



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 August 2019

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
12/08/2019	0457 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	0703 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	0757 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	0804 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	0807 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	0857 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	0904 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	0908 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	0957 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	0986 On 31-March-36			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	1386 On 28-February-31			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	1409 On 28-February-41			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	2025 On 07-November-19			Bond Future	138.11	138.1502	138.1119	138.1502	1,451.00
12/08/2019	2025 On 06-February-20			Bond Future	139.16	139.1984	139.1595	139.1984	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
12/08/2019	2025 On 07-May-20			Bond Future	141.78	141.8153	141.7756	141.8153	0.00
12/08/2019	2029 On 07-November-19			Bond Future	102.93	102.9790	102.9326	102.9790	4,260.00
12/08/2019	2029 On 06-February-20			Bond Future	104.81	104.8591	104.8118	104.8591	0.00
12/08/2019	2029 On 07-May-20			Bond Future	105.67	105.7177	105.6695	105.7177	0.00
12/08/2019	2030 On 07-November-19			Bond Future	9.24	94.8640	9.2384	94.8640	70,106.00
12/08/2019	2030 On 07-November-19	9.48	Call	Bond Future	2522	3	2522	3	0.00
12/08/2019	2030 On 07-November-19	9.10	Call	Bond Future	1216	2	1216	2	5,500.00
12/08/2019	2030 On 07-November-19	8.60	Call	Bond Future	290	0	290	0	5,500.00
12/08/2019	2030 On 07-November-19	9.49	Call	Bond Future	2563	3	2563	3	0.00
12/08/2019	2030 On 07-November-19	9.76	Call	Bond Future	3758	4	3758	4	0.00
12/08/2019	2030 On 07-November-19	9.47	Call	Bond Future	2482	3	2482	3	0.00
12/08/2019	2030 On 07-November-19	9.70	Call	Bond Future	3479	4	3479	4	0.00
12/08/2019	2030 On 07-November-19	8.95	Call	Bond Future	848	1	848	1	0.00
12/08/2019	2030 On 07-November-19	9.12	Call	Bond Future	1271	2	1271	2	0.00
12/08/2019	2030 On 07-November-19	8.57	Call	Bond Future	260	0	260	0	0.00
12/08/2019	2030 On 07-November-19	9.12	Put	Bond Future	2005	2	2005	2	0.00
12/08/2019	2030 On 07-November-19	8.95	Put	Bond Future	2650	2	2650	2	5,000.00
12/08/2019	2030 On 07-November-19	9.70	Put	Bond Future	688	1	688	1	0.00
12/08/2019	2030 On 07-November-19	9.47	Put	Bond Future	1067	1	1067	1	0.00
12/08/2019	2030 On 07-November-19	8.57	Put	Bond Future	4509	4	4509	4	0.00
12/08/2019	2030 On 07-November-19	9.10	Put	Bond Future	2075	2	2075	2	0.00
12/08/2019	2030 On 07-November-19	9.48	Put	Bond Future	1047	1	1047	1	0.00
12/08/2019	2030 On 07-November-19	8.60	Put	Bond Future	4344	4	4344	4	0.00
12/08/2019	2030 On 07-November-19	9.49	Put	Bond Future	1027	1	1027	1	0.00
12/08/2019	2030 On 07-November-19	9.76	Put	Bond Future	612	0	612	0	5,500.00
12/08/2019	2030 On 06-February-20			Bond Future	9.31	92.5644	9.3094	92.5644	0.00
12/08/2019	2030 On 06-February-20	9.00	Call	Bond Future	1466	2	1466	2	5,820.00
12/08/2019	2030 On 06-February-20	9.14	Call	Bond Future	1836	2	1836	2	0.00
12/08/2019	2030 On 06-February-20	8.40	Call	Bond Future	391	1	391	1	5,820.00
12/08/2019	2030 On 06-February-20	9.15	Call	Bond Future	1864	2	1864	2	0.00
12/08/2019	2030 On 06-February-20	9.16	Call	Bond Future	1893	2	1893	2	0.00
12/08/2019	2030 On 06-February-20	9.16	Put	Bond Future	2802	2	2802	2	0.00
12/08/2019	2030 On 06-February-20	9.14	Put	Bond Future	2868	3	2868	3	0.00
12/08/2019	2030 On 06-February-20	8.40	Put	Bond Future	6114	6	6114	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
12/08/2019	2030 On 06-February-20	9.15	Put	Bond Future	2835	2	2835	2	0.00
12/08/2019	2030 On 06-February-20	9.00	Put	Bond Future	3362	3	3362	3	0.00
12/08/2019	2030 On 07-May-20			Bond Future	9.38	94.2835	9.3779	94.2835	0.00
12/08/2019	2030 On 07-May-20	8.80	Call	Bond Future	1382	2	1382	2	0.00
12/08/2019	2030 On 07-May-20	8.79	Call	Bond Future	1360	2	1360	2	0.00
12/08/2019	2030 On 07-May-20	8.78	Call	Bond Future	1338	2	1338	2	0.00
12/08/2019	2030 On 07-May-20	8.79	Put	Bond Future	4933	4	4933	4	0.00
12/08/2019	2030 On 07-May-20	8.78	Put	Bond Future	4974	5	4974	5	0.00
12/08/2019	2030 On 07-May-20	8.80	Put	Bond Future	4893	4	4893	4	0.00
12/08/2019	2032 On 07-November-19			Bond Future	9.61	91.9748	9.6061	91.9748	50,602.00
12/08/2019	2032 On 07-November-19	9.72	Call	Bond Future	2227	3	2227	3	0.00
12/08/2019	2032 On 07-November-19	9.71	Call	Bond Future	2188	3	2188	3	0.00
12/08/2019	2032 On 07-November-19	9.70	Call	Bond Future	2150	3	2150	3	0.00
12/08/2019	2032 On 07-November-19	9.71	Put	Bond Future	1500	1	1500	1	0.00
12/08/2019	2032 On 07-November-19	9.70	Put	Bond Future	1527	1	1527	1	0.00
12/08/2019	2032 On 07-November-19	9.72	Put	Bond Future	1472	1	1472	1	0.00
12/08/2019	2032 On 06-February-20			Bond Future	9.68	93.6318	9.6836	93.6318	0.00
12/08/2019	2032 On 06-February-20	9.39	Call	Bond Future	1741	2	1741	2	0.00
12/08/2019	2032 On 06-February-20	9.40	Call	Bond Future	1769	2	1769	2	0.00
12/08/2019	2032 On 06-February-20	9.38	Call	Bond Future	1714	2	1714	2	0.00
12/08/2019	2032 On 06-February-20	9.38	Put	Bond Future	3734	3	3734	3	0.00
12/08/2019	2032 On 06-February-20	9.39	Put	Bond Future	3694	3	3694	3	0.00
12/08/2019	2032 On 06-February-20	9.40	Put	Bond Future	3654	3	3654	3	0.00
12/08/2019	2032 On 07-May-20			Bond Future	9.76	91.2103	9.7572	91.2103	0.00
12/08/2019	2032 On 07-May-20	9.17	Call	Bond Future	1690	2	1690	2	0.00
12/08/2019	2032 On 07-May-20	9.19	Call	Bond Future	1738	2	1738	2	0.00
12/08/2019	2032 On 07-May-20	9.18	Call	Bond Future	1714	2	1714	2	0.00
12/08/2019	2032 On 07-May-20	9.18	Put	Bond Future	5539	5	5539	5	0.00
12/08/2019	2032 On 07-May-20	9.19	Put	Bond Future	5494	5	5494	5	0.00
12/08/2019	2032 On 07-May-20	9.17	Put	Bond Future	5583	5	5583	5	0.00
12/08/2019	2033 On 07-November-19			Bond Future	103.84	103.9647	103.8420	103.9647	6,140.00
12/08/2019	2033 On 06-February-20			Bond Future	105.74	105.8627	105.7378	105.8627	0.00
12/08/2019	2033 On 07-May-20			Bond Future	106.53	106.6571	106.5299	106.6571	0.00
12/08/2019	2037 On 07-November-19			Bond Future	9.98	91.1949	9.9803	91.1949	62,399.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
12/08/2019	2037 On 07-November-19	9.95	Call	Bond Future	1969	2	1969	2	0.00
12/08/2019	2037 On 07-November-19	9.97	Call	Bond Future	2045	3	2045	3	0.00
12/08/2019	2037 On 07-November-19	9.96	Call	Bond Future	2006	3	2006	3	0.00
12/08/2019	2037 On 07-November-19	9.96	Put	Bond Future	2157	2	2157	2	0.00
12/08/2019	2037 On 07-November-19	9.97	Put	Bond Future	2121	2	2121	2	0.00
12/08/2019	2037 On 07-November-19	9.95	Put	Bond Future	2193	2	2193	2	0.00
12/08/2019	2037 On 06-February-20			Bond Future	10.06	88.5786	10.0587	88.5786	0.00
12/08/2019	2037 On 06-February-20	9.68	Call	Bond Future	1704	2	1704	2	0.00
12/08/2019	2037 On 06-February-20	9.67	Call	Bond Future	1675	2	1675	2	0.00
12/08/2019	2037 On 06-February-20	9.66	Call	Bond Future	1646	2	1646	2	0.00
12/08/2019	2037 On 06-February-20	9.67	Put	Bond Future	4578	4	4578	4	0.00
12/08/2019	2037 On 06-February-20	9.66	Put	Bond Future	4626	4	4626	4	0.00
12/08/2019	2037 On 06-February-20	9.68	Put	Bond Future	4531	4	4531	4	0.00
12/08/2019	2037 On 07-May-20			Bond Future	10.13	90.2237	10.1349	90.2237	0.00
12/08/2019	2037 On 07-May-20	9.59	Call	Bond Future	2041	2	2041	2	0.00
12/08/2019	2037 On 07-May-20	9.60	Call	Bond Future	2069	2	2069	2	0.00
12/08/2019	2037 On 07-May-20	9.61	Call	Bond Future	2096	2	2096	2	0.00
12/08/2019	2037 On 07-May-20	9.61	Put	Bond Future	5994	5	5994	5	0.00
12/08/2019	2037 On 07-May-20	9.59	Put	Bond Future	6092	6	6092	6	0.00
12/08/2019	2037 On 07-May-20	9.60	Put	Bond Future	6043	5	6043	5	0.00
12/08/2019	2038 On 07-November-19			Bond Future	121.97	122.1499	121.9706	122.1499	21,774.00
12/08/2019	2038 On 06-February-20			Bond Future	122.54	122.7218	122.5392	122.7218	0.00
12/08/2019	2038 On 07-May-20			Bond Future	124.84	125.0289	124.8430	125.0289	0.00
12/08/2019	2040 On 07-November-19			Bond Future	10.07	94.1670	10.0699	94.1670	44,699.00
12/08/2019	2040 On 07-November-19	10.03	Call	Bond Future	2028	3	2028	3	0.00
12/08/2019	2040 On 07-November-19	10.04	Call	Bond Future	2068	3	2068	3	0.00
12/08/2019	2040 On 07-November-19	9.80	Call	Bond Future	1221	2	1221	2	1,260.00
12/08/2019	2040 On 07-November-19	9.30	Call	Bond Future	221	0	221	0	1,260.00
12/08/2019	2040 On 07-November-19	10.05	Call	Bond Future	2108	3	2108	3	0.00
12/08/2019	2040 On 07-November-19	10.05	Put	Bond Future	2267	2	2267	2	0.00
12/08/2019	2040 On 07-November-19	10.03	Put	Bond Future	2346	2	2346	2	0.00
12/08/2019	2040 On 07-November-19	9.80	Put	Bond Future	3406	3	3406	3	0.00
12/08/2019	2040 On 07-November-19	9.30	Put	Bond Future	6678	6	6678	6	0.00
12/08/2019	2040 On 07-November-19	10.04	Put	Bond Future	2306	2	2306	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
12/08/2019	2040 On 06-February-20			Bond Future	10.15	91.3537	10.1479	91.3537	0.00
12/08/2019	2040 On 06-February-20	9.74	Call	Bond Future	1772	2	1772	2	0.00
12/08/2019	2040 On 06-February-20	9.76	Call	Bond Future	1833	2	1833	2	0.00
12/08/2019	2040 On 06-February-20	9.75	Call	Bond Future	1803	2	1803	2	0.00
12/08/2019	2040 On 06-February-20	9.75	Put	Bond Future	5004	5	5004	5	0.00
12/08/2019	2040 On 06-February-20	9.76	Put	Bond Future	4952	4	4952	4	0.00
12/08/2019	2040 On 06-February-20	9.74	Put	Bond Future	5056	5	5056	5	0.00
12/08/2019	2040 On 07-May-20			Bond Future	10.22	93.0504	10.2235	93.0504	0.00
12/08/2019	2040 On 07-May-20	9.75	Call	Bond Future	2446	3	2446	3	0.00
12/08/2019	2040 On 07-May-20	9.74	Call	Bond Future	2414	3	2414	3	0.00
12/08/2019	2040 On 07-May-20	9.73	Call	Bond Future	2383	3	2383	3	0.00
12/08/2019	2040 On 07-May-20	9.73	Put	Bond Future	6326	6	6326	6	0.00
12/08/2019	2040 On 07-May-20	9.75	Put	Bond Future	6224	6	6224	6	0.00
12/08/2019	2040 On 07-May-20	9.74	Put	Bond Future	6275	6	6275	6	0.00
12/08/2019	2044 On 07-November-19			Bond Future	10.11	90.9547	10.1125	90.9547	37,851.00
12/08/2019	2044 On 07-November-19	10.06	Call	Bond Future	2026	2	2026	2	0.00
12/08/2019	2044 On 07-November-19	10.52	Call	Bond Future	4277	5	4277	5	0.00
12/08/2019	2044 On 07-November-19	10.05	Call	Bond Future	1987	2	1987	2	0.00
12/08/2019	2044 On 07-November-19	10.07	Call	Bond Future	2067	3	2067	3	0.00
12/08/2019	2044 On 07-November-19	9.19	Call	Bond Future	114	0	114	0	328.00
12/08/2019	2044 On 07-November-19	9.74	Call	Bond Future	966	1	966	1	328.00
12/08/2019	2044 On 07-November-19	10.05	Put	Bond Future	2493	2	2493	2	0.00
12/08/2019	2044 On 07-November-19	9.19	Put	Bond Future	8110	7	8110	7	0.00
12/08/2019	2044 On 07-November-19	10.07	Put	Bond Future	2410	2	2410	2	0.00
12/08/2019	2044 On 07-November-19	9.74	Put	Bond Future	4056	4	4056	4	0.00
12/08/2019	2044 On 07-November-19	10.06	Put	Bond Future	2451	2	2451	2	0.00
12/08/2019	2044 On 07-November-19	10.52	Put	Bond Future	1093	1	1093	1	328.00
12/08/2019	2044 On 06-February-20			Bond Future	10.19	88.2089	10.1878	88.2089	0.00
12/08/2019	2044 On 06-February-20	9.77	Call	Bond Future	1791	2	1791	2	0.00
12/08/2019	2044 On 06-February-20	9.09	Call	Bond Future	365	0	365	0	328.00
12/08/2019	2044 On 06-February-20	9.74	Call	Bond Future	1701	2	1701	2	328.00
12/08/2019	2044 On 06-February-20	9.76	Call	Bond Future	1761	2	1761	2	0.00
12/08/2019	2044 On 06-February-20	10.78	Call	Bond Future	6203	7	6203	7	0.00
12/08/2019	2044 On 06-February-20	9.78	Call	Bond Future	1821	2	1821	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
12/08/2019	2044 On 06-February-20	9.76	Put	Bond Future	5276	5	5276	5	0.00
12/08/2019	2044 On 06-February-20	9.78	Put	Bond Future	5167	5	5167	5	0.00
12/08/2019	2044 On 06-February-20	10.78	Put	Bond Future	1701	2	1701	2	328.00
12/08/2019	2044 On 06-February-20	9.77	Put	Bond Future	5221	5	5221	5	0.00
12/08/2019	2044 On 06-February-20	9.74	Put	Bond Future	5386	5	5386	5	0.00
12/08/2019	2044 On 06-February-20	9.09	Put	Bond Future	9879	9	9879	9	0.00
12/08/2019	2044 On 07-May-20			Bond Future	10.26	89.8472	10.2607	89.8472	0.00
12/08/2019	2044 On 07-May-20	9.79	Call	Bond Future	2420	3	2420	3	0.00
12/08/2019	2044 On 07-May-20	9.81	Call	Bond Future	2485	3	2485	3	0.00
12/08/2019	2044 On 07-May-20	9.26	Call	Bond Future	1027	1	1027	1	556.00
12/08/2019	2044 On 07-May-20	9.80	Call	Bond Future	2452	3	2452	3	0.00
12/08/2019	2044 On 07-May-20	9.91	Call	Bond Future	2821	3	2821	3	556.00
12/08/2019	2044 On 07-May-20	11.02	Call	Bond Future	7754	8	7754	8	0.00
12/08/2019	2044 On 07-May-20	11.02	Put	Bond Future	2122	2	2122	2	556.00
12/08/2019	2044 On 07-May-20	9.80	Put	Bond Future	6198	6	6198	6	0.00
12/08/2019	2044 On 07-May-20	9.26	Put	Bond Future	9517	9	9517	9	0.00
12/08/2019	2044 On 07-May-20	9.91	Put	Bond Future	5649	5	5649	5	0.00
12/08/2019	2044 On 07-May-20	9.79	Put	Bond Future	6250	6	6250	6	0.00
12/08/2019	2044 On 07-May-20	9.81	Put	Bond Future	6146	6	6146	6	0.00
12/08/2019	2046 On 07-November-19			Bond Future	113.10	113.0995	113.0981	113.0995	17,994.00
12/08/2019	2046 On 06-February-20			Bond Future	115.16	115.1643	115.1631	115.1643	0.00
12/08/2019	2046 On 07-May-20			Bond Future	115.58	115.5809	115.5796	115.5809	0.00
12/08/2019	2050 On 07-November-19			Bond Future	117.84	118.2018	117.8423	118.2018	12,776.00
12/08/2019	2050 On 06-February-20			Bond Future	118.16	118.5241	118.1581	118.5241	0.00
12/08/2019	2050 On 07-May-20			Bond Future	120.38	120.7525	120.3795	120.7525	0.00
12/08/2019	8607 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	8608 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	8657 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	AL37 On 07-November-19			Index Future	661.33	662.8360	661.3330	662.8360	0.00
12/08/2019	AL37 On 06-February-20			Index Future	673.25	674.7780	673.2480	674.7780	0.00
12/08/2019	AL37 On 07-May-20			Index Future	685.75	687.3070	685.7470	687.3070	0.00
12/08/2019	AL7T On 07-November-19			Index Future	763.32	767.8120	763.3160	767.8120	120.00
12/08/2019	AL7T On 06-February-20			Index Future	777.07	781.6450	777.0690	781.6450	0.00
12/08/2019	AL7T On 07-May-20			Index Future	791.50	796.1580	791.4950	796.1580	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
12/08/2019	ALBI On 07-November-19			Index Future	682.94	687.5060	682.9370	687.5060	226.00
12/08/2019	ALBI On 06-February-20			Index Future	695.24	699.8920	695.2420	699.8920	0.00
12/08/2019	ALBI On 07-May-20			Index Future	708.15	712.8880	708.1490	712.8880	0.00
12/08/2019	C002 On 31-March-32			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C007 On 31-January-37			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C023 On 28-February-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C025 On 31-January-25			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C030 On 31-January-30			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C035 On 28-February-35			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C038 On 31-January-38			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C040 On 06-October-15			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C040 On 31-January-40			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C044 On 31-January-44			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C048 On 28-February-48			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C050 On 31-December-50			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C070 On 01-August-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C186 On 21-December-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C197 On 07-December-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C202 On 07-December-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C207 On 15-January-20			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C208 On 31-March-21			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C209 On 31-March-36			Price Contribution	6.25	6.2500	6.2500	6.2500	0.00
12/08/2019	C210 On 31-March-28			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C212 On 31-January-22			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C213 On 28-February-31			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C214 On 28-February-41			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C223 On 25-January-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C226 On 25-January-23			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C303 On 14-August-15			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C303 On 28-February-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C333 On 15-September-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C442 On 25-April-42			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	C446 On 31-March-46			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	CS23 On 25-January-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
12/08/2019	CS26 On 02-April-26			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	CS33 On 15-September-33			Price Contribution	100.00	100.0000	100.0000	100.0000	0.00
12/08/2019	ES33 On 07-November-19			Bond Future	11.15	76.3580	11.1519	76.3580	350.00
12/08/2019	ES33 On 06-February-20			Bond Future	11.28	77.7337	11.2806	77.7337	0.00
12/08/2019	ES33 On 07-May-20			Bond Future	11.40	75.3830	11.4042	75.3830	0.00
12/08/2019	ES42 On 07-November-19			Bond Future	11.47	77.2518	11.4705	77.2518	4,919.00
12/08/2019	ES42 On 06-February-20			Bond Future	11.59	78.6435	11.5930	78.6435	0.00
12/08/2019	ES42 On 07-May-20			Bond Future	11.72	75.8392	11.7155	75.8392	0.00
12/08/2019	GOVI On 07-November-19			GOVI	675.83	680.5360	675.8270	680.5360	1,186.00
12/08/2019	GOVI On 07-November-19	672.90	Call	GOVI	29270	8	29270	8	0.00
12/08/2019	GOVI On 07-November-19	672.91	Call	GOVI	29170	8	29170	8	0.00
12/08/2019	GOVI On 07-November-19	672.92	Call	GOVI	29070	8	29070	8	0.00
12/08/2019	GOVI On 07-November-19	672.91	Put	GOVI	0	0	0	0	0.00
12/08/2019	GOVI On 07-November-19	672.92	Put	GOVI	0	0	0	0	0.00
12/08/2019	GOVI On 07-November-19	672.90	Put	GOVI	0	0	0	0	0.00
12/08/2019	GOVI On 06-February-20			GOVI	688.00	692.7960	688.0040	692.7960	0.00
12/08/2019	GOVI On 06-February-20	703.15	Call	GOVI	0	0	0	0	0.00
12/08/2019	GOVI On 06-February-20	703.14	Call	GOVI	0	0	0	0	0.00
12/08/2019	GOVI On 06-February-20	703.13	Call	GOVI	0	0	0	0	0.00
12/08/2019	GOVI On 06-February-20	703.13	Put	GOVI	151260	10	151260	10	0.00
12/08/2019	GOVI On 06-February-20	703.15	Put	GOVI	151460	10	151460	10	0.00
12/08/2019	GOVI On 06-February-20	703.14	Put	GOVI	151360	10	151360	10	0.00
12/08/2019	GOVI On 07-May-20			GOVI	700.78	705.6600	700.7770	705.6600	0.00
12/08/2019	GOVI On 07-May-20	719.98	Call	GOVI	0	0	0	0	0.00
12/08/2019	GOVI On 07-May-20	720.00	Call	GOVI	0	0	0	0	0.00
12/08/2019	GOVI On 07-May-20	719.99	Call	GOVI	0	0	0	0	0.00
12/08/2019	GOVI On 07-May-20	720.00	Put	GOVI	192230	14	192230	14	0.00
12/08/2019	GOVI On 07-May-20	719.98	Put	GOVI	192030	14	192030	14	0.00
12/08/2019	GOVI On 07-May-20	719.99	Put	GOVI	192130	14	192130	14	0.00
12/08/2019	GVIX On 01-January-29			LIVE INDEX	110.00	110.0000	110.0000	110.0000	0.00
12/08/2019	IGOV On 07-November-19			Index Future	264.53	264.7020	264.5270	264.7020	1,016.00
12/08/2019	IGOV On 06-February-20			Index Future	269.36	269.5340	269.3560	269.5340	0.00
12/08/2019	IGOV On 07-May-20			Index Future	274.42	274.6010	274.4200	274.6010	0.00
12/08/2019	IS01 On 19-September-19			Interest Rate Swap	99.85	99.8500	99.8500	99.8500	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
12/08/2019	IS02 On 20-September-19			Interest Rate Swap	101.84	101.8400	101.8400	101.8400	0.00
12/08/2019	IS02 On 20-December-19			Interest Rate Swap	102.71	102.7100	102.7100	102.7100	0.00
12/08/2019	IS02 On 23-March-20			Interest Rate Swap	98.61	98.5900	98.6100	98.5900	0.00
12/08/2019	IS02 On 22-June-20			Interest Rate Swap	102.05	102.0200	102.0500	102.0200	0.00
12/08/2019	IS02 On 21-September-20			Interest Rate Swap	98.91	98.8700	98.9100	98.8700	0.00
12/08/2019	IS05 On 17-December-20			Interest Rate Swap	95.55	95.4900	95.5500	95.4900	0.00
12/08/2019	IS05 On 16-March-21			Interest Rate Swap	94.57	94.5000	94.5700	94.5000	0.00
12/08/2019	IS05 On 15-June-21			Interest Rate Swap	93.55	93.4600	93.5500	93.4600	0.00
12/08/2019	IS05 On 21-September-21			Interest Rate Swap	93.50	93.3900	93.5000	93.3900	0.00
12/08/2019	IS05 On 21-December-21			Interest Rate Swap	95.53	95.4000	95.5300	95.4000	51.00
12/08/2019	IS05 On 15-March-22			Interest Rate Swap	95.51	95.3500	95.5100	95.3500	0.00
12/08/2019	IS05 On 21-June-22			Interest Rate Swap	96.54	96.3400	96.5400	96.3400	0.00
12/08/2019	IS05 On 20-September-22			Interest Rate Swap	100.32	100.1200	100.3200	100.1200	0.00
12/08/2019	IS05 On 20-December-22			Interest Rate Swap	101.43	101.2300	101.4300	101.2300	0.00
12/08/2019	IS05 On 22-March-23			Interest Rate Swap	94.60	94.3800	94.6000	94.3800	0.00
12/08/2019	IS05 On 20-June-23			Interest Rate Swap	100.56	100.3500	100.5600	100.3500	0.00
12/08/2019	IS05 On 19-September-23			Interest Rate Swap	95.89	95.6600	95.8900	95.6600	0.00
12/08/2019	IS10 On 17-December-25			Interest Rate Swap	91.72	91.3100	91.7200	91.3100	0.00
12/08/2019	IS10 On 16-March-26			Interest Rate Swap	88.58	88.1700	88.5800	88.1700	0.00
12/08/2019	IS10 On 15-June-26			Interest Rate Swap	87.22	86.8000	87.2200	86.8000	0.00
12/08/2019	IS10 On 21-September-26			Interest Rate Swap	89.36	88.9300	89.3600	88.9300	0.00
12/08/2019	IS10 On 21-December-26			Interest Rate Swap	93.19	92.7600	93.1900	92.7600	0.00
12/08/2019	IS10 On 15-March-27			Interest Rate Swap	91.69	91.2500	91.6900	91.2500	0.00
12/08/2019	IS10 On 21-June-27			Interest Rate Swap	93.78	93.3300	93.7800	93.3300	0.00
12/08/2019	IS10 On 20-September-27			Interest Rate Swap	99.30	98.8600	99.3000	98.8600	0.00
12/08/2019	IS10 On 20-December-27			Interest Rate Swap	99.65	99.2200	99.6500	99.2200	0.00
12/08/2019	IS10 On 22-March-28			Interest Rate Swap	93.02	92.5900	93.0200	92.5900	0.00
12/08/2019	IS10 On 20-June-28			Interest Rate Swap	100.34	99.9400	100.3400	99.9400	0.00
12/08/2019	IS10 On 19-September-28			Interest Rate Swap	93.78	93.3600	93.7800	93.3600	0.00
12/08/2019	J186 On 21-December-26			Interest Rate Swap	8.68	0.1077	8.6830	0.1077	0.00
12/08/2019	J207 On 15-January-20			Interest Rate Swap	9.00	0.0691	8.9970	0.0691	0.00
12/08/2019	JBAF On 18-September-19			Jibar Tradeable Future	7.07	92.9300	7.0700	92.9300	0.00
12/08/2019	JBAF On 18-December-19			Jibar Tradeable Future	7.13	92.8700	7.1300	92.8700	0.00
12/08/2019	R023 On 07-November-19			Bond Future	7.55	102.3174	7.5519	102.3174	52,610.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
12/08/2019	R023 On 07-November-19	7.98	Call	Bond Future	1424	2	1424	2	0.00
12/08/2019	R023 On 07-November-19	8.00	Call	Bond Future	1471	2	1471	2	0.00
12/08/2019	R023 On 07-November-19	7.99	Call	Bond Future	1447	2	1447	2	0.00
12/08/2019	R023 On 07-November-19	7.98	Put	Bond Future	198	0	198	0	0.00
12/08/2019	R023 On 07-November-19	8.00	Put	Bond Future	189	0	189	0	0.00
12/08/2019	R023 On 07-November-19	7.99	Put	Bond Future	194	0	194	0	0.00
12/08/2019	R023 On 06-February-20			Bond Future	7.58	104.1607	7.5820	104.1607	0.00
12/08/2019	R023 On 06-February-20	7.52	Call	Bond Future	735	1	735	1	0.00
12/08/2019	R023 On 06-February-20	7.54	Call	Bond Future	764	1	764	1	0.00
12/08/2019	R023 On 06-February-20	7.53	Call	Bond Future	749	1	749	1	0.00
12/08/2019	R023 On 06-February-20	7.53	Put	Bond Future	889	1	889	1	0.00
12/08/2019	R023 On 06-February-20	7.54	Put	Bond Future	877	1	877	1	0.00
12/08/2019	R023 On 06-February-20	7.52	Put	Bond Future	902	1	902	1	0.00
12/08/2019	R023 On 07-May-20			Bond Future	7.58	102.1617	7.5813	102.1617	0.00
12/08/2019	R023 On 07-May-20	6.90	Call	Bond Future	217	0	217	0	0.00
12/08/2019	R023 On 07-May-20	6.91	Call	Bond Future	225	0	225	0	0.00
12/08/2019	R023 On 07-May-20	6.89	Call	Bond Future	210	0	210	0	0.00
12/08/2019	R023 On 07-May-20	6.89	Put	Bond Future	1949	2	1949	2	0.00
12/08/2019	R023 On 07-May-20	6.90	Put	Bond Future	1931	2	1931	2	0.00
12/08/2019	R023 On 07-May-20	6.91	Put	Bond Future	1913	2	1913	2	0.00
12/08/2019	R035 On 07-November-19			Bond Future	9.89	94.7503	9.8856	94.7503	94,508.00
12/08/2019	R035 On 07-November-19	9.87	Call	Bond Future	1969	2	1969	2	0.00
12/08/2019	R035 On 07-November-19	8.92	Call	Bond Future	85	0	85	0	3,500.00
12/08/2019	R035 On 07-November-19	9.52	Call	Bond Future	887	1	887	1	3,500.00
12/08/2019	R035 On 07-November-19	9.88	Call	Bond Future	2007	3	2007	3	0.00
12/08/2019	R035 On 07-November-19	9.89	Call	Bond Future	2046	3	2046	3	0.00
12/08/2019	R035 On 07-November-19	10.21	Call	Bond Future	3482	4	3482	4	0.00
12/08/2019	R035 On 07-November-19	9.88	Put	Bond Future	2048	2	2048	2	0.00
12/08/2019	R035 On 07-November-19	9.87	Put	Bond Future	2083	2	2083	2	0.00
12/08/2019	R035 On 07-November-19	10.21	Put	Bond Future	1142	1	1142	1	3,500.00
12/08/2019	R035 On 07-November-19	9.52	Put	Bond Future	3633	3	3633	3	0.00
12/08/2019	R035 On 07-November-19	8.92	Put	Bond Future	7603	7	7603	7	0.00
12/08/2019	R035 On 07-November-19	9.89	Put	Bond Future	2013	2	2013	2	0.00
12/08/2019	R035 On 06-February-20			Bond Future	9.97	96.4574	9.9700	96.4574	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
12/08/2019	R035 On 06-February-20	9.61	Call	Bond Future	1772	2	1772	2	0.00
12/08/2019	R035 On 06-February-20	9.60	Call	Bond Future	1744	2	1744	2	0.00
12/08/2019	R035 On 06-February-20	9.59	Call	Bond Future	1715	2	1715	2	0.00
12/08/2019	R035 On 06-February-20	9.59	Put	Bond Future	4524	4	4524	4	0.00
12/08/2019	R035 On 06-February-20	9.61	Put	Bond Future	4430	4	4430	4	0.00
12/08/2019	R035 On 06-February-20	9.60	Put	Bond Future	4477	4	4477	4	0.00
12/08/2019	R035 On 07-May-20			Bond Future	10.04	93.7443	10.0440	93.7443	0.00
12/08/2019	R035 On 07-May-20	9.47	Call	Bond Future	1887	2	1887	2	0.00
12/08/2019	R035 On 07-May-20	9.49	Call	Bond Future	1942	2	1942	2	0.00
12/08/2019	R035 On 07-May-20	9.48	Call	Bond Future	1915	2	1915	2	0.00
12/08/2019	R035 On 07-May-20	9.47	Put	Bond Future	6113	6	6113	6	0.00
12/08/2019	R035 On 07-May-20	9.49	Put	Bond Future	6016	5	6016	5	0.00
12/08/2019	R035 On 07-May-20	9.48	Put	Bond Future	6064	6	6064	6	0.00
12/08/2019	R186 On 07-November-19			Bond Future	8.53	114.9731	8.5308	114.9731	135,940.00
12/08/2019	R186 On 07-November-19	8.25	Call	Bond Future	660	1	660	1	3,750.00
12/08/2019	R186 On 07-November-19	8.73	Call	Bond Future	1977	2	1977	2	0.00
12/08/2019	R186 On 07-November-19	8.23	Call	Bond Future	623	1	623	1	5,000.00
12/08/2019	R186 On 07-November-19	8.94	Call	Bond Future	2802	3	2802	3	0.00
12/08/2019	R186 On 07-November-19	8.20	Call	Bond Future	570	1	570	1	0.00
12/08/2019	R186 On 07-November-19	8.96	Call	Bond Future	2886	3	2886	3	0.00
12/08/2019	R186 On 07-November-19	8.95	Call	Bond Future	2844	3	2844	3	0.00
12/08/2019	R186 On 07-November-19	8.96	Put	Bond Future	519	0	519	0	0.00
12/08/2019	R186 On 07-November-19	8.23	Put	Bond Future	2322	2	2322	2	0.00
12/08/2019	R186 On 07-November-19	8.20	Put	Bond Future	2440	2	2440	2	7,500.00
12/08/2019	R186 On 07-November-19	8.95	Put	Bond Future	531	0	531	0	0.00
12/08/2019	R186 On 07-November-19	8.73	Put	Bond Future	870	1	870	1	5,000.00
12/08/2019	R186 On 07-November-19	8.94	Put	Bond Future	543	0	543	0	0.00
12/08/2019	R186 On 07-November-19	8.25	Put	Bond Future	2245	2	2245	2	3,750.00
12/08/2019	R186 On 06-February-20			Bond Future	8.59	111.7403	8.5918	111.7403	0.00
12/08/2019	R186 On 06-February-20	8.11	Call	Bond Future	844	1	844	1	1,007.00
12/08/2019	R186 On 06-February-20	8.55	Call	Bond Future	1858	2	1858	2	0.00
12/08/2019	R186 On 06-February-20	8.50	Call	Bond Future	1720	2	1720	2	0.00
12/08/2019	R186 On 06-February-20	8.57	Call	Bond Future	1915	2	1915	2	0.00
12/08/2019	R186 On 06-February-20	9.00	Call	Bond Future	3362	4	3362	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
12/08/2019	R186 On 06-February-20	8.56	Call	Bond Future	1887	2	1887	2	0.00
12/08/2019	R186 On 06-February-20	8.56	Put	Bond Future	2059	2	2059	2	0.00
12/08/2019	R186 On 06-February-20	9.00	Put	Bond Future	1179	1	1179	1	1,007.00
12/08/2019	R186 On 06-February-20	8.50	Put	Bond Future	2219	2	2219	2	1,007.00
12/08/2019	R186 On 06-February-20	8.57	Put	Bond Future	2034	2	2034	2	0.00
12/08/2019	R186 On 06-February-20	8.11	Put	Bond Future	3495	3	3495	3	0.00
12/08/2019	R186 On 06-February-20	8.55	Put	Bond Future	2085	2	2085	2	0.00
12/08/2019	R186 On 07-May-20			Bond Future	8.65	113.8155	8.6462	113.8155	0.00
12/08/2019	R186 On 07-May-20	8.08	Call	Bond Future	1025	1	1025	1	0.00
12/08/2019	R186 On 07-May-20	8.93	Call	Bond Future	3336	4	3336	4	0.00
12/08/2019	R186 On 07-May-20	8.28	Call	Bond Future	1447	2	1447	2	6,000.00
12/08/2019	R186 On 07-May-20	8.09	Call	Bond Future	1044	1	1044	1	0.00
12/08/2019	R186 On 07-May-20	8.07	Call	Bond Future	1006	1	1006	1	0.00
12/08/2019	R186 On 07-May-20	7.60	Call	Bond Future	335	0	335	0	6,000.00
12/08/2019	R186 On 07-May-20	8.07	Put	Bond Future	4081	4	4081	4	0.00
12/08/2019	R186 On 07-May-20	7.60	Put	Bond Future	6001	6	6001	6	0.00
12/08/2019	R186 On 07-May-20	8.93	Put	Bond Future	1860	2	1860	2	6,000.00
12/08/2019	R186 On 07-May-20	8.28	Put	Bond Future	3389	3	3389	3	0.00
12/08/2019	R186 On 07-May-20	8.09	Put	Bond Future	4011	4	4011	4	0.00
12/08/2019	R186 On 07-May-20	8.08	Put	Bond Future	4046	4	4046	4	0.00
12/08/2019	R197 On 07-November-19			Bond Future	309.13	309.1439	309.1342	309.1439	2,507.00
12/08/2019	R197 On 06-February-20			Bond Future	307.12	307.1296	307.1199	307.1296	40.00
12/08/2019	R197 On 07-May-20			Bond Future	312.89	312.9038	312.8937	312.9038	0.00
12/08/2019	R202 On 07-November-19			Bond Future	235.83	235.8300	235.8267	235.8300	9,082.00
12/08/2019	R202 On 06-February-20			Bond Future	236.06	236.0677	236.0644	236.0677	0.00
12/08/2019	R202 On 07-May-20			Bond Future	240.50	240.5058	240.5022	240.5058	0.00
12/08/2019	R207 On 07-November-19			Bond Future	6.49	102.4602	6.4883	102.4602	3,801.00
12/08/2019	R207 On 07-November-19	2.07	Call	Bond Future	0	0	0	0	0.00
12/08/2019	R207 On 07-November-19	2.08	Call	Bond Future	0	0	0	0	0.00
12/08/2019	R207 On 07-November-19	2.06	Call	Bond Future	0	0	0	0	0.00
12/08/2019	R207 On 07-November-19	2.06	Put	Bond Future	793	1	793	1	0.00
12/08/2019	R207 On 07-November-19	2.07	Put	Bond Future	791	1	791	1	0.00
12/08/2019	R207 On 07-November-19	2.08	Put	Bond Future	789	1	789	1	0.00
12/08/2019	R208 On 07-November-19			Bond Future	6.73	100.8152	6.7260	100.8152	10,137.00

Date	Contract Details	Strike	Call/ Put	Product	MTM Yield	Previous Day's Closing MTM	MTM Price	Previous Day's Closing Price	Open Interest
12/08/2019	R208 On 07-November-19	6.84	Call	Bond Future	250	0	250	0	0.00
12/08/2019	R208 On 07-November-19	6.83	Call	Bond Future	241	0	241	0	0.00
12/08/2019	R208 On 07-November-19	6.82	Call	Bond Future	232	0	232	0	0.00
12/08/2019	R208 On 07-November-19	6.83	Put	Bond Future	106	0	106	0	0.00
12/08/2019	R208 On 07-November-19	6.82	Put	Bond Future	109	0	109	0	0.00
12/08/2019	R208 On 07-November-19	6.84	Put	Bond Future	102	0	102	0	0.00
12/08/2019	R208 On 06-February-20			Bond Future	6.59	102.6314	6.5920	102.6314	0.00
12/08/2019	R208 On 06-February-20	6.12	Call	Bond Future	23	0	23	0	0.00
12/08/2019	R208 On 06-February-20	6.13	Call	Bond Future	24	0	24	0	0.00
12/08/2019	R208 On 06-February-20	6.14	Call	Bond Future	25	0	25	0	0.00
12/08/2019	R208 On 06-February-20	6.14	Put	Bond Future	514	1	514	1	0.00
12/08/2019	R208 On 06-February-20	6.12	Put	Bond Future	534	1	534	1	0.00
12/08/2019	R208 On 06-February-20	6.13	Put	Bond Future	524	1	524	1	0.00
12/08/2019	R208 On 07-May-20			Bond Future	6.32	101.1334	6.3172	101.1334	0.00
12/08/2019	R208 On 07-May-20	4.82	Call	Bond Future	0	0	0	0	0.00
12/08/2019	R208 On 07-May-20	4.81	Call	Bond Future	0	0	0	0	0.00
12/08/2019	R208 On 07-May-20	4.80	Call	Bond Future	0	0	0	0	0.00
12/08/2019	R208 On 07-May-20	4.81	Put	Bond Future	1297	1	1297	1	0.00
12/08/2019	R208 On 07-May-20	4.80	Put	Bond Future	1306	1	1306	1	0.00
12/08/2019	R208 On 07-May-20	4.82	Put	Bond Future	1288	1	1288	1	0.00
12/08/2019	R209 On 07-November-19			Bond Future	9.86	72.3834	9.8604	72.3834	91,356.00
12/08/2019	R209 On 07-November-19	9.80	Call	Bond Future	1555	2	1555	2	0.00
12/08/2019	R209 On 07-November-19	9.50	Call	Bond Future	788	1	788	1	5,000.00
12/08/2019	R209 On 07-November-19	8.92	Call	Bond Future	99	0	99	0	8,000.00
12/08/2019	R209 On 07-November-19	9.82	Call	Bond Future	1618	2	1618	2	0.00
12/08/2019	R209 On 07-November-19	9.33	Call	Bond Future	481	1	481	1	8,000.00
12/08/2019	R209 On 07-November-19	9.77	Call	Bond Future	1464	2	1464	2	0.00
12/08/2019	R209 On 07-November-19	9.81	Call	Bond Future	1586	2	1586	2	0.00
12/08/2019	R209 On 07-November-19	9.81	Put	Bond Future	1904	2	1904	2	0.00
12/08/2019	R209 On 07-November-19	9.33	Put	Bond Future	3930	3	3930	3	0.00
12/08/2019	R209 On 07-November-19	9.82	Put	Bond Future	1872	2	1872	2	0.00
12/08/2019	R209 On 07-November-19	9.77	Put	Bond Future	2036	2	2036	2	8,000.00
12/08/2019	R209 On 07-November-19	8.92	Put	Bond Future	6382	6	6382	6	0.00
12/08/2019	R209 On 07-November-19	9.50	Put	Bond Future	3106	3	3106	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
12/08/2019	R209 On 07-November-19	9.80	Put	Bond Future	1936	2	1936	2	0.00
12/08/2019	R209 On 06-February-20			Bond Future	9.93	73.6875	9.9317	73.6875	0.00
12/08/2019	R209 On 06-February-20	9.51	Call	Bond Future	1409	2	1409	2	0.00
12/08/2019	R209 On 06-February-20	9.52	Call	Bond Future	1433	2	1433	2	0.00
12/08/2019	R209 On 06-February-20	9.50	Call	Bond Future	1386	2	1386	2	0.00
12/08/2019	R209 On 06-February-20	9.50	Put	Bond Future	4139	4	4139	4	0.00
12/08/2019	R209 On 06-February-20	9.51	Put	Bond Future	4097	4	4097	4	0.00
12/08/2019	R209 On 06-February-20	9.52	Put	Bond Future	4056	4	4056	4	0.00
12/08/2019	R209 On 07-May-20			Bond Future	10.00	71.9042	9.9994	71.9042	0.00
12/08/2019	R209 On 07-May-20	9.45	Call	Bond Future	1749	2	1749	2	0.00
12/08/2019	R209 On 07-May-20	9.47	Call	Bond Future	1797	2	1797	2	0.00
12/08/2019	R209 On 07-May-20	9.46	Call	Bond Future	1773	2	1773	2	0.00
12/08/2019	R209 On 07-May-20	9.46	Put	Bond Future	5194	5	5194	5	0.00
12/08/2019	R209 On 07-May-20	9.47	Put	Bond Future	5153	5	5153	5	0.00
12/08/2019	R209 On 07-May-20	9.45	Put	Bond Future	5236	5	5236	5	0.00
12/08/2019	R210 On 07-November-19			Bond Future	190.97	190.9787	190.9749	190.9787	2,132.00
12/08/2019	R210 On 06-February-20			Bond Future	194.46	194.4654	194.4615	194.4654	0.00
12/08/2019	R210 On 07-May-20			Bond Future	195.47	195.4708	195.4668	195.4708	0.00
12/08/2019	R212 On 07-November-19			Bond Future	163.40	163.4101	163.4038	163.4101	6,684.00
12/08/2019	R212 On 06-February-20			Bond Future	164.14	164.1476	164.1412	164.1476	0.00
12/08/2019	R212 On 07-May-20			Bond Future	167.23	167.2336	167.2269	167.2336	0.00
12/08/2019	R213 On 07-November-19			Bond Future	9.46	85.2016	9.4643	85.2016	20,854.00
12/08/2019	R213 On 07-November-19	9.58	Call	Bond Future	2027	2	2027	2	0.00
12/08/2019	R213 On 07-November-19	9.59	Call	Bond Future	2063	3	2063	3	0.00
12/08/2019	R213 On 07-November-19	9.60	Call	Bond Future	2099	3	2099	3	0.00
12/08/2019	R213 On 07-November-19	9.60	Put	Bond Future	1283	1	1283	1	0.00
12/08/2019	R213 On 07-November-19	9.58	Put	Bond Future	1330	1	1330	1	0.00
12/08/2019	R213 On 07-November-19	9.59	Put	Bond Future	1307	1	1307	1	0.00
12/08/2019	R213 On 06-February-20			Bond Future	9.54	86.7366	9.5423	86.7366	0.00
12/08/2019	R213 On 06-February-20	9.28	Call	Bond Future	1613	2	1613	2	0.00
12/08/2019	R213 On 06-February-20	9.27	Call	Bond Future	1587	2	1587	2	0.00
12/08/2019	R213 On 06-February-20	9.26	Call	Bond Future	1562	2	1562	2	0.00
12/08/2019	R213 On 06-February-20	9.27	Put	Bond Future	3228	3	3228	3	0.00
12/08/2019	R213 On 06-February-20	9.26	Put	Bond Future	3263	3	3263	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
12/08/2019	R213 On 06-February-20	9.28	Put	Bond Future	3192	3	3192	3	0.00
12/08/2019	R213 On 07-May-20			Bond Future	9.61	84.7946	9.6092	84.7946	0.00
12/08/2019	R213 On 07-May-20	9.00	Call	Bond Future	1343	2	1343	2	0.00
12/08/2019	R213 On 07-May-20	9.01	Call	Bond Future	1364	2	1364	2	0.00
12/08/2019	R213 On 07-May-20	9.02	Call	Bond Future	1386	2	1386	2	0.00
12/08/2019	R213 On 07-May-20	9.02	Put	Bond Future	4928	4	4928	4	0.00
12/08/2019	R213 On 07-May-20	9.00	Put	Bond Future	5009	5	5009	5	0.00
12/08/2019	R213 On 07-May-20	9.01	Put	Bond Future	4969	5	4969	5	0.00
12/08/2019	R214 On 07-November-19			Bond Future	10.08	70.7623	10.0833	70.7623	16,189.00
12/08/2019	R214 On 07-November-19	10.01	Call	Bond Future	1611	2	1611	2	0.00
12/08/2019	R214 On 07-November-19	10.02	Call	Bond Future	1642	2	1642	2	0.00
12/08/2019	R214 On 07-November-19	10.00	Call	Bond Future	1579	2	1579	2	0.00
12/08/2019	R214 On 07-November-19	10.00	Put	Bond Future	2123	2	2123	2	0.00
12/08/2019	R214 On 07-November-19	10.01	Put	Bond Future	2089	2	2089	2	0.00
12/08/2019	R214 On 07-November-19	10.02	Put	Bond Future	2055	2	2055	2	0.00
12/08/2019	R214 On 06-February-20			Bond Future	10.16	72.0372	10.1596	72.0372	0.00
12/08/2019	R214 On 06-February-20	9.71	Call	Bond Future	1435	2	1435	2	0.00
12/08/2019	R214 On 06-February-20	9.73	Call	Bond Future	1485	2	1485	2	0.00
12/08/2019	R214 On 06-February-20	9.72	Call	Bond Future	1459	2	1459	2	0.00
12/08/2019	R214 On 06-February-20	9.72	Put	Bond Future	4373	4	4373	4	0.00
12/08/2019	R214 On 06-February-20	9.73	Put	Bond Future	4330	4	4330	4	0.00
12/08/2019	R214 On 06-February-20	9.71	Put	Bond Future	4417	4	4417	4	0.00
12/08/2019	R214 On 07-May-20			Bond Future	10.23	70.0760	10.2266	70.0760	0.00
12/08/2019	R214 On 07-May-20	9.76	Call	Bond Future	2113	2	2113	2	0.00
12/08/2019	R214 On 07-May-20	9.77	Call	Bond Future	2139	2	2139	2	0.00
12/08/2019	R214 On 07-May-20	9.75	Call	Bond Future	2087	2	2087	2	0.00
12/08/2019	R214 On 07-May-20	9.75	Put	Bond Future	5219	5	5219	5	0.00
12/08/2019	R214 On 07-May-20	9.76	Put	Bond Future	5177	5	5177	5	0.00
12/08/2019	R214 On 07-May-20	9.77	Put	Bond Future	5135	5	5135	5	0.00
12/08/2019	R248 On 07-November-19			Bond Future	10.10	89.9305	10.1037	89.9305	88,756.00
12/08/2019	R248 On 07-November-19	10.03	Call	Bond Future	1977	2	1977	2	0.00
12/08/2019	R248 On 07-November-19	10.02	Call	Bond Future	1937	2	1937	2	0.00
12/08/2019	R248 On 07-November-19	10.01	Call	Bond Future	1898	2	1898	2	0.00
12/08/2019	R248 On 07-November-19	10.02	Put	Bond Future	2634	2	2634	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
12/08/2019	R248 On 07-November-19	10.01	Put	Bond Future	2678	2	2678	2	0.00
12/08/2019	R248 On 07-November-19	10.03	Put	Bond Future	2590	2	2590	2	0.00
12/08/2019	R248 On 06-February-20			Bond Future	10.18	91.5508	10.1805	91.5508	100.00
12/08/2019	R248 On 06-February-20	9.71	Call	Bond Future	1656	2	1656	2	0.00
12/08/2019	R248 On 06-February-20	9.72	Call	Bond Future	1686	2	1686	2	0.00
12/08/2019	R248 On 06-February-20	9.70	Call	Bond Future	1626	2	1626	2	0.00
12/08/2019	R248 On 06-February-20	9.72	Put	Bond Future	5587	5	5587	5	0.00
12/08/2019	R248 On 06-February-20	9.70	Put	Bond Future	5703	5	5703	5	0.00
12/08/2019	R248 On 06-February-20	9.71	Put	Bond Future	5645	5	5645	5	0.00
12/08/2019	R248 On 07-May-20			Bond Future	10.25	88.8100	10.2479	88.8100	0.00
12/08/2019	R248 On 07-May-20	9.77	Call	Bond Future	2436	3	2436	3	0.00
12/08/2019	R248 On 07-May-20	9.79	Call	Bond Future	2502	3	2502	3	0.00
12/08/2019	R248 On 07-May-20	9.78	Call	Bond Future	2469	3	2469	3	0.00
12/08/2019	R248 On 07-May-20	9.78	Put	Bond Future	6388	6	6388	6	0.00
12/08/2019	R248 On 07-May-20	9.77	Put	Bond Future	6442	6	6442	6	0.00
12/08/2019	R248 On 07-May-20	9.79	Put	Bond Future	6334	6	6334	6	0.00