

JSE
INTEREST RATE DERIVATIVES
MONTHLY VIEW

September 2021

Compiled by the IRC team

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HIGHLIGHTS

September is historically one of the least active months of the year for IRD with this month being no different. We do expect increase in volumes in October, as positions are rolled or closed into the November expiry.

- All **IRD contracts traded** are down 8.4% while open interest is down 9.6% ytd
- **Bond futures** contracts traded is down 8.5% down while open interest is down 2.1%.
- **Bond options activity** is 26% lower and open interest represents an exposure of R14.7 bln in underlying nominal value
- The **Govi and Bond Index Futures** value traded was R75bln ytd, down 18% from previous year
- The underlying nominal of 13 bln of **Jibar futures** trading in September represents a record month

MONTHLY SNAPSHOT: CONTRACTS & OPEN INTEREST

Monthly Snapshot Contracts Traded 2021								
	Bond Futures	Calls	Puts	Govi Futures	Index Futures	Jibar Futures	Swap Futures	Total
2021.01	2,064,147	21,004	17,677	1,941	2,888	40,001	-	2,147,658
2021.02	647,370	24,856	21,684	101	582	40,470	-	735,063
2021.03	127,022	21,895	15,812	29	60	400	-	165,218
2021.04	1,995,098	13,289	27,516	1,517	1,720	-	-	2,039,140
2021.05	920,233	13,899	108,021	87	753	-	-	1,042,993
2021.06	50,847	12,776	24,800	17	161	-	-	88,601
2021.07	2,210,468	7,750	9,100	1,996	1,298	-	-	2,230,612
2021.08	497,888	14,332	25,619	30	138	69	-	538,076
2021.09	61,417	18,400	22,650	11	31	130,000	-	232,509
Grand Total	8,574,490	148,201	272,879	5,729	7,631	210,940	-	9,219,870

Monthly Snapshot Open Interest 2021								
	Bond Futures	Calls	Puts	Govi Futures	Index Futures	Jibar Futures	Swap Futures	Total
2021.01	1,368,771	54,416	117,177	977	1,365	50,001	51	1,592,758
2021.02	1,012,584	45,247	96,085	975	1,212	30,471	51	1,186,625
2021.03	1,043,823	52,181	103,536	1,001	1,196	30,471	51	1,232,259
2021.04	1,493,709	61,680	114,125	1,003	1,270	30,471	51	1,702,309
2021.05	989,485	31,963	76,593	987	726	30,471	51	1,130,276
2021.06	986,432	38,363	82,093	981	581	30,471	51	1,138,972
2021.07	1,311,466	41,313	91,193	997	631	30,471	51	1,476,122
2021.08	946,280	36,714	85,050	986	594	30,540	51	1,100,215
2021.09	948,396	48,514	98,050	993	625	50,540	51	1,147,169

INTEREST RATE DERIVATIVE CONTRACTS

IRD CONTRACTS TRADED

The number of IRD contracts traded YTD is 8.4% down from 2020 equivalent period. This lower activity is more pronounced in the bond options and index futures markets.

Listed IRD CONTRACTS TRADED							
YTD - Contracts	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2020	9,367,813	569,101	7,373	11,618	110,085	-	10,065,990
2021	8,574,490	421,080	5,729	7,631	210,940	-	9,219,870
Growth	-8.5%	-26.0%	-22.3%	-34.3%	91.6%	0.0%	-8.4%

IRD VALUE TRADED

The value traded YTD is 7.9% lower than 2020 equivalent period with a total of R887bln notional.

IRD VALUE TRADED YTD (Rm)							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2020	R 867,362	R 1,058	R 50,939	R 41,738	R 2,654	R 0	R 963,751
2021	R 806,286	R 760	R 44,313	R 31,536	R 5,062	R 0	R 887,957
Growth	-7.0%	-28.1%	-13.0%	-24.4%	90.7%	0.0%	-7.9%

IRD NOMINAL EXPOSURE*

LISTED IRD UNDERLYING NOMINAL EXPOSURE Rbln							
YTD - Nominal	Bond Fut	Bond Opt	Govi Fut val traded	Index Fut val traded	JIBAR Fut	SWAP Fut	Total
Contract size	100k	100k	1	1	100k	100k	
2020	936.8	56.9	50.9	41.7	11.0	-	1,097.4
2021	857.4	42.1	44.3	31.5	21.1	-	996.5
Growth	-8.5%	-26.0%	-13.0%	-24.4%	91.6%	0.0%	-9.2%
% Split	86.0%	4.2%	4.4%	3.2%	2.1%	0.0%	100.0%

*All the underlying nominals traded (in R billions) are represented by the contract size multiplied by the contracts traded, except for the Govi and Index futures which are represented by the value traded.

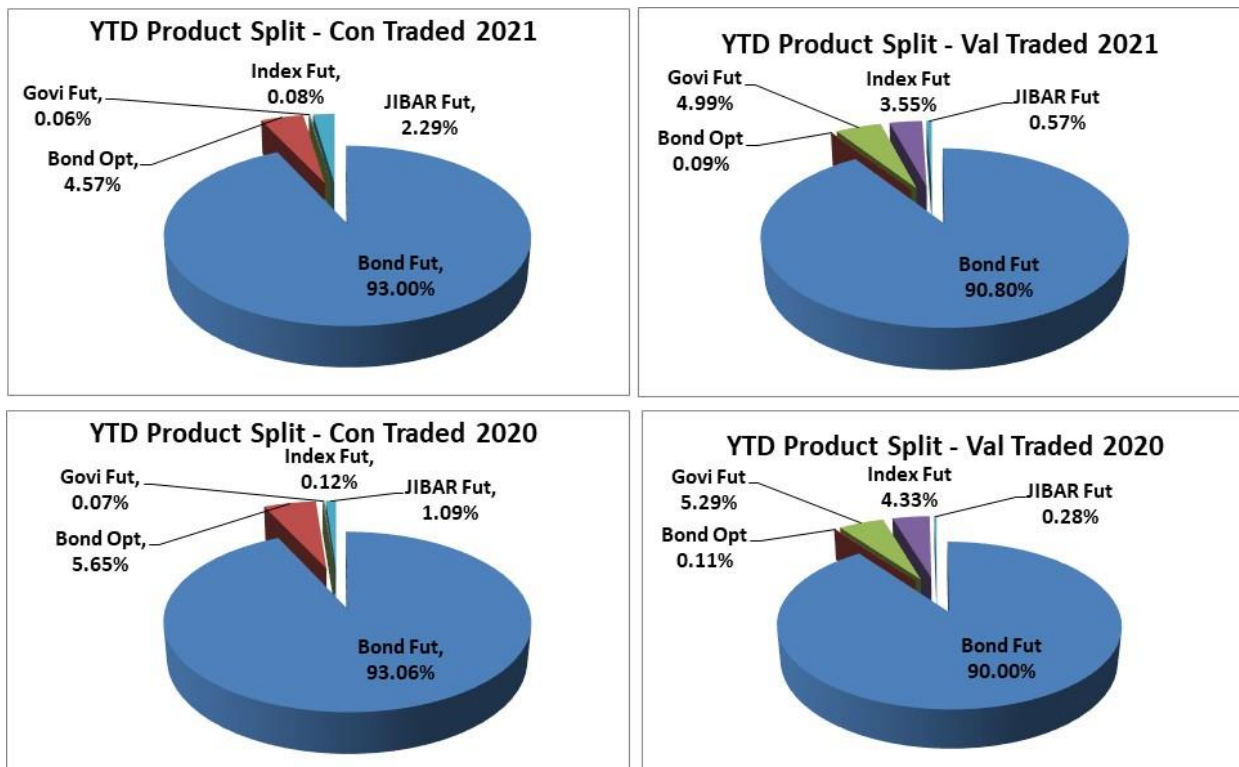
IRD OPEN INTEREST

The overall Open Interest is 9.6% down compared to previous year

IRD OPEN INTEREST YTD							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2020	969,022	236,877	1,009	1,427	60,010	51	1,268,396
2021	948,396	146,564	993	625	50,540	51	1,147,169
Growth	-2.1%	-38.1%	-1.6%	-56.2%	-15.8%	0.0%	-9.6%

IRD PRODUCT SPLIT IN CONTRACTS AND VALUE TRADED

GOVI and Index Futures represent about 1.4% of all contracts traded but 8.5% of value traded YTD.



TWO_MONTH CLOSE OUT PERIOD VOLUME (ALL IRD CONTRACTS)

Roll activity normally starts in the month prior to close-out. Thus, close-out activity is represented by consolidating volumes for the close-out month and the prior month as a 2-month period.

ALL IRD CONTRACTS (in 2-mth periods) (in millions of contracts)								
Close-Out (2-mth)	2016	2017	2018	2019	2020	2021	% Chg 2020/19	% Chg 2021/20
Close-Out 1 (Feb)	1.733	2.455	3.292	2.609	3.097	2.883	18.7%	-6.9%
Close-Out 2 (May)	2.401	2.491	2.973	2.518	3.219	3.082	27.8%	-4.2%
Close-Out 3 (Aug)	2.313	3.051	2.532	3.009	3.040	2.769	1.0%	-8.9%
Close-Out 4 (Nov)	2.399	3.320	2.749	2.787	3.082	-	10.6%	

All (2-month) close-out periods in 2020 reported greater than 3m contracts and double-digit growth from previous year. The latest **August 2021 (2-mth) close-out period**, saw a total of 2.7 million contracts traded, 9% lower than the same close-out period in 2020

BOND FUTURES

BOND FUTURES: CONTRACTS TRADED

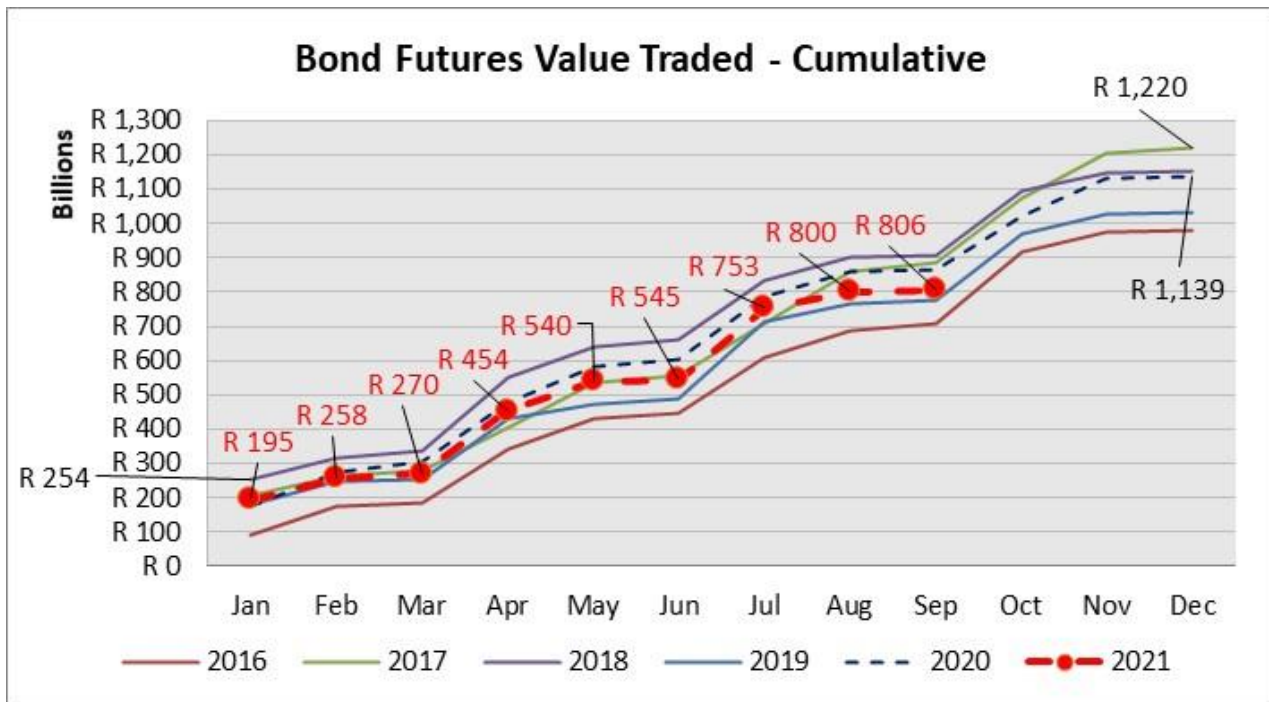
The total cumulative contracts traded in Bond Futures year-to-date, at 8.5m contracts, is 8.5% lower than equivalent period previous year.



Bond Futures Contracts Traded								
Date	2016	2017	2018	2019	2020	2021	Chg 20/19	Chg 21/20
Jan	826,485	1,963,456	2,512,043	1,872,040	1,808,945	2,064,147	-3.4%	14.1%
Feb	883,377	493,725	622,760	654,730	994,022	647,370	51.8%	-34.9%
Mar	79,520	148,066	184,080	71,194	337,360	127,022	373.9%	-62.3%
Apr	1,490,182	1,168,792	2,071,717	1,778,197	1,984,879	1,995,098	11.6%	0.5%
May	854,135	1,322,123	868,973	434,577	1,152,932	920,233	165.3%	-20.2%
Jun	134,452	177,529	241,609	121,845	187,670	50,847	54.0%	-72.9%
Jul	1,542,365	1,475,383	1,770,507	2,232,039	2,022,009	2,210,468	-9.4%	9.3%
Aug	691,788	1,497,690	706,275	550,331	820,119	497,888	49.0%	-39.3%
Sep	207,021	235,816	53,904	85,331	59,877	61,417	-29.8%	2.6%
Oct	1,903,245	1,947,995	1,987,598	1,970,014	1,707,398		-13.3%	
Nov	477,584	1,304,500	599,247	610,292	1,210,516		98.4%	
Dec	77,224	180,041	69,157	57,887	64,811		12.0%	
TOTAL	9,167,378	11,915,116	11,687,870	10,438,477	12,350,538	8,574,490	18.3%	-8.5%
%Chg		30.0%	-1.9%	-10.7%	18.3%			

BOND FUTURES: VALUE TRADED

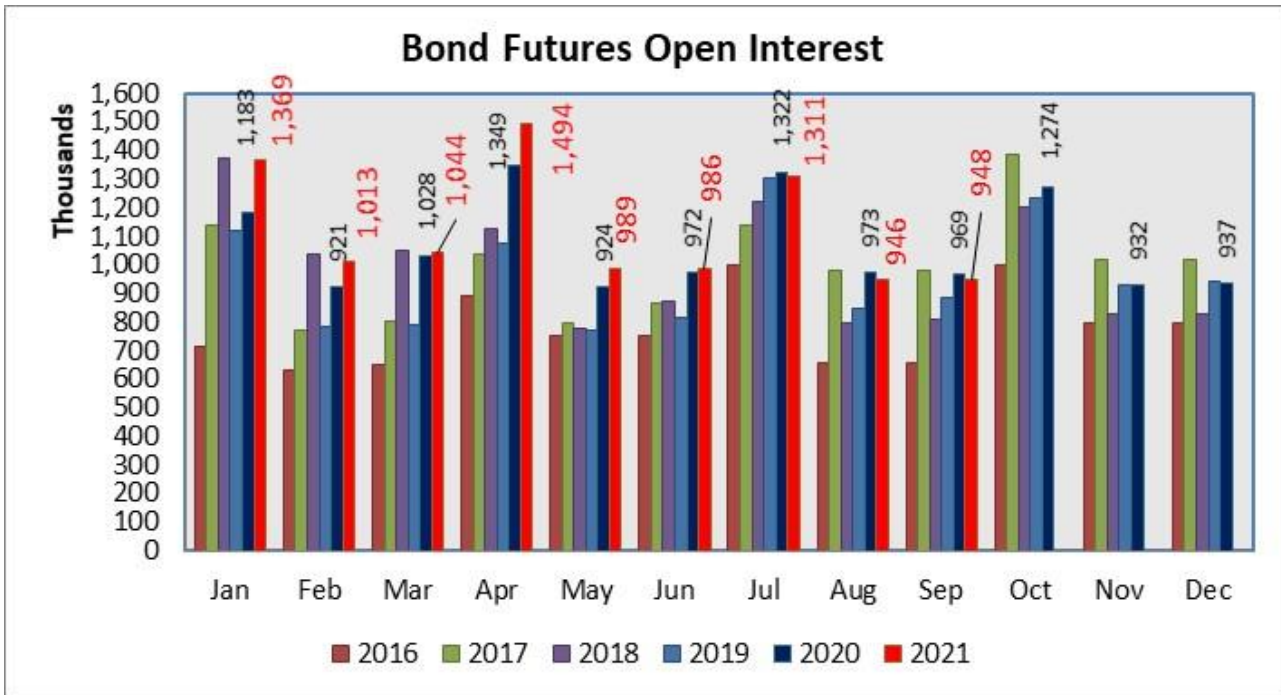
The cumulative value traded has seen a 7.1% decline in value traded to R806 bln year-to-date compared to value traded in 2020.



Bond Futures Value Traded Rm								
Date	2016	2017	2018	2019	2020	2021	Chg 20/19	Chg 21/20
Jan	R 93,017	R 207,419	R 253,621	R 180,384	R 176,702	R 194,789	-2.0%	10.2%
Feb	R 83,446	R 54,107	R 63,521	R 65,075	R 97,898	R 62,982	50.4%	-35.7%
Mar	R 8,122	R 15,689	R 18,820	R 7,378	R 29,570	R 12,063	300.8%	-59.2%
Apr	R 159,522	R 128,361	R 212,944	R 177,545	R 174,397	R 184,453	-1.8%	5.8%
May	R 87,612	R 131,736	R 91,403	R 44,429	R 106,329	R 85,790	139.3%	-19.3%
Jun	R 13,129	R 19,049	R 22,502	R 11,983	R 17,525	R 5,349	46.2%	-69.5%
Jul	R 166,159	R 151,742	R 170,320	R 225,830	R 185,667	R 207,191	-17.8%	11.6%
Aug	R 75,809	R 152,914	R 68,472	R 53,410	R 73,391	R 47,531	37.4%	-35.2%
Sep	R 20,266	R 24,072	R 5,123	R 8,239	R 5,882	R 6,139	-28.6%	4.4%
Oct	R 210,332	R 191,314	R 185,855	R 194,759	R 156,245		-19.8%	
Nov	R 55,648	R 126,095	R 54,306	R 59,502	R 109,123		83.4%	
Dec	R 7,458	R 17,391	R 6,458	R 5,516	R 6,269		13.7%	
TOTAL	980,519	1,219,888	1,153,345	1,034,049	1,138,999	806,286	10.1%	-7.1%
%Chg		24.4%	-5.5%	-10.3%	10.1%			

BOND FUTURES: OPEN INTEREST

Bond Futures Open interest at month end was 948k contracts, 2.1% lower than that of the equivalent month in previous year.

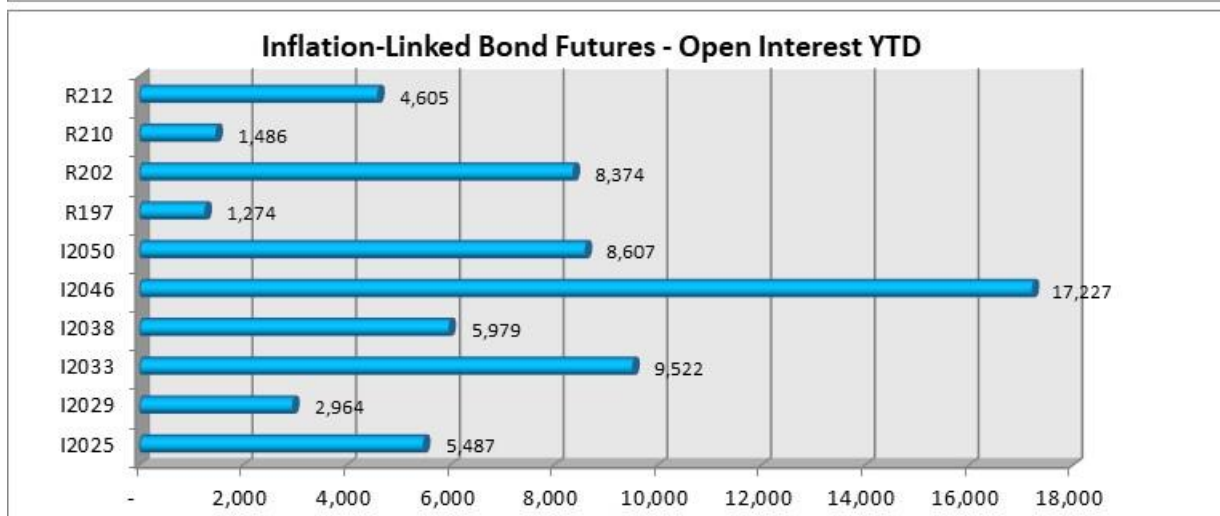


Bond Futures Open Interest								
Date	2016	2017	2018	2019	2020	2021	Chg 20/19	Chg 21/20
Jan	713,913	1,137,425	1,372,543	1,118,795	1,183,158	1,368,771	5.8%	15.7%
Feb	633,062	770,321	1,037,493	784,852	921,269	1,012,584	17.4%	9.9%
Mar	650,335	801,800	1,052,470	787,390	1,027,896	1,043,823	30.5%	1.5%
Apr	890,406	1,037,427	1,126,181	1,073,638	1,349,483	1,493,709	25.7%	10.7%
May	752,370	794,207	777,714	769,139	923,863	989,485	20.1%	7.1%
Jun	753,049	868,162	870,652	817,539	971,675	986,432	18.9%	1.5%
Jul	996,943	1,139,985	1,222,141	1,302,006	1,321,763	1,311,466	1.5%	-0.8%
Aug	655,211	977,327	798,912	849,438	973,254	946,280	14.6%	-2.8%
Sep	657,642	981,713	809,221	883,920	969,022	948,396	9.6%	-2.1%
Oct	999,507	1,383,649	1,201,141	1,231,132	1,273,672		3.5%	
Nov	793,813	1,020,399	826,316	927,675	931,839		0.4%	
Dec	798,552	1,016,463	827,458	944,806	936,762		-0.9%	
%Chg		27.3%	-18.6%	14.2%	-0.9%	-2.1%		

BOND FUTURES: OPEN INTEREST PER INSTRUMENT

The open interest is spread across several contacts, with R2032, R2037 and R2048 all above 120k open contracts (> R12 bln nominal), and the highest inflation-linked bond is I2046 at R17 bln notional.

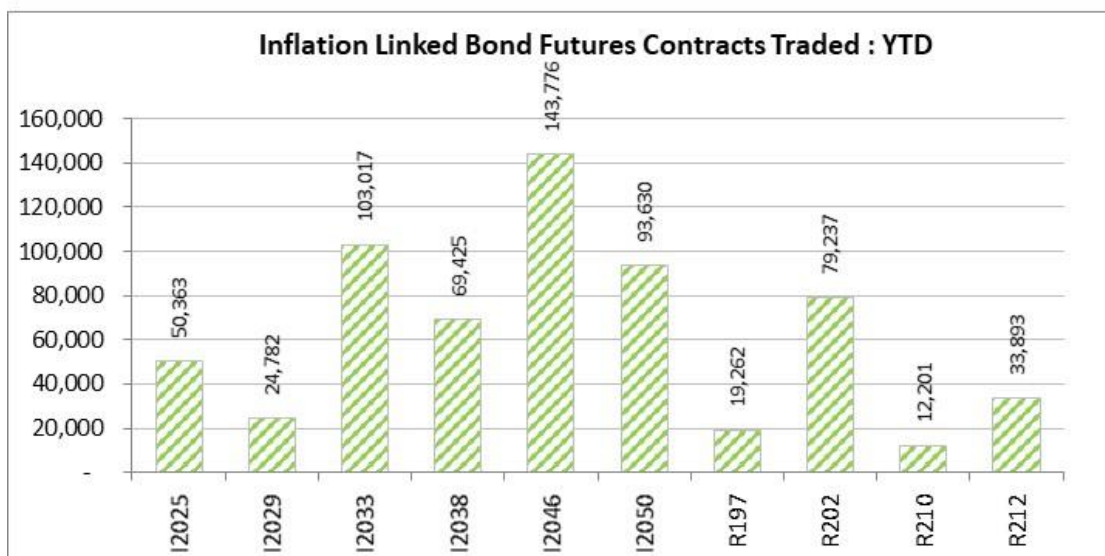
Open Interest Table: YTD			
	Nominal Bond	Inflation-Linkers	Total
Contracts	882,871	65,525	948,396
Nominal Value Rm	88,287	6,553	94,840
% Split	93.1%	6.9%	100.0%



SINGLE BOND FUTURE CONTRACTS

The chart shows an **even spread of trading activity** across | Nominal and Inflation Bond Futures.

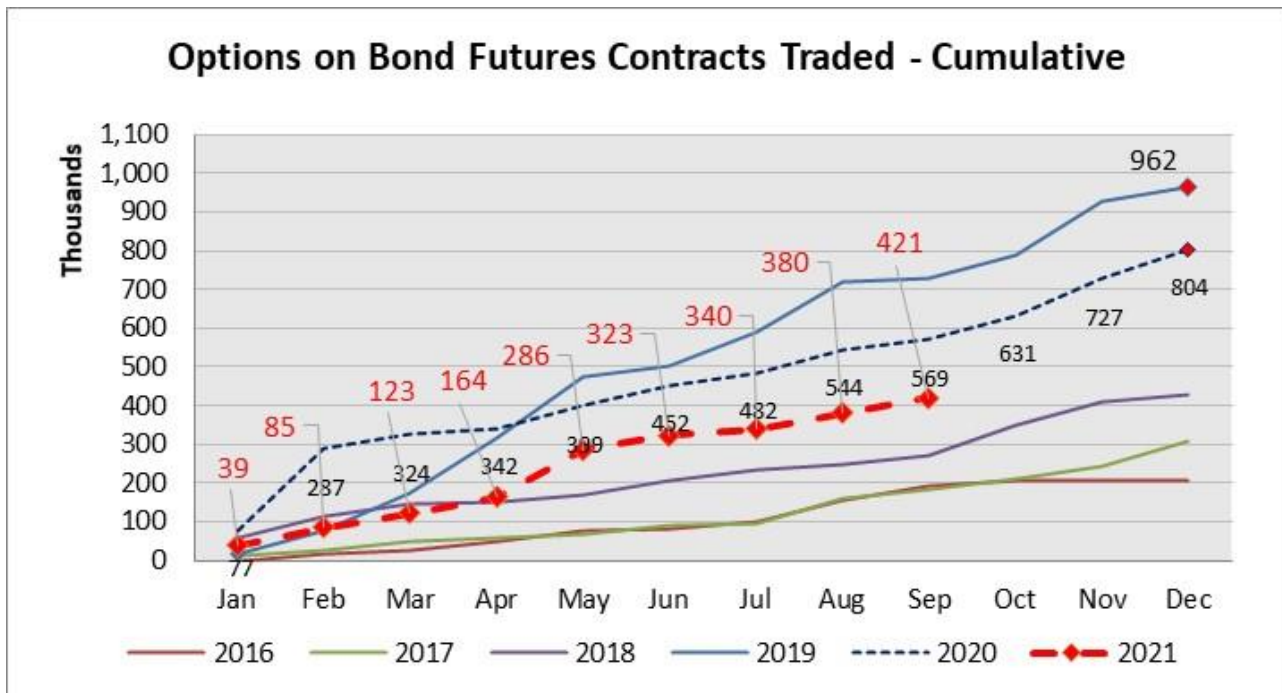
Total Contracts Traded ytd			
	Nominal Bond	Inflation-Linkers	Total
Contracts	7,944,904	629,586	8,574,490
Nominal Value Rm	794,490	62,959	857,449
% Split	92.7%	7.3%	100.0%



OPTIONS ON BOND FUTURES

OPTIONS ON BOND FUTURES: CONTRACTS TRADED YTD

Despite higher option activity in April and May 2021 compared to the previous year, overall option activity is showing a 26% decline in contracts ytd.

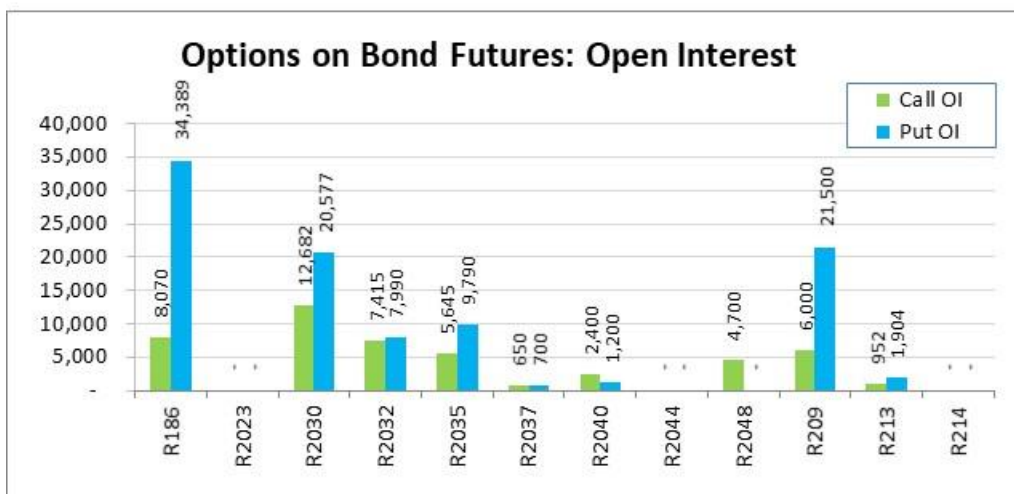
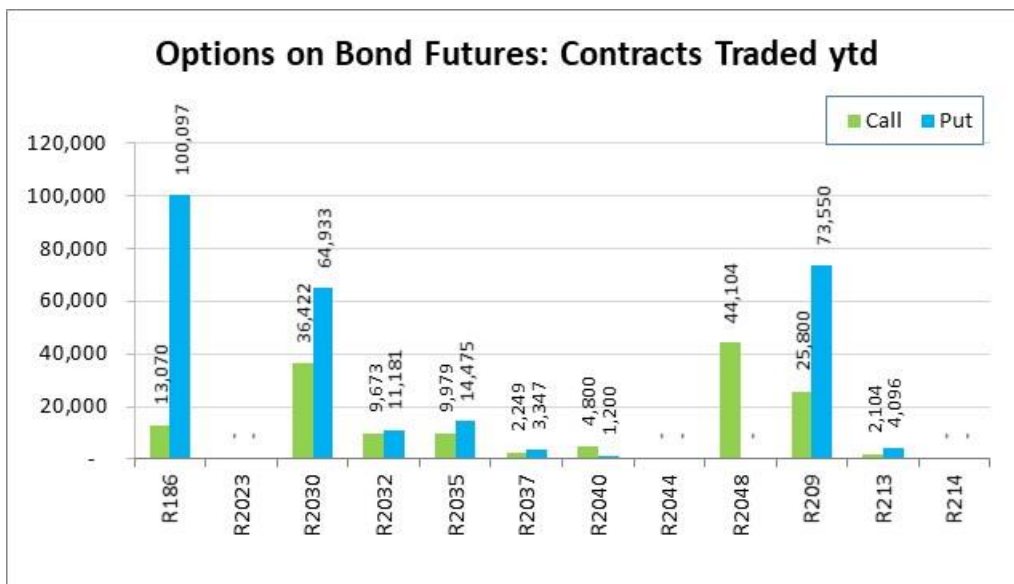


Options on Bond Futures Contracts Traded									
Date	2016	2017	2018	2019	2020	2021	Chg 20/19	Chg 21/20	
Jan	-	14,483	60,405	19,110	77,201	38,681	304.0%	-49.9%	
Feb	17,536	11,415	54,977	59,033	210,210	46,540	256.1%	-77.9%	
Mar	8,812	25,538	28,832	95,276	36,940	37,707	-61.2%	2.1%	
Apr	22,435	5,400	5,558	143,016	17,731	40,805	-87.6%	130.1%	
May	29,048	8,862	20,150	157,005	56,719	121,920	-63.9%	115.0%	
Jun	5,775	23,320	34,432	26,470	53,416	37,576	101.8%	-29.7%	
Jul	18,285	8,019	28,655	88,896	30,101	16,850	-66.1%	-44.0%	
Aug	54,921	63,882	17,260	131,864	61,600	39,951	-53.3%	-35.1%	
Sep	36,208	22,555	19,612	7,489	25,183	41,050	236.3%	63.0%	
Oct	12,419	26,394	78,210	58,639	61,600		5.0%		
Nov	50	34,036	63,736	140,504	96,308		-31.5%		
Dec	50	63,418	16,886	34,609	76,656		121.5%		
TOTAL	205,539	307,322	428,713	961,911	803,665	421,080	-16.5%	-26.0%	
%Chg		49.5%	39.5%	124.4%	-16.5%				

OPTIONS ON BOND FUTURES: CONTRACTS TRADED AND OPEN INTEREST

The option activity in 2021 is focussed on the bonds R186, R2030 and R209 (exp 2036). The total open interest represents options on R14.6 bln underlying nominal value, with twice as many open puts relative to open calls. The largest open contracts are in the R186 puts.

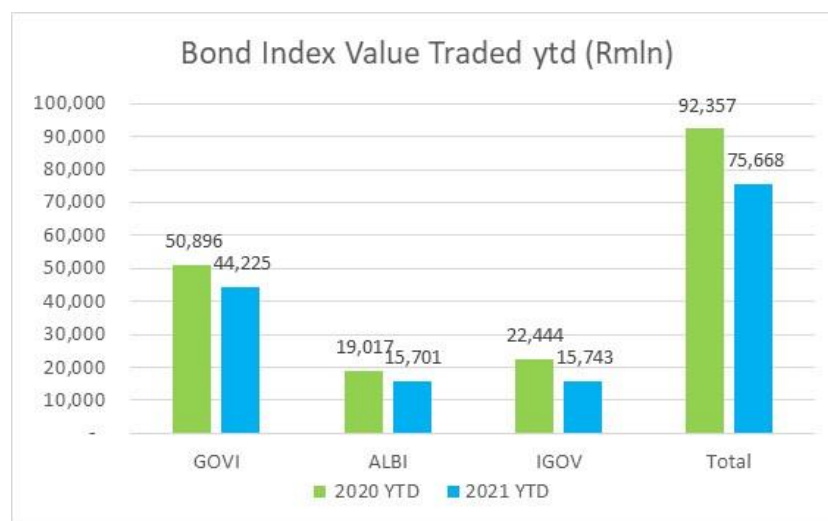
Options on Bond Futures				
	Contracts ytd		Open Interest	
Calls	148,201	35.2%	48,514	33.1%
Puts	272,879	64.8%	98,050	66.9%
Total	421,080	100.0%	146,564	100.0%



BOND INDEX FUTURES

The total Bond Index futures value traded ytd was R75bln, down 18% from last year

VALUE TRADED Rm				
	GOVI	ALBI	IGOV	Total
2020 YTD	50,896	19,017	22,444	92,357
2021 YTD	44,225	15,701	15,743	75,668
% Change	-13%	-17%	-30%	-18%



VALUE TRADED Rm					
	GOVI	ALBI	IGOV	Val Traded	%Chg YoY
Jan-19	5,683	11,086	2,674	19,442	
Feb-19	497	4,005	327	4,828	
Mar-19	2,086	1,092	118	3,296	
Apr-19	5,676	16,580	4,658	26,914	
May-19	538	115	50	702	
Jun-19	74	138	-	211	
Jul-19	11,167	11,628	4,418	27,214	
Aug-19	797	482	271	1,550	
Sep-19	339	21	878	1,238	
Oct-19	18,183	5,601	7,265	31,049	
Nov-19	2,362	2,695	884	5,941	
Dec-19	55	14	-	69	
Jan-20	17,443	5,266	6,425	29,134	50%
Feb-20	1,283	2,316	663	4,262	-12%
Mar-20	73	624	74	771	-77%
Apr-20	13,806	4,444	5,987	24,237	-10%
May-20	2,966	805	1,845	5,616	699%
Jun-20	300	50	461	812	284%
Jul-20	14,676	4,597	6,436	25,710	-6%
Aug-20	349	915	552	1,816	17%
Sep-20	43	238	39	320	-74%
Oct-20	14,608	5,155	6,094	25,857	-17%
Nov-20	1,824	1,228	868	3,920	-34%
Dec-20	67	30	8	105	52%
Jan-21	14,739	4,375	6,347	25,461	-13%
Feb-21	778	1,715	1,003	3,496	-18%
Mar-21	216	181	100	498	-35%
Apr-21	11,671	3,020	3,841	18,532	-24%
May-21	667	2,130	1,351	4,149	-26%
Jun-21	134	274	372	780	-4%
Jul-21	15,780	2,933	2,711	21,424	-17%
Aug-21	239	1,073	18	1,330	-27%
Sep-21	88	-	92	181	-43%

For any queries, please contact irc@jse.co.za