



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

DAILY MTM REPORT

DAILY SUMMARY FOR: 31/01/2020

Contract Details	Strike	Call / Put	MTM Yield	Mark Price	Spot Rate	Previous MTM	Previous Price	Premium On Option	Volatility	Delta	Delta Value	Contracts Traded	Open Interest
Derivatives													
5Y STND	On 21/12/2021	Interest Rate Swap	94.73000	94.73000		94.72000	94.72000			0.00	0.00	0	51.00
AL37	On 06/02/2020	Index Future	691.44700	691.44700		690.51700	690.51700			0.00	0.00	0	0.00
AL37	On 07/05/2020	Index Future	703.59600	703.59600		702.65000	702.65000			0.00	0.00	0	0.00
AL37	On 06/08/2020	Index Future	716.19300	716.19300		715.23100	715.23100			0.00	0.00	0	0.00
AL7T	On 06/02/2020	Index Future	794.07200	794.07200		792.78800	792.78800			0.00	0.00	0	0.00
AL7T	On 07/05/2020	Index Future	808.02500	808.02500		806.71900	806.71900			0.00	0.00	0	0.00
AL7T	On 06/08/2020	Index Future	822.49200	822.49200		821.16200	821.16200			0.00	0.00	0	0.00
ALBI	On 06/02/2020	Index Future	707.58800	707.58800		706.30200	706.30200			0.00	169,821,120.00	24	247.00
ALBI	On 07/05/2020	Index Future	720.02100	720.02100		718.71300	718.71300			0.00	172,805,040.00	24	203.00
ALBI	On 06/08/2020	Index Future	732.91200	732.91200		731.58100	731.58100			0.00	0.00	0	0.00
E170	On 01/08/2021	Price Contribution	100.00000	100.00000		100.00000	100.00000			0.00	0.00	0	0.00

Contract Details	Strike	Call / Put	MTM	Yield	Mark Price	Spot Rate	Previous MTM	Previous Price	Premium On Option	Volatility	Delta	Delta Value	Contracts Traded	Open Interest
ES23	On 25/01/2023	Price Contribution	100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00
ES23A	On 25/01/2023	Price Contribution	100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00
ES26	On 25/01/2023	Price Contribution	100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00
ES26A	On 02/04/2026	Price Contribution	100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00
ES33	On 06/02/2020	Bond Future	10.92850	79.07081		10.94997	78.94740				0.00	0.00	0	0.00
ES33	On 07/05/2020	Bond Future	11.05265	76.66821		11.07491	76.54265				0.00	0.00	0	350.00
ES33	On 06/08/2020	Bond Future	11.17861	78.05564		11.20170	77.90478				0.00	0.00	0	0.00
ES33	On 05/11/2020	Bond Future	11.31111	75.64330		11.33509	75.51315				0.00	0.00	0	0.00
ES33	On 15/09/2033	Price Contribution	100.00000	100.00000		100.00000	100.00000				0.00	0.00	0	0.00
ES33A	On 15/09/2033	Price Contribution	100.00000	100.00000		100.00000	100.00000				0.00	0.00	0	0.00
ES42	On 06/02/2020	Bond Future	11.20292	80.52169		11.22430	80.38029				0.00	0.00	0	0.00
ES42	On 07/05/2020	Bond Future	11.32336	77.67256		11.34551	77.52878				0.00	0.00	0	4,919.00
ES42	On 06/08/2020	Bond Future	11.44369	79.07828		11.46666	78.90781				0.00	0.00	0	0.00
ES42	On 05/11/2020	Bond Future	11.56893	76.21197		11.59277	76.06286				0.00	0.00	0	0.00
ES42	On 25/04/2042	Price Contribution	100.00000	100.00000		100.00000	100.00000				0.00	0.00	0	0.00
GOVI	On 06/02/2020	GOVI	699.60200	699.60200		698.27700	698.27700				0.00	20,988,060.00	3	174.00
GOVI	On 07/05/2020	GOVI	711.89500	711.89500		710.54700	710.54700				0.00	0.00	0	1,179.00
GOVI	On 06/08/2020	GOVI	724.64000	724.64000		723.26900	723.26900				0.00	0.00	0	0.00
I2025	On 06/02/2020	Bond Future	135.45845	135.45845		135.34028	135.34028				0.00	0.00	0	2,027.00
I2025	On 07/05/2020	Bond Future	137.87228	137.87228		137.75199	137.75199				0.00	0.00	0	4,213.00
I2025	On 06/08/2020	Bond Future	138.90741	138.90741		138.78497	138.78497				0.00	0.00	0	0.00
I2025	On 05/11/2020	Bond Future	141.39397	141.39397		141.26912	141.26912				0.00	0.00	0	0.00
I2025	On 04/02/2021	Bond Future	142.33378	142.33378		142.20628	142.20628				0.00	0.00	0	0.00
I2025	On 31/01/2025	Price Contribution	100.00000	100.00000		100.00000	100.00000				0.00	0.00	0	0.00
I2029	On 06/02/2020	Bond Future	100.64052	100.64052		100.85207	100.85207				0.00	0.00	0	1,961.00
I2029	On 07/05/2020	Bond Future	101.33056	101.33056		101.54594	101.54594				0.00	0.00	0	3,765.00
I2029	On 06/08/2020	Bond Future	103.18897	103.18897		103.40826	103.40826				0.00	0.00	0	0.00
I2029	On 05/11/2020	Bond Future	103.90287	103.90287		104.12597	104.12597				0.00	0.00	0	0.00
I2033	On 14/08/2015	Price Contribution	100.00000	100.00000		100.00000	100.00000				0.00	0.00	0	0.00
I2033	On 06/02/2020	Bond Future	100.50241	100.50241		100.50798	100.50798				0.00	0.00	0	490.00
I2033	On 07/05/2020	Bond Future	101.10787	101.10787		101.11365	101.11365				0.00	0.00	0	6,960.00
I2033	On 06/08/2020	Bond Future	102.96223	102.96223		102.96808	102.96808				0.00	0.00	0	0.00
I2033	On 05/11/2020	Bond Future	103.59436	103.59436		103.60018	103.60018				0.00	0.00	0	0.00
I2033	On 28/02/2033	Price Contribution	100.00000	100.00000		100.00000	100.00000				0.00	0.00	0	0.00

Contract Details			Strike	Call / Put	MTM	Yield	Mark Price	Spot Rate	Previous MTM	Previous Price	Premium On Option	Volatility	Delta	Delta Value	Contracts Traded	Open Interest
I2038	On 06/02/2020	Bond Future			115.32241		115.32241		115.24744	115.24744			0.00	0.00	0	5,624.00
I2038	On 07/05/2020	Bond Future			117.37739		117.37739		117.30099	117.30099			0.00	0.00	0	10,867.00
I2038	On 06/08/2020	Bond Future			117.84995		117.84995		117.77226	117.77226			0.00	0.00	0	0.00
I2038	On 05/11/2020	Bond Future			119.95947		119.95947		119.88016	119.88016			0.00	0.00	0	0.00
I2038	On 31/01/2038	Price Contribution			100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00
I2046	On 06/02/2020	Bond Future			107.31134		107.31134		107.22252	107.22252			0.00	0.00	0	10,343.00
I2046	On 07/05/2020	Bond Future			107.49001		107.49001		107.39967	107.39967			0.00	0.00	0	13,000.00
I2046	On 06/08/2020	Bond Future			109.46127		109.46127		109.36934	109.36934			0.00	0.00	0	0.00
I2046	On 05/11/2020	Bond Future			109.63992		109.63992		109.54615	109.54615			0.00	0.00	0	0.00
I2046	On 31/03/2046	Price Contribution			100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00
I2050	On 06/02/2020	Bond Future			109.07773		109.07773		109.08370	109.08370			0.00	0.00	0	6,616.00
I2050	On 07/05/2020	Bond Future			111.02160		111.02160		111.02762	111.02762			0.00	1,665,324.00	15	11,773.00
I2050	On 06/08/2020	Bond Future			111.19298		111.19298		111.19922	111.19922			0.00	0.00	0	0.00
I2050	On 05/11/2020	Bond Future			113.18333		113.18333		113.18938	113.18938			0.00	0.00	0	0.00
I2050	On 31/12/2050	Price Contribution			100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00
IGOV	On 06/02/2020	Index Future			257.91000		257.91000		258.07700	258.07700			0.00	0.00	0	138.00
IGOV	On 07/05/2020	Index Future			262.50600		262.50600		262.67600	262.67600			0.00	0.00	0	1,021.00
IGOV	On 06/08/2020	Index Future			267.26900		267.26900		267.44200	267.44200			0.00	0.00	0	0.00
R186	On 06/02/2020	Bond Future			8.01814		114.37060		8.03874	114.25493		5.55	0.00	0.00	0	58,591.00
R186	On 06/02/2020	Bond Future	8.11	Call	648.00000		0.64800		583.21000	0.58321	648.000	5.63	0.74	0.00	0	821.00
R186	On 06/02/2020	Bond Future	8.50	Put	0.26000		0.00026		0.65000	0.00065	0.260	6.00	0.00	0.00	0	821.00
R186	On 06/02/2020	Bond Future	9.00	Put	0.00000		0.00000		0.00000	0.00000	0.000	6.53	0.00	0.00	0	821.00
R186	On 07/05/2020	Bond Future			8.06369		116.38021		8.08535	116.26256		5.50	0.00	3,258,645.88	28	74,100.00
R186	On 07/05/2020	Bond Future	7.60	Call	392.72000		0.39272		365.16000	0.36516	392.720	5.32	0.22	0.00	0	6,000.00
R186	On 07/05/2020	Bond Future	7.90	Put	1,806.21000		1.80621		1,871.83000	1.87183	1,806.210	5.46	0.60	0.00	0	2,500.00
R186	On 07/05/2020	Bond Future	8.28	Call	2,017.61000		2.01761		1,925.09000	1.92509	2,017.610	5.69	0.64	0.00	0	6,000.00
R186	On 07/05/2020	Bond Future	8.50	Put	526.60000		0.52660		529.21000	0.52921	526.600	5.89	0.25	0.00	0	23,230.00
R186	On 07/05/2020	Bond Future	8.93	Put	197.07000		0.19707		191.05000	0.19105	197.070	6.34	0.11	0.00	0	6,000.00
R186	On 06/08/2020	Bond Future			8.10629		113.18269		8.12911	113.03831		5.80	0.00	0.00	0	1,420.00
R186	On 06/08/2020	Bond Future	8.25	Put	1,521.35000		1.52135		1,596.90000	1.59690	1,521.350	5.80	0.43	0.00	0	3,150.00
R186	On 05/11/2020	Bond Future			8.15236		115.18220		8.17645	115.06018		5.50	0.00	0.00	0	0.00
R186	On 05/11/2020	Bond Future	7.84	Call	1,452.93000		1.45293		1,418.45000	1.41845	1,452.930	5.34	0.39	0.00	0	3,500.00
R186	On 05/11/2020	Bond Future	8.34	Call	2,722.52000		2.72252		2,672.40000	2.67240	2,722.520	5.54	0.58	0.00	0	3,500.00
R186	On 05/11/2020	Bond Future	9.26	Put	623.16000		0.62316		648.33000	0.64833	623.160	6.21	0.18	0.00	0	3,500.00
R186	On 21/12/2026	Price Contribution			100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00
R186/R207	On 21/12/2026	Price Contribution			100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00
R186/R208	On 21/12/2026	Price Contribution			100.00000		100.00000		100.00000	100.00000			0.00	0.00	0	0.00

Contract Details	Strike	Call / Put	MTM	Yield	Mark Price	Spot Rate	Previous MTM	Previous Price	Premium On Option	Volatility	Delta	Delta Value	Contracts Traded	Open Interest
R197	On 06/02/2020	Bond Future		301.18513	301.18513		301.20773	301.20773			0.00	0.00	0	1,440.00
R197	On 07/05/2020	Bond Future		306.55213	306.55213		306.57521	306.57521			0.00	0.00	0	2,500.00
R197	On 06/08/2020	Bond Future		304.44587	304.44587		304.46946	304.46946			0.00	0.00	0	0.00
R197	On 05/11/2020	Bond Future		309.89519	309.89519		309.91873	309.91873			0.00	0.00	0	0.00
R197	On 07/12/2023	Price Contribution		100.00000	100.00000		100.00000	100.00000			0.00	0.00	0	0.00
R202	On 06/02/2020	Bond Future		223.67529	223.67529		224.65335	224.65335			0.00	0.00	0	1,855.00
R202	On 07/05/2020	Bond Future		227.66095	227.66095		228.65670	228.65670			0.00	0.00	0	7,783.00
R202	On 06/08/2020	Bond Future		227.73140	227.73140		228.74523	228.74523			0.00	0.00	0	0.00
R202	On 05/11/2020	Bond Future		231.80783	231.80783		232.83960	232.83960			0.00	0.00	0	0.00
R202	On 07/12/2033	Price Contribution		100.00000	100.00000		100.00000	100.00000			0.00	0.00	0	0.00
R2023	On 06/02/2020	Bond Future		6.65815	106.47240		6.73842	106.25054		1.90	0.00	0.00	0	35,567.00
R2023	On 07/05/2020	Bond Future		6.60731	104.41286		6.69539	104.18719		2.08	0.00	29,235,600.80	280	65,223.00
R2023	On 06/08/2020	Bond Future		6.52738	106.30247		6.62499	106.05399		2.06	0.00	0.00	0	0.00
R2023	On 05/11/2020	Bond Future		6.44827	104.25142		6.55732	104.01748		1.96	0.00	0.00	0	0.00
R2023	On 28/02/2023	Price Contribution		100.00000	100.00000		100.00000	100.00000			0.00	0.00	0	0.00
R2030	On 06/02/2020	Bond Future		8.97471	93.90237		9.00057	93.74156		8.54	0.00	0.00	0	28,208.00
R2030	On 06/02/2020	Bond Future	8.40	Call	0.02000	0.00002	0.02000	0.00002	0.020	7.91	0.00	0.00	0	5,820.00
R2030	On 06/02/2020	Bond Future	9.00	Call	493.26000	0.49326	426.54000	0.42654	493.260	8.54	0.56	0.00	0	5,820.00
R2030	On 06/02/2020	Bond Future	9.25	Put	24.06000	0.02406	41.46000	0.04146	24.060	8.83	0.05	0.00	0	5,000.00
R2030	On 06/02/2020	Bond Future	9.40	Put	2.84000	0.00284	6.23000	0.00623	2.840	9.08	0.01	0.00	0	5,000.00
R2030	On 07/05/2020	Bond Future		9.04565	95.55229		9.07251	95.38872		8.44	0.00	3,726,539.31	39	53,142.00
R2030	On 06/08/2020	Bond Future		9.11690	93.27211		9.14486	93.08294		8.94	0.00	0.00	0	0.00
R2030	On 05/11/2020	Bond Future		9.18663	94.91979		9.21571	94.75019		8.59	0.00	0.00	0	0.00
R2030	On 05/11/2020	Bond Future	8.34	Call	886.43000	0.88643	874.81000	0.87481	886.430	7.98	0.24	0.00	0	1,000.00
R2030	On 05/11/2020	Bond Future	8.53	Call	1,206.58000	1.20658	1,185.99000	1.18599	1,206.580	8.10	0.30	0.00	0	16,000.00
R2030	On 05/11/2020	Bond Future	8.73	Call	1,619.39000	1.61939	1,585.36000	1.58536	1,619.390	8.25	0.36	0.00	0	3,000.00
R2030	On 05/11/2020	Bond Future	9.03	Call	2,373.85000	2.37385	2,320.56000	2.32056	2,373.850	8.45	0.46	0.00	0	16,000.00
R2030	On 05/11/2020	Bond Future	9.04	Call	2,401.56000	2.40156	2,347.72000	2.34772	2,401.560	8.46	0.47	0.00	0	1,000.00
R2030	On 05/11/2020	Bond Future	9.23	Call	2,963.35000	2.96335	2,896.36000	2.89636	2,963.350	8.58	0.53	0.00	0	3,000.00
R2030	On 05/11/2020	Bond Future	10.06	Put	1,182.99000	1.18299	1,219.57000	1.21957	1,182.990	9.40	0.25	0.00	0	1,000.00
R2030	On 05/11/2020	Bond Future	10.37	Put	843.28000	0.84328	865.54000	0.86554	843.280	9.64	0.19	0.00	0	16,000.00
R2030	On 05/11/2020	Bond Future	10.47	Put	738.38000	0.73838	758.09000	0.75809	738.380	9.64	0.17	0.00	0	3,000.00
R2030	On 31/01/2030	Price Contribution		100.00000	100.00000		100.00000	100.00000			0.00	0.00	0	0.00
R2032	On 06/02/2020	Bond Future		9.38518	94.88115		9.41111	94.70633		9.73	0.00	0.00	0	43,177.00
R2032	On 07/05/2020	Bond Future		9.46199	92.38982		9.48885	92.21198		9.93	0.00	1,570,626.94	17	81,720.00
R2032	On 07/05/2020	Bond Future	9.20	Call	1,086.43000	1.08643	980.96000	0.98096	1,086.430	9.56	0.36	0.00	0	7,500.00
R2032	On 07/05/2020	Bond Future	9.50	Call	2,012.45000	2.01245	1,873.72000	1.87372	2,012.450	9.93	0.53	0.00	0	7,500.00
R2032	On 06/08/2020	Bond Future		9.53853	94.06184		9.56638	93.85681		10.08	0.00	0.00	0	0.00
R2032	On 05/11/2020	Bond Future		9.61859	91.56543		9.64749	91.38101		10.16	0.00	0.00	0	0.00

Contract Details			Strike	Call / Put	MTM	Yield	Mark Price	Spot Rate	Previous MTM	Previous Price	Premium On Option	Volatility	Delta	Delta Value	Contracts Traded	Open Interest
R2032	On 05/11/2020	Bond Future	8.94	Call	1,353.61000		1.35361	1,440.79000	1.44079	1,353.610	9.45	0.30	0.00	0	1,000.00	
R2032	On 05/11/2020	Bond Future	9.11	Call	1,738.60000		1.73860	1,813.55000	1.81355	1,738.600	9.62	0.35	0.00	0	3,000.00	
R2032	On 05/11/2020	Bond Future	9.44	Call	2,641.05000		2.64105	2,686.35000	2.68635	2,641.050	9.91	0.46	0.00	0	1,000.00	
R2032	On 05/11/2020	Bond Future	9.61	Call	3,181.61000		3.18161	3,210.42000	3.21042	3,181.610	10.05	0.51	0.00	0	3,000.00	
R2032	On 05/11/2020	Bond Future	10.99	Put	797.33000		0.79733	831.21000	0.83121	797.330	11.35	0.16	0.00	0	3,000.00	
R2032	On 05/11/2020	Bond Future	11.08	Put	708.50000		0.70850	739.47000	0.73947	708.500	11.35	0.15	0.00	0	1,000.00	
R2032	On 31/03/2032	Price Contribution			100.00000		100.00000	100.00000	100.00000			0.00	0.00	0	0.00	
R2035	On 06/02/2020	Bond Future			9.71572		97.43444	9.74175	97.24093		10.79	0.00	0.00	0	47,571.00	
R2035	On 07/05/2020	Bond Future			9.79399		94.64549	9.82088	94.44872		10.95	0.00	0.00	0	107,891.00	
R2035	On 07/05/2020	Bond Future	9.11	Call	362.52000		0.36252	297.68000	0.29768	362.520	9.80	0.15	0.00	0	5,000.00	
R2035	On 07/05/2020	Bond Future	9.18	Call	466.81000		0.46681	390.83000	0.39083	466.810	9.96	0.18	0.00	0	3,530.00	
R2035	On 07/05/2020	Bond Future	9.55	Call	1,314.77000		1.31477	1,180.95000	1.18095	1,314.770	10.68	0.38	0.00	0	7,500.00	
R2035	On 07/05/2020	Bond Future	9.75	Call	1,977.03000		1.97703	1,817.56000	1.81756	1,977.030	10.95	0.49	0.00	0	5,000.00	
R2035	On 07/05/2020	Bond Future	9.78	Call	2,089.53000		2.08953	1,926.72000	1.92672	2,089.530	10.99	0.50	0.00	0	3,530.00	
R2035	On 07/05/2020	Bond Future	9.85	Call	2,364.45000		2.36445	2,194.40000	2.19440	2,364.450	11.09	0.54	0.00	0	7,500.00	
R2035	On 07/05/2020	Bond Future	10.57	Put	570.47000		0.57047	563.54000	0.56354	570.470	12.47	0.17	0.00	0	3,530.00	
R2035	On 07/05/2020	Bond Future	10.75	Put	417.64000		0.41764	409.61000	0.40961	417.640	12.86	0.13	0.00	0	5,000.00	
R2035	On 06/08/2020	Bond Future			9.87190		96.35831	9.89972	96.13290		11.12	0.00	0.00	0	0.00	
R2035	On 06/08/2020	Bond Future	8.75	Call	379.44000		0.37944	312.08000	0.31208	379.440	9.79	0.12	0.00	0	3,000.00	
R2035	On 06/08/2020	Bond Future	9.00	Call	647.15000		0.64715	617.41000	0.61741	647.150	9.79	0.18	0.00	0	24,761.00	
R2035	On 05/11/2020	Bond Future			9.95616		93.56111	9.98496	93.35714		11.25	0.00	0.00	0	0.00	
R2035	On 28/02/2035	Price Contribution			100.00000		100.00000	100.00000	100.00000			0.00	0.00	0	0.00	
R2037	On 06/02/2020	Bond Future			9.90548		88.81277	9.93146	88.62008		12.05	0.00	586,164,282.00	6,600	25,813.00	
R2037	On 07/05/2020	Bond Future			9.98872		90.37326	10.01555	90.17726		11.68	0.00	596,463,516.00	6,600	67,193.00	
R2037	On 07/05/2020	Bond Future	9.70	Call	1,205.29000		1.20529	1,072.32000	1.07232	1,205.290	11.21	0.35	0.00	0	7,500.00	
R2037	On 07/05/2020	Bond Future	10.00	Call	2,211.04000		2.21104	2,040.03000	2.04003	2,211.040	11.68	0.52	0.00	0	7,500.00	
R2037	On 06/08/2020	Bond Future			10.07323		87.74871	10.10098	87.52575		12.45	0.00	0.00	0	0.00	
R2037	On 05/11/2020	Bond Future			10.15519		89.29875	10.18387	89.09558		12.03	0.00	0.00	0	0.00	
R2037	On 31/01/2037	Price Contribution			100.00000		100.00000	100.00000	100.00000			0.00	0.00	0	0.00	
R2040	On 06/10/2015	Price Contribution			100.00000		100.00000	100.00000	100.00000			0.00	0.00	0	0.00	
R2040	On 06/02/2020	Bond Future			10.01046		91.60693	10.04645	91.32052		12.47	0.00	0.00	0	24,348.00	
R2040	On 07/05/2020	Bond Future			10.09329		93.21663	10.13046	92.92516		12.09	0.00	55,929,978.00	600	36,954.00	
R2040	On 07/05/2020	Bond Future	9.50	Call	486.20000		0.48620	468.73000	0.46873	486.200	10.52	0.18	0.00	0	2,640.00	
R2040	On 07/05/2020	Bond Future	10.00	Call	1,903.60000		1.90360	1,776.30000	1.77630	1,903.600	11.71	0.46	0.00	0	2,640.00	
R2040	On 06/08/2020	Bond Future			10.17740		90.39292	10.21582	90.07186		12.92	0.00	0.00	0	0.00	
R2040	On 05/11/2020	Bond Future			10.25880		91.98962	10.29848	91.68758		12.49	0.00	0.00	0	0.00	
R2040	On 05/11/2020	Bond Future	9.50	Call	1,551.78000		1.55178	1,619.02000	1.61902	1,551.780	11.65	0.28	0.00	0	2,000.00	
R2040	On 05/11/2020	Bond Future	9.73	Call	2,172.68000		2.17268	2,209.48000	2.20948	2,172.680	11.94	0.35	0.00	0	2,000.00	
R2040	On 05/11/2020	Bond Future	10.00	Call	3,046.93000		3.04693	3,042.35000	3.04235	3,046.930	12.25	0.44	0.00	0	2,000.00	
R2040	On 05/11/2020	Bond Future	10.23	Call	3,895.00000		3.89500	3,858.90000	3.85890	3,895.000	12.47	0.51	0.00	0	2,000.00	
R2040	On 05/11/2020	Bond Future	11.50	Put	1,239.94000		1.23994	1,328.48000	1.32848	1,239.940	13.94	0.19	0.00	0	2,000.00	

Contract Details			Strike	Call / Put	MTM	Yield	Mark Price	Spot Rate	Previous MTM	Previous Price	Premium On Option	Volatility	Delta	Delta Value	Contracts Traded	Open Interest
R2040	On 05/11/2020	Bond Future	11.70	Put	976.49000	0.97649		1,051.82000	1.05182	976.490	13.94	0.16	0.00	0	2,000.00	
R2040	On 31/01/2040	Price Contribution			100.00000	100.00000		100.00000	100.00000				0.00	0.00	0	0.00
R2044	On 06/02/2020	Bond Future			10.11538	88.02802		10.13633	87.85989		13.16	0.00	278,872,767.36	3,168	17,395.00	
R2044	On 06/02/2020	Bond Future	9.09	Call	0.00000	0.00000		0.00000	0.00000	0.000	11.88	0.00	0.00	0	328.00	
R2044	On 06/02/2020	Bond Future	9.74	Call	5.83000	0.00583		6.24000	0.00624	5.830	12.02	0.01	0.00	0	328.00	
R2044	On 06/02/2020	Bond Future	10.78	Put	0.27000	0.00027		0.77000	0.00077	0.270	14.39	0.00	0.00	0	328.00	
R2044	On 07/05/2020	Bond Future			10.19713	89.57474		10.21874	89.40377		12.77	0.00	54,103,142.96	604	50,970.00	
R2044	On 07/05/2020	Bond Future	9.26	Call	139.45000	0.13945		108.00000	0.10800	139.450	10.78	0.07	0.00	0	556.00	
R2044	On 07/05/2020	Bond Future	9.33	Call	188.48000	0.18848		149.57000	0.14957	188.480	10.87	0.08	0.00	0	100.00	
R2044	On 07/05/2020	Bond Future	9.45	Call	302.22000	0.30222		248.68000	0.24868	302.220	11.04	0.12	0.00	0	129.00	
R2044	On 07/05/2020	Bond Future	9.91	Call	1,293.18000	1.29318		1,171.46000	1.17146	1,293.180	12.16	0.35	0.00	0	556.00	
R2044	On 07/05/2020	Bond Future	9.97	Call	1,488.67000	1.48867		1,359.13000	1.35913	1,488.670	12.30	0.39	0.00	0	129.00	
R2044	On 07/05/2020	Bond Future	9.98	Call	1,522.72000	1.52272		1,391.92000	1.39192	1,522.720	12.32	0.39	0.00	0	100.00	
R2044	On 07/05/2020	Bond Future	10.81	Put	829.48000	0.82948		817.79000	0.81779	829.480	13.89	0.22	0.00	0	129.00	
R2044	On 07/05/2020	Bond Future	11.02	Put	583.60000	0.58360		570.77000	0.57077	583.600	14.42	0.16	0.00	0	556.00	
R2044	On 07/05/2020	Bond Future	11.09	Put	519.73000	0.51973		506.55000	0.50655	519.730	14.60	0.15	0.00	0	100.00	
R2044	On 06/08/2020	Bond Future			10.28011	86.81043		10.30244	86.61271		13.66	0.00	0.00	0	0.00	
R2044	On 06/08/2020	Bond Future	9.01	Call	304.34000	0.30434		250.57000	0.25057	304.340	12.00	0.09	0.00	0	140.00	
R2044	On 06/08/2020	Bond Future	9.36	Call	698.03000	0.69803		605.34000	0.60534	698.030	12.21	0.18	0.00	0	602.00	
R2044	On 06/08/2020	Bond Future	9.66	Call	1,337.29000	1.33729		1,204.77000	1.20477	1,337.290	12.78	0.28	0.00	0	140.00	
R2044	On 06/08/2020	Bond Future	9.98	Call	2,288.93000	2.28893		2,123.03000	2.12303	2,288.930	13.31	0.41	0.00	0	602.00	
R2044	On 06/08/2020	Bond Future	10.93	Put	1,668.42000	1.66842		1,632.68000	1.63268	1,668.420	14.82	0.28	0.00	0	140.00	
R2044	On 06/08/2020	Bond Future	11.09	Put	1,408.67000	1.40867		1,372.83000	1.37283	1,408.670	15.17	0.24	0.00	0	602.00	
R2044	On 05/11/2020	Bond Future			10.36028	88.34382		10.38333	88.16658		13.21	0.00	0.00	0	0.00	
R2044	On 05/11/2020	Bond Future	8.87	Call	447.80000	0.44780		535.33000	0.53533	447.800	11.96	0.11	0.00	0	1,815.00	
R2044	On 05/11/2020	Bond Future	9.29	Call	932.73000	0.93273		1,063.27000	1.06327	932.730	11.96	0.19	0.00	0	568.00	
R2044	On 05/11/2020	Bond Future	9.72	Call	1,835.40000	1.83540		2,018.39000	2.01839	1,835.400	12.27	0.32	0.00	0	1,815.00	
R2044	On 05/11/2020	Bond Future	9.97	Call	2,594.46000	2.59446		2,749.51000	2.74951	2,594.460	12.61	0.40	0.00	0	568.00	
R2044	On 05/11/2020	Bond Future	10.02	Call	2,762.20000	2.76220		2,910.64000	2.91064	2,762.200	12.67	0.41	0.00	0	1,815.00	
R2044	On 05/11/2020	Bond Future	11.17	Put	1,904.26000	1.90426		2,118.54000	2.11854	1,904.260	14.13	0.27	0.00	0	1,815.00	
R2044	On 05/11/2020	Bond Future	11.38	Put	1,588.52000	1.58852		1,722.58000	1.72258	1,588.520	14.52	0.23	0.00	0	568.00	
R2044	On 05/11/2020	Bond Future	11.43	Put	1,522.84000	1.52284		1,631.53000	1.63153	1,522.840	14.61	0.22	0.00	0	1,815.00	
R2044	On 31/01/2044	Price Contribution			100.00000	100.00000		100.00000	100.00000				0.00	0.00	0	0.00
R2048	On 06/02/2020	Bond Future			10.10552	91.38593		10.13151	91.17184		12.92	0.00	27,781,322.72	304	74,209.00	
R2048	On 07/05/2020	Bond Future			10.18141	88.55408		10.20820	88.33636		13.17	0.00	53,132,448.00	600	36,411.00	
R2048	On 07/05/2020	Bond Future	9.69	Call	740.28000	0.74028		638.35000	0.63835	740.280	11.98	0.24	0.00	0	300.00	
R2048	On 07/05/2020	Bond Future	10.20	Put	2,305.92000	2.30592		2,341.30000	2.34130	2,305.920	13.09	0.48	0.00	0	300.00	
R2048	On 07/05/2020	Bond Future	10.70	Put	979.18000	0.97918		978.86000	0.97886	979.180	14.05	0.25	0.00	0	300.00	
R2048	On 06/08/2020	Bond Future			10.25702	90.15672		10.28468	89.91063		13.41	0.00	0.00	0	0.00	
R2048	On 06/08/2020	Bond Future	9.00	Call	303.90000	0.30390		245.75000	0.24575	303.900	11.78	0.09	0.00	0	3,000.00	
R2048	On 06/08/2020	Bond Future	9.25	Call	545.80000	0.54580		458.35000	0.45835	545.800	11.78	0.14	0.00	0	20,640.00	
R2048	On 05/11/2020	Bond Future			10.33746	87.31328		10.36602	87.08753		13.63	0.00	0.00	0	0.00	

Contract Details	Strike	Call / Put	MTM	Yield	Mark Price	Spot Rate	Previous MTM	Previous Price	Premium On Option	Volatility	Delta	Delta Value	Contracts Traded	Open Interest
R2048		On 28/02/2048	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R208		On 06/02/2020	Bond Future		6.49186	102.73858	6.57193	102.65214		0.49	0.00	1,232,862.96	12	7,572.00
R208		On 07/05/2020	Bond Future		6.30656	101.14141	6.40979	101.05352		0.45	0.00	5,562,777.55	55	8,015.00
R208		On 06/08/2020	Bond Future		5.91813	102.97181	6.06311	102.86554		0.38	0.00	0.00	0	0.00
R208		On 05/11/2020	Bond Future		5.07062	101.38901	5.30819	101.29783		0.24	0.00	0.00	0	0.00
R208		On 31/03/2021	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R208/R204		On 31/03/2021	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R208/R207		On 31/03/2021	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R209		On 06/02/2020	Bond Future		9.77502	73.94482	9.79590	73.81284		12.03	0.00	126,297,752.56	1,708	16,163.00
R209	9.40	On 06/02/2020	Bond Future	Call	5.41000	0.00541	5.00000	0.00500	5.410	11.47	0.01	0.00	0	7,500.00
R209		On 07/05/2020	Bond Future		9.84947	72.09378	9.87100	71.95948		12.46	0.00	18,383,913.90	255	66,871.00
R209		On 06/08/2020	Bond Future		9.92356	73.39849	9.94577	73.24233		12.75	0.00	0.00	0	0.00
R209		On 05/11/2020	Bond Future		10.00008	71.54505	10.02300	71.40583		12.89	0.00	0.00	0	0.00
R209		On 31/03/2036	Price Contribution		6.25000	6.25000	6.25000	6.25000			0.00	0.00	0	0.00
R209/R186		On 31/03/2036	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R209/R204		On 31/03/2036	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R209/R208		On 31/03/2036	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R210		On 06/02/2020	Bond Future		187.06927	187.06927	187.21448	187.21448			0.00	0.00	0	374.00
R210		On 07/05/2020	Bond Future		187.77471	187.77471	187.92254	187.92254			0.00	0.00	0	1,941.00
R210		On 06/08/2020	Bond Future		191.21842	191.21842	191.36909	191.36909			0.00	0.00	0	0.00
R210		On 05/11/2020	Bond Future		191.94174	191.94174	192.09493	192.09493			0.00	0.00	0	0.00
R210		On 31/03/2028	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R212		On 06/02/2020	Bond Future		161.52360	161.52360	161.53665	161.53665			0.00	13,083,411.60	81	7,719.00
R212		On 07/05/2020	Bond Future		164.40188	164.40188	164.41523	164.41523			0.00	0.00	0	3,251.00
R212		On 06/08/2020	Bond Future		165.14154	165.14154	165.15513	165.15513			0.00	0.00	0	0.00
R212		On 05/11/2020	Bond Future		168.09754	168.09754	168.11120	168.11120			0.00	0.00	0	0.00
R212		On 31/01/2022	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R213		On 06/02/2020	Bond Future		9.19509	88.13493	9.21599	88.00659		9.17	0.00	401,895,280.80	4,560	5,161.00
R213		On 07/05/2020	Bond Future		9.26383	86.13354	9.28547	86.00296		9.49	0.00	392,768,942.40	4,560	18,813.00
R213		On 06/08/2020	Bond Future		9.33151	87.69233	9.35395	87.53774		9.67	0.00	0.00	0	0.00
R213		On 05/11/2020	Bond Future		9.40655	85.69269	9.42984	85.55725		9.71	0.00	0.00	0	0.00
R213		On 28/02/2031	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00
R213/R186		On 28/02/2031	Price Contribution		100.00000	100.00000	100.00000	100.00000			0.00	0.00	0	0.00

Contract Details	Strike	Call / Put	MTM	Yield	Mark Price	Spot Rate	Previous MTM	Previous Price	Premium On Option	Volatility	Delta	Delta Value	Contracts Traded	Open Interest
R214	On 06/02/2020	Bond Future		9.96024	72.68861		9.98116	72.55062		13.12	0.00	30,674,593.42	422	10,465.00
R214	On 06/02/2020	Bond Future	9.52	Call	1.70000	0.00170	1.44000	0.00144	1.700	12.17	0.00	0.00	0	1,000.00
R214	On 06/02/2020	Bond Future	9.87	Call	239.69000	0.23969	209.96000	0.20996	239.690	12.90	0.31	0.00	0	1,000.00
R214	On 06/02/2020	Bond Future	10.42	Put	4.79000	0.00479	8.06000	0.00806	4.790	14.02	0.01	0.00	0	1,000.00
R214	On 07/05/2020	Bond Future		10.03207	70.66942		10.05361	70.52904		13.53	0.00	43,037,676.78	609	10,424.00
R214	On 07/05/2020	Bond Future	9.31	Call	325.77000	0.32577	280.63000	0.28063	325.770	12.19	0.15	0.00	0	1,250.00
R214	On 07/05/2020	Bond Future	9.91	Call	1,581.36000	1.58136	1,478.68000	1.47868	1,581.360	13.39	0.45	0.00	0	1,250.00
R214	On 07/05/2020	Bond Future	10.66	Put	707.48000	0.70748	708.32000	0.70832	707.480	14.96	0.22	0.00	0	1,250.00
R214	On 06/08/2020	Bond Future		10.10337	71.94833		10.12557	71.78624		13.82	0.00	0.00	0	0.00
R214	On 05/11/2020	Bond Future		10.17949	69.92398		10.20238	69.77843		14.02	0.00	0.00	0	0.00
R214	On 28/02/2041	Price Contribution		100.00000	100.00000		100.00000	100.00000			0.00	0.00	0	0.00
R214/R209	On 28/02/2041	Price Contribution		100.00000	100.00000		100.00000	100.00000			0.00	0.00	0	0.00
Total for Derivatives :												3,088,455,625.94	31,168	1 510 419.00
Grand Total:												3,088,455,625.94	31,168	1 510 419.00