



Johannesburg
Stock Exchange

One Exchange Square,
Gwen Lane,
Sandown, South Africa
Private Bag X991174
Sandton 2146

Tel: +27 11 520 7000
Fax: +27 11 520 8584

www.jse.co.za

Registration number: 2005/022939/06
VAT number: 4080119391

INTEREST RATE AND CURRENCY DERIVATIVES

DERIVATIVES MONTHLY STATISTICS REPORT

For April 2019

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	0457 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	0703 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	0757 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	0804 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	0807 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	0857 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	0904 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	0908 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	0957 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	0986 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	1386 On 28-February-31			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	1409 On 28-February-41			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	2025 On 02-May-19			Bond Future	133.62	133.6462	133.6226	133.6462	685.00
08/04/2019	2025 On 01-August-19			Bond Future	134.70	134.7225	134.6984	134.7225	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	2025 On 07-November-19			Bond Future	137.54	137.5614	137.5366	137.5614	0.00
08/04/2019	2029 On 02-May-19			Bond Future	99.86	99.8784	99.8610	99.8784	3,020.00
08/04/2019	2029 On 01-August-19			Bond Future	101.74	101.7558	101.7381	101.7558	0.00
08/04/2019	2029 On 07-November-19			Bond Future	102.79	102.8085	102.7902	102.8085	0.00
08/04/2019	2030 On 02-May-19			Bond Future	9.08	94.8678	9.0774	94.8678	46,283.00
08/04/2019	2030 On 02-May-19	9.39	Call	Bond Future	2210	2	2210	2	0.00
08/04/2019	2030 On 02-May-19	10.20	Call	Bond Future	6867	7	6867	7	0.00
08/04/2019	2030 On 02-May-19	9.41	Call	Bond Future	2314	2	2314	2	0.00
08/04/2019	2030 On 02-May-19	8.90	Call	Bond Future	385	0	385	0	3,000.00
08/04/2019	2030 On 02-May-19	9.40	Call	Bond Future	2262	2	2262	2	3,000.00
08/04/2019	2030 On 02-May-19	9.40	Put	Bond Future	216	0	216	0	0.00
08/04/2019	2030 On 02-May-19	9.41	Put	Bond Future	206	0	206	0	0.00
08/04/2019	2030 On 02-May-19	8.90	Put	Bond Future	1536	2	1536	2	0.00
08/04/2019	2030 On 02-May-19	10.20	Put	Bond Future	1	0	1	0	3,000.00
08/04/2019	2030 On 02-May-19	9.39	Put	Bond Future	226	0	226	0	0.00
08/04/2019	2030 On 01-August-19			Bond Future	9.14	92.6227	9.1370	92.6227	0.00
08/04/2019	2030 On 01-August-19	9.22	Call	Bond Future	2127	2	2127	2	5,400.00
08/04/2019	2030 On 01-August-19	9.69	Call	Bond Future	4105	4	4105	4	0.00
08/04/2019	2030 On 01-August-19	8.35	Call	Bond Future	232	0	232	0	2,025.00
08/04/2019	2030 On 01-August-19	9.68	Call	Bond Future	4058	4	4058	4	0.00
08/04/2019	2030 On 01-August-19	9.15	Call	Bond Future	1886	2	1886	2	2,025.00
08/04/2019	2030 On 01-August-19	9.92	Call	Bond Future	5237	5	5237	5	0.00
08/04/2019	2030 On 01-August-19	8.67	Call	Bond Future	640	1	640	1	5,400.00
08/04/2019	2030 On 01-August-19	9.91	Call	Bond Future	5186	5	5186	5	0.00
08/04/2019	2030 On 01-August-19	9.27	Call	Bond Future	2309	2	2309	2	4,800.00
08/04/2019	2030 On 01-August-19	8.77	Call	Bond Future	838	1	838	1	4,800.00
08/04/2019	2030 On 01-August-19	9.90	Call	Bond Future	5136	5	5136	5	0.00
08/04/2019	2030 On 01-August-19	9.92	Put	Bond Future	463	0	463	0	0.00
08/04/2019	2030 On 01-August-19	8.77	Put	Bond Future	3195	3	3195	3	0.00
08/04/2019	2030 On 01-August-19	9.27	Put	Bond Future	1474	1	1474	1	0.00
08/04/2019	2030 On 01-August-19	9.90	Put	Bond Future	480	0	480	0	0.00
08/04/2019	2030 On 01-August-19	9.68	Put	Bond Future	711	1	711	1	4,800.00
08/04/2019	2030 On 01-August-19	9.15	Put	Bond Future	1804	2	1804	2	0.00
08/04/2019	2030 On 01-August-19	8.67	Put	Bond Future	3653	4	3653	4	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	2030 On 01-August-19	9.91	Put	Bond Future	471	0	471	0	0.00
08/04/2019	2030 On 01-August-19	9.22	Put	Bond Future	1605	2	1605	2	0.00
08/04/2019	2030 On 01-August-19	9.69	Put	Bond Future	699	1	699	1	5,400.00
08/04/2019	2030 On 01-August-19	8.35	Put	Bond Future	5385	5	5385	5	0.00
08/04/2019	2030 On 07-November-19			Bond Future	9.19	94.5515	9.1855	94.5515	0.00
08/04/2019	2030 On 07-November-19	9.48	Call	Bond Future	3713	4	3713	4	0.00
08/04/2019	2030 On 07-November-19	9.49	Call	Bond Future	3751	4	3751	4	0.00
08/04/2019	2030 On 07-November-19	9.47	Call	Bond Future	3675	4	3675	4	0.00
08/04/2019	2030 On 07-November-19	9.47	Put	Bond Future	1933	2	1933	2	0.00
08/04/2019	2030 On 07-November-19	9.48	Put	Bond Future	1911	2	1911	2	0.00
08/04/2019	2030 On 07-November-19	9.49	Put	Bond Future	1889	2	1889	2	0.00
08/04/2019	2032 On 02-May-19			Bond Future	9.31	93.0424	9.3068	93.0424	42,003.00
08/04/2019	2032 On 02-May-19	9.61	Call	Bond Future	2364	2	2364	2	0.00
08/04/2019	2032 On 02-May-19	9.63	Call	Bond Future	2476	3	2476	3	0.00
08/04/2019	2032 On 02-May-19	9.62	Call	Bond Future	2420	3	2420	3	0.00
08/04/2019	2032 On 02-May-19	9.61	Put	Bond Future	271	0	271	0	0.00
08/04/2019	2032 On 02-May-19	9.63	Put	Bond Future	248	0	248	0	0.00
08/04/2019	2032 On 02-May-19	9.62	Put	Bond Future	259	0	259	0	0.00
08/04/2019	2032 On 01-August-19			Bond Future	9.36	94.7684	9.3649	94.7684	0.00
08/04/2019	2032 On 01-August-19	10.11	Call	Bond Future	5588	6	5588	6	0.00
08/04/2019	2032 On 01-August-19	10.10	Call	Bond Future	5535	6	5535	6	0.00
08/04/2019	2032 On 01-August-19	10.09	Call	Bond Future	5481	6	5481	6	0.00
08/04/2019	2032 On 01-August-19	10.09	Put	Bond Future	658	1	658	1	0.00
08/04/2019	2032 On 01-August-19	10.11	Put	Bond Future	637	1	637	1	0.00
08/04/2019	2032 On 01-August-19	10.10	Put	Bond Future	647	1	647	1	0.00
08/04/2019	2032 On 07-November-19			Bond Future	9.42	92.5787	9.4193	92.5787	0.00
08/04/2019	2032 On 07-November-19	9.72	Call	Bond Future	4123	4	4123	4	0.00
08/04/2019	2032 On 07-November-19	9.71	Call	Bond Future	4081	4	4081	4	0.00
08/04/2019	2032 On 07-November-19	9.70	Call	Bond Future	4040	4	4040	4	0.00
08/04/2019	2032 On 07-November-19	9.71	Put	Bond Future	2135	2	2135	2	0.00
08/04/2019	2032 On 07-November-19	9.70	Put	Bond Future	2160	2	2160	2	0.00
08/04/2019	2032 On 07-November-19	9.72	Put	Bond Future	2111	2	2111	2	0.00
08/04/2019	2033 On 02-May-19			Bond Future	101.56	101.5757	101.5580	101.5757	6,090.00
08/04/2019	2033 On 01-August-19			Bond Future	103.47	103.4849	103.4671	103.4849	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	2033 On 07-November-19			Bond Future	104.48	104.4991	104.4806	104.4991	0.00
08/04/2019	2037 On 02-May-19			Bond Future	9.58	93.2295	9.5831	93.2295	51,935.00
08/04/2019	2037 On 02-May-19	9.80	Call	Bond Future	2145	2	2145	2	0.00
08/04/2019	2037 On 02-May-19	9.81	Call	Bond Future	2203	2	2203	2	0.00
08/04/2019	2037 On 02-May-19	9.79	Call	Bond Future	2088	2	2088	2	0.00
08/04/2019	2037 On 02-May-19	9.79	Put	Bond Future	483	0	483	0	0.00
08/04/2019	2037 On 02-May-19	9.80	Put	Bond Future	464	0	464	0	0.00
08/04/2019	2037 On 02-May-19	9.81	Put	Bond Future	445	0	445	0	0.00
08/04/2019	2037 On 01-August-19			Bond Future	9.65	90.7037	9.6454	90.7037	0.00
08/04/2019	2037 On 01-August-19	10.29	Call	Bond Future	5596	6	5596	6	0.00
08/04/2019	2037 On 01-August-19	10.31	Call	Bond Future	5713	6	5713	6	0.00
08/04/2019	2037 On 01-August-19	10.30	Call	Bond Future	5655	6	5655	6	0.00
08/04/2019	2037 On 01-August-19	10.30	Put	Bond Future	785	1	785	1	0.00
08/04/2019	2037 On 01-August-19	10.31	Put	Bond Future	773	1	773	1	0.00
08/04/2019	2037 On 01-August-19	10.29	Put	Bond Future	799	1	799	1	0.00
08/04/2019	2037 On 07-November-19			Bond Future	9.70	92.5927	9.6994	92.5927	0.00
08/04/2019	2037 On 07-November-19	9.95	Call	Bond Future	4470	5	4470	5	0.00
08/04/2019	2037 On 07-November-19	9.97	Call	Bond Future	4561	5	4561	5	0.00
08/04/2019	2037 On 07-November-19	9.96	Call	Bond Future	4515	5	4515	5	0.00
08/04/2019	2037 On 07-November-19	9.96	Put	Bond Future	2550	3	2550	3	0.00
08/04/2019	2037 On 07-November-19	9.97	Put	Bond Future	2522	2	2522	2	0.00
08/04/2019	2037 On 07-November-19	9.95	Put	Bond Future	2579	3	2579	3	0.00
08/04/2019	2038 On 02-May-19			Bond Future	120.42	120.7949	120.4186	120.7949	11,111.00
08/04/2019	2038 On 01-August-19			Bond Future	121.07	121.4503	121.0667	121.4503	0.00
08/04/2019	2038 On 07-November-19			Bond Future	123.62	124.0096	123.6177	124.0096	0.00
08/04/2019	2040 On 02-May-19			Bond Future	9.68	96.6339	9.6782	96.6339	25,028.00
08/04/2019	2040 On 02-May-19	9.90	Call	Bond Future	2309	3	2309	3	0.00
08/04/2019	2040 On 02-May-19	10.20	Call	Bond Future	4361	5	4361	5	1,150.00
08/04/2019	2040 On 02-May-19	9.89	Call	Bond Future	2248	3	2248	3	0.00
08/04/2019	2040 On 02-May-19	9.60	Call	Bond Future	824	1	824	1	1,150.00
08/04/2019	2040 On 02-May-19	9.88	Call	Bond Future	2188	2	2188	2	0.00
08/04/2019	2040 On 02-May-19	10.15	Call	Bond Future	3999	4	3999	4	0.00
08/04/2019	2040 On 02-May-19	9.65	Call	Bond Future	1016	1	1016	1	0.00
08/04/2019	2040 On 02-May-19	10.15	Put	Bond Future	142	0	142	0	880.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	2040 On 02-May-19	9.65	Put	Bond Future	1254	1	1254	1	880.00
08/04/2019	2040 On 02-May-19	9.89	Put	Bond Future	484	0	484	0	0.00
08/04/2019	2040 On 02-May-19	9.88	Put	Bond Future	506	0	506	0	0.00
08/04/2019	2040 On 02-May-19	10.20	Put	Bond Future	110	0	110	0	0.00
08/04/2019	2040 On 02-May-19	9.90	Put	Bond Future	464	0	464	0	0.00
08/04/2019	2040 On 02-May-19	9.60	Put	Bond Future	1488	1	1488	1	0.00
08/04/2019	2040 On 01-August-19			Bond Future	9.74	93.9209	9.7408	93.9209	0.00
08/04/2019	2040 On 01-August-19	10.36	Call	Bond Future	5880	6	5880	6	0.00
08/04/2019	2040 On 01-August-19	10.37	Call	Bond Future	5942	6	5942	6	0.00
08/04/2019	2040 On 01-August-19	10.38	Call	Bond Future	6003	6	6003	6	0.00
08/04/2019	2040 On 01-August-19	10.38	Put	Bond Future	902	1	902	1	0.00
08/04/2019	2040 On 01-August-19	10.36	Put	Bond Future	932	1	932	1	0.00
08/04/2019	2040 On 01-August-19	10.37	Put	Bond Future	917	1	917	1	0.00
08/04/2019	2040 On 07-November-19			Bond Future	9.80	95.8769	9.7954	95.8769	0.00
08/04/2019	2040 On 07-November-19	10.03	Call	Bond Future	4768	5	4768	5	0.00
08/04/2019	2040 On 07-November-19	10.04	Call	Bond Future	4818	5	4818	5	0.00
08/04/2019	2040 On 07-November-19	10.05	Call	Bond Future	4869	5	4869	5	0.00
08/04/2019	2040 On 07-November-19	10.05	Put	Bond Future	2805	3	2805	3	0.00
08/04/2019	2040 On 07-November-19	10.03	Put	Bond Future	2864	3	2864	3	0.00
08/04/2019	2040 On 07-November-19	10.04	Put	Bond Future	2834	3	2834	3	0.00
08/04/2019	2044 On 02-May-19			Bond Future	9.69	93.8955	9.6873	93.8955	37,759.00
08/04/2019	2044 On 02-May-19	9.90	Call	Bond Future	2301	3	2301	3	0.00
08/04/2019	2044 On 02-May-19	9.91	Call	Bond Future	2363	3	2363	3	0.00
08/04/2019	2044 On 02-May-19	9.92	Call	Bond Future	2426	3	2426	3	0.00
08/04/2019	2044 On 02-May-19	9.91	Put	Bond Future	471	0	471	0	0.00
08/04/2019	2044 On 02-May-19	9.92	Put	Bond Future	450	0	450	0	0.00
08/04/2019	2044 On 02-May-19	9.90	Put	Bond Future	492	0	492	0	0.00
08/04/2019	2044 On 01-August-19			Bond Future	9.75	91.2569	9.7469	91.2569	0.00
08/04/2019	2044 On 01-August-19	10.39	Call	Bond Future	6144	6	6144	6	0.00
08/04/2019	2044 On 01-August-19	10.53	Call	Bond Future	7031	7	7031	7	0.00
08/04/2019	2044 On 01-August-19	9.86	Call	Bond Future	3128	3	3128	3	100.00
08/04/2019	2044 On 01-August-19	10.40	Call	Bond Future	6207	7	6207	7	0.00
08/04/2019	2044 On 01-August-19	9.36	Call	Bond Future	1154	1	1154	1	100.00
08/04/2019	2044 On 01-August-19	10.38	Call	Bond Future	6082	6	6082	6	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	2044 On 01-August-19	10.38	Put	Bond Future	929	1	929	1	0.00
08/04/2019	2044 On 01-August-19	9.36	Put	Bond Future	4564	4	4564	4	0.00
08/04/2019	2044 On 01-August-19	10.53	Put	Bond Future	730	1	730	1	100.00
08/04/2019	2044 On 01-August-19	10.40	Put	Bond Future	900	1	900	1	0.00
08/04/2019	2044 On 01-August-19	9.86	Put	Bond Future	2170	2	2170	2	0.00
08/04/2019	2044 On 01-August-19	10.39	Put	Bond Future	915	1	915	1	0.00
08/04/2019	2044 On 07-November-19			Bond Future	9.80	93.1574	9.7988	93.1574	0.00
08/04/2019	2044 On 07-November-19	10.06	Call	Bond Future	5013	5	5013	5	0.00
08/04/2019	2044 On 07-November-19	10.07	Call	Bond Future	5064	5	5064	5	0.00
08/04/2019	2044 On 07-November-19	10.05	Call	Bond Future	4962	5	4962	5	0.00
08/04/2019	2044 On 07-November-19	10.05	Put	Bond Future	2878	3	2878	3	0.00
08/04/2019	2044 On 07-November-19	10.06	Put	Bond Future	2847	3	2847	3	0.00
08/04/2019	2044 On 07-November-19	10.07	Put	Bond Future	2817	3	2817	3	0.00
08/04/2019	2046 On 02-May-19			Bond Future	112.24	112.0499	112.2402	112.0499	12,523.00
08/04/2019	2046 On 01-August-19			Bond Future	114.35	114.1559	114.3498	114.1559	0.00
08/04/2019	2046 On 07-November-19			Bond Future	115.04	114.8466	115.0444	114.8466	0.00
08/04/2019	2050 On 02-May-19			Bond Future	117.12	117.1438	117.1240	117.1438	10,717.00
08/04/2019	2050 On 01-August-19			Bond Future	117.53	117.5544	117.5340	117.5544	0.00
08/04/2019	2050 On 07-November-19			Bond Future	120.01	120.0315	120.0106	120.0315	0.00
08/04/2019	8607 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	8608 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	8657 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	AL37 On 02-May-19			Index Future	633.58	633.9030	633.5780	633.9030	0.00
08/04/2019	AL37 On 01-August-19			Index Future	645.33	645.6620	645.3310	645.6620	0.00
08/04/2019	AL37 On 07-November-19			Index Future	658.76	659.1010	658.7600	659.1010	0.00
08/04/2019	AL7T On 02-May-19			Index Future	735.27	735.7450	735.2730	735.7450	0.00
08/04/2019	AL7T On 01-August-19			Index Future	748.91	749.3930	748.9120	749.3930	0.00
08/04/2019	AL7T On 07-November-19			Index Future	764.50	764.9910	764.4960	764.9910	0.00
08/04/2019	ALBI On 02-May-19			Index Future	666.12	667.1530	666.1240	667.1530	898.00
08/04/2019	ALBI On 01-August-19			Index Future	678.48	679.5290	678.4800	679.5290	38.00
08/04/2019	ALBI On 07-November-19			Index Future	692.60	693.6730	692.5980	693.6730	0.00
08/04/2019	C002 On 31-March-32			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C007 On 31-January-37			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C023 On 28-February-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	C025 On 31-January-25			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C030 On 31-January-30			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C035 On 28-February-35			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C038 On 31-January-38			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C040 On 06-October-15			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C040 On 31-January-40			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C044 On 31-January-44			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C048 On 28-February-48			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C050 On 31-December-50			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C070 On 01-August-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C186 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C197 On 07-December-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C202 On 07-December-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C207 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C208 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C209 On 31-March-36			Price Contribution	6.25	6.2500	6.2500	6.2500	0.00
08/04/2019	C210 On 31-March-28			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C212 On 31-January-22			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C213 On 28-February-31			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C214 On 28-February-41			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C223 On 25-January-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C226 On 25-January-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C303 On 14-August-15			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C303 On 28-February-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C333 On 15-September-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C442 On 25-April-42			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	C446 On 31-March-46			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	CS23 On 25-January-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	CS26 On 02-April-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	CS33 On 15-September-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
08/04/2019	ES33 On 02-May-19			Bond Future	10.76	77.6141	10.7586	77.6141	350.00
08/04/2019	ES33 On 01-August-19			Bond Future	10.86	79.0539	10.8599	79.0539	0.00
08/04/2019	ES33 On 07-November-19			Bond Future	10.96	76.9037	10.9649	76.9037	0.00
08/04/2019	ES42 On 02-May-19			Bond Future	11.04	79.4175	11.0394	79.4175	4,919.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	ES42 On 01-August-19			Bond Future	11.14	80.8907	11.1394	80.8907	0.00
08/04/2019	ES42 On 07-November-19			Bond Future	11.24	78.3085	11.2433	78.3085	0.00
08/04/2019	GOVI On 02-May-19			GOVI	659.79	660.8860	659.7880	660.8860	449.00
08/04/2019	GOVI On 02-May-19	647.88	Call	GOVI	119080	13	119080	13	0.00
08/04/2019	GOVI On 02-May-19	647.87	Call	GOVI	119180	13	119180	13	0.00
08/04/2019	GOVI On 02-May-19	647.86	Call	GOVI	119280	13	119280	13	0.00
08/04/2019	GOVI On 02-May-19	647.88	Put	GOVI	0	0	0	0	0.00
08/04/2019	GOVI On 02-May-19	647.86	Put	GOVI	0	0	0	0	0.00
08/04/2019	GOVI On 02-May-19	647.87	Put	GOVI	0	0	0	0	0.00
08/04/2019	GOVI On 01-August-19			GOVI	672.03	673.1460	672.0260	673.1460	2.00
08/04/2019	GOVI On 01-August-19	638.69	Call	GOVI	333360	34	333360	34	0.00
08/04/2019	GOVI On 01-August-19	638.68	Call	GOVI	333460	34	333460	34	0.00
08/04/2019	GOVI On 01-August-19	638.67	Call	GOVI	333560	34	333560	34	0.00
08/04/2019	GOVI On 01-August-19	638.68	Put	GOVI	0	0	0	0	0.00
08/04/2019	GOVI On 01-August-19	638.67	Put	GOVI	0	0	0	0	0.00
08/04/2019	GOVI On 01-August-19	638.69	Put	GOVI	0	0	0	0	0.00
08/04/2019	GOVI On 07-November-19			GOVI	686.01	687.1570	686.0100	687.1570	0.00
08/04/2019	GOVI On 07-November-19	672.90	Call	GOVI	131100	14	131100	14	0.00
08/04/2019	GOVI On 07-November-19	672.91	Call	GOVI	131000	14	131000	14	0.00
08/04/2019	GOVI On 07-November-19	672.92	Call	GOVI	130900	14	130900	14	0.00
08/04/2019	GOVI On 07-November-19	672.91	Put	GOVI	0	0	0	0	0.00
08/04/2019	GOVI On 07-November-19	672.92	Put	GOVI	0	0	0	0	0.00
08/04/2019	GOVI On 07-November-19	672.90	Put	GOVI	0	0	0	0	0.00
08/04/2019	GVIX On 01-January-29			LIVE INDEX	110.00	110.0000	110.0000	110.0000	0.00
08/04/2019	IGOV On 02-May-19			Index Future	254.89	255.0520	254.8920	255.0520	723.00
08/04/2019	IGOV On 01-August-19			Index Future	259.68	259.8460	259.6830	259.8460	299.00
08/04/2019	IGOV On 07-November-19			Index Future	265.15	265.3210	265.1530	265.3210	0.00
08/04/2019	IS01 On 20-June-19			Interest Rate Swap	102.01	102.0100	102.0100	102.0100	0.00
08/04/2019	IS01 On 19-September-19			Interest Rate Swap	99.87	99.8600	99.8700	99.8600	0.00
08/04/2019	IS02 On 21-June-19			Interest Rate Swap	99.74	99.7400	99.7400	99.7400	0.00
08/04/2019	IS02 On 20-September-19			Interest Rate Swap	101.86	101.8600	101.8600	101.8600	0.00
08/04/2019	IS02 On 20-December-19			Interest Rate Swap	102.79	102.7800	102.7900	102.7800	0.00
08/04/2019	IS02 On 23-March-20			Interest Rate Swap	98.74	98.7400	98.7400	98.7400	0.00
08/04/2019	IS02 On 22-June-20			Interest Rate Swap	102.27	102.2700	102.2700	102.2700	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	IS02 On 21-September-20			Interest Rate Swap	99.21	99.2000	99.2100	99.2000	0.00
08/04/2019	IS05 On 17-December-20			Interest Rate Swap	95.95	95.9400	95.9500	95.9400	0.00
08/04/2019	IS05 On 16-March-21			Interest Rate Swap	95.07	95.0500	95.0700	95.0500	0.00
08/04/2019	IS05 On 15-June-21			Interest Rate Swap	94.14	94.1200	94.1400	94.1200	0.00
08/04/2019	IS05 On 21-September-21			Interest Rate Swap	94.17	94.1600	94.1700	94.1600	0.00
08/04/2019	IS05 On 21-December-21			Interest Rate Swap	96.26	96.2400	96.2600	96.2400	51.00
08/04/2019	IS05 On 15-March-22			Interest Rate Swap	96.29	96.2700	96.2900	96.2700	0.00
08/04/2019	IS05 On 21-June-22			Interest Rate Swap	97.37	97.3400	97.3700	97.3400	0.00
08/04/2019	IS05 On 20-September-22			Interest Rate Swap	101.20	101.1700	101.2000	101.1700	0.00
08/04/2019	IS05 On 20-December-22			Interest Rate Swap	102.36	102.3200	102.3600	102.3200	0.00
08/04/2019	IS05 On 22-March-23			Interest Rate Swap	95.60	95.5600	95.6000	95.5600	0.00
08/04/2019	IS05 On 20-June-23			Interest Rate Swap	101.58	101.5500	101.5800	101.5500	0.00
08/04/2019	IS05 On 19-September-23			Interest Rate Swap	96.97	96.9400	96.9700	96.9400	0.00
08/04/2019	IS10 On 17-December-25			Interest Rate Swap	93.03	92.9800	93.0300	92.9800	0.00
08/04/2019	IS10 On 16-March-26			Interest Rate Swap	89.95	89.8900	89.9500	89.8900	0.00
08/04/2019	IS10 On 15-June-26			Interest Rate Swap	88.63	88.5600	88.6300	88.5600	0.00
08/04/2019	IS10 On 21-September-26			Interest Rate Swap	90.77	90.6900	90.7700	90.6900	0.00
08/04/2019	IS10 On 21-December-26			Interest Rate Swap	94.56	94.4800	94.5600	94.4800	0.00
08/04/2019	IS10 On 15-March-27			Interest Rate Swap	93.09	93.0000	93.0900	93.0000	0.00
08/04/2019	IS10 On 21-June-27			Interest Rate Swap	95.15	95.0700	95.1500	95.0700	0.00
08/04/2019	IS10 On 20-September-27			Interest Rate Swap	100.64	100.5600	100.6400	100.5600	0.00
08/04/2019	IS10 On 20-December-27			Interest Rate Swap	100.98	100.9100	100.9800	100.9100	0.00
08/04/2019	IS10 On 22-March-28			Interest Rate Swap	94.40	94.3300	94.4000	94.3300	0.00
08/04/2019	IS10 On 20-June-28			Interest Rate Swap	101.66	101.5900	101.6600	101.5900	0.00
08/04/2019	IS10 On 19-September-28			Interest Rate Swap	95.13	95.0500	95.1300	95.0500	0.00
08/04/2019	J186 On 21-December-26			Interest Rate Swap	8.68	0.1077	8.6830	0.1077	0.00
08/04/2019	J207 On 15-January-20			Interest Rate Swap	9.00	0.0691	8.9970	0.0691	0.00
08/04/2019	JBAF On 19-June-19			Jibar Tradeable Future	7.03	92.9700	7.0300	92.9700	0.00
08/04/2019	JBAF On 18-September-19			Jibar Tradeable Future	7.07	92.9300	7.0700	92.9300	0.00
08/04/2019	JBAF On 18-December-19			Jibar Tradeable Future	7.13	92.8700	7.1300	92.8700	0.00
08/04/2019	R023 On 02-May-19			Bond Future	7.65	101.7946	7.6487	101.7946	66,073.00
08/04/2019	R023 On 02-May-19	8.46	Call	Bond Future	2608	3	2608	3	0.00
08/04/2019	R023 On 02-May-19	8.45	Call	Bond Future	2576	3	2576	3	0.00
08/04/2019	R023 On 02-May-19	8.44	Call	Bond Future	2544	3	2544	3	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	R023 On 02-May-19	8.45	Put	Bond Future	1	0	1	0	0.00
08/04/2019	R023 On 02-May-19	8.44	Put	Bond Future	1	0	1	0	0.00
08/04/2019	R023 On 02-May-19	8.46	Put	Bond Future	1	0	1	0	0.00
08/04/2019	R023 On 01-August-19			Bond Future	7.65	103.6829	7.6548	103.6829	0.00
08/04/2019	R023 On 01-August-19	8.93	Call	Bond Future	3871	4	3871	4	0.00
08/04/2019	R023 On 01-August-19	8.95	Call	Bond Future	3927	4	3927	4	0.00
08/04/2019	R023 On 01-August-19	8.94	Call	Bond Future	3899	4	3899	4	0.00
08/04/2019	R023 On 01-August-19	8.94	Put	Bond Future	37	0	37	0	0.00
08/04/2019	R023 On 01-August-19	8.95	Put	Bond Future	36	0	36	0	0.00
08/04/2019	R023 On 01-August-19	8.93	Put	Bond Future	38	0	38	0	0.00
08/04/2019	R023 On 07-November-19			Bond Future	7.64	101.9066	7.6421	101.9066	0.00
08/04/2019	R023 On 07-November-19	7.98	Call	Bond Future	1567	2	1567	2	0.00
08/04/2019	R023 On 07-November-19	7.99	Call	Bond Future	1588	2	1588	2	0.00
08/04/2019	R023 On 07-November-19	8.00	Call	Bond Future	1608	2	1608	2	0.00
08/04/2019	R023 On 07-November-19	8.00	Put	Bond Future	586	1	586	1	0.00
08/04/2019	R023 On 07-November-19	7.99	Put	Bond Future	594	1	594	1	0.00
08/04/2019	R023 On 07-November-19	7.98	Put	Bond Future	601	1	601	1	0.00
08/04/2019	R035 On 02-May-19			Bond Future	9.50	96.6907	9.4968	96.6907	80,557.00
08/04/2019	R035 On 02-May-19	9.74	Call	Bond Future	2261	2	2261	2	0.00
08/04/2019	R035 On 02-May-19	9.75	Call	Bond Future	2319	2	2319	2	0.00
08/04/2019	R035 On 02-May-19	9.73	Call	Bond Future	2203	2	2203	2	0.00
08/04/2019	R035 On 02-May-19	9.73	Put	Bond Future	409	0	409	0	0.00
08/04/2019	R035 On 02-May-19	9.75	Put	Bond Future	374	0	374	0	0.00
08/04/2019	R035 On 02-May-19	9.74	Put	Bond Future	391	0	391	0	0.00
08/04/2019	R035 On 01-August-19			Bond Future	9.56	98.4844	9.5551	98.4844	0.00
08/04/2019	R035 On 01-August-19	10.24	Call	Bond Future	5840	6	5840	6	0.00
08/04/2019	R035 On 01-August-19	10.23	Call	Bond Future	5782	6	5782	6	0.00
08/04/2019	R035 On 01-August-19	10.22	Call	Bond Future	5724	6	5724	6	0.00
08/04/2019	R035 On 01-August-19	10.23	Put	Bond Future	791	1	791	1	0.00
08/04/2019	R035 On 01-August-19	10.22	Put	Bond Future	804	1	804	1	0.00
08/04/2019	R035 On 01-August-19	10.24	Put	Bond Future	778	1	778	1	0.00
08/04/2019	R035 On 07-November-19			Bond Future	9.61	96.0288	9.6133	96.0288	0.00
08/04/2019	R035 On 07-November-19	9.87	Call	Bond Future	4500	5	4500	5	0.00
08/04/2019	R035 On 07-November-19	9.88	Call	Bond Future	4546	5	4546	5	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	R035 On 07-November-19	9.89	Call	Bond Future	4593	5	4593	5	0.00
08/04/2019	R035 On 07-November-19	9.87	Put	Bond Future	2581	3	2581	3	0.00
08/04/2019	R035 On 07-November-19	9.89	Put	Bond Future	2527	3	2527	3	0.00
08/04/2019	R035 On 07-November-19	9.88	Put	Bond Future	2554	3	2554	3	0.00
08/04/2019	R186 On 02-May-19			Bond Future	8.52	114.9559	8.5199	114.9559	99,788.00
08/04/2019	R186 On 02-May-19	9.03	Call	Bond Future	3018	3	3018	3	0.00
08/04/2019	R186 On 02-May-19	8.65	Call	Bond Future	1185	1	1185	1	3,250.00
08/04/2019	R186 On 02-May-19	9.02	Call	Bond Future	2964	3	2964	3	0.00
08/04/2019	R186 On 02-May-19	9.75	Call	Bond Future	6971	7	6971	7	0.00
08/04/2019	R186 On 02-May-19	10.07	Call	Bond Future	8691	9	8691	9	0.00
08/04/2019	R186 On 02-May-19	9.01	Call	Bond Future	2911	3	2911	3	0.00
08/04/2019	R186 On 02-May-19	9.30	Call	Bond Future	4499	5	4499	5	200.00
08/04/2019	R186 On 02-May-19	9.96	Call	Bond Future	8104	8	8104	8	0.00
08/04/2019	R186 On 02-May-19	9.25	Call	Bond Future	4222	4	4222	4	3,250.00
08/04/2019	R186 On 02-May-19	8.90	Call	Bond Future	2335	2	2335	2	0.00
08/04/2019	R186 On 02-May-19	8.80	Call	Bond Future	1841	2	1841	2	7,500.00
08/04/2019	R186 On 02-May-19	9.05	Call	Bond Future	3126	3	3126	3	0.00
08/04/2019	R186 On 02-May-19	8.70	Call	Bond Future	1389	1	1389	1	200.00
08/04/2019	R186 On 02-May-19	9.20	Call	Bond Future	3946	4	3946	4	90.00
08/04/2019	R186 On 02-May-19	8.62	Call	Bond Future	1069	1	1069	1	90.00
08/04/2019	R186 On 02-May-19	8.50	Call	Bond Future	670	1	670	1	7,000.00
08/04/2019	R186 On 02-May-19	9.00	Call	Bond Future	2857	3	2857	3	7,000.00
08/04/2019	R186 On 02-May-19	10.02	Call	Bond Future	8424	9	8424	9	0.00
08/04/2019	R186 On 02-May-19	8.80	Put	Bond Future	201	0	201	0	0.00
08/04/2019	R186 On 02-May-19	9.00	Put	Bond Future	66	0	66	0	7,500.00
08/04/2019	R186 On 02-May-19	8.50	Put	Bond Future	788	1	788	1	0.00
08/04/2019	R186 On 02-May-19	8.62	Put	Bond Future	480	0	480	0	0.00
08/04/2019	R186 On 02-May-19	9.30	Put	Bond Future	10	0	10	0	0.00
08/04/2019	R186 On 02-May-19	8.70	Put	Bond Future	331	0	331	0	4,150.00
08/04/2019	R186 On 02-May-19	9.05	Put	Bond Future	49	0	49	0	3,250.00
08/04/2019	R186 On 02-May-19	8.90	Put	Bond Future	118	0	118	0	4,000.00
08/04/2019	R186 On 02-May-19	9.20	Put	Bond Future	19	0	19	0	0.00
08/04/2019	R186 On 02-May-19	9.75	Put	Bond Future	0	0	0	0	7,000.00
08/04/2019	R186 On 02-May-19	10.02	Put	Bond Future	0	0	0	0	3,250.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	R186 On 02-May-19	10.07	Put	Bond Future	0	0	0	0	200.00
08/04/2019	R186 On 02-May-19	9.02	Put	Bond Future	59	0	59	0	0.00
08/04/2019	R186 On 02-May-19	9.96	Put	Bond Future	0	0	0	0	90.00
08/04/2019	R186 On 02-May-19	9.25	Put	Bond Future	14	0	14	0	0.00
08/04/2019	R186 On 02-May-19	8.65	Put	Bond Future	419	0	419	0	4,100.00
08/04/2019	R186 On 02-May-19	9.01	Put	Bond Future	62	0	62	0	0.00
08/04/2019	R186 On 02-May-19	9.03	Put	Bond Future	55	0	55	0	0.00
08/04/2019	R186 On 01-August-19			Bond Future	8.57	111.7891	8.5681	111.7891	110.00
08/04/2019	R186 On 01-August-19	8.30	Call	Bond Future	924	1	924	1	6,000.00
08/04/2019	R186 On 01-August-19	9.05	Call	Bond Future	3399	3	3399	3	6,000.00
08/04/2019	R186 On 01-August-19	9.52	Call	Bond Future	5570	6	5570	6	0.00
08/04/2019	R186 On 01-August-19	8.38	Call	Bond Future	1104	1	1104	1	0.00
08/04/2019	R186 On 01-August-19	9.54	Call	Bond Future	5665	6	5665	6	0.00
08/04/2019	R186 On 01-August-19	10.08	Call	Bond Future	8315	8	8315	8	0.00
08/04/2019	R186 On 01-August-19	8.70	Call	Bond Future	2033	2	2033	2	0.00
08/04/2019	R186 On 01-August-19	9.22	Call	Bond Future	4155	4	4155	4	0.00
08/04/2019	R186 On 01-August-19	9.53	Call	Bond Future	5617	6	5617	6	0.00
08/04/2019	R186 On 01-August-19	9.53	Put	Bond Future	269	0	269	0	0.00
08/04/2019	R186 On 01-August-19	9.22	Put	Bond Future	492	0	492	0	0.00
08/04/2019	R186 On 01-August-19	8.38	Put	Bond Future	2192	2	2192	2	0.00
08/04/2019	R186 On 01-August-19	8.70	Put	Bond Future	1280	1	1280	1	0.00
08/04/2019	R186 On 01-August-19	9.54	Put	Bond Future	262	0	262	0	0.00
08/04/2019	R186 On 01-August-19	10.08	Put	Bond Future	58	0	58	0	6,000.00
08/04/2019	R186 On 01-August-19	9.52	Put	Bond Future	275	0	275	0	0.00
08/04/2019	R186 On 01-August-19	9.05	Put	Bond Future	676	1	676	1	0.00
08/04/2019	R186 On 01-August-19	8.30	Put	Bond Future	2478	2	2478	2	0.00
08/04/2019	R186 On 07-November-19			Bond Future	8.61	114.1167	8.6062	114.1167	0.00
08/04/2019	R186 On 07-November-19	8.94	Call	Bond Future	3430	4	3430	4	0.00
08/04/2019	R186 On 07-November-19	8.95	Call	Bond Future	3467	4	3467	4	0.00
08/04/2019	R186 On 07-November-19	8.96	Call	Bond Future	3504	4	3504	4	0.00
08/04/2019	R186 On 07-November-19	8.95	Put	Bond Future	1575	2	1575	2	0.00
08/04/2019	R186 On 07-November-19	8.96	Put	Bond Future	1557	2	1557	2	0.00
08/04/2019	R186 On 07-November-19	8.94	Put	Bond Future	1592	2	1592	2	0.00
08/04/2019	R197 On 02-May-19			Bond Future	301.27	301.3264	301.2716	301.3264	2,500.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	R197 On 01-August-19			Bond Future	299.48	299.5398	299.4840	299.5398	40.00
08/04/2019	R197 On 07-November-19			Bond Future	305.79	305.8520	305.7944	305.8520	0.00
08/04/2019	R202 On 02-May-19			Bond Future	232.10	232.1411	232.1010	232.1411	8,706.00
08/04/2019	R202 On 01-August-19			Bond Future	232.51	232.5471	232.5065	232.5471	0.00
08/04/2019	R202 On 07-November-19			Bond Future	237.41	237.4474	237.4054	237.4474	0.00
08/04/2019	R207 On 02-May-19			Bond Future	6.66	102.6235	6.6587	102.6235	6,013.00
08/04/2019	R207 On 02-May-19	7.61	Call	Bond Future	633	1	633	1	0.00
08/04/2019	R207 On 02-May-19	7.63	Call	Bond Future	646	1	646	1	0.00
08/04/2019	R207 On 02-May-19	7.62	Call	Bond Future	639	1	639	1	0.00
08/04/2019	R207 On 02-May-19	7.62	Put	Bond Future	0	0	0	0	0.00
08/04/2019	R207 On 02-May-19	7.63	Put	Bond Future	0	0	0	0	0.00
08/04/2019	R207 On 02-May-19	7.61	Put	Bond Future	0	0	0	0	0.00
08/04/2019	R207 On 01-August-19			Bond Future	6.12	100.8859	6.1211	100.8859	50.00
08/04/2019	R207 On 01-August-19	7.33	Call	Bond Future	524	1	524	1	0.00
08/04/2019	R207 On 01-August-19	7.34	Call	Bond Future	529	1	529	1	0.00
08/04/2019	R207 On 01-August-19	7.35	Call	Bond Future	533	1	533	1	0.00
08/04/2019	R207 On 01-August-19	7.35	Put	Bond Future	0	0	0	0	0.00
08/04/2019	R207 On 01-August-19	7.33	Put	Bond Future	0	0	0	0	0.00
08/04/2019	R207 On 01-August-19	7.34	Put	Bond Future	0	0	0	0	0.00
08/04/2019	R207 On 07-November-19			Bond Future	3.55	102.9865	3.5465	102.9865	0.00
08/04/2019	R207 On 07-November-19	2.07	Call	Bond Future	0	0	0	0	0.00
08/04/2019	R207 On 07-November-19	2.08	Call	Bond Future	0	0	0	0	0.00
08/04/2019	R207 On 07-November-19	2.06	Call	Bond Future	0	0	0	0	0.00
08/04/2019	R207 On 07-November-19	2.06	Put	Bond Future	267	0	267	0	0.00
08/04/2019	R207 On 07-November-19	2.07	Put	Bond Future	266	0	266	0	0.00
08/04/2019	R207 On 07-November-19	2.08	Put	Bond Future	264	0	264	0	0.00
08/04/2019	R208 On 02-May-19			Bond Future	6.85	100.5030	6.8479	100.5030	15,592.00
08/04/2019	R208 On 02-May-19	8.02	Call	Bond Future	2026	2	2026	2	0.00
08/04/2019	R208 On 02-May-19	8.04	Call	Bond Future	2060	2	2060	2	0.00
08/04/2019	R208 On 02-May-19	8.03	Call	Bond Future	2043	2	2043	2	0.00
08/04/2019	R208 On 02-May-19	8.02	Put	Bond Future	0	0	0	0	0.00
08/04/2019	R208 On 02-May-19	8.04	Put	Bond Future	0	0	0	0	0.00
08/04/2019	R208 On 02-May-19	8.03	Put	Bond Future	0	0	0	0	0.00
08/04/2019	R208 On 01-August-19			Bond Future	6.74	102.3674	6.7389	102.3674	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	R208 On 01-August-19	8.17	Call	Bond Future	2173	2	2173	2	0.00
08/04/2019	R208 On 01-August-19	8.16	Call	Bond Future	2158	2	2158	2	0.00
08/04/2019	R208 On 01-August-19	8.15	Call	Bond Future	2143	2	2143	2	0.00
08/04/2019	R208 On 01-August-19	8.15	Put	Bond Future	2	0	2	0	0.00
08/04/2019	R208 On 01-August-19	8.17	Put	Bond Future	2	0	2	0	0.00
08/04/2019	R208 On 01-August-19	8.16	Put	Bond Future	2	0	2	0	0.00
08/04/2019	R208 On 07-November-19			Bond Future	6.51	101.0926	6.5138	101.0926	0.00
08/04/2019	R208 On 07-November-19	6.84	Call	Bond Future	586	1	586	1	0.00
08/04/2019	R208 On 07-November-19	6.83	Call	Bond Future	576	1	576	1	0.00
08/04/2019	R208 On 07-November-19	6.82	Call	Bond Future	565	1	565	1	0.00
08/04/2019	R208 On 07-November-19	6.83	Put	Bond Future	164	0	164	0	0.00
08/04/2019	R208 On 07-November-19	6.82	Put	Bond Future	166	0	166	0	0.00
08/04/2019	R208 On 07-November-19	6.84	Put	Bond Future	161	0	161	0	0.00
08/04/2019	R209 On 02-May-19			Bond Future	9.45	74.0349	9.4451	74.0349	101,914.00
08/04/2019	R209 On 02-May-19	9.69	Call	Bond Future	1944	2	1944	2	0.00
08/04/2019	R209 On 02-May-19	10.50	Call	Bond Future	6585	7	6585	7	0.00
08/04/2019	R209 On 02-May-19	10.71	Call	Bond Future	7787	8	7787	8	0.00
08/04/2019	R209 On 02-May-19	9.70	Call	Bond Future	1994	2	1994	2	0.00
08/04/2019	R209 On 02-May-19	9.35	Call	Bond Future	612	1	612	1	760.00
08/04/2019	R209 On 02-May-19	9.95	Call	Bond Future	3360	4	3360	4	760.00
08/04/2019	R209 On 02-May-19	9.68	Call	Bond Future	1895	2	1895	2	0.00
08/04/2019	R209 On 02-May-19	9.68	Put	Bond Future	350	0	350	0	0.00
08/04/2019	R209 On 02-May-19	9.35	Put	Bond Future	1251	1	1251	1	0.00
08/04/2019	R209 On 02-May-19	10.50	Put	Bond Future	4	0	4	0	11,560.00
08/04/2019	R209 On 02-May-19	10.71	Put	Bond Future	1	0	1	0	760.00
08/04/2019	R209 On 02-May-19	9.95	Put	Bond Future	96	0	96	0	0.00
08/04/2019	R209 On 02-May-19	9.69	Put	Bond Future	334	0	334	0	0.00
08/04/2019	R209 On 02-May-19	9.70	Put	Bond Future	319	0	319	0	0.00
08/04/2019	R209 On 01-August-19			Bond Future	9.50	75.4083	9.4970	75.4083	0.00
08/04/2019	R209 On 01-August-19	10.15	Call	Bond Future	4841	5	4841	5	0.00
08/04/2019	R209 On 01-August-19	9.30	Call	Bond Future	1404	1	1404	1	7,560.00
08/04/2019	R209 On 01-August-19	10.17	Call	Bond Future	4940	5	4940	5	0.00
08/04/2019	R209 On 01-August-19	10.46	Call	Bond Future	6409	7	6409	7	0.00
08/04/2019	R209 On 01-August-19	9.80	Call	Bond Future	3206	3	3206	3	7,560.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	R209 On 01-August-19	10.16	Call	Bond Future	4891	5	4891	5	0.00
08/04/2019	R209 On 01-August-19	10.46	Put	Bond Future	425	0	425	0	7,560.00
08/04/2019	R209 On 01-August-19	9.30	Put	Bond Future	2723	3	2723	3	0.00
08/04/2019	R209 On 01-August-19	9.80	Put	Bond Future	1242	1	1242	1	0.00
08/04/2019	R209 On 01-August-19	10.16	Put	Bond Future	691	1	691	1	0.00
08/04/2019	R209 On 01-August-19	10.15	Put	Bond Future	703	1	703	1	0.00
08/04/2019	R209 On 01-August-19	10.17	Put	Bond Future	680	1	680	1	0.00
08/04/2019	R209 On 07-November-19			Bond Future	9.55	73.8246	9.5459	73.8246	0.00
08/04/2019	R209 On 07-November-19	9.80	Call	Bond Future	3868	4	3868	4	0.00
08/04/2019	R209 On 07-November-19	9.82	Call	Bond Future	3948	4	3948	4	0.00
08/04/2019	R209 On 07-November-19	9.81	Call	Bond Future	3908	4	3908	4	0.00
08/04/2019	R209 On 07-November-19	9.81	Put	Bond Future	2209	2	2209	2	0.00
08/04/2019	R209 On 07-November-19	9.82	Put	Bond Future	2186	2	2186	2	0.00
08/04/2019	R209 On 07-November-19	9.80	Put	Bond Future	2233	2	2233	2	0.00
08/04/2019	R210 On 02-May-19			Bond Future	185.04	185.0723	185.0400	185.0723	1,628.00
08/04/2019	R210 On 01-August-19			Bond Future	188.52	188.5511	188.5181	188.5511	0.00
08/04/2019	R210 On 07-November-19			Bond Future	189.89	189.9246	189.8905	189.9246	0.00
08/04/2019	R212 On 02-May-19			Bond Future	157.26	157.2920	157.2630	157.2920	8,946.00
08/04/2019	R212 On 01-August-19			Bond Future	158.03	158.0608	158.0314	158.0608	0.00
08/04/2019	R212 On 07-November-19			Bond Future	161.36	161.3917	161.3613	161.3917	0.00
08/04/2019	R213 On 02-May-19			Bond Future	9.20	85.7124	9.1956	85.7124	28,756.00
08/04/2019	R213 On 02-May-19	9.50	Call	Bond Future	2128	2	2128	2	0.00
08/04/2019	R213 On 02-May-19	9.49	Call	Bond Future	2078	2	2078	2	0.00
08/04/2019	R213 On 02-May-19	9.48	Call	Bond Future	2028	2	2028	2	0.00
08/04/2019	R213 On 02-May-19	9.49	Put	Bond Future	236	0	236	0	0.00
08/04/2019	R213 On 02-May-19	9.48	Put	Bond Future	248	0	248	0	0.00
08/04/2019	R213 On 02-May-19	9.50	Put	Bond Future	225	0	225	0	0.00
08/04/2019	R213 On 01-August-19			Bond Future	9.25	87.3024	9.2493	87.3024	0.00
08/04/2019	R213 On 01-August-19	9.98	Call	Bond Future	4955	5	4955	5	0.00
08/04/2019	R213 On 01-August-19	9.99	Call	Bond Future	5004	5	5004	5	0.00
08/04/2019	R213 On 01-August-19	10.00	Call	Bond Future	5053	5	5053	5	0.00
08/04/2019	R213 On 01-August-19	10.00	Put	Bond Future	529	1	529	1	0.00
08/04/2019	R213 On 01-August-19	9.98	Put	Bond Future	547	1	547	1	0.00
08/04/2019	R213 On 01-August-19	9.99	Put	Bond Future	538	1	538	1	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	R213 On 07-November-19			Bond Future	9.30	85.5659	9.3022	85.5659	0.00
08/04/2019	R213 On 07-November-19	9.58	Call	Bond Future	3694	4	3694	4	0.00
08/04/2019	R213 On 07-November-19	9.59	Call	Bond Future	3733	4	3733	4	0.00
08/04/2019	R213 On 07-November-19	9.60	Call	Bond Future	3772	4	3772	4	0.00
08/04/2019	R213 On 07-November-19	9.60	Put	Bond Future	1966	2	1966	2	0.00
08/04/2019	R213 On 07-November-19	9.58	Put	Bond Future	2008	2	2008	2	0.00
08/04/2019	R213 On 07-November-19	9.59	Put	Bond Future	1987	2	1987	2	0.00
08/04/2019	R214 On 02-May-19			Bond Future	9.66	72.8875	9.6553	72.8875	21,077.00
08/04/2019	R214 On 02-May-19	9.87	Call	Bond Future	1879	2	1879	2	0.00
08/04/2019	R214 On 02-May-19	9.85	Call	Bond Future	1781	2	1781	2	0.00
08/04/2019	R214 On 02-May-19	9.86	Call	Bond Future	1830	2	1830	2	0.00
08/04/2019	R214 On 02-May-19	9.86	Put	Bond Future	429	0	429	0	0.00
08/04/2019	R214 On 02-May-19	9.87	Put	Bond Future	411	0	411	0	0.00
08/04/2019	R214 On 02-May-19	9.85	Put	Bond Future	447	0	447	0	0.00
08/04/2019	R214 On 01-August-19			Bond Future	9.71	74.2395	9.7084	74.2395	0.00
08/04/2019	R214 On 01-August-19	10.33	Call	Bond Future	4880	5	4880	5	0.00
08/04/2019	R214 On 01-August-19	10.34	Call	Bond Future	4930	5	4930	5	0.00
08/04/2019	R214 On 01-August-19	10.32	Call	Bond Future	4830	5	4830	5	0.00
08/04/2019	R214 On 01-August-19	10.32	Put	Bond Future	809	1	809	1	0.00
08/04/2019	R214 On 01-August-19	10.33	Put	Bond Future	797	1	797	1	0.00
08/04/2019	R214 On 01-August-19	10.34	Put	Bond Future	784	1	784	1	0.00
08/04/2019	R214 On 07-November-19			Bond Future	9.76	72.4850	9.7613	72.4850	0.00
08/04/2019	R214 On 07-November-19	10.01	Call	Bond Future	4042	4	4042	4	0.00
08/04/2019	R214 On 07-November-19	10.00	Call	Bond Future	4001	4	4001	4	0.00
08/04/2019	R214 On 07-November-19	10.02	Call	Bond Future	4083	4	4083	4	0.00
08/04/2019	R214 On 07-November-19	10.00	Put	Bond Future	2403	2	2403	2	0.00
08/04/2019	R214 On 07-November-19	10.01	Put	Bond Future	2378	2	2378	2	0.00
08/04/2019	R214 On 07-November-19	10.02	Put	Bond Future	2353	2	2353	2	0.00
08/04/2019	R248 On 02-May-19			Bond Future	9.64	93.3293	9.6351	93.3293	103,341.00
08/04/2019	R248 On 02-May-19	9.90	Call	Bond Future	2754	3	2754	3	0.00
08/04/2019	R248 On 02-May-19	9.89	Call	Bond Future	2687	3	2687	3	0.00
08/04/2019	R248 On 02-May-19	9.91	Call	Bond Future	2822	3	2822	3	0.00
08/04/2019	R248 On 02-May-19	9.89	Put	Bond Future	450	0	450	0	0.00
08/04/2019	R248 On 02-May-19	9.91	Put	Bond Future	412	0	412	0	0.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
08/04/2019	R248 On 02-May-19	9.90	Put	Bond Future	431	0	431	0	0.00
08/04/2019	R248 On 01-August-19			Bond Future	9.69	95.0606	9.6872	95.0606	100.00
08/04/2019	R248 On 01-August-19	10.36	Call	Bond Future	6519	7	6519	7	0.00
08/04/2019	R248 On 01-August-19	10.35	Call	Bond Future	6454	7	6454	7	0.00
08/04/2019	R248 On 01-August-19	10.34	Call	Bond Future	6389	7	6389	7	0.00
08/04/2019	R248 On 01-August-19	10.35	Put	Bond Future	885	1	885	1	0.00
08/04/2019	R248 On 01-August-19	10.34	Put	Bond Future	900	1	900	1	0.00
08/04/2019	R248 On 01-August-19	10.36	Put	Bond Future	871	1	871	1	0.00
08/04/2019	R248 On 07-November-19			Bond Future	9.74	92.5972	9.7391	92.5972	0.00
08/04/2019	R248 On 07-November-19	10.03	Call	Bond Future	5301	6	5301	6	0.00
08/04/2019	R248 On 07-November-19	10.02	Call	Bond Future	5247	5	5247	5	0.00
08/04/2019	R248 On 07-November-19	10.01	Call	Bond Future	5194	5	5194	5	0.00
08/04/2019	R248 On 07-November-19	10.02	Put	Bond Future	2836	3	2836	3	0.00
08/04/2019	R248 On 07-November-19	10.01	Put	Bond Future	2867	3	2867	3	0.00
08/04/2019	R248 On 07-November-19	10.03	Put	Bond Future	2806	3	2806	3	0.00