

JSE
INTEREST RATE DERIVATIVES
MONTHLY VIEW

Apr 2022

Compiled by the IRC team

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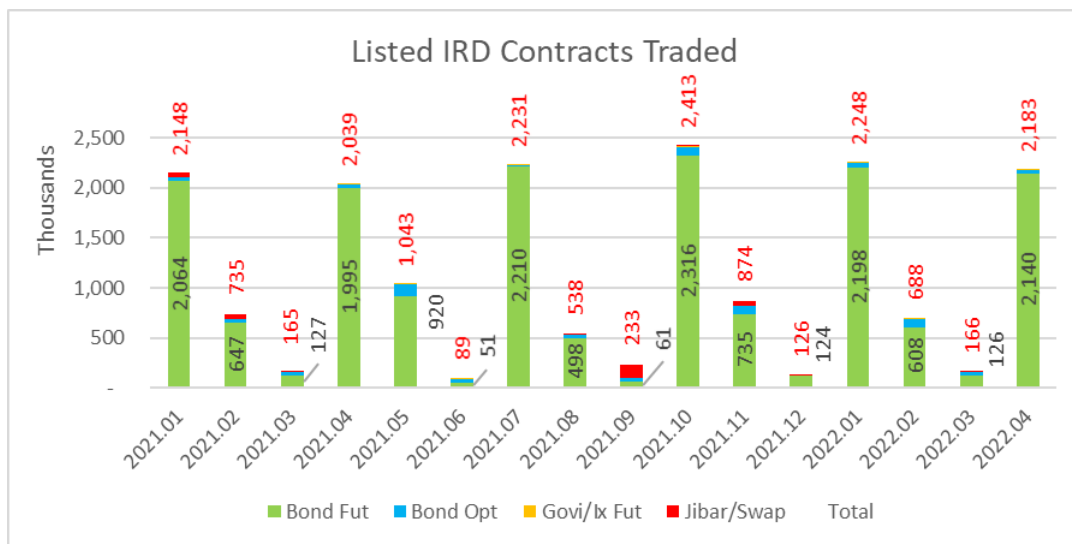
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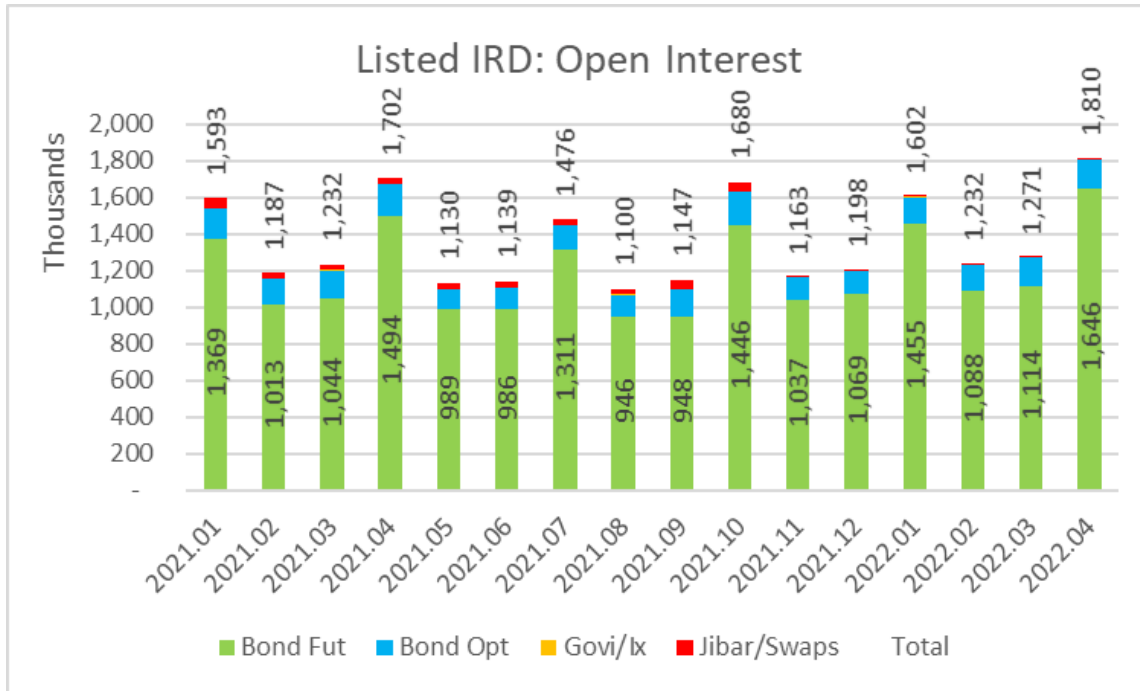
HIGHLIGHTS

- With the close-out in the first week of May, the April period was an active month with 2.1m contracts traded. The total **IRD contracts traded** ytd was 3.9% UP
- The **IRD open interest** is 1.8m contracts which was 6.3% UP
- The number of **Bond futures** contracts traded was 4.9% up with open interest up 10.2% at 1.6m. This represents a record for month end open interest
- **Bond options** up 25% with open interest on R20.5 bln underlying nominal
- The **Govi and Bond Index Futures** value traded ytd was up 4.5%, and the rolling 12m value traded has moved up to R103bln from R98bln (as at last month)

MONTHLY SNAPSHOT: CONTRACTS & OPEN INTEREST



Monthly Snapshot Contracts Traded 2021/22								
	Bond Fut	Calls	Puts	Govi Fut	Index Fut	Jibar Fut	Swap Fut	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
2021.10	2,316,337	34,747	57,736	2,056	1,386	800	-	2,413,062
2021.11	734,640	25,520	63,241	213	254	50,075	-	873,943
2021.12	123,724	2,100	-	6	-	-	51	125,881
2022.01	2,198,294	8,260	38,140	2,132	1,356	-	-	2,248,182
2022.02	607,540	39,077	40,890	48	208	-	-	687,763
2022.03	126,385	29,435	10,026	3	5	222	-	166,076
2022.04	2,139,536	10,546	29,023	2,264	1,262	-	-	2,182,631
TOTALS '22	5,071,755	87,318	118,079	4,447	2,831	222	-	5,284,652



Monthly Snapshot Open Interest 2021/22								
	Bond Fut	Calls	Puts	Govi Fut	Index Fut	Jibar Fut	Swap Fut	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
2021.10	1,445,779	64,705	117,651	1,098	829	50,140	51	1,680,253
2021.11	1,036,547	56,870	67,614	983	721	215	51	1,163,001
2021.12	1,069,111	58,970	67,614	987	721	215	-	1,197,618
2022.01	1,454,861	66,850	78,374	1,023	805	215	-	1,602,128
2022.02	1,088,101	66,830	74,984	989	718	215	-	1,231,837
2022.03	1,114,292	76,765	78,019	990	720	215	-	1,271,001
2022.04	1,645,940	76,742	85,496	1,115	669	215	-	1,810,177

INTEREST RATE DERIVATIVE CONTRACTS

IRD CONTRACTS TRADED

The number of IRD contracts traded ytd is UP 3.9% over same period previous year, with double digit growth in bond options and Govi futures

Listed IRD CONTRACTS TRADED							
YTD - Contracts	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2021	4,833,637	163,733	3,588	5,250	80,871	-	5,087,079
2022	5,071,755	205,397	4,447	2,831	222	-	5,284,652
Growth	4.9%	25.4%	23.9%	-46.1%	-99.7%	0.0%	3.9%

IRD VALUE TRADED

The IRD value traded ytd is UP 3.4% compared to the same period last year

IRD VALUE TRADED YTD (Rm)							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2021	454,287	353	27,405	20,582	1,932	-	504,559
2022	470,985	346	36,719	13,422	5	-	521,477
Growth	3.7%	-2.1%	34.0%	-34.8%	-99.7%	0.0%	3.4%

IRD TRADED 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	
2021	483.4	16.4	27.4	20.6	8.1	-	555.8
2022	507.2	20.5	36.7	13.4	0.02	-	577.9
Growth	4.9%	25.4%	34.0%	-34.8%	-99.7%	0.0%	4.0%
% Split	87.8%	3.6%	6.4%	2.3%	0.0%	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.

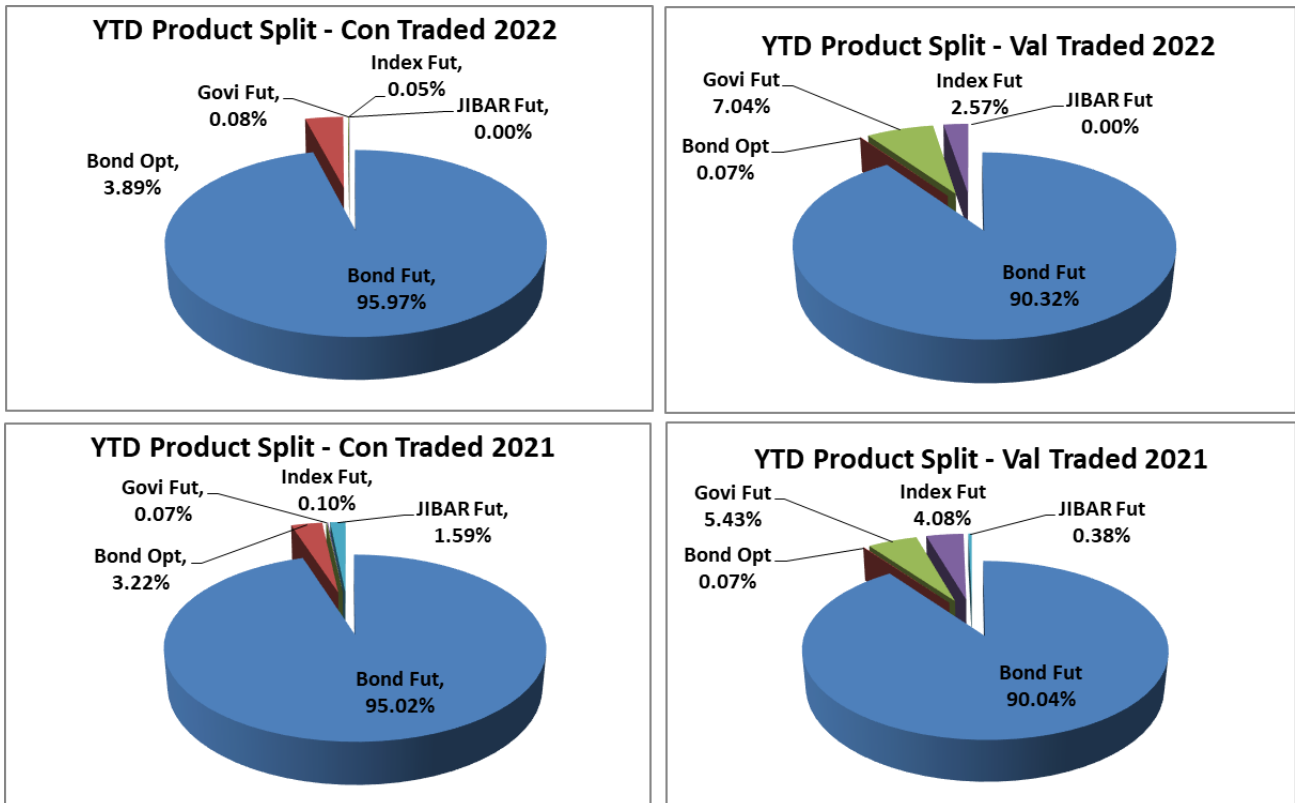
IRD OPEN INTEREST

The Open Interest up 6.3% compared to same period last year while bond futures up 10.2%.

IRD OPEN INTEREST CONTRACTS YTD							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2021	1,493,709	175,805	1,003	1,270	30,471	51	1,702,309
2022	1,645,940	162,238	1,115	669	215	-	1,810,177
Growth	10.2%	-7.7%	11.2%	-47.3%	-99.3%	-100.0%	6.3%

IRD PRODUCT SPLIT IN CONTRACTS AND VALUE TRADED

With a high nominal underlying per contract, **GOVI** and **Index Futures** represent a small percentage of all contracts traded but 9.5% of value traded YTD. The **Bond Futures** represents the largest product split.



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 here by consolidating **volumes for the close-out month and the prior month as a 2-month period**.

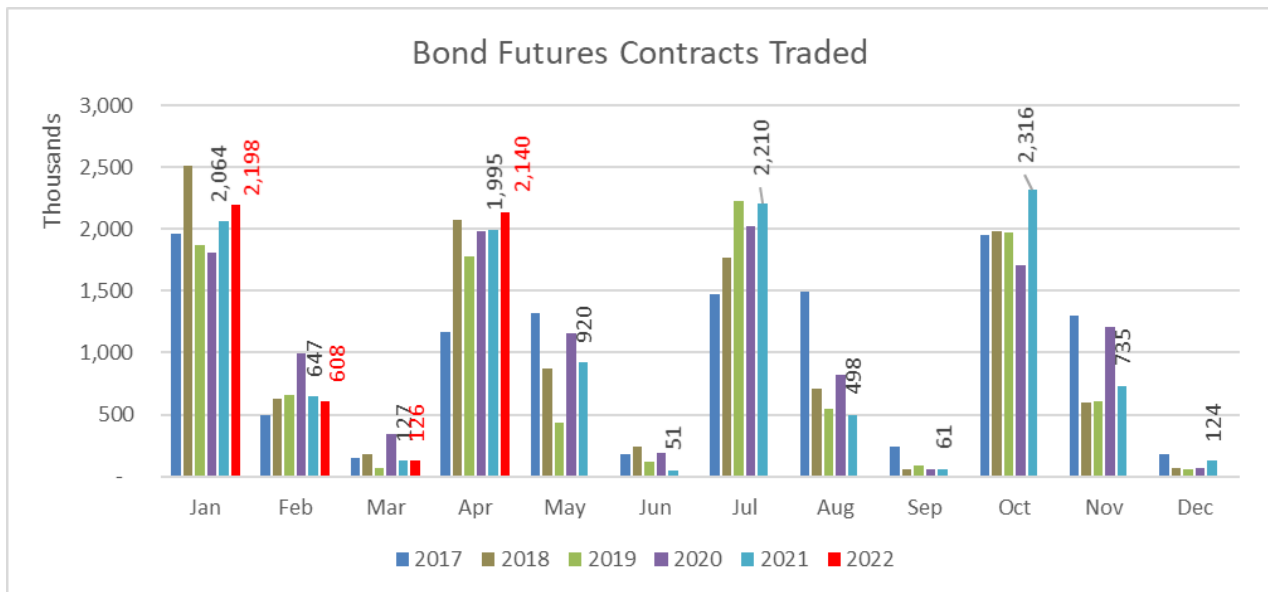
	ALL IRD CONTRACTS (in 2-mth periods) (in millions of contracts)								
Close-Out (2-mth)	2016	2017	2018	2019	2020	2021	2022	% Chg 2021/20	% Chg 2022/21
Close-Out 1 (Feb)	1.733	2.455	3.292	2.609	3.097	2.883	2.936	-6.9%	1.8%
Close-Out 2 (May)	2.401	2.491	2.973	2.518	3.219	3.082		-4.2%	
Close-Out 3 (Aug)	2.313	3.051	2.532	3.009	3.040	2.769		-8.9%	
Close-Out 4 (Nov)	2.399	3.320	2.749	2.787	3.082	3.287		6.7%	

The **February 2022 (2-mth) close-out period**, saw a total of 2.9m contracts traded, 1.8% up over the same close-out period in 2021.

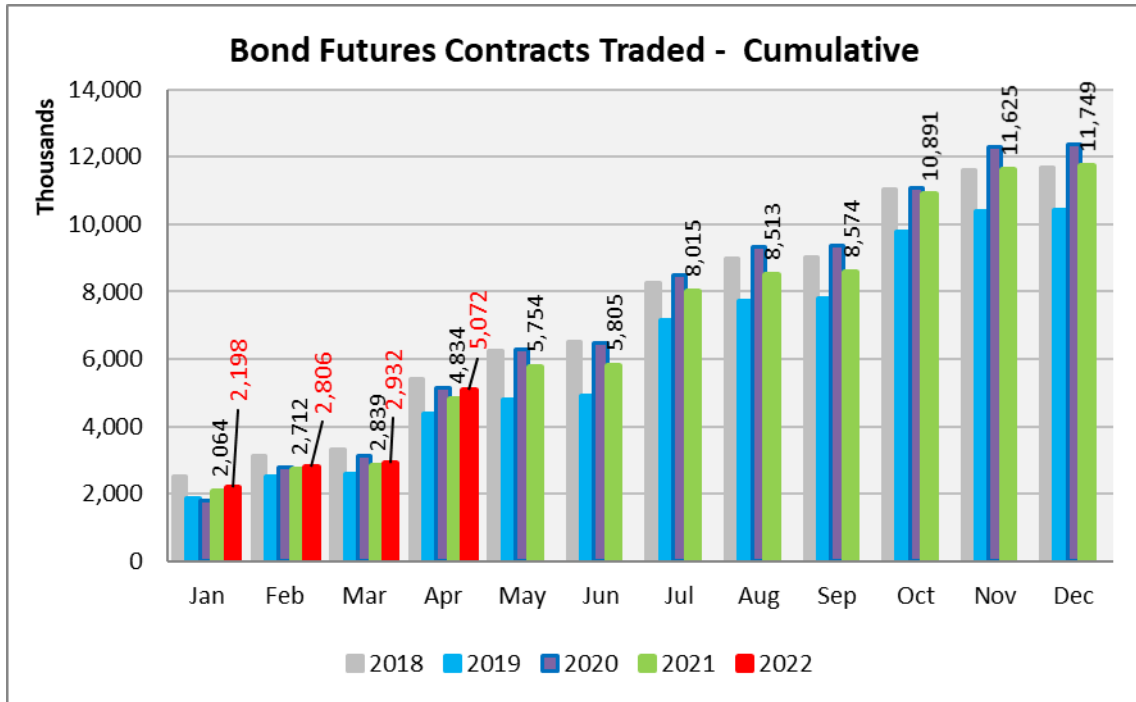
BOND FUTURES

BOND FUTURES: CONTRACTS TRADED

Futures contracts traded in April were 2.14m (equivalent of R214 bln notional), higher than any April month in the past, while year-to-date contracts remain higher by 4.9%.

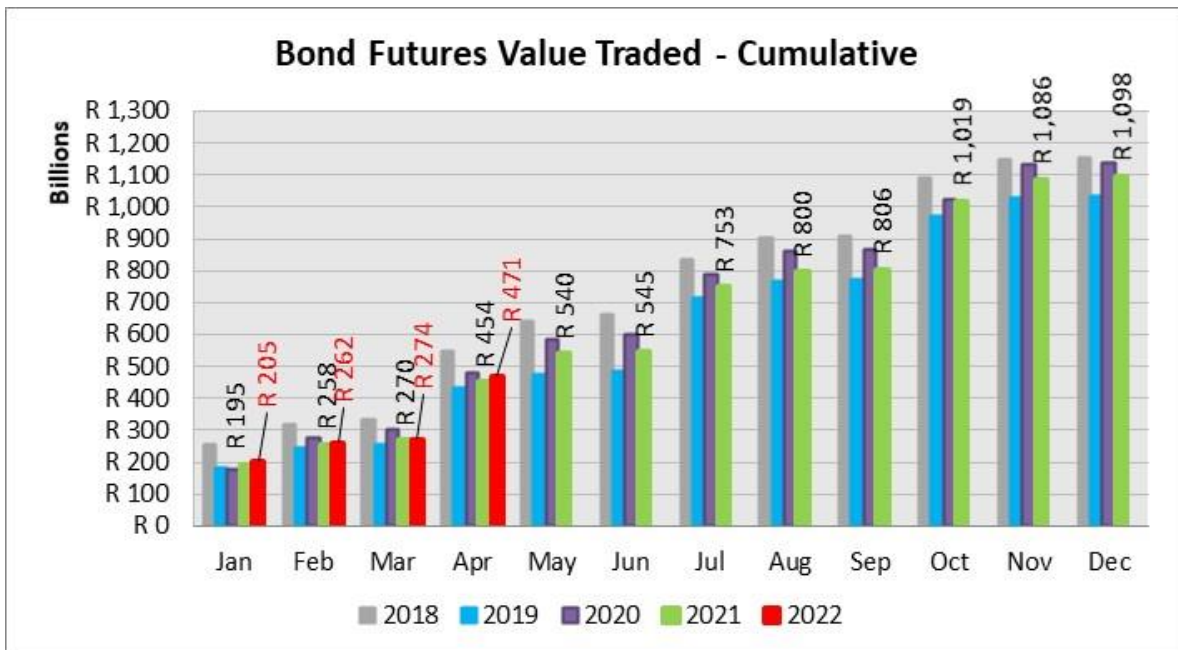


Bond Futures Contracts Traded									
Date	2016	2017	2018	2019	2020	2021	2022	Chg 21/20	Chg 22/21
Jan	826,485	1,963,456	2,512,043	1,872,040	1,808,945	2,064,147	2,198,294	14.1%	6.5%
Feb	883,377	493,725	622,760	654,730	994,022	647,370	607,540	-34.9%	-6.2%
Mar	79,520	148,066	184,080	71,194	337,360	127,022	126,385	-62.3%	-0.5%
Apr	1,490,182	1,168,792	2,071,717	1,778,197	1,984,879	1,995,098	2,139,536	0.5%	7.2%
May	854,135	1,322,123	868,973	434,577	1,152,932	920,233		-20.2%	
Jun	134,452	177,529	241,609	121,845	187,670	50,847		-72.9%	
Jul	1,542,365	1,475,383	1,770,507	2,232,039	2,022,009	2,210,468		9.3%	
Aug	691,788	1,497,690	706,275	550,331	820,119	497,888		-39.3%	
Sep	207,021	235,816	53,904	85,331	59,877	61,417		2.6%	
Oct	1,903,245	1,947,995	1,987,598	1,970,014	1,707,398	2,316,337		35.7%	
Nov	477,584	1,304,500	599,247	610,292	1,210,516	734,640		-39.3%	
Dec	77,224	180,041	69,157	57,887	64,811	123,724		90.9%	
TOTAL	9,167,378	11,915,116	11,687,870	10,438,477	12,350,538	11,749,191	5,071,755	-4.9%	4.9%
%Chg		30.0%	-1.9%	-10.7%	18.3%	-4.9%			



BOND FUTURES: VALUE TRADED

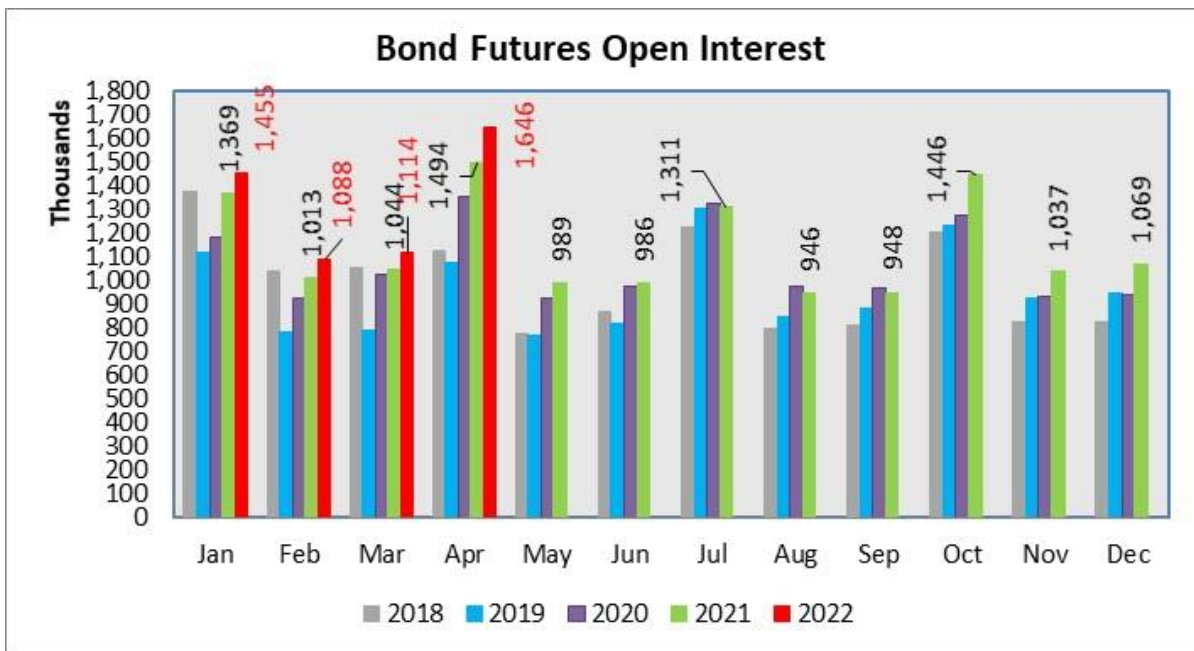
The value traded year-to-date is 3.7% UP compared to same period in 2021.



Bond Futures Value Traded Rm									
Date	2016	2017	2018	2019	2020	2021	2022	Chg 21/20	Chg 22/21
Jan	R 93,017	R 207,419	R 253,621	R 180,384	R 176,702	R 194,789	R 204,686	10.2%	5.1%
Feb	R 83,446	R 54,107	R 63,521	R 65,075	R 97,898	R 62,982	R 57,288	-35.7%	-9.0%
Mar	R 8,122	R 15,689	R 18,820	R 7,378	R 29,570	R 12,063	R 11,528	-59.2%	-4.4%
Apr	R 159,522	R 128,361	R 212,944	R 177,545	R 174,397	R 184,453	R 197,483	5.8%	7.1%
May	R 87,612	R 131,736	R 91,403	R 44,429	R 106,329	R 85,790		-19.3%	
Jun	R 13,129	R 19,049	R 22,502	R 11,983	R 17,525	R 5,349		-69.5%	
Jul	R 166,159	R 151,742	R 170,320	R 225,830	R 185,667	R 207,191		11.6%	
Aug	R 75,809	R 152,914	R 68,472	R 53,410	R 73,391	R 47,531		-35.2%	
Sep	R 20,266	R 24,072	R 5,123	R 8,239	R 5,882	R 6,139		4.4%	
Oct	R 210,332	R 191,314	R 185,855	R 194,759	R 156,245	R 212,448		36.0%	
Nov	R 55,648	R 126,095	R 54,306	R 59,502	R 109,123	R 67,490		-38.2%	
Dec	R 7,458	R 17,391	R 6,458	R 5,516	R 6,269	R 11,623		85.4%	
TOTAL	980,519	1,219,888	1,153,345	1,034,049	1,138,999	1,097,847	470,985	-3.6%	3.7%
%Chg		24.4%	-5.5%	-10.3%	10.1%	-3.6%			

BOND FUTURES: OPEN INTEREST

Bond Futures Open interest at month end was 1.646m contracts, up 10.2% on the equivalent month in previous year. *This was above the higher end of expectations and is a record for any end of month open interest. The end of May will likely see a decrease, commonly seen post the close-out in the first week of May.*

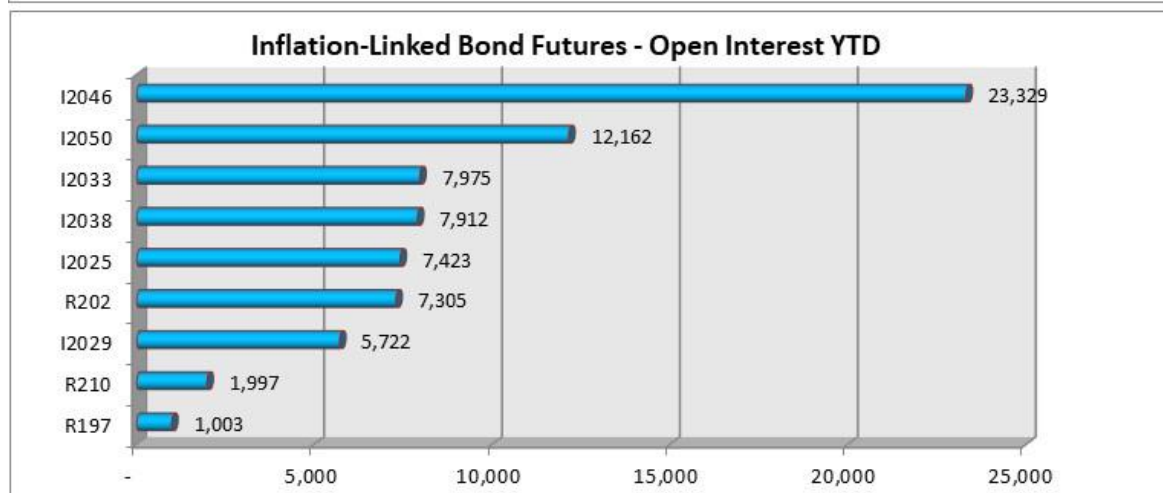
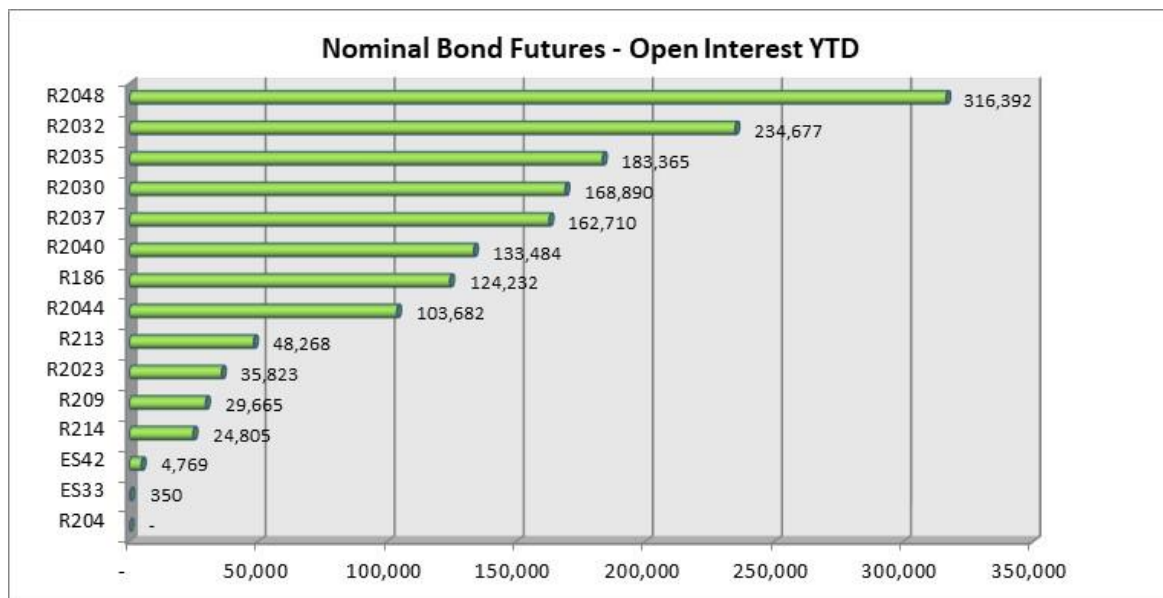


Bond Futures Open Interest									
Date	2016	2017	2018	2019	2020	2021	2022	Chg 21/20	Chg 22/21
Jan	713,913	1,137,425	1,372,543	1,118,795	1,183,158	1,368,771	1,454,861	15.7%	6.3%
Feb	633,062	770,321	1,037,493	784,852	921,269	1,012,584	1,088,101	9.9%	7.5%
Mar	650,335	801,800	1,052,470	787,390	1,027,896	1,043,823	1,114,292	1.5%	6.8%
Apr	890,406	1,037,427	1,126,181	1,073,638	1,349,483	1,493,709	1,645,940	10.7%	10.2%
May	752,370	794,207	777,714	769,139	923,863	989,485	989,485	7.1%	
Jun	753,049	868,162	870,652	817,539	971,675	986,432	986,432	1.5%	
Jul	996,943	1,139,985	1,222,141	1,302,006	1,321,763	1,311,466	1,311,466	-0.8%	
Aug	655,211	977,327	798,912	849,438	973,254	946,280	946,280	-2.8%	
Sep	657,642	981,713	809,221	883,920	969,022	948,396	948,396	-2.1%	
Oct	999,507	1,383,649	1,201,141	1,231,132	1,273,672	1,445,779	1,445,779	13.5%	
Nov	793,813	1,020,399	826,316	927,675	931,839	1,036,547	1,036,547	11.2%	
Dec	798,552	1,016,463	827,458	944,806	936,762	1,069,111	1,069,111	14.1%	
%Chg		27.3%	-18.6%	14.2%	-0.9%	14.1%			

BOND FUTURES: OPEN INTEREST PER INSTRUMENT

The open interest is spread across several contracts. The largest open positions in the R2032 and R2048 ranging from ~R23 bln to R31 bln nominal (234k - 316k open contracts). Largest linker open interest is the I2046 at R2.3bln nominal underlying

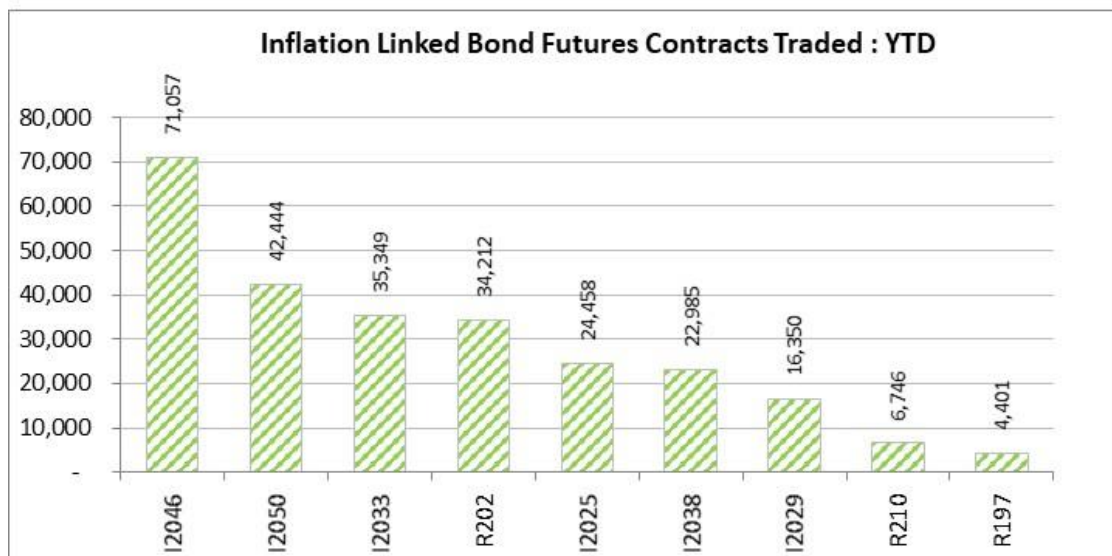
Open Interest Table: YTD			
	Nominal Bond	Inflation-Linkers	Total
Contracts	1,571,112	74,828	1,645,940
Nominal Value Rm	157,111	7,483	164,594
% Split	95.5%	4.5%	100.0%



SINGLE BOND FUTURE CONTRACTS

The most actively traded bond future ytd is the R2048 with a total of R93.4bln notional underlying. The graph shows a further 7 bonds trading above R39bln notional

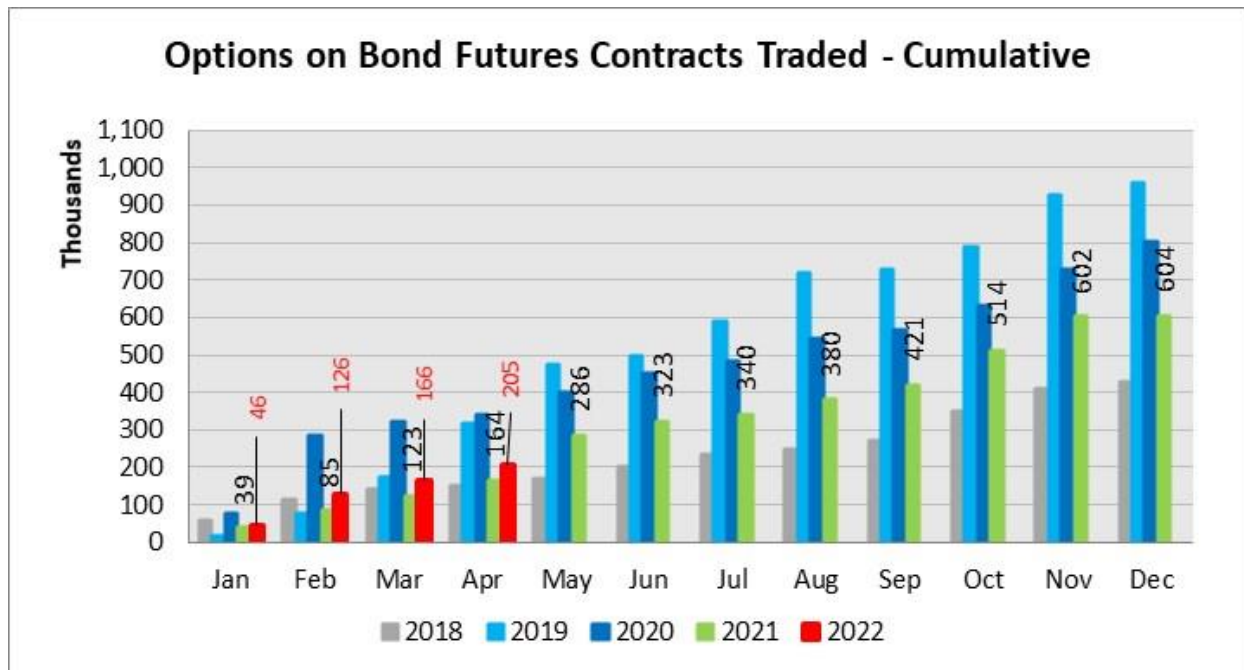
Total Contracts Traded ytd			
	Nominal Bond	Inflation-Linkers	Total
Contracts	4,813,753	258,002	5,071,755
Nominal Value Rm	481,375	25,800	507,176
% Split	94.9%	5.1%	100.0%



OPTIONS ON BOND FUTURES

OPTIONS ON BOND FUTURES: CONTRACTS TRADED YTD

Following annual declines of 16% (2020/19) and 25% (2021/20) in option contracts traded over the past 2 years, year-to-date has seen an increase of 25% over the same period last year.

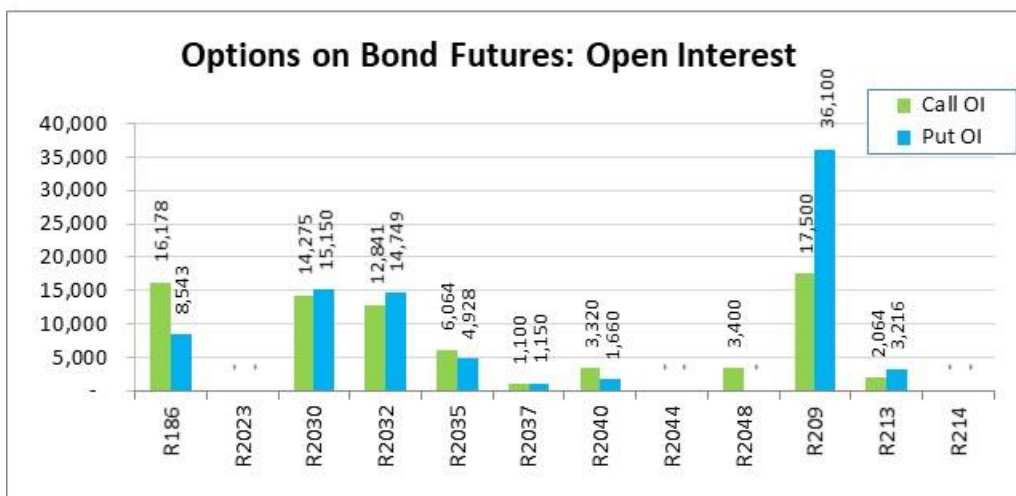
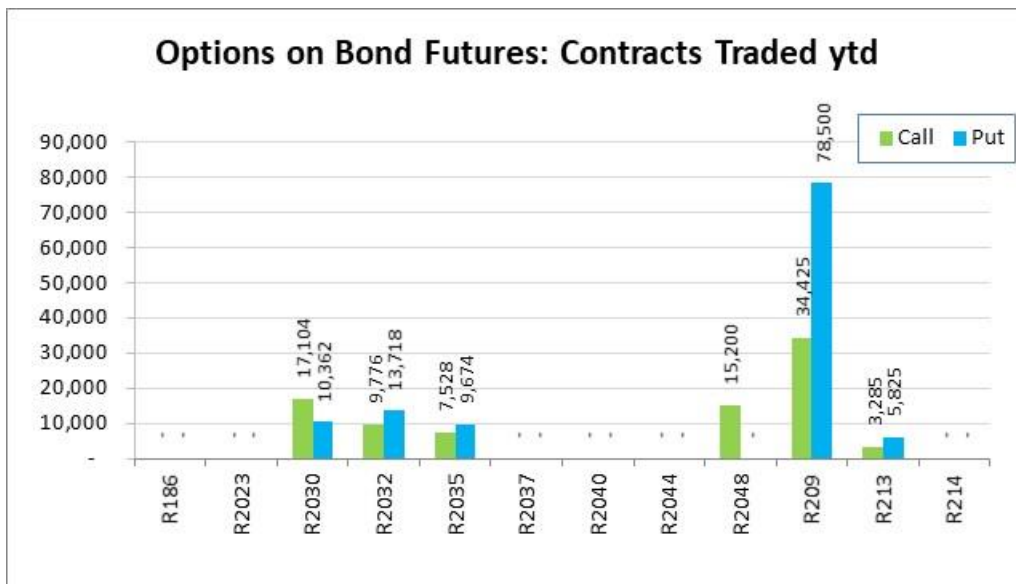


Options on Bond Futures Contracts Traded									
Date	2016	2017	2018	2019	2020	2021	2022	Chg 21/20	Chg 22/21
Jan	-	14,483	60,405	19,110	77,201	38,681	46,400	-49.9%	20.0%
Feb	17,536	11,415	54,977	59,033	210,210	46,540	79,967	-77.9%	71.8%
Mar	8,812	25,538	28,832	95,276	36,940	37,707	39,461	2.1%	4.7%
Apr	22,435	5,400	5,558	143,016	17,731	40,805	39,569	130.1%	-3.0%
May	29,048	8,862	20,150	157,005	56,719	121,920		115.0%	
Jun	5,775	23,320	34,432	26,470	53,416	37,576		-29.7%	
Jul	18,285	8,019	28,655	88,896	30,101	16,850		-44.0%	
Aug	54,921	63,882	17,260	131,864	61,600	39,951		-35.1%	
Sep	36,208	22,555	19,612	7,489	25,183	41,050		63.0%	
Oct	12,419	26,394	78,210	58,639	61,600	92,483		50.1%	
Nov	50	34,036	63,736	140,504	96,308	88,761		-7.8%	
Dec	50	63,418	16,886	34,609	76,656	2,100		-97.3%	
TOTAL	205,539	307,322	428,713	961,911	803,665	604,424	205,397	-24.8%	25.4%
%Chg		49.5%	39.5%	124.4%	-16.5%	-24.8%			

OPTIONS ON BOND FUTURES: CONTRACTS TRADED AND OPEN INTEREST

The options activity in 2022 is in 6 different bonds, with even split between puts and calls. Overall open interest is spread over 9 bonds

Options on Bond Futures				
	Contracts ytd		Open Interest	
Calls	87,318	42.5%	76,742	47.3%
Puts	118,079	57.5%	85,496	52.7%
Total	205,397	100.0%	162,238	100.0%



BOND INDEX FUTURES

Total Bond Index futures value traded in 2021 was down 17% from previous year. The current year-to-date value traded is 4.5% UP over previous period. An interesting trend is that the rolling 12m value traded is R104bln and has broken the down trend as seen in the chart below

VALUE TRADED Rm				
	GOVI	ALBI	IGOV	Total
2021 YTD	27,405	9,291	11,291	47,987
2022 YTD	36,719	7,230	6,192	50,141
% Change	34.0%	-22.2%	-45.2%	4.5%



VALUE TRADED Rm					
	GOVI	ALBI	IGOV	Val Traded	Roll 12m Val
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	122,455
Jan-20	17,443	5,266	6,425	29,134	132,147
Feb-20	1,283	2,316	663	4,262	131,580
Mar-20	73	624	74	771	129,056
Apr-20	13,806	4,444	5,987	24,237	126,379
May-20	2,966	805	1,845	5,616	131,292
Jun-20	300	50	461	812	131,893
Jul-20	14,676	4,597	6,436	25,710	130,389
Aug-20	349	915	552	1,816	130,654
Sep-20	43	238	39	320	129,736
Oct-20	14,608	5,155	6,094	25,857	124,544
Nov-20	1,824	1,228	868	3,920	122,523
Dec-20	67	30	8	105	122,558
Jan-21	14,739	4,375	6,347	25,461	118,885
Feb-21	778	1,715	1,003	3,496	118,120
Mar-21	216	181	100	498	117,846
Apr-21	11,671	3,020	3,841	18,532	112,141
May-21	667	2,130	1,351	4,149	110,674
Jun-21	134	274	372	780	110,642
Jul-21	15,780	2,933	2,711	21,424	106,356
Aug-21	239	1,073	18	1,330	105,870
Sep-21	88	-	92	181	105,731
Oct-21	16,282	2,948	3,056	22,286	102,160
Nov-21	1,703	1,510	193	3,406	101,646
Dec-21	49	-	-	49	101,590
Jan-22	17,537	3,262	2,972	23,771	99,900
Feb-22	399	1,753	3	2,155	98,559
Mar-22	25	17	9	51	98,112
Apr-22	18,758	2,199	3,207	24,164	103,744

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