



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 September 2019

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
05/09/2019	0457 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	0703 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	0757 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	0804 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	0807 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	0857 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	0904 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	0908 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	0957 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	0986 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	1386 On 28-February-31			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	1409 On 28-February-41			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	2025 On 07-November-19			Bond Future	137.49	137.4904	137.4890	137.4904	1,451.00
05/09/2019	2025 On 06-February-20			Bond Future	138.51	138.5153	138.5140	138.5153	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
05/09/2019	2025 On 07-May-20			Bond Future	141.10	141.0966	141.0952	141.0966	0.00
05/09/2019	2029 On 07-November-19			Bond Future	102.06	102.0582	102.0577	102.0582	4,260.00
05/09/2019	2029 On 06-February-20			Bond Future	103.91	103.9131	103.9126	103.9131	0.00
05/09/2019	2029 On 07-May-20			Bond Future	104.74	104.7369	104.7364	104.7369	0.00
05/09/2019	2030 On 07-November-19			Bond Future	8.87	96.7684	8.8692	96.7684	72,732.00
05/09/2019	2030 On 07-November-19	9.48	Call	Bond Future	4045	4	4045	4	0.00
05/09/2019	2030 On 07-November-19	9.10	Call	Bond Future	2191	2	2191	2	5,500.00
05/09/2019	2030 On 07-November-19	9.30	Call	Bond Future	3118	3	3118	3	0.00
05/09/2019	2030 On 07-November-19	8.60	Call	Bond Future	586	1	586	1	5,500.00
05/09/2019	2030 On 07-November-19	9.49	Call	Bond Future	4098	4	4098	4	0.00
05/09/2019	2030 On 07-November-19	9.76	Call	Bond Future	5574	6	5574	6	0.00
05/09/2019	2030 On 07-November-19	9.20	Call	Bond Future	2638	3	2638	3	0.00
05/09/2019	2030 On 07-November-19	9.25	Call	Bond Future	2873	3	2873	3	0.00
05/09/2019	2030 On 07-November-19	8.40	Call	Bond Future	267	0	267	0	0.00
05/09/2019	2030 On 07-November-19	9.47	Call	Bond Future	3992	4	3992	4	0.00
05/09/2019	2030 On 07-November-19	9.70	Call	Bond Future	5241	6	5241	6	0.00
05/09/2019	2030 On 07-November-19	9.85	Call	Bond Future	6075	6	6075	6	0.00
05/09/2019	2030 On 07-November-19	8.57	Call	Bond Future	526	1	526	1	0.00
05/09/2019	2030 On 07-November-19	9.12	Call	Bond Future	2277	2	2277	2	0.00
05/09/2019	2030 On 07-November-19	8.95	Call	Bond Future	1592	2	1592	2	0.00
05/09/2019	2030 On 07-November-19	9.35	Call	Bond Future	3369	4	3369	4	0.00
05/09/2019	2030 On 07-November-19	9.35	Put	Bond Future	368	0	368	0	2,500.00
05/09/2019	2030 On 07-November-19	9.25	Put	Bond Future	485	0	485	0	5,333.00
05/09/2019	2030 On 07-November-19	8.95	Put	Bond Future	1078	1	1078	1	5,000.00
05/09/2019	2030 On 07-November-19	9.12	Put	Bond Future	696	1	696	1	0.00
05/09/2019	2030 On 07-November-19	9.70	Put	Bond Future	134	0	134	0	0.00
05/09/2019	2030 On 07-November-19	9.47	Put	Bond Future	261	0	261	0	0.00
05/09/2019	2030 On 07-November-19	9.85	Put	Bond Future	86	0	86	0	2,500.00
05/09/2019	2030 On 07-November-19	8.57	Put	Bond Future	2460	2	2460	2	0.00
05/09/2019	2030 On 07-November-19	9.10	Put	Bond Future	734	1	734	1	0.00
05/09/2019	2030 On 07-November-19	9.48	Put	Bond Future	253	0	253	0	0.00
05/09/2019	2030 On 07-November-19	8.60	Put	Bond Future	2323	2	2323	2	0.00
05/09/2019	2030 On 07-November-19	9.49	Put	Bond Future	246	0	246	0	0.00
05/09/2019	2030 On 07-November-19	9.76	Put	Bond Future	112	0	112	0	5,500.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
05/09/2019	2030 On 07-November-19	9.20	Put	Bond Future	559	0	559	0	2,750.00
05/09/2019	2030 On 07-November-19	8.40	Put	Bond Future	3323	3	3323	3	0.00
05/09/2019	2030 On 07-November-19	9.30	Put	Bond Future	423	0	423	0	2,750.00
05/09/2019	2030 On 06-February-20			Bond Future	8.93	94.4949	8.9272	94.4949	0.00
05/09/2019	2030 On 06-February-20	9.00	Call	Bond Future	2474	3	2474	3	5,820.00
05/09/2019	2030 On 06-February-20	9.14	Call	Bond Future	2986	3	2986	3	0.00
05/09/2019	2030 On 06-February-20	8.40	Call	Bond Future	843	1	843	1	5,820.00
05/09/2019	2030 On 06-February-20	9.15	Call	Bond Future	3024	3	3024	3	0.00
05/09/2019	2030 On 06-February-20	9.16	Call	Bond Future	3063	3	3063	3	0.00
05/09/2019	2030 On 06-February-20	9.16	Put	Bond Future	1622	2	1622	2	0.00
05/09/2019	2030 On 06-February-20	9.14	Put	Bond Future	1668	2	1668	2	0.00
05/09/2019	2030 On 06-February-20	8.40	Put	Bond Future	4216	4	4216	4	0.00
05/09/2019	2030 On 06-February-20	9.15	Put	Bond Future	1645	2	1645	2	0.00
05/09/2019	2030 On 06-February-20	9.00	Put	Bond Future	2020	2	2020	2	0.00
05/09/2019	2030 On 07-May-20			Bond Future	8.98	96.2339	8.9835	96.2339	0.00
05/09/2019	2030 On 07-May-20	8.80	Call	Bond Future	2237	2	2237	2	0.00
05/09/2019	2030 On 07-May-20	8.79	Call	Bond Future	2207	2	2207	2	0.00
05/09/2019	2030 On 07-May-20	8.78	Call	Bond Future	2178	2	2178	2	0.00
05/09/2019	2030 On 07-May-20	8.79	Put	Bond Future	3403	3	3403	3	0.00
05/09/2019	2030 On 07-May-20	8.78	Put	Bond Future	3436	3	3436	3	0.00
05/09/2019	2030 On 07-May-20	8.80	Put	Bond Future	3370	3	3370	3	0.00
05/09/2019	2032 On 07-November-19			Bond Future	9.25	93.9122	9.2502	93.9122	47,957.00
05/09/2019	2032 On 07-November-19	9.72	Call	Bond Future	3665	4	3665	4	0.00
05/09/2019	2032 On 07-November-19	9.71	Call	Bond Future	3611	4	3611	4	0.00
05/09/2019	2032 On 07-November-19	9.70	Call	Bond Future	3558	4	3558	4	0.00
05/09/2019	2032 On 07-November-19	9.71	Put	Bond Future	506	0	506	0	0.00
05/09/2019	2032 On 07-November-19	9.70	Put	Bond Future	518	0	518	0	0.00
05/09/2019	2032 On 07-November-19	9.72	Put	Bond Future	493	0	493	0	0.00
05/09/2019	2032 On 06-February-20			Bond Future	9.32	95.5962	9.3162	95.5962	0.00
05/09/2019	2032 On 06-February-20	9.39	Call	Bond Future	2816	3	2816	3	0.00
05/09/2019	2032 On 06-February-20	9.40	Call	Bond Future	2853	3	2853	3	0.00
05/09/2019	2032 On 06-February-20	9.38	Call	Bond Future	2778	3	2778	3	0.00
05/09/2019	2032 On 06-February-20	9.38	Put	Bond Future	2346	2	2346	2	0.00
05/09/2019	2032 On 06-February-20	9.39	Put	Bond Future	2315	2	2315	2	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
05/09/2019	2032 On 06-February-20	9.40	Put	Bond Future	2286	2	2286	2	0.00
05/09/2019	2032 On 07-May-20			Bond Future	9.38	93.1953	9.3788	93.1953	0.00
05/09/2019	2032 On 07-May-20	9.17	Call	Bond Future	2463	3	2463	3	0.00
05/09/2019	2032 On 07-May-20	9.19	Call	Bond Future	2527	3	2527	3	0.00
05/09/2019	2032 On 07-May-20	9.18	Call	Bond Future	2495	3	2495	3	0.00
05/09/2019	2032 On 07-May-20	9.18	Put	Bond Future	3837	4	3837	4	0.00
05/09/2019	2032 On 07-May-20	9.19	Put	Bond Future	3801	4	3801	4	0.00
05/09/2019	2032 On 07-May-20	9.17	Put	Bond Future	3874	4	3874	4	0.00
05/09/2019	2033 On 07-November-19			Bond Future	102.74	102.8545	102.7354	102.8545	6,260.00
05/09/2019	2033 On 06-February-20			Bond Future	104.60	104.7238	104.6028	104.7238	0.00
05/09/2019	2033 On 07-May-20			Bond Future	105.36	105.4797	105.3564	105.4797	0.00
05/09/2019	2037 On 07-November-19			Bond Future	9.65	93.0332	9.6463	93.0332	60,745.00
05/09/2019	2037 On 07-November-19	9.95	Call	Bond Future	3144	3	3144	3	0.00
05/09/2019	2037 On 07-November-19	9.97	Call	Bond Future	3251	3	3251	3	0.00
05/09/2019	2037 On 07-November-19	9.96	Call	Bond Future	3197	3	3197	3	0.00
05/09/2019	2037 On 07-November-19	9.96	Put	Bond Future	823	1	823	1	0.00
05/09/2019	2037 On 07-November-19	9.97	Put	Bond Future	803	1	803	1	0.00
05/09/2019	2037 On 07-November-19	9.95	Put	Bond Future	844	1	844	1	0.00
05/09/2019	2037 On 06-February-20			Bond Future	9.71	90.4422	9.7147	90.4422	0.00
05/09/2019	2037 On 06-February-20	9.68	Call	Bond Future	2752	3	2752	3	0.00
05/09/2019	2037 On 06-February-20	9.67	Call	Bond Future	2713	3	2713	3	0.00
05/09/2019	2037 On 06-February-20	9.66	Call	Bond Future	2675	3	2675	3	0.00
05/09/2019	2037 On 06-February-20	9.67	Put	Bond Future	3054	3	3054	3	0.00
05/09/2019	2037 On 06-February-20	9.66	Put	Bond Future	3093	3	3093	3	0.00
05/09/2019	2037 On 06-February-20	9.68	Put	Bond Future	3017	3	3017	3	0.00
05/09/2019	2037 On 07-May-20			Bond Future	9.78	92.1066	9.7817	92.1066	0.00
05/09/2019	2037 On 07-May-20	9.59	Call	Bond Future	2970	3	2970	3	0.00
05/09/2019	2037 On 07-May-20	9.60	Call	Bond Future	3005	3	3005	3	0.00
05/09/2019	2037 On 07-May-20	9.61	Call	Bond Future	3041	3	3041	3	0.00
05/09/2019	2037 On 07-May-20	9.61	Put	Bond Future	4344	4	4344	4	0.00
05/09/2019	2037 On 07-May-20	9.59	Put	Bond Future	4427	4	4427	4	0.00
05/09/2019	2037 On 07-May-20	9.60	Put	Bond Future	4385	4	4385	4	0.00
05/09/2019	2038 On 07-November-19			Bond Future	121.15	121.1466	121.1462	121.1466	21,859.00
05/09/2019	2038 On 06-February-20			Bond Future	121.69	121.6902	121.6898	121.6902	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
05/09/2019	2038 On 07-May-20			Bond Future	123.96	123.9579	123.9575	123.9579	0.00
05/09/2019	2040 On 07-November-19			Bond Future	9.79	95.9294	9.7923	95.9294	40,851.00
05/09/2019	2040 On 07-November-19	10.03	Call	Bond Future	3030	3	3030	3	0.00
05/09/2019	2040 On 07-November-19	10.04	Call	Bond Future	3085	3	3085	3	0.00
05/09/2019	2040 On 07-November-19	9.80	Call	Bond Future	1900	2	1900	2	1,260.00
05/09/2019	2040 On 07-November-19	9.30	Call	Bond Future	398	0	398	0	1,260.00
05/09/2019	2040 On 07-November-19	10.05	Call	Bond Future	3141	3	3141	3	0.00
05/09/2019	2040 On 07-November-19	10.05	Put	Bond Future	1051	1	1051	1	0.00
05/09/2019	2040 On 07-November-19	10.03	Put	Bond Future	1100	1	1100	1	0.00
05/09/2019	2040 On 07-November-19	9.80	Put	Bond Future	1836	2	1836	2	0.00
05/09/2019	2040 On 07-November-19	9.30	Put	Bond Future	4607	4	4607	4	0.00
05/09/2019	2040 On 07-November-19	10.04	Put	Bond Future	1075	1	1075	1	0.00
05/09/2019	2040 On 06-February-20			Bond Future	9.86	93.1398	9.8622	93.1398	0.00
05/09/2019	2040 On 06-February-20	8.40	Call	Bond Future	94	0	94	0	0.00
05/09/2019	2040 On 06-February-20	9.74	Call	Bond Future	2563	3	2563	3	0.00
05/09/2019	2040 On 06-February-20	9.76	Call	Bond Future	2643	3	2643	3	0.00
05/09/2019	2040 On 06-February-20	9.00	Call	Bond Future	514	1	514	1	0.00
05/09/2019	2040 On 06-February-20	9.75	Call	Bond Future	2603	3	2603	3	0.00
05/09/2019	2040 On 06-February-20	9.75	Put	Bond Future	3524	3	3524	3	0.00
05/09/2019	2040 On 06-February-20	9.76	Put	Bond Future	3481	3	3481	3	0.00
05/09/2019	2040 On 06-February-20	9.00	Put	Bond Future	7979	8	7979	8	0.00
05/09/2019	2040 On 06-February-20	9.74	Put	Bond Future	3567	3	3567	3	0.00
05/09/2019	2040 On 06-February-20	8.40	Put	Bond Future	13321	13	13321	13	0.00
05/09/2019	2040 On 07-May-20			Bond Future	9.93	94.8539	9.9306	94.8539	0.00
05/09/2019	2040 On 07-May-20	9.75	Call	Bond Future	3192	3	3192	3	0.00
05/09/2019	2040 On 07-May-20	9.74	Call	Bond Future	3154	3	3154	3	0.00
05/09/2019	2040 On 07-May-20	9.73	Call	Bond Future	3116	3	3116	3	0.00
05/09/2019	2040 On 07-May-20	9.73	Put	Bond Future	4751	5	4751	5	0.00
05/09/2019	2040 On 07-May-20	9.75	Put	Bond Future	4663	4	4663	4	0.00
05/09/2019	2040 On 07-May-20	9.74	Put	Bond Future	4707	5	4707	5	0.00
05/09/2019	2044 On 07-November-19			Bond Future	9.84	92.7400	9.8357	92.7400	38,089.00
05/09/2019	2044 On 07-November-19	10.06	Call	Bond Future	3025	3	3025	3	0.00
05/09/2019	2044 On 07-November-19	10.52	Call	Bond Future	5867	6	5867	6	0.00
05/09/2019	2044 On 07-November-19	10.05	Call	Bond Future	2970	3	2970	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
05/09/2019	2044 On 07-November-19	10.07	Call	Bond Future	3081	3	3081	3	0.00
05/09/2019	2044 On 07-November-19	9.19	Call	Bond Future	204	0	204	0	328.00
05/09/2019	2044 On 07-November-19	9.74	Call	Bond Future	1518	2	1518	2	328.00
05/09/2019	2044 On 07-November-19	10.05	Put	Bond Future	1197	1	1197	1	0.00
05/09/2019	2044 On 07-November-19	9.19	Put	Bond Future	5921	6	5921	6	0.00
05/09/2019	2044 On 07-November-19	10.07	Put	Bond Future	1145	1	1145	1	0.00
05/09/2019	2044 On 07-November-19	9.74	Put	Bond Future	2329	2	2329	2	0.00
05/09/2019	2044 On 07-November-19	10.06	Put	Bond Future	1171	1	1171	1	0.00
05/09/2019	2044 On 07-November-19	10.52	Put	Bond Future	404	0	404	0	328.00
05/09/2019	2044 On 06-February-20			Bond Future	9.90	90.0185	9.9032	90.0185	0.00
05/09/2019	2044 On 06-February-20	9.09	Call	Bond Future	613	1	613	1	328.00
05/09/2019	2044 On 06-February-20	9.77	Call	Bond Future	2585	3	2585	3	0.00
05/09/2019	2044 On 06-February-20	9.74	Call	Bond Future	2467	3	2467	3	328.00
05/09/2019	2044 On 06-February-20	9.76	Call	Bond Future	2545	3	2545	3	0.00
05/09/2019	2044 On 06-February-20	10.78	Call	Bond Future	7823	8	7823	8	0.00
05/09/2019	2044 On 06-February-20	9.78	Call	Bond Future	2624	3	2624	3	0.00
05/09/2019	2044 On 06-February-20	9.76	Put	Bond Future	3748	4	3748	4	0.00
05/09/2019	2044 On 06-February-20	9.78	Put	Bond Future	3657	4	3657	4	0.00
05/09/2019	2044 On 06-February-20	10.78	Put	Bond Future	1008	1	1008	1	328.00
05/09/2019	2044 On 06-February-20	9.77	Put	Bond Future	3702	4	3702	4	0.00
05/09/2019	2044 On 06-February-20	9.74	Put	Bond Future	3839	4	3839	4	0.00
05/09/2019	2044 On 06-February-20	9.09	Put	Bond Future	7814	8	7814	8	0.00
05/09/2019	2044 On 07-May-20			Bond Future	9.97	91.6752	9.9691	91.6752	0.00
05/09/2019	2044 On 07-May-20	9.79	Call	Bond Future	3278	3	3278	3	0.00
05/09/2019	2044 On 07-May-20	9.81	Call	Bond Future	3357	3	3357	3	0.00
05/09/2019	2044 On 07-May-20	9.26	Call	Bond Future	1521	2	1521	2	556.00
05/09/2019	2044 On 07-May-20	9.33	Call	Bond Future	1714	2	1714	2	100.00
05/09/2019	2044 On 07-May-20	9.98	Call	Bond Future	4056	4	4056	4	100.00
05/09/2019	2044 On 07-May-20	9.80	Call	Bond Future	3317	3	3317	3	0.00
05/09/2019	2044 On 07-May-20	9.91	Call	Bond Future	3760	4	3760	4	556.00
05/09/2019	2044 On 07-May-20	11.02	Call	Bond Future	9432	10	9432	10	0.00
05/09/2019	2044 On 07-May-20	11.09	Call	Bond Future	9801	10	9801	10	0.00
05/09/2019	2044 On 07-May-20	9.80	Put	Bond Future	4723	5	4723	5	0.00
05/09/2019	2044 On 07-May-20	9.26	Put	Bond Future	7671	7	7671	7	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
05/09/2019	2044 On 07-May-20	9.91	Put	Bond Future	4247	4	4247	4	0.00
05/09/2019	2044 On 07-May-20	9.98	Put	Bond Future	3966	4	3966	4	0.00
05/09/2019	2044 On 07-May-20	11.02	Put	Bond Future	1459	1	1459	1	556.00
05/09/2019	2044 On 07-May-20	11.09	Put	Bond Future	1341	1	1341	1	100.00
05/09/2019	2044 On 07-May-20	9.79	Put	Bond Future	4768	5	4768	5	0.00
05/09/2019	2044 On 07-May-20	9.33	Put	Bond Future	7225	7	7225	7	0.00
05/09/2019	2044 On 07-May-20	9.81	Put	Bond Future	4678	5	4678	5	0.00
05/09/2019	2046 On 07-November-19			Bond Future	111.52	111.6258	111.5235	111.6258	17,994.00
05/09/2019	2046 On 06-February-20			Bond Future	113.55	113.6545	113.5505	113.6545	0.00
05/09/2019	2046 On 07-May-20			Bond Future	113.92	114.0243	113.9183	114.0243	0.00
05/09/2019	2050 On 07-November-19			Bond Future	116.29	116.7534	116.2855	116.7534	12,882.00
05/09/2019	2050 On 06-February-20			Bond Future	116.56	117.0397	116.5636	117.0397	0.00
05/09/2019	2050 On 07-May-20			Bond Future	118.74	119.2209	118.7357	119.2209	0.00
05/09/2019	8607 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	8608 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	8657 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	AL37 On 07-November-19			Index Future	668.48	669.2500	668.4810	669.2500	0.00
05/09/2019	AL37 On 06-February-20			Index Future	680.47	681.2510	680.4690	681.2510	0.00
05/09/2019	AL37 On 07-May-20			Index Future	692.99	693.7860	692.9900	693.7860	0.00
05/09/2019	AL7T On 07-November-19			Index Future	779.99	781.7510	779.9870	781.7510	120.00
05/09/2019	AL7T On 06-February-20			Index Future	793.97	795.7690	793.9740	795.7690	0.00
05/09/2019	AL7T On 07-May-20			Index Future	808.58	810.4120	808.5830	810.4120	0.00
05/09/2019	ALBI On 07-November-19			Index Future	698.31	699.9390	698.3050	699.9390	220.00
05/09/2019	ALBI On 06-February-20			Index Future	710.83	712.4900	710.8280	712.4900	0.00
05/09/2019	ALBI On 07-May-20			Index Future	723.91	725.6010	723.9070	725.6010	0.00
05/09/2019	C002 On 31-March-32			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C007 On 31-January-37			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C023 On 28-February-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C025 On 31-January-25			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C030 On 31-January-30			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C035 On 28-February-35			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C038 On 31-January-38			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C040 On 06-October-15			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C040 On 31-January-40			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
05/09/2019	C044 On 31-January-44			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C048 On 28-February-48			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C050 On 31-December-50			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C070 On 01-August-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C186 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C197 On 07-December-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C202 On 07-December-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C207 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C208 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C209 On 31-March-36			Price Contribution	6.25	6.2500	6.2500	6.2500	0.00
05/09/2019	C210 On 31-March-28			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C212 On 31-January-22			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C213 On 28-February-31			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C214 On 28-February-41			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C223 On 25-January-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C226 On 25-January-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C303 On 14-August-15			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C303 On 28-February-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C333 On 15-September-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C442 On 25-April-42			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	C446 On 31-March-46			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	CS23 On 25-January-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	CS26 On 02-April-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	CS33 On 15-September-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
05/09/2019	ES33 On 07-November-19			Bond Future	10.79	77.9626	10.7923	77.9626	350.00
05/09/2019	ES33 On 06-February-20			Bond Future	10.91	79.3606	10.9089	79.3606	0.00
05/09/2019	ES33 On 07-May-20			Bond Future	11.02	77.0271	11.0211	77.0271	0.00
05/09/2019	ES42 On 07-November-19			Bond Future	11.14	78.9355	11.1423	78.9355	4,919.00
05/09/2019	ES42 On 06-February-20			Bond Future	11.25	80.3509	11.2540	80.3509	0.00
05/09/2019	ES42 On 07-May-20			Bond Future	11.37	77.5649	11.3661	77.5649	0.00
05/09/2019	GOVI On 07-November-19			GOVI	691.37	693.0520	691.3710	693.0520	1,199.00
05/09/2019	GOVI On 07-November-19	672.90	Call	GOVI	184710	20	184710	20	0.00
05/09/2019	GOVI On 07-November-19	672.91	Call	GOVI	184610	20	184610	20	0.00
05/09/2019	GOVI On 07-November-19	672.92	Call	GOVI	184510	20	184510	20	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
05/09/2019	GOVI On 07-November-19	672.91	Put	GOVI	0	0	0	0	0.00
05/09/2019	GOVI On 07-November-19	672.92	Put	GOVI	0	0	0	0	0.00
05/09/2019	GOVI On 07-November-19	672.90	Put	GOVI	0	0	0	0	0.00
05/09/2019	GOVI On 06-February-20			GOVI	703.77	705.4800	703.7690	705.4800	0.00
05/09/2019	GOVI On 06-February-20	703.15	Call	GOVI	6190	2	6190	2	0.00
05/09/2019	GOVI On 06-February-20	703.14	Call	GOVI	6290	2	6290	2	0.00
05/09/2019	GOVI On 06-February-20	703.13	Call	GOVI	6390	2	6390	2	0.00
05/09/2019	GOVI On 06-February-20	703.13	Put	GOVI	0	0	0	0	0.00
05/09/2019	GOVI On 06-February-20	703.15	Put	GOVI	0	0	0	0	0.00
05/09/2019	GOVI On 06-February-20	703.14	Put	GOVI	0	0	0	0	0.00
05/09/2019	GOVI On 07-May-20			GOVI	716.72	718.4610	716.7190	718.4610	0.00
05/09/2019	GOVI On 07-May-20	719.98	Call	GOVI	0	0	0	0	0.00
05/09/2019	GOVI On 07-May-20	720.00	Call	GOVI	0	0	0	0	0.00
05/09/2019	GOVI On 07-May-20	719.99	Call	GOVI	0	0	0	0	0.00
05/09/2019	GOVI On 07-May-20	720.00	Put	GOVI	32810	2	32810	2	0.00
05/09/2019	GOVI On 07-May-20	719.98	Put	GOVI	32610	2	32610	2	0.00
05/09/2019	GOVI On 07-May-20	719.99	Put	GOVI	32710	2	32710	2	0.00
05/09/2019	GVIX On 01-January-29			LIVE INDEX	110.00	110.0000	110.0000	110.0000	0.00
05/09/2019	IGOV On 07-November-19			Index Future	262.70	262.8510	262.6970	262.8510	1,017.00
05/09/2019	IGOV On 06-February-20			Index Future	267.47	267.6280	267.4720	267.6280	0.00
05/09/2019	IGOV On 07-May-20			Index Future	272.46	272.6150	272.4560	272.6150	0.00
05/09/2019	IS01 On 19-September-19			Interest Rate Swap	99.85	99.8500	99.8500	99.8500	0.00
05/09/2019	IS02 On 20-September-19			Interest Rate Swap	101.84	101.8400	101.8400	101.8400	0.00
05/09/2019	IS02 On 20-December-19			Interest Rate Swap	102.70	102.6900	102.7000	102.6900	0.00
05/09/2019	IS02 On 23-March-20			Interest Rate Swap	98.54	98.5400	98.5400	98.5400	0.00
05/09/2019	IS02 On 22-June-20			Interest Rate Swap	101.94	101.9300	101.9400	101.9300	0.00
05/09/2019	IS02 On 21-September-20			Interest Rate Swap	98.73	98.7200	98.7300	98.7200	0.00
05/09/2019	IS05 On 17-December-20			Interest Rate Swap	95.30	95.3000	95.3000	95.3000	0.00
05/09/2019	IS05 On 16-March-21			Interest Rate Swap	94.24	94.2400	94.2400	94.2400	0.00
05/09/2019	IS05 On 15-June-21			Interest Rate Swap	93.14	93.1300	93.1400	93.1300	0.00
05/09/2019	IS05 On 21-September-21			Interest Rate Swap	93.00	92.9900	93.0000	92.9900	0.00
05/09/2019	IS05 On 21-December-21			Interest Rate Swap	94.94	94.9300	94.9400	94.9300	51.00
05/09/2019	IS05 On 15-March-22			Interest Rate Swap	94.85	94.8300	94.8500	94.8300	0.00
05/09/2019	IS05 On 21-June-22			Interest Rate Swap	95.79	95.7700	95.7900	95.7700	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
05/09/2019	IS05 On 20-September-22			Interest Rate Swap	99.50	99.4800	99.5000	99.4800	0.00
05/09/2019	IS05 On 20-December-22			Interest Rate Swap	100.52	100.5100	100.5200	100.5100	0.00
05/09/2019	IS05 On 22-March-23			Interest Rate Swap	93.58	93.5600	93.5800	93.5600	0.00
05/09/2019	IS05 On 20-June-23			Interest Rate Swap	99.46	99.4500	99.4600	99.4500	0.00
05/09/2019	IS05 On 19-September-23			Interest Rate Swap	94.69	94.6800	94.6900	94.6800	0.00
05/09/2019	IS10 On 17-December-25			Interest Rate Swap	89.77	89.7600	89.7700	89.7600	0.00
05/09/2019	IS10 On 16-March-26			Interest Rate Swap	86.57	86.5600	86.5700	86.5600	0.00
05/09/2019	IS10 On 15-June-26			Interest Rate Swap	85.17	85.1500	85.1700	85.1500	0.00
05/09/2019	IS10 On 21-September-26			Interest Rate Swap	87.28	87.2600	87.2800	87.2600	0.00
05/09/2019	IS10 On 21-December-26			Interest Rate Swap	91.10	91.0700	91.1000	91.0700	0.00
05/09/2019	IS10 On 15-March-27			Interest Rate Swap	89.54	89.5100	89.5400	89.5100	0.00
05/09/2019	IS10 On 21-June-27			Interest Rate Swap	91.60	91.5700	91.6000	91.5700	0.00
05/09/2019	IS10 On 20-September-27			Interest Rate Swap	97.12	97.0900	97.1200	97.0900	0.00
05/09/2019	IS10 On 20-December-27			Interest Rate Swap	97.44	97.4200	97.4400	97.4200	0.00
05/09/2019	IS10 On 22-March-28			Interest Rate Swap	90.72	90.7100	90.7200	90.7100	0.00
05/09/2019	IS10 On 20-June-28			Interest Rate Swap	98.08	98.0900	98.0800	98.0900	0.00
05/09/2019	IS10 On 19-September-28			Interest Rate Swap	91.42	91.4200	91.4200	91.4200	0.00
05/09/2019	J186 On 21-December-26			Interest Rate Swap	8.68	0.1077	8.6830	0.1077	0.00
05/09/2019	J207 On 15-January-20			Interest Rate Swap	9.00	0.0691	8.9970	0.0691	0.00
05/09/2019	JBAF On 18-September-19			Jibar Tradeable Future	7.07	92.9300	7.0700	92.9300	0.00
05/09/2019	JBAF On 18-December-19			Jibar Tradeable Future	7.13	92.8700	7.1300	92.8700	0.00
05/09/2019	R023 On 07-November-19			Bond Future	7.25	103.0936	7.2515	103.0936	53,397.00
05/09/2019	R023 On 07-November-19	7.98	Call	Bond Future	2137	2	2137	2	0.00
05/09/2019	R023 On 07-November-19	8.00	Call	Bond Future	2191	2	2191	2	0.00
05/09/2019	R023 On 07-November-19	7.99	Call	Bond Future	2164	2	2164	2	0.00
05/09/2019	R023 On 07-November-19	7.98	Put	Bond Future	40	0	40	0	0.00
05/09/2019	R023 On 07-November-19	8.00	Put	Bond Future	38	0	38	0	0.00
05/09/2019	R023 On 07-November-19	7.99	Put	Bond Future	39	0	39	0	0.00
05/09/2019	R023 On 06-February-20			Bond Future	7.26	104.9422	7.2566	104.9422	0.00
05/09/2019	R023 On 06-February-20	7.52	Call	Bond Future	1183	1	1183	1	0.00
05/09/2019	R023 On 06-February-20	7.54	Call	Bond Future	1222	1	1222	1	0.00
05/09/2019	R023 On 06-February-20	7.53	Call	Bond Future	1203	1	1203	1	0.00
05/09/2019	R023 On 06-February-20	7.53	Put	Bond Future	464	0	464	0	0.00
05/09/2019	R023 On 06-February-20	7.54	Put	Bond Future	457	0	457	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
05/09/2019	R023 On 06-February-20	7.52	Put	Bond Future	472	0	472	0	0.00
05/09/2019	R023 On 07-May-20			Bond Future	7.23	102.9404	7.2308	102.9404	0.00
05/09/2019	R023 On 07-May-20	6.90	Call	Bond Future	469	1	469	1	0.00
05/09/2019	R023 On 07-May-20	6.91	Call	Bond Future	480	1	480	1	0.00
05/09/2019	R023 On 07-May-20	6.89	Call	Bond Future	458	0	458	0	0.00
05/09/2019	R023 On 07-May-20	6.89	Put	Bond Future	1320	1	1320	1	0.00
05/09/2019	R023 On 07-May-20	6.90	Put	Bond Future	1305	1	1305	1	0.00
05/09/2019	R023 On 07-May-20	6.91	Put	Bond Future	1291	1	1291	1	0.00
05/09/2019	R035 On 07-November-19			Bond Future	9.52	96.8204	9.5191	96.8204	94,357.00
05/09/2019	R035 On 07-November-19	9.87	Call	Bond Future	3401	4	3401	4	0.00
05/09/2019	R035 On 07-November-19	9.52	Call	Bond Future	1712	2	1712	2	3,500.00
05/09/2019	R035 On 07-November-19	8.92	Call	Bond Future	219	0	219	0	3,500.00
05/09/2019	R035 On 07-November-19	9.88	Call	Bond Future	3457	4	3457	4	0.00
05/09/2019	R035 On 07-November-19	9.89	Call	Bond Future	3513	4	3513	4	0.00
05/09/2019	R035 On 07-November-19	10.21	Call	Bond Future	5425	6	5425	6	0.00
05/09/2019	R035 On 07-November-19	9.88	Put	Bond Future	745	1	745	1	0.00
05/09/2019	R035 On 07-November-19	9.87	Put	Bond Future	763	1	763	1	0.00
05/09/2019	R035 On 07-November-19	10.21	Put	Bond Future	332	0	332	0	3,500.00
05/09/2019	R035 On 07-November-19	9.52	Put	Bond Future	1705	2	1705	2	0.00
05/09/2019	R035 On 07-November-19	8.92	Put	Bond Future	4984	5	4984	5	0.00
05/09/2019	R035 On 07-November-19	9.89	Put	Bond Future	728	1	728	1	0.00
05/09/2019	R035 On 06-February-20			Bond Future	9.59	98.5566	9.5919	98.5566	0.00
05/09/2019	R035 On 06-February-20	9.61	Call	Bond Future	2873	3	2873	3	0.00
05/09/2019	R035 On 06-February-20	9.60	Call	Bond Future	2833	3	2833	3	0.00
05/09/2019	R035 On 06-February-20	9.59	Call	Bond Future	2794	3	2794	3	0.00
05/09/2019	R035 On 06-February-20	9.59	Put	Bond Future	2808	3	2808	3	0.00
05/09/2019	R035 On 06-February-20	9.61	Put	Bond Future	2737	3	2737	3	0.00
05/09/2019	R035 On 06-February-20	9.60	Put	Bond Future	2773	3	2773	3	0.00
05/09/2019	R035 On 07-May-20			Bond Future	9.66	95.8664	9.6554	95.8664	0.00
05/09/2019	R035 On 07-May-20	9.11	Call	Bond Future	1751	2	1751	2	5,000.00
05/09/2019	R035 On 07-May-20	9.75	Call	Bond Future	3952	4	3952	4	5,000.00
05/09/2019	R035 On 07-May-20	9.47	Call	Bond Future	2886	3	2886	3	0.00
05/09/2019	R035 On 07-May-20	9.49	Call	Bond Future	2958	3	2958	3	0.00
05/09/2019	R035 On 07-May-20	10.75	Call	Bond Future	8866	9	8866	9	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
05/09/2019	R035 On 07-May-20	9.48	Call	Bond Future	2922	3	2922	3	0.00
05/09/2019	R035 On 07-May-20	9.47	Put	Bond Future	4282	4	4282	4	0.00
05/09/2019	R035 On 07-May-20	9.75	Put	Bond Future	3252	3	3252	3	0.00
05/09/2019	R035 On 07-May-20	9.49	Put	Bond Future	4202	4	4202	4	0.00
05/09/2019	R035 On 07-May-20	10.75	Put	Bond Future	1206	1	1206	1	5,000.00
05/09/2019	R035 On 07-May-20	9.48	Put	Bond Future	4242	4	4242	4	0.00
05/09/2019	R035 On 07-May-20	9.11	Put	Bond Future	5944	6	5944	6	0.00
05/09/2019	R035 On 06-August-20			Bond Future	9.72	97.6484	9.7188	97.6484	0.00
05/09/2019	R035 On 06-August-20	9.00	Call	Bond Future	2524	3	2524	3	24,761.00
05/09/2019	R035 On 06-August-20	9.92	Call	Bond Future	5703	6	5703	6	0.00
05/09/2019	R035 On 06-August-20	9.91	Call	Bond Future	5662	6	5662	6	0.00
05/09/2019	R035 On 06-August-20	9.93	Call	Bond Future	5744	6	5744	6	0.00
05/09/2019	R035 On 06-August-20	9.91	Put	Bond Future	4274	4	4274	4	0.00
05/09/2019	R035 On 06-August-20	9.93	Put	Bond Future	4212	4	4212	4	0.00
05/09/2019	R035 On 06-August-20	9.00	Put	Bond Future	8022	8	8022	8	0.00
05/09/2019	R035 On 06-August-20	9.92	Put	Bond Future	4243	4	4243	4	0.00
05/09/2019	R186 On 07-November-19			Bond Future	8.16	116.7762	8.1556	116.7762	127,184.00
05/09/2019	R186 On 07-November-19	8.25	Call	Bond Future	1380	2	1380	2	3,750.00
05/09/2019	R186 On 07-November-19	8.73	Call	Bond Future	3425	4	3425	4	0.00
05/09/2019	R186 On 07-November-19	8.23	Call	Bond Future	1313	1	1313	1	4,955.00
05/09/2019	R186 On 07-November-19	8.94	Call	Bond Future	4479	5	4479	5	0.00
05/09/2019	R186 On 07-November-19	8.20	Call	Bond Future	1217	1	1217	1	0.00
05/09/2019	R186 On 07-November-19	8.96	Call	Bond Future	4581	5	4581	5	0.00
05/09/2019	R186 On 07-November-19	8.95	Call	Bond Future	4530	5	4530	5	0.00
05/09/2019	R186 On 07-November-19	8.96	Put	Bond Future	90	0	90	0	0.00
05/09/2019	R186 On 07-November-19	8.23	Put	Bond Future	888	1	888	1	0.00
05/09/2019	R186 On 07-November-19	8.20	Put	Bond Future	963	1	963	1	7,500.00
05/09/2019	R186 On 07-November-19	8.95	Put	Bond Future	93	0	93	0	0.00
05/09/2019	R186 On 07-November-19	8.73	Put	Bond Future	194	0	194	0	4,955.00
05/09/2019	R186 On 07-November-19	8.94	Put	Bond Future	96	0	96	0	0.00
05/09/2019	R186 On 07-November-19	8.25	Put	Bond Future	841	1	841	1	3,750.00
05/09/2019	R186 On 06-February-20			Bond Future	8.20	113.5663	8.1994	113.5663	0.00
05/09/2019	R186 On 06-February-20	8.11	Call	Bond Future	1592	2	1592	2	1,007.00
05/09/2019	R186 On 06-February-20	8.55	Call	Bond Future	3034	3	3034	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
05/09/2019	R186 On 06-February-20	8.50	Call	Bond Future	2844	3	2844	3	0.00
05/09/2019	R186 On 06-February-20	8.57	Call	Bond Future	3111	3	3111	3	0.00
05/09/2019	R186 On 06-February-20	9.00	Call	Bond Future	4916	5	4916	5	0.00
05/09/2019	R186 On 06-February-20	8.56	Call	Bond Future	3072	3	3072	3	0.00
05/09/2019	R186 On 06-February-20	8.56	Put	Bond Future	1092	1	1092	1	0.00
05/09/2019	R186 On 06-February-20	9.00	Put	Bond Future	580	1	580	1	1,007.00
05/09/2019	R186 On 06-February-20	8.50	Put	Bond Future	1190	1	1190	1	1,007.00
05/09/2019	R186 On 06-February-20	8.57	Put	Bond Future	1077	1	1077	1	0.00
05/09/2019	R186 On 06-February-20	8.11	Put	Bond Future	2091	2	2091	2	0.00
05/09/2019	R186 On 06-February-20	8.55	Put	Bond Future	1108	1	1108	1	0.00
05/09/2019	R186 On 07-May-20			Bond Future	8.24	115.6562	8.2369	115.6562	0.00
05/09/2019	R186 On 07-May-20	8.08	Call	Bond Future	1835	2	1835	2	0.00
05/09/2019	R186 On 07-May-20	8.93	Call	Bond Future	4789	5	4789	5	0.00
05/09/2019	R186 On 07-May-20	8.28	Call	Bond Future	2413	3	2413	3	6,000.00
05/09/2019	R186 On 07-May-20	8.09	Call	Bond Future	1862	2	1862	2	0.00
05/09/2019	R186 On 07-May-20	8.07	Call	Bond Future	1808	2	1808	2	0.00
05/09/2019	R186 On 07-May-20	7.60	Call	Bond Future	763	1	763	1	6,000.00
05/09/2019	R186 On 07-May-20	8.07	Put	Bond Future	2710	3	2710	3	0.00
05/09/2019	R186 On 07-May-20	7.60	Put	Bond Future	4256	4	4256	4	0.00
05/09/2019	R186 On 07-May-20	8.93	Put	Bond Future	1140	1	1140	1	6,000.00
05/09/2019	R186 On 07-May-20	8.28	Put	Bond Future	2181	2	2181	2	0.00
05/09/2019	R186 On 07-May-20	8.09	Put	Bond Future	2655	3	2655	3	0.00
05/09/2019	R186 On 07-May-20	8.08	Put	Bond Future	2683	3	2683	3	0.00
05/09/2019	R197 On 07-November-19			Bond Future	309.02	309.0304	309.0236	309.0304	2,507.00
05/09/2019	R197 On 06-February-20			Bond Future	306.98	306.9890	306.9823	306.9890	40.00
05/09/2019	R197 On 07-May-20			Bond Future	312.70	312.7098	312.7030	312.7098	0.00
05/09/2019	R202 On 07-November-19			Bond Future	233.81	233.8069	233.8062	233.8069	9,082.00
05/09/2019	R202 On 06-February-20			Bond Future	233.99	233.9887	233.9882	233.9887	0.00
05/09/2019	R202 On 07-May-20			Bond Future	238.35	238.3490	238.3485	238.3490	0.00
05/09/2019	R207 On 07-November-19			Bond Future	6.61	102.4387	6.6092	102.4387	3,884.00
05/09/2019	R207 On 07-November-19	2.07	Call	Bond Future	0	0	0	0	0.00
05/09/2019	R207 On 07-November-19	2.08	Call	Bond Future	0	0	0	0	0.00
05/09/2019	R207 On 07-November-19	2.06	Call	Bond Future	0	0	0	0	0.00
05/09/2019	R207 On 07-November-19	2.06	Put	Bond Future	814	1	814	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
05/09/2019	R207 On 07-November-19	2.07	Put	Bond Future	812	1	812	1	0.00
05/09/2019	R207 On 07-November-19	2.08	Put	Bond Future	811	1	811	1	0.00
05/09/2019	R208 On 07-November-19			Bond Future	6.55	101.0476	6.5481	101.0476	10,069.00
05/09/2019	R208 On 07-November-19	6.84	Call	Bond Future	416	0	416	0	0.00
05/09/2019	R208 On 07-November-19	6.83	Call	Bond Future	405	0	405	0	0.00
05/09/2019	R208 On 07-November-19	6.82	Call	Bond Future	394	0	394	0	0.00
05/09/2019	R208 On 07-November-19	6.83	Put	Bond Future	38	0	38	0	0.00
05/09/2019	R208 On 07-November-19	6.82	Put	Bond Future	40	0	40	0	0.00
05/09/2019	R208 On 07-November-19	6.84	Put	Bond Future	36	0	36	0	0.00
05/09/2019	R208 On 06-February-20			Bond Future	6.38	102.8595	6.3814	102.8595	0.00
05/09/2019	R208 On 06-February-20	6.12	Call	Bond Future	57	0	57	0	0.00
05/09/2019	R208 On 06-February-20	6.13	Call	Bond Future	60	0	60	0	0.00
05/09/2019	R208 On 06-February-20	6.14	Call	Bond Future	63	0	63	0	0.00
05/09/2019	R208 On 06-February-20	6.14	Put	Bond Future	325	0	325	0	0.00
05/09/2019	R208 On 06-February-20	6.12	Put	Bond Future	340	0	340	0	0.00
05/09/2019	R208 On 06-February-20	6.13	Put	Bond Future	332	0	332	0	0.00
05/09/2019	R208 On 07-May-20			Bond Future	6.07	101.3486	6.0655	101.3486	0.00
05/09/2019	R208 On 07-May-20	4.82	Call	Bond Future	1	0	1	0	0.00
05/09/2019	R208 On 07-May-20	4.81	Call	Bond Future	1	0	1	0	0.00
05/09/2019	R208 On 07-May-20	4.80	Call	Bond Future	0	0	0	0	0.00
05/09/2019	R208 On 07-May-20	4.81	Put	Bond Future	1083	1	1083	1	0.00
05/09/2019	R208 On 07-May-20	4.80	Put	Bond Future	1091	1	1091	1	0.00
05/09/2019	R208 On 07-May-20	4.82	Put	Bond Future	1074	1	1074	1	0.00
05/09/2019	R209 On 07-November-19			Bond Future	9.52	74.0709	9.5175	74.0709	89,289.00
05/09/2019	R209 On 07-November-19	9.80	Call	Bond Future	2600	3	2600	3	0.00
05/09/2019	R209 On 07-November-19	8.92	Call	Bond Future	205	0	205	0	8,000.00
05/09/2019	R209 On 07-November-19	9.50	Call	Bond Future	1418	2	1418	2	5,000.00
05/09/2019	R209 On 07-November-19	9.82	Call	Bond Future	2691	3	2691	3	0.00
05/09/2019	R209 On 07-November-19	9.33	Call	Bond Future	916	1	916	1	8,000.00
05/09/2019	R209 On 07-November-19	9.77	Call	Bond Future	2465	3	2465	3	0.00
05/09/2019	R209 On 07-November-19	9.81	Call	Bond Future	2645	3	2645	3	0.00
05/09/2019	R209 On 07-November-19	9.81	Put	Bond Future	760	1	760	1	0.00
05/09/2019	R209 On 07-November-19	9.33	Put	Bond Future	2163	2	2163	2	0.00
05/09/2019	R209 On 07-November-19	9.82	Put	Bond Future	743	1	743	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
05/09/2019	R209 On 07-November-19	9.77	Put	Bond Future	834	1	834	1	8,000.00
05/09/2019	R209 On 07-November-19	8.92	Put	Bond Future	4286	4	4286	4	0.00
05/09/2019	R209 On 07-November-19	9.80	Put	Bond Future	778	1	778	1	0.00
05/09/2019	R209 On 07-November-19	9.50	Put	Bond Future	1534	1	1534	1	0.00
05/09/2019	R209 On 06-February-20			Bond Future	9.58	75.3991	9.5794	75.3991	0.00
05/09/2019	R209 On 06-February-20	9.51	Call	Bond Future	2284	2	2284	2	0.00
05/09/2019	R209 On 06-February-20	9.52	Call	Bond Future	2317	2	2317	2	0.00
05/09/2019	R209 On 06-February-20	9.50	Call	Bond Future	2252	2	2252	2	0.00
05/09/2019	R209 On 06-February-20	9.50	Put	Bond Future	2770	3	2770	3	0.00
05/09/2019	R209 On 06-February-20	9.51	Put	Bond Future	2736	3	2736	3	0.00
05/09/2019	R209 On 06-February-20	9.52	Put	Bond Future	2704	3	2704	3	0.00
05/09/2019	R209 On 07-May-20			Bond Future	9.64	73.6350	9.6382	73.6350	0.00
05/09/2019	R209 On 07-May-20	9.45	Call	Bond Future	2509	3	2509	3	0.00
05/09/2019	R209 On 07-May-20	9.47	Call	Bond Future	2572	3	2572	3	0.00
05/09/2019	R209 On 07-May-20	9.46	Call	Bond Future	2540	3	2540	3	0.00
05/09/2019	R209 On 07-May-20	9.46	Put	Bond Future	3697	4	3697	4	0.00
05/09/2019	R209 On 07-May-20	9.47	Put	Bond Future	3663	4	3663	4	0.00
05/09/2019	R209 On 07-May-20	9.45	Put	Bond Future	3731	4	3731	4	0.00
05/09/2019	R210 On 07-November-19			Bond Future	189.74	189.7378	189.7362	189.7378	2,132.00
05/09/2019	R210 On 06-February-20			Bond Future	193.18	193.1862	193.1848	193.1862	0.00
05/09/2019	R210 On 07-May-20			Bond Future	194.13	194.1361	194.1346	194.1361	0.00
05/09/2019	R212 On 07-November-19			Bond Future	162.62	162.6206	162.6166	162.6206	6,684.00
05/09/2019	R212 On 06-February-20			Bond Future	163.33	163.3303	163.3264	163.3303	0.00
05/09/2019	R212 On 07-May-20			Bond Future	166.37	166.3740	166.3700	166.3740	0.00
05/09/2019	R213 On 07-November-19			Bond Future	9.08	87.1134	9.0789	87.1134	18,654.00
05/09/2019	R213 On 07-November-19	9.58	Call	Bond Future	3476	4	3476	4	0.00
05/09/2019	R213 On 07-November-19	9.59	Call	Bond Future	3526	4	3526	4	0.00
05/09/2019	R213 On 07-November-19	9.60	Call	Bond Future	3576	4	3576	4	0.00
05/09/2019	R213 On 07-November-19	9.60	Put	Bond Future	381	0	381	0	0.00
05/09/2019	R213 On 07-November-19	9.58	Put	Bond Future	401	0	401	0	0.00
05/09/2019	R213 On 07-November-19	9.59	Put	Bond Future	391	0	391	0	0.00
05/09/2019	R213 On 06-February-20			Bond Future	9.14	88.6756	9.1439	88.6756	0.00
05/09/2019	R213 On 06-February-20	9.28	Call	Bond Future	2719	3	2719	3	0.00
05/09/2019	R213 On 06-February-20	9.27	Call	Bond Future	2683	3	2683	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
05/09/2019	R213 On 06-February-20	9.26	Call	Bond Future	2648	3	2648	3	0.00
05/09/2019	R213 On 06-February-20	9.27	Put	Bond Future	1909	2	1909	2	0.00
05/09/2019	R213 On 06-February-20	9.26	Put	Bond Future	1935	2	1935	2	0.00
05/09/2019	R213 On 06-February-20	9.28	Put	Bond Future	1884	2	1884	2	0.00
05/09/2019	R213 On 07-May-20			Bond Future	9.20	86.7550	9.1991	86.7550	0.00
05/09/2019	R213 On 07-May-20	9.00	Call	Bond Future	2230	2	2230	2	0.00
05/09/2019	R213 On 07-May-20	9.01	Call	Bond Future	2260	2	2260	2	0.00
05/09/2019	R213 On 07-May-20	9.02	Call	Bond Future	2289	2	2289	2	0.00
05/09/2019	R213 On 07-May-20	9.02	Put	Bond Future	3387	3	3387	3	0.00
05/09/2019	R213 On 07-May-20	9.00	Put	Bond Future	3452	3	3452	3	0.00
05/09/2019	R213 On 07-May-20	9.01	Put	Bond Future	3419	3	3419	3	0.00
05/09/2019	R214 On 07-November-19			Bond Future	9.78	72.3746	9.7810	72.3746	15,541.00
05/09/2019	R214 On 07-November-19	10.01	Call	Bond Future	2490	3	2490	3	0.00
05/09/2019	R214 On 07-November-19	10.02	Call	Bond Future	2535	3	2535	3	0.00
05/09/2019	R214 On 07-November-19	10.00	Call	Bond Future	2445	3	2445	3	0.00
05/09/2019	R214 On 07-November-19	10.00	Put	Bond Future	981	1	981	1	0.00
05/09/2019	R214 On 07-November-19	10.01	Put	Bond Future	960	1	960	1	0.00
05/09/2019	R214 On 07-November-19	10.02	Put	Bond Future	939	1	939	1	0.00
05/09/2019	R214 On 06-February-20			Bond Future	9.85	73.6724	9.8490	73.6724	0.00
05/09/2019	R214 On 06-February-20	9.71	Call	Bond Future	2133	2	2133	2	0.00
05/09/2019	R214 On 06-February-20	9.73	Call	Bond Future	2198	2	2198	2	0.00
05/09/2019	R214 On 06-February-20	9.72	Call	Bond Future	2165	2	2165	2	0.00
05/09/2019	R214 On 06-February-20	9.72	Put	Bond Future	3040	3	3040	3	0.00
05/09/2019	R214 On 06-February-20	9.73	Put	Bond Future	3004	3	3004	3	0.00
05/09/2019	R214 On 06-February-20	9.71	Put	Bond Future	3076	3	3076	3	0.00
05/09/2019	R214 On 07-May-20			Bond Future	9.91	71.7296	9.9087	71.7296	0.00
05/09/2019	R214 On 07-May-20	9.76	Call	Bond Future	2826	3	2826	3	0.00
05/09/2019	R214 On 07-May-20	9.77	Call	Bond Future	2859	3	2859	3	0.00
05/09/2019	R214 On 07-May-20	9.75	Call	Bond Future	2794	3	2794	3	0.00
05/09/2019	R214 On 07-May-20	9.75	Put	Bond Future	3862	4	3862	4	0.00
05/09/2019	R214 On 07-May-20	9.76	Put	Bond Future	3826	4	3826	4	0.00
05/09/2019	R214 On 07-May-20	9.77	Put	Bond Future	3790	4	3790	4	0.00
05/09/2019	R248 On 07-November-19			Bond Future	9.83	91.8130	9.8266	91.8130	86,284.00
05/09/2019	R248 On 07-November-19	10.03	Call	Bond Future	2977	3	2977	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
05/09/2019	R248 On 07-November-19	10.02	Call	Bond Future	2922	3	2922	3	0.00
05/09/2019	R248 On 07-November-19	10.01	Call	Bond Future	2866	3	2866	3	0.00
05/09/2019	R248 On 07-November-19	10.02	Put	Bond Future	1273	1	1273	1	0.00
05/09/2019	R248 On 07-November-19	10.01	Put	Bond Future	1302	1	1302	1	0.00
05/09/2019	R248 On 07-November-19	10.03	Put	Bond Future	1245	1	1245	1	0.00
05/09/2019	R248 On 06-February-20			Bond Future	9.90	93.4594	9.8955	93.4594	100.00
05/09/2019	R248 On 06-February-20	9.71	Call	Bond Future	2426	3	2426	3	0.00
05/09/2019	R248 On 06-February-20	9.72	Call	Bond Future	2466	3	2466	3	0.00
05/09/2019	R248 On 06-February-20	9.70	Call	Bond Future	2387	3	2387	3	0.00
05/09/2019	R248 On 06-February-20	9.72	Put	Bond Future	3988	4	3988	4	0.00
05/09/2019	R248 On 06-February-20	9.70	Put	Bond Future	4085	4	4085	4	0.00
05/09/2019	R248 On 06-February-20	9.71	Put	Bond Future	4037	4	4037	4	0.00
05/09/2019	R248 On 07-May-20			Bond Future	9.96	90.7388	9.9561	90.7388	0.00
05/09/2019	R248 On 07-May-20	9.77	Call	Bond Future	3320	3	3320	3	0.00
05/09/2019	R248 On 07-May-20	9.79	Call	Bond Future	3401	4	3401	4	0.00
05/09/2019	R248 On 07-May-20	9.78	Call	Bond Future	3360	4	3360	4	0.00
05/09/2019	R248 On 07-May-20	9.78	Put	Bond Future	4870	5	4870	5	0.00
05/09/2019	R248 On 07-May-20	9.77	Put	Bond Future	4918	5	4918	5	0.00
05/09/2019	R248 On 07-May-20	9.79	Put	Bond Future	4824	5	4824	5	0.00
05/09/2019	R248 On 06-August-20			Bond Future	10.02	92.4255	10.0163	92.4255	0.00
05/09/2019	R248 On 06-August-20	10.18	Call	Bond Future	6338	7	6338	7	0.00
05/09/2019	R248 On 06-August-20	9.25	Call	Bond Future	2736	3	2736	3	20,640.00
05/09/2019	R248 On 06-August-20	10.20	Call	Bond Future	6428	7	6428	7	0.00
05/09/2019	R248 On 06-August-20	10.19	Call	Bond Future	6383	7	6383	7	0.00
05/09/2019	R248 On 06-August-20	10.19	Put	Bond Future	4952	5	4952	5	0.00
05/09/2019	R248 On 06-August-20	10.20	Put	Bond Future	4916	5	4916	5	0.00
05/09/2019	R248 On 06-August-20	10.18	Put	Bond Future	4988	5	4988	5	0.00
05/09/2019	R248 On 06-August-20	9.25	Put	Bond Future	9566	9	9566	9	0.00