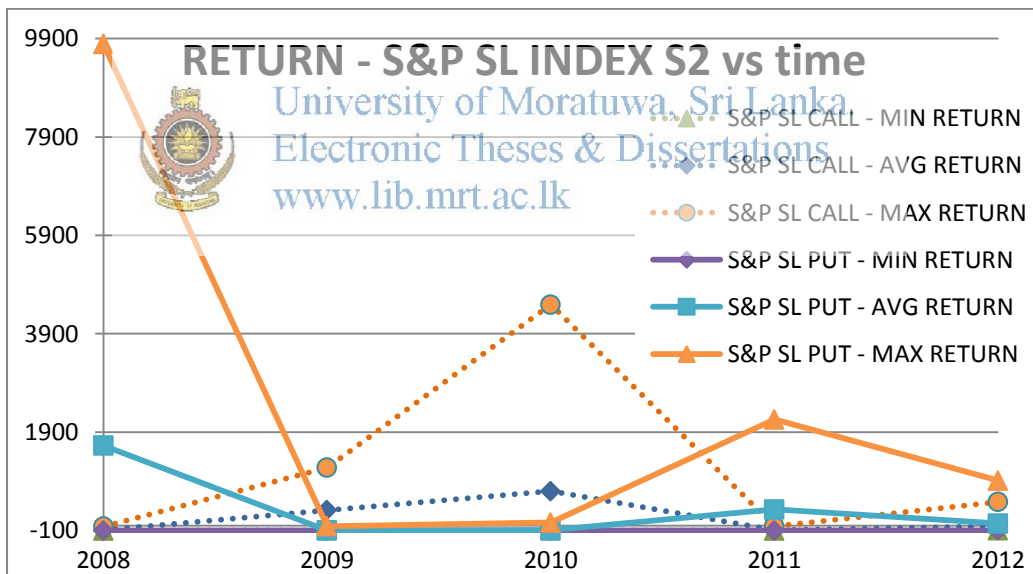
Graph I: Return – ASPI Index S2 vs Time

10) Graph J: Return – S&P SL Index S2 vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for the S&P SL index to observe the returns made from strategy 2.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



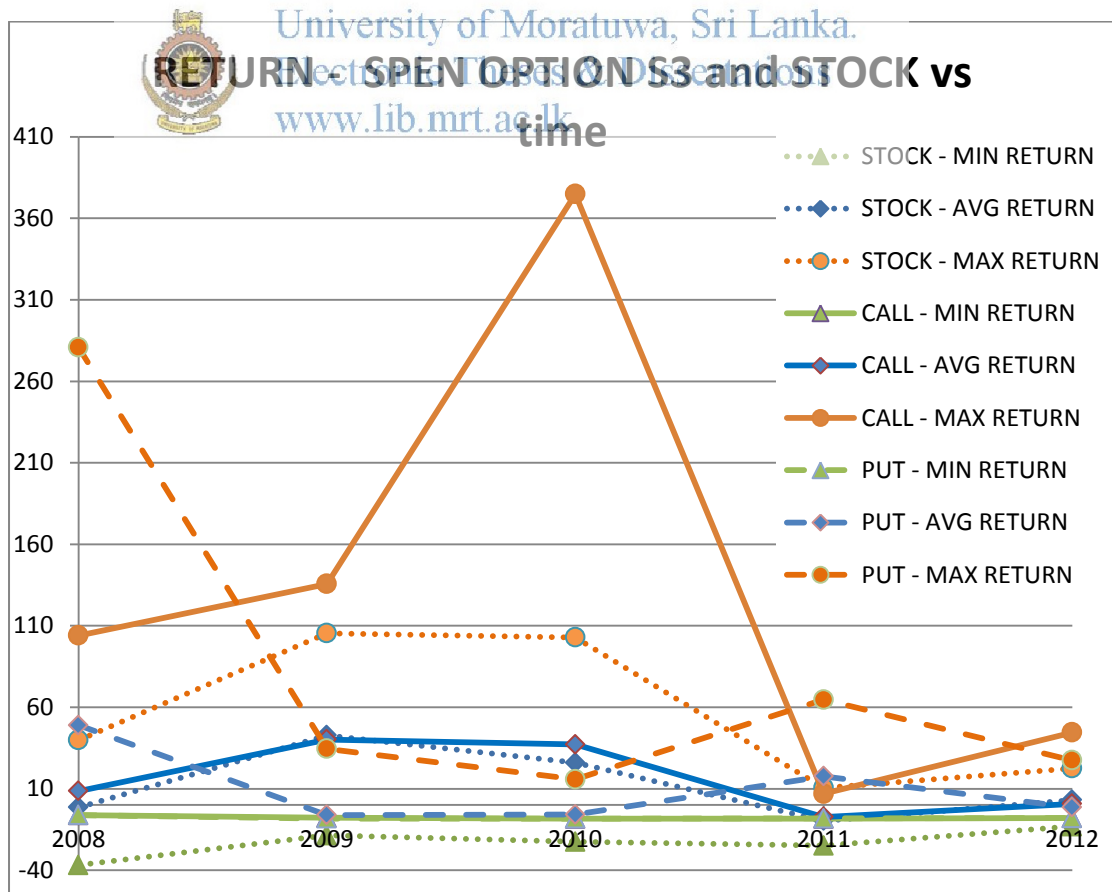
Graph J: Return – S&P SL Index S2 vs Time

11) Graph K: Return - SPEN option S3 and Stock vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for SPEN. This graph plots the returns from strategy 3 as an alternative to buying stocks.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- The returns from stock investments are also plotted in the same graph to observe the returns from the alternative option investment.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



Graph K: Return SPEN option S3 and Stock vs Time

12) Graph L: Return - DFCC option S3 and Stock vs Time

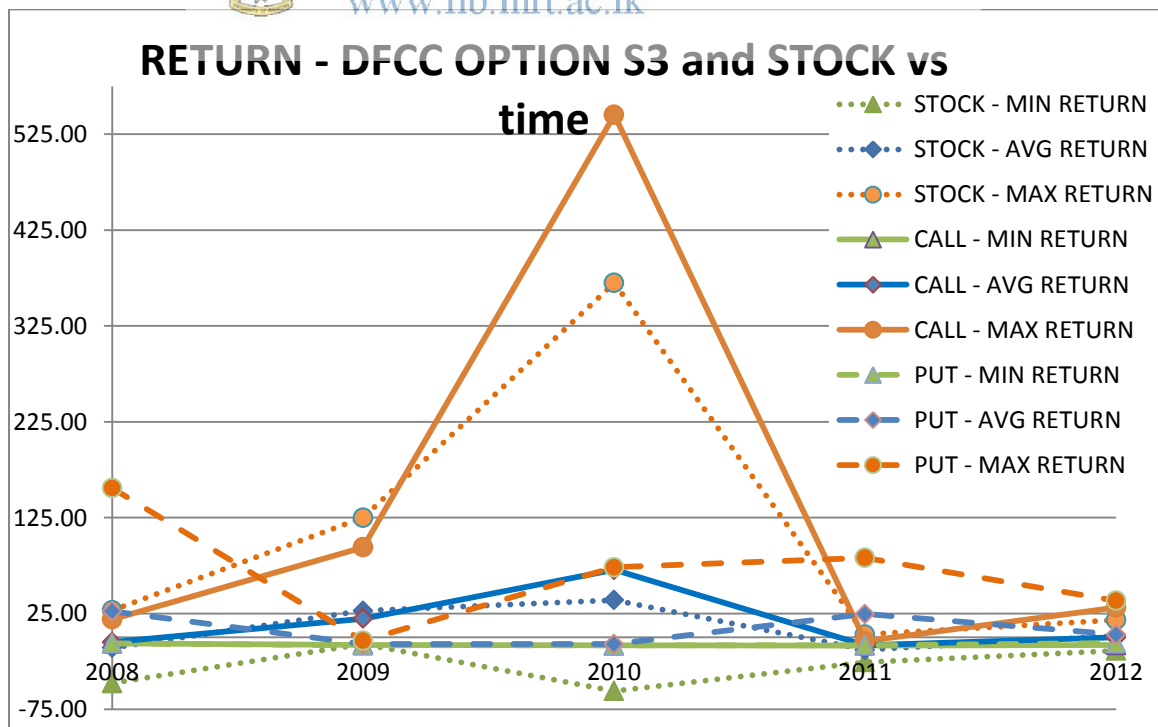
- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for DFCC. This graph plots the returns from strategy 3 as an alternative to buying stocks.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- The returns from stock investments are also plotted in the same graph to observe the returns from the alternative option investment.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



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Graph L: Return DFCC option S3 and Stock vs Time

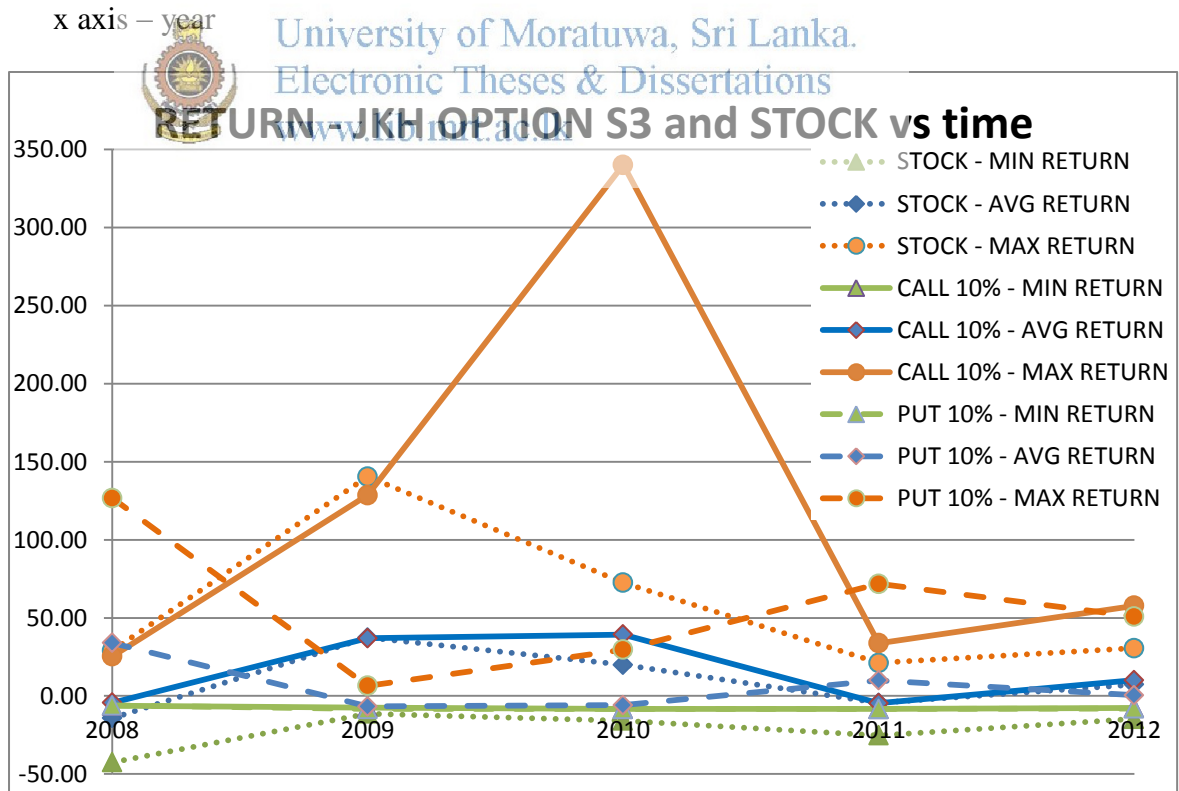


13) Graph M: Return - JKH option S3 and Stock vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for JKH. This graph plots the returns from strategy 3 as an alternative to buying stocks.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- The returns from stock investments are also plotted in the same graph to observe the returns from the alternative option investment.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



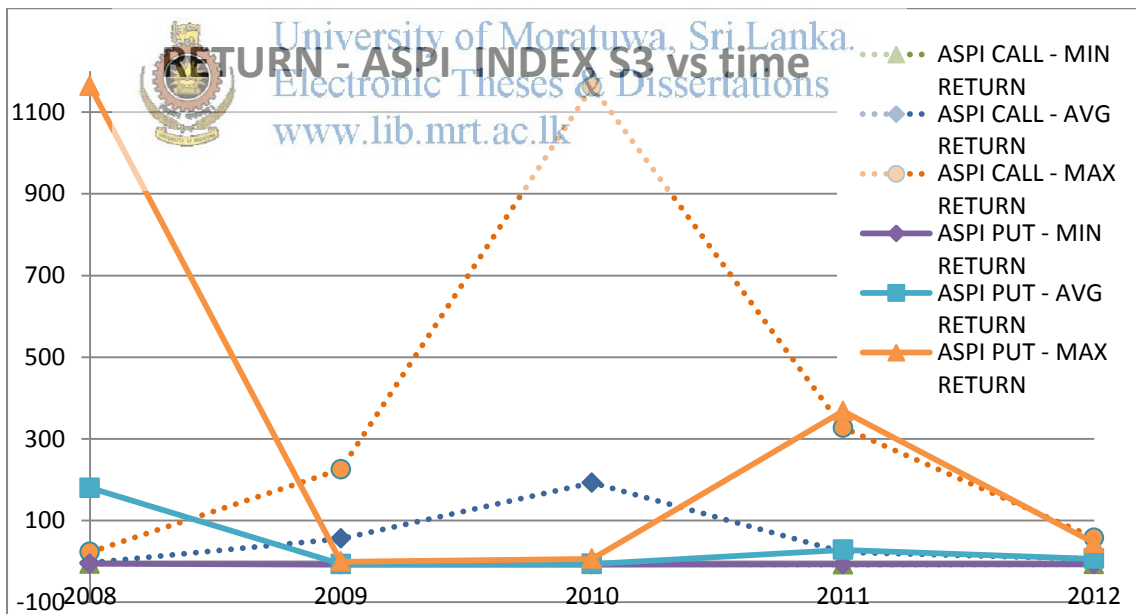
Graph M: Return JKH option S3 and Stock vs Time

14) Graph N: Return – ASPI Index S3 vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for the ASPI index to observe the returns made from strategy 3.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



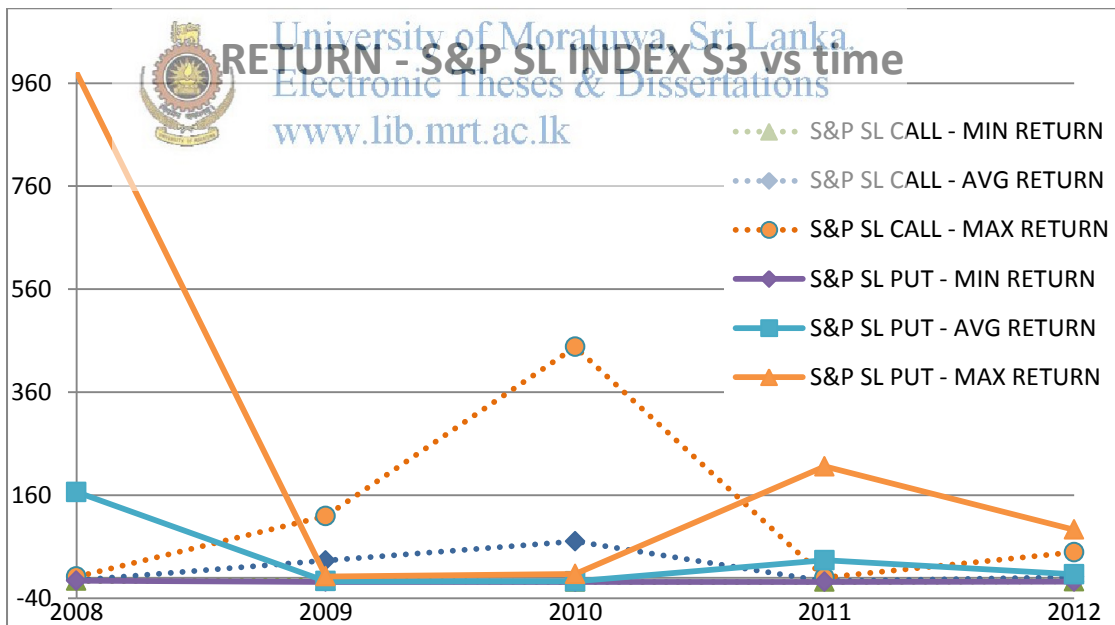
Graph N: Return – ASPI Index S3 vs Time

15) Graph O: Return – S&P SL Index S3 vs Time

- This graph is plotted with the minimum, maximum and average returns calculated per year for call and put options for the S&P SL index to observe the returns made from strategy 3.
- The minimum, maximum and average returns are plotted as 3 different series for each option type; call and put.
- Return percentages will include gains made from options as well as the risk free investments (from T-bill investments)

y axis – minimum return for year, maximum return for year, average return for year for options and returns from stock investments

x axis – year



Graph O: Return – S&P SL Index S3 vs Time

## APPENDIX C – DATA USED FOR ANALYSIS

### 1. Trading Data of Securities

Table A: Summary of Trading Data for Selected Securities

Year	SECURITY ID	CODE	OPEN	CLOSE	CHANGE %	HIGHEST	LOWEST	TURNOVER (RS.)	SHARES	TRADES
2008	DFCC BANK	N 0000	127.00	53.00	-58.27	130.00	52.00	778,412,425.25	7,909,523.00	2,249.00
2009	DFCC BANK	N 0000	53.00	167.00	215.09	168.00	56.25	5,009,718,648.25	41,393,246.00	10,342.00
2010	DFCC BANK	N 0000	167.00	200.20	19.88	550.00	164.50	8,239,011,769.15	28,942,657.00	18,777.00
2011	DFCC BANK	N 0000	200.20	112.90	-43.61	249.90	106.00	2,695,585,579.50	18,630,418.00	9,307.00
2012-1Q	DFCC BANK	N 0000	112.90	112.60	-0.27	115.00	98.00	167,198,225.40	1,585,396.00	1,337.00
2008	JKH	N 0000	127.25	50.00	-60.71	128.00	49.25	6,606,813,612.75	69,005,802.00	10,693.00
2009	JKH	N 0000	50.00	171.50	243.00	180.00	48.25	32,286,972,493.75	269,167,702.00	38,191.00
2010	JKH	N 0000	171.50	298.40	73.99	360.00	162.00	65,249,872,889.80	283,103,314.00	29,832.00
2011	JKH	N 0000	298.40	170.20	-42.96	304.90	161.80	29,258,992,767.00	130,333,941.00	22,319.00
2012-1Q	JKH	N 0000	170.20	206.00	21.03	210.00	158.20	22,671,125,330.50	120,876,239.00	8,398.00
2008	AITKEN SPENCE	N 0000	400.00	311.00	-22.25	560.00	305.00	668,794,589.00	1,425,355.00	1,003.00
2009	AITKEN SPENCE	N 0000	311.00	1,325.00	326.05	1,350.00	309.00	1,407,735,828.75	2,085,737.00	2,127.00
2010	AITKEN SPENCE	N 0000	1,325.00	-169.90	87.18	3,500.00	0.00	18,997,453,990.15	55,804,769.00	14,554.00
2011	AITKEN SPENCE	N 0000	169.90	120.40	-29.13	200.10	100.00	4,437,810,170.30	29,275,958.00	10,243.00
2012-1Q	AITKEN SPENCE	N 0000	120.40	112.70	-6.40	120.00	103.60	9,261,282,606.30	80,597,610.00	1,370.00

## 2. 91 day Treasury Bill rates from 2007-2012

Table B: Treasury bill rates

Date	91 day TBill rate	Date	91 day TBill rate	Date	91 day TBill rate	Date	91 day TBill rate
05.01.2007	12.77	25.05.2007	16.69	26.10.2007	17.23	14.03.2008	18.4
12.01.2007	12.79	01.06.2007	16.91	02.11.2007	15.8	19.03.2008	18.36
19.01.2007	12.8	08.06.2007	16.94	09.11.2007	15.74	28.03.2008	18.39
26.01.2007	13.07	15.06.2007	17.09	16.11.2007	15.74	04.04.2008	18.4
02.02.2007	13.37	22.06.2007	17.4	23.11.2007	16.07	11.04.2008	18.5
09.02.2007	13.55	13.07.2007	17.4	30.11.2007	17.07	17.04.2008	18.7
16.02.2007	13.75	20.07.2007	17.39	07.12.2007	18.03	25.04.2008	18.67
23.02.2007	13.78	27.07.2007	17.38	14.12.2007	18.99	02.05.2008	18.51
02.03.2007	14.06	03.08.2007	17.39	21.12.2007	20.14	09.05.2008	18.09
09.03.2007	14.23	10.08.2007	17.41	28.12.2007	21.3	16.05.2008	17.55
16.03.2007	14.36	17.08.2007	17.45	04.01.2008	21.3	23.05.2008	17.14
23.03.2007	14.44	24.08.2007	17.55	11.01.2008	20.12	20.06.2008	17.29
30.03.2007	14.62	31.08.2007	17.65	18.01.2008	19.25	11.07.2008	17.42
06.04.2007	14.89	07.09.2007	17.8	25.01.2008	19.25	18.07.2008	17.41
13.04.2007	15.01	14.09.2007	17.93	01.02.2008	19.25	25.07.2008	17.36
20.04.2007	15.44	21.09.2007	18.05	08.02.2008	19.24	01.08.2008	17.26
27.04.2007	16.01	28.09.2007	18.2	15.02.2008	18.97	08.08.2008	17.11
04.05.2007	16.56	05.10.2007	18.4	22.02.2008	18.59	15.08.2008	16.73
11.05.2007	16.52	12.10.2007	18.46	29.02.2008	18.48	22.08.2008	16.46
18.05.2007	16.6	19.10.2007	18.25	07.03.2008	18.48	26.09.2008	17.22

Table C: Treasury bill rates

Date	91 day TBill rate
10.10.2008	17.22
17.10.2008	17.2
14.11.2008	17.2
21.11.2008	17.2
28.11.2008	17.2
05.12.2008	17.2
11.12.2008	17.2
19.12.2008	17.26
26.12.2008	17.33
09.01.2009	17.31
16.01.2009	16.79
23.01.2009	16.18
30.01.2009	15.94
06.02.2009	15.99
13.02.2009	15.78
20.02.2009	15.76
27.02.2009	15.76
06.03.2009	15.73
13.03.2009	15.46
20.03.2009	14.94

Date	91 day TBill rate
27.03.2009	14.62
03.04.2009	14.46
08.04.2009	14.16
17.04.2009	14.09
24.04.2009	13.38
30.04.2009	12.65
07.05.2009	12.22
15.05.2009	12.2
22.05.2009	12.05
29.05.2009	12.04
05.06.2009	12.04
12.06.2009	12.01
19.06.2009	11.56
26.06.2009	11.41
03.07.2009	11.29
10.07.2009	11.28
17.07.2009	11.05
24.07.2009	10.79
31.07.2009	10.64
07.08.2009	10.58

Date	91 day TBill rate
14.08.2009	10.57
21.08.2009	10.57
28.08.2009	10.57
03.09.2009	10.55
11.09.2009	10.54
18.09.2009	10.04
25.09.2009	9.7
02.10.2009	9.48
09.10.2009	9.26
16.10.2009	9.15
23.10.2009	9.1
30.10.2009	8.5
06.11.2009	8.14
13.11.2009	7.73
20.11.2009	7.25
27.11.2009	7.25
04.12.2009	7.4
11.12.2009	7.51
18.12.2009	7.6
24.12.2009	7.67

Date	91 day TBill rate
01.01.2010	7.73
08.01.2010	7.77
15.01.2010	7.84
22.01.2010	7.86
28.01.2010	7.95
05.02.2010	7.99
12.02.2010	8.07
19.02.2010	8.17
26.02.2010	8.26
05.03.2010	8.38
19.03.2010	8.4
26.03.2010	8.45
01.04.2010	8.52
16.04.2010	8.52
23.04.2010	8.46
30.04.2010	8.4
07.05.2010	8.24
14.05.2010	8.18
21.05.2010	8.13
26.05.2010	8.1

Table D: Treasury bill rates

Date	91 day TBill rate
04.06.2010	8.08
11.06.2010	8.07
18.06.2010	8.05
25.06.2010	8.07
02.07.2010	8.07
09.07.2010	8.07
16.07.2010	7.98
23.07.2010	7.92
30.07.2010	7.9
06.08.2010	7.78
13.08.2010	7.64
20.08.2010	7.4
27.08.2010	7.28
03.09.2010	7.13
21.10.2010	7.02
29.10.2010	7.13
04.11.2010	7.29
12.11.2010	7.3
19.11.2010	7.29
26.11.2010	7.29

Date	91 day TBill rate
03.12.2010	7.28
10.12.2010	7.27
17.12.2010	7.25
24.12.2010	7.25
31.12.2010	7.24
07.01.2011	7.24
14.01.2011	7.07
21.01.2011	7.04
28.01.2011	7.01
03.02.2011	7
11.02.2011	6.99
18.02.2011	6.99
25.02.2011	6.97
04.03.2011	6.97
11.03.2011	6.97
18.03.2011	6.97
25.03.2011	6.98
01.04.2011	6.98
08.04.2011	6.99
12.04.2011	7

Date	91 day TBill rate
21.04.2011	7.03
29.04.2011	7.04
06.05.2011	7.05
13.05.2011	7.06
20.05.2011	7.07
27.05.2011	7.09
03.06.2011	7.1
10.06.2011	7.11
17.06.2011	7.12
24.06.2011	7.12
01.07.2011	7.12
08.07.2011	7.11
15.07.2011	7.11
22.07.2011	7.11
29.07.2011	7.11
05.08.2011	7.11
12.08.2011	7.11
19.08.2011	7.11
26.08.2011	7.11
02.09.2011	7.11

Date	91 day TBill rate
09.09.2011	7.11
16.09.2011	7.11
23.09.2011	7.14
30.09.2011	7.15
07.10.2011	7.21
14.10.2011	7.21
21.10.2011	7.24
28.10.2011	7.29
11.11.2011	7.39
18.11.2011	7.51
25.11.2011	7.95
02.12.2011	8.2
09.12.2011	8.28
16.12.2011	8.43
23.12.2011	8.58
30.12.2011	8.68
06.01.2012	8.68
13.01.2012	8.68
20.01.2012	8.67
27.01.2012	8.67

Table E: Treasury bill rates from 2008-2012

Date	91 day TBill rate	Date	91 day TBill rate	Date	91 day TBill rate
03.02.2012	8.68	22.06.2012	11.04	16.11.2012	10.67
09.02.2012	9.24	29.06.2012	11.12	23.11.2012	10.74
17.02.2012	9.31	06.07.2012	11.2	30.11.2012	10.79
24.02.2012	9.51	13.07.2012	11.34	14.12.2012	10.44
02.03.2012	9.81	20.07.2012	11.36	21.12.2012	10.23
09.03.2012	10.11	27.07.2012	11.35	28.12.2012	10
16.03.2012	10.42	03.08.2012	11.35		
23.03.2012	10.75	10.08.2012	11.37		
30.03.2012	11	17.08.2012	11.36		
05.04.2012	11.05	24.08.2012	11.36		
11.04.2012	11.62	31.08.2012	11.41		
20.04.2012	11.73	07.09.2012	11.44		
27.04.2012	11.93	14.09.2012	11.44		
04.05.2012	12.11	21.09.2012	11.41		
11.05.2012	12.19	28.09.2012	11.3		
18.05.2012	11.99	05.10.2012	11		
25.05.2012	11.58	12.10.2012	10.63		
01.06.2012	11.01	19.10.2012	10.66		
08.06.2012	10.86	02.11.2012	10.68		
15.06.2012	10.95	09.11.2012	10.68		



### 3. Dividend Announcements

Table F: Dividend Announcements for DFCC

DATE OF ANNOUNCEMENT	SECURITY	RATE & REMARKS	DATE OF EX	DATE OF PAYMENT	CUM PRICE	EX PRICE
1-Mar-07	DFCC-N-0	45% INTERIM DIVIDEND	20-Mar-07	30-Mar-07	196.75	201.5
1-Jun-07	DFCC-N-0	5% FINAL DIVIDEND	2-Jul-07	6-Jul-07	143.75	148
5-Jun-08	DFCC-N-0	RS.5.00 PER SHARE - FI	1-Jul-08	7-Jul-08	120.5	114.75
7-May-09	DFCC-N-0000	FIRST & FINAL DIVIDEND OF RS.5.00 PER SHARE	1-Jul-09	10-Jul-09	135.25	131
6-May-10	DFCC-N-0	FIRST & FINAL DIVIDEND OF RS.6.00 PER SHARE	1-Jul-10	9-Jul-10	267.75	260.25
1-Apr-11	DFCC-N-0000	INTERIM DIVIDEND OF RS.7.00 PER SHARE	12-Apr-11	27-Apr-11	184.3	180.9
5-May-11	DFCC-N-0000	FINAL DIVIDEND OF RS.3.00 PER SAHRE	1-Jul-11	11-Jul-11	146.4	145.7

Table G: Dividend Announcements for JKH

DATE OF ANNOUNCEMENT	SECURITY	RATE & REMARKS	DATE OF EX	DATE OF PAYMENT	CUM PRICE	EX PRICE
27-Oct-06	JKH-N-00	10% INTERIM DIVIDEND	13-Nov-06	23-Nov-06	179.00	178.50
5-Mar-07	JKH-N-00	10% 2 INT.(INCLU.RIGHT	9-Mar-07	21-Mar-07	181.25	181.00
4-Jun-07	JKH-N-00	RS. 1/= PER SHARE-FINA	2-Jul-07	6-Jul-07	145.25	145.25
13-Nov-07	JKH-N-00	RS.1 PER SHARE - INTER	23-Nov-07	5-Dec-07	131.00	129.00
30-Jan-08	JKH-N-00	RS.2.00 PER SHARE - 2N	6-Feb-08	18-Feb-08	119.50	118.00
10-Mar-08	JKH-N-00	RS. 1.00 PER SHARE-3RD	17-Mar-08	31-Mar-08	120.25	120.00
22-May-08	JKH-N-00	RS.1.00 PER SHARE - FI	16-Jun-08	27-Jun-08	112.00	112.00
2-Oct-08	JKH-N-00	RS. 1.00 PER SHARE INTE	13-Oct-08	24-Oct-08	75.25	76.00
28-Jan-09	JKH-N-0000	SECOND INTERIM DIVIDEND OF RS.1.00 PER SHARE	10-Feb-09	39864	59.5	62
21-May-09	JKH-N-0000	FINAL DIVIDEND OF RS.1.00 PER SHARE	1-Jun-09	39974	115.25	114
10-Nov-09	JKH-N-0000	FIRST INTERIM DIVIDEND OF RS.1.00 PER SHARE	19-Nov-09	40147	144.25	143
16-Mar-10	JKH-N-00	SECOND INTERIM DIVIDEND OF RS.1.00 PER SHARE	25-Mar-10	7-Apr-10	171	178
19-May-10	JKH-N-00	FINAL DIVIDEND OF RS. 1.00 PER SHARE	1-Jun-10	10-Jun-10	183.75	186
10-Nov-10	JKH-N-00	INTERIM DIVIDEND OF RS.1.00 PER SHARE	22-Nov-10	1-Dec-10	300	300
23-Feb-11	JKH-N-0000	SECOND INTERIM DIVIDEND OF RS.1.00 PER SHARE	7-Mar-11	16-Mar-11	289.7	285.6
20-May-11	JKH-N-0000	FINAL DIVIDEND OF RS.1 PER SHARE	31-May-11	9-Jun-11	300	300
3-Nov-11	JKH-N-0000	INTERIM DIVIDEND OF RS.1.00 PER SHARE	16-Nov-11	24-Nov-11	181.2	177.7
15-Feb-12	JKH-N-0000	SECOND INTERIM DIVIDEND OF RS 1.00 PER SHARE	27-Feb-12	8-Mar-12	176.1	175
25-May-12	JKH-N-0000	FINAL DIVIDEND OF RS.1.50	6-Jun-12	15-Jun-12	173.6	177.3

Table H: Dividend Announcements for SPEN

DATE OF ANNOUNCEMENT	SECURITY	RATE & REMARKS	DATE OF EX	DATE OF PAYMENT	CUM PRICE	EX PRICE
27-Mar-07 28-May-07	SPEN-N-0 SPEN-N-0	30% INTERIM DIVIDEND RS. 3.50 PER SHARE-FIN	29-Mar-07 29-Jun-07	10-Apr-07 5-Jul-07	380 336	375.5 334
1-Apr-08 28-May-08	SPEN-N-0 SPEN-N-0	RS.3.00 PER SHARE - IN RS.4.00 PER SHARE - FI	3-Apr-08 30-Jun-08	10-Apr-08 4-Jul-08	435 540	435.25 525
4-May-09 22-May-09	SPEN-N-0000 SPEN-N-0000	INTERIM DIVIDEND OF RS.3.50 PER SHARE FINAL DIVIDEND OF RS.6.00 PER SHARE	14-May-09 30-Jun-09	21-May-09 9-Jul-09	336 648	335.75 648
29-Apr-10 25-May-10	SPEN-N-0 SPEN-N-0	INTERIM DIVIDEND OF RS. 3.50 PER SHARE FINAL DIVIDEND OF RS.6.50 PER SHARE	10-May-10 30-Jun-10	19-May-10 8-Jul-10	1450 1607.75	1450 1610
30-May-11	SPEN-N-0000	FIRST & FINAL DIVIDEND OF RS. 1.00 PER SHARE	30-Jun-11	8-Jul-11	136.5	137.6
9-May-12	SPEN-N-0000	1.40 per share	29-Jun-12	10-Jul-12		



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#### 4. Bonus, Rights, Subdivision of Shares

Table I: Rights Issues for selected securities

Company	Ratio	No. of Shares offered	Issue Price (Rs.)	No. of shares subscribed by public	Amount raised	Allotment
Aitken Spence Hotel Holdings	1:04	9,608,286	260.00	9,608,286	2,498,154,360.00	30-Mar-10
John Keells Hotels	1:03	364,036,695	10.00	364,036,695	3,640,366,950.00	1-Mar-10

Table J: Bonus Issues for selected securities

Company	Ratio	No. of Shares offered	Allotment
DFCC Bank	1:1	132431968	01-NOV-2010

Table K: Share Splits for selected securities

Company ID	Company Name	Security	Action Type	Old Proportion	New Proportion	Effective Date
JKH	JKH	JKH-N-0000	Division	3	4	30-Jun-11
SPEN	AITKEN SPENCE	SPEN-N-0000	Division	1	15	11-Oct-10

## APPENDIX D – GLOSSARY OF DEFINITIONS

**American Options:** An option which can be exercised by the option holder (the option buyer) any time during the life of the contract.

**Call Option:** A "Call" option gives its buyer the right, but not the obligation, to buy shares of a stock at a specified price on or before a given date.

**Debt instrument:** A contract with pre-determined terms for rate of interest and repayment of principal amount by the borrower to the lender, used by either companies or governments to generate funds for capital-intensive projects.

**Derivative:** A financial instrument whose value is based on one or more underlying assets for example a stock, index, currency, interest rate or commodity.

A derivative is a contract between 2 parties with specific conditions to trade the underlying asset for example, the contract expiry date, price, and quantities.

**European Options:** An option which can only be exercised on the expiration date of the option contract.



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**Intrinsic value:** The intrinsic value of an option is the difference between the actual price of the underlying security and the strike price of the option. The intrinsic value reflects the effective financial advantage which would result from the immediate exercise of that option.

**Option:** An option is a contract that conveys to its holder the right, but not the obligation, to buy or sell shares of the underlying security at a specified price on or before a given date. After this given date, the option ceases to exist.

Options based on stocks can be offered by companies or can be defined by a stock exchange. Options introduced by companies are known as stock options are given to employees by the company. Options introduced by exchanges, can be based on securities or indices. These options are listed by exchanges with expiry dates every month, week or trading day.

Options listed by an exchange can be bought or sold. Therefore these options are defined as Call or Put, giving the traders and investors the choice to get an option to buy or sell. The basic concepts of options are described below.

1. Underlying Security - Options are based on an underlying security (stock). So, a specific company's stock option is linked to that specific company's stock, and the price of the option will rise and fall with the price of the stock.
2. Right, Not Obligation - Owning an option gives the owner the right, but not the obligation, to buy or sell the underlying security (the stock) at a specified price.
3. Specified Price (strike price) - Owning an option gives owner the right to buy or sell a stock at a specified price. Listed options have been standardized to represent specified stock prices.
4. Time – The option owners' right to buy, or sell, the underlying stock expires on a given date. The period of time the option exists is known as the life of the option. After that date the option ceases to exist, the stock does not go away but the option does.



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**Premium:** also known as option price is the price paid to acquire the option. The premium is determined based on the Market price, volatility and time remaining for exercise. The premium is the price at which the contract trades. It is a function of supply and demand. This is the price of the option paid by the buyer to the writer, or seller, of the option. In return, the writer of the option is obligated to deliver the underlying security to an option buyer if a call option is exercised or buy the underlying security if a put option is exercised. The writer keeps the premium whether or not the option is exercised.

There are two components to the options premium: intrinsic value and time value.

$$\text{Option premium} = \text{intrinsic value} + \text{time value}$$

**Profit from options:** Call options increase in value when the underlying stock it's attached to goes up in price, and decrease in value when the stock goes down in price. Put options increase in value when the underlying stock it's attached to goes down in price, and decrease in value when the stock goes up in price.

A buyer of an option can close the position and make profit by trading (selling) the option itself at a higher price when the option is in-the-money.

If the option is in-the-money the buyer can exercise it and make a minimum profit equal to the difference of the strike price and the market price of the underlying security

Say a buyer of an option pays 'c' as the premium for a strike price of 'X'.

For call options, if the market price goes up to 'S' where  $S > X$ , then the option is worth at least  $(S - X)$

For put options, if the market price goes down to 'S' where  $S < X$ , then the option is worth at least  $(X - S)$

So a buyer who has acquired the option at a price 'c' can sell it at a higher price "c\*" and make a profit of  $(c^* - c)$

E.g: Buyer pays a premium of 2 for a call option with strike price of 30. If the market price is 35, then the option is worth at least 5.

If the current bid price for the option is 5.5, the buyer can sell the option making a profit of 3.5.

The option holder can make a profit by selling the option even when the option is out-of-the-money as long as there is demand and the option is trading at a higher price (current bid price of option in the market > premium paid initially). This is the most common way of making profit in options trading



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**Put Option:** A "Put" option gives its buyer the right, but not the obligation, to sell shares of a stock at a specified price on or before a given date.

**Stock:** an equity investment that represents part ownership in a corporation and entitles an investor to part of that corporation's earnings and assets.

**Time value:** It is determined by the remaining lifespan of the option, the volatility and the cost of refinancing the underlying asset (interest rates).