

JSE
INTEREST RATE DERIVATIVES
MONTHLY VIEW

January 2022

Compiled by the IRC team

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HIGHLIGHTS

- The start of 2022 has seen the number of IRD contracts up 4.7% over same period in the previous year, with growth across bond futures, bond options and Govi futures.
- The **IRD open interest** is flat at 1.6m contracts from same period last year.
- **Bond futures** contracts traded 6.5% up with open interest up 6.3%
- **Bond options up 20%** with open interest on R14 bln underlying nominal
- The **Govi and Bond Index Futures** value traded still on a decline with rolling 12m value traded at R100bln compared to R118bln in January 2021

MONTHLY SNAPSHOT: CONTRACTS & OPEN INTEREST

Monthly Snapshot Contracts Traded 2021								
	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	13,899	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
TOTALS 22	2,198,294	8,260	38,140	2,132	1,356	-	-	2,248,182

Monthly Snapshot Open Interest 2021								
	Bond Fut	Calls	Puts	Govi Fut	Index Fut	Jibar Futures	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

INTEREST RATE DERIVATIVE CONTRACTS

IRD CONTRACTS TRADED

The start of 2022 sees the number of IRD contracts up 4.7% over same period previous year, with growth across bond futures, options and Govi futures

Listed IRD CONTRACTS TRADED							
YTD - Contracts	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2021	2,064,147	38,681	1,941	2,888	40,001	-	2,147,658
2022	2,198,294	46,400	2,132	1,356	-	-	2,248,182
Growth	6.5%	20.0%	9.8%	-53.0%	-100.0%	0.0%	4.7%

IRD VALUE TRADED

The IRD value traded for Jan 2022 is 3.3% higher than same period last year

IRD VALUE TRADED YTD (Rm)							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2021	194,789	88	14,739	10,722	959	-	221,296
2022	204,686	102	17,537	6,234	-	-	228,559
Growth	5.1%	16.1%	19.0%	-41.9%	-100.0%	0.0%	3.3%

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	206.4	3.9	14.7	10.7	4.0	-	239.7
2022	219.8	4.6	17.5	6.2	-	-	248.2
Growth	6.5%	20.0%	19.0%	-41.9%	-100.0%	0.0%	3.5%
% Split	88.6%	1.9%	7.1%	2.5%	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.

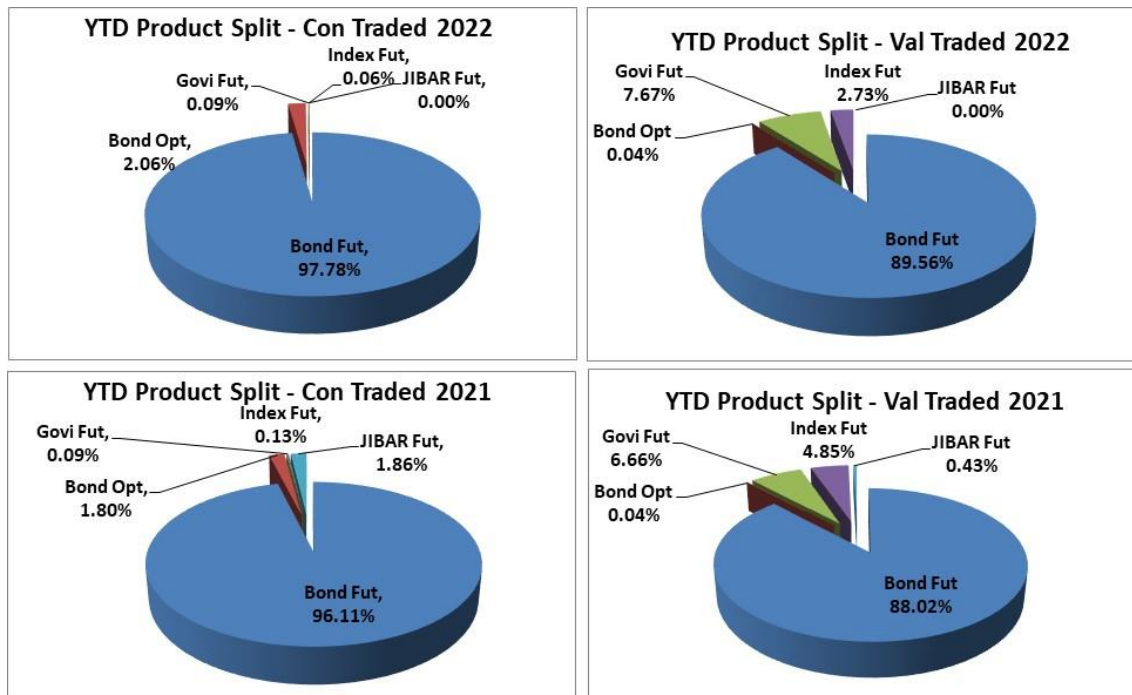
IRD OPEN INTEREST

The overall Open Interest flat compared to same period last year while bond futures see growth of 6.3%.

IRD OPEN INTEREST YTD							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2021	1,368,771	171,593	977	1,365	50,001	51	1,592,758
2022	1,454,861	145,224	1,023	805	215	-	1,602,128
Growth	6.3%	-15.4%	4.7%	-41.0%	-99.6%	-100.0%	0.6%

IRD PRODUCT SPLIT IN CONTRACTS AND VALUE TRADED

With a high nominal underlying per contract, **GOVI and Index Futures** represent only 1.5% of all contracts traded but 10.4% of value traded YTD. The Bond Futures represent the largest product split in the suite.



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	% 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	3.287	10.6%	6.7%

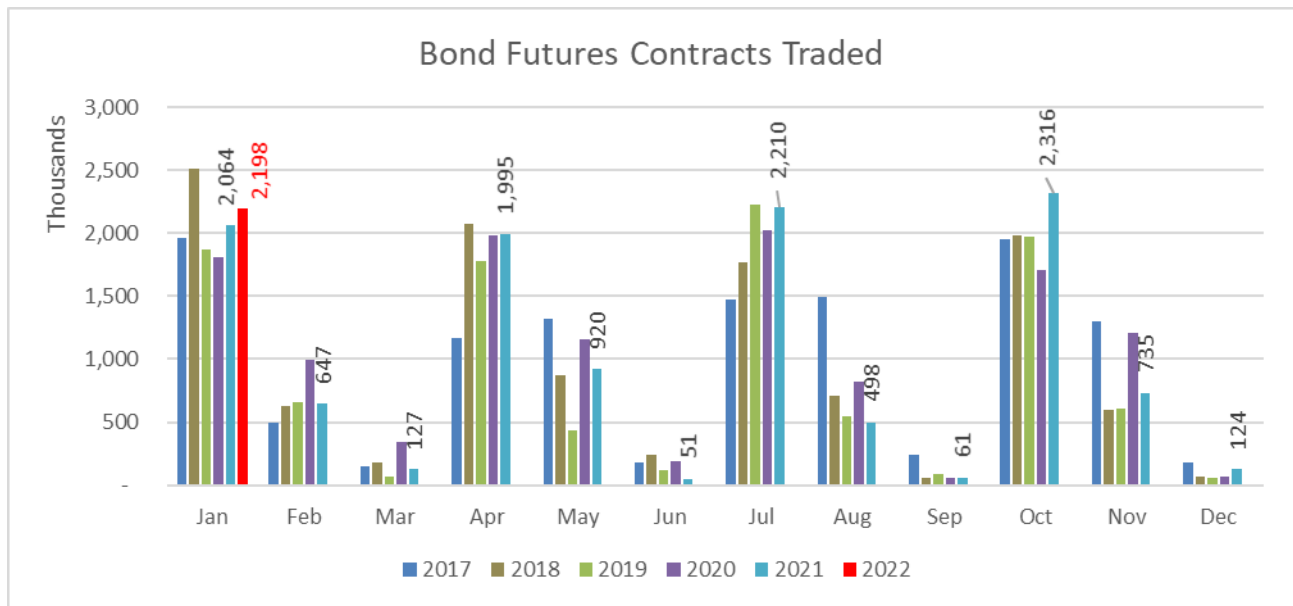
The **November 2021 (2-mth) close-out period**, saw a total of 3.2m contracts traded, 6.7% up over the same close-out period in 2020. This was the first 2021 close-out period (2 months) that was higher than the equivalent period last year

The Feb 2022 close-out figures available next month

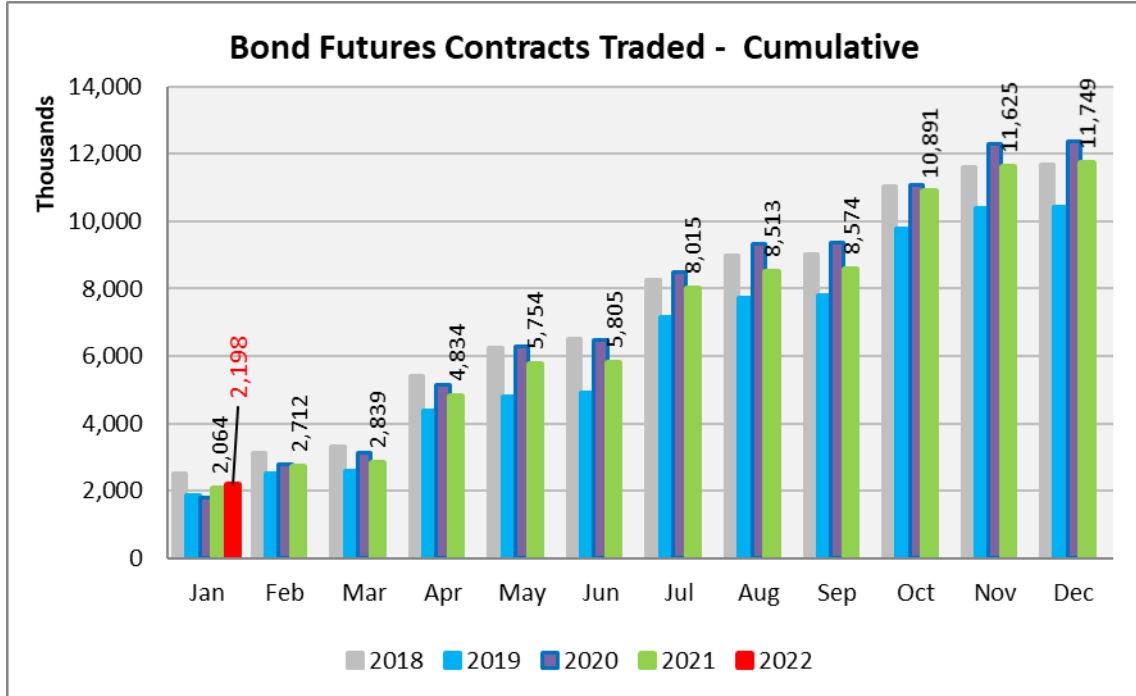
BOND FUTURES

BOND FUTURES: CONTRACTS TRADED

Contracts traded in January 2022 at 2.198m were up 6.5% over previous January as the market headed into the Feb close-out.

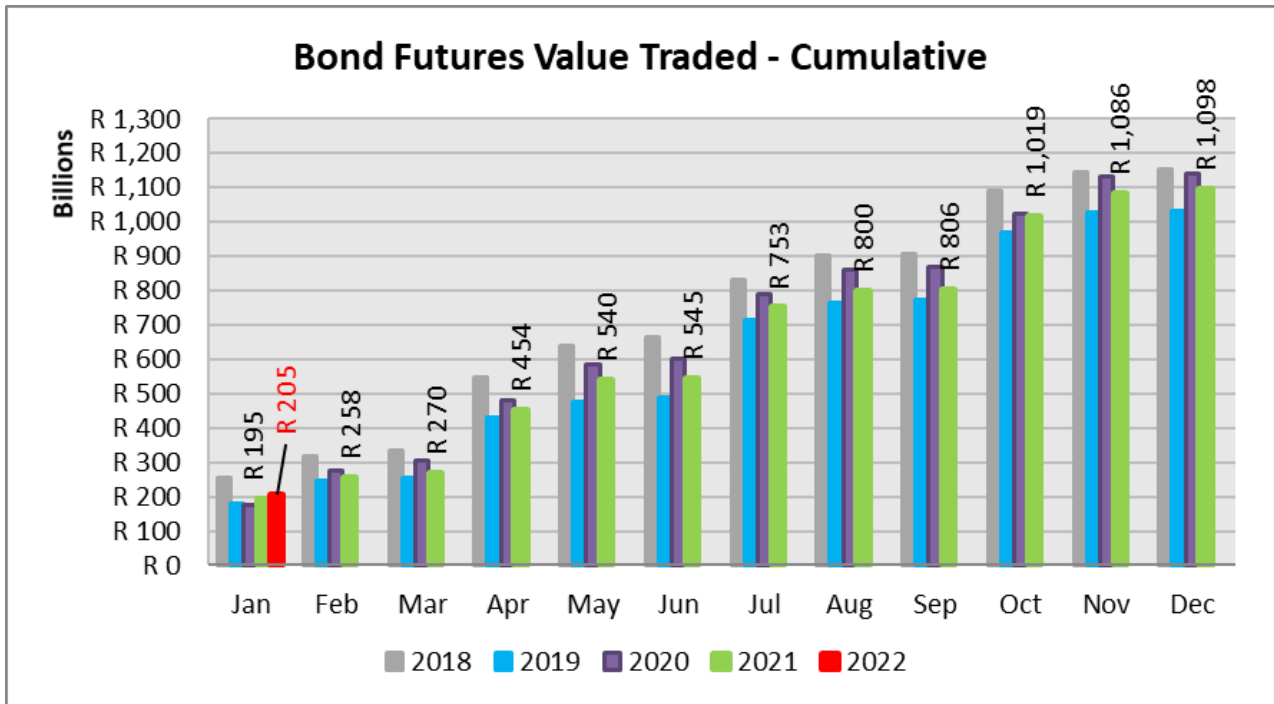


Bond Futures Contracts Traded									
Date	2016	2017	2018	2019	2020	2021	2022	Chg 21/20	Chg 22/21
Jan	826,485	1,963,456	2,512,043	1,872,040	1,808,945	2,064,147	2,198,294	14.1%	6.5%
Feb	883,377	493,725	622,760	654,730	994,022	647,370		-34.9%	
Mar	79,520	148,066	184,080	71,194	337,360	127,022		-62.3%	
Apr	1,490,182	1,168,792	2,071,717	1,778,197	1,984,879	1,995,098		0.5%	
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	2,198,294	-4.9%	6.5%
%Chg		30.0%	-1.9%	-10.7%	18.3%	-4.9%			



BOND FUTURES: VALUE TRADED

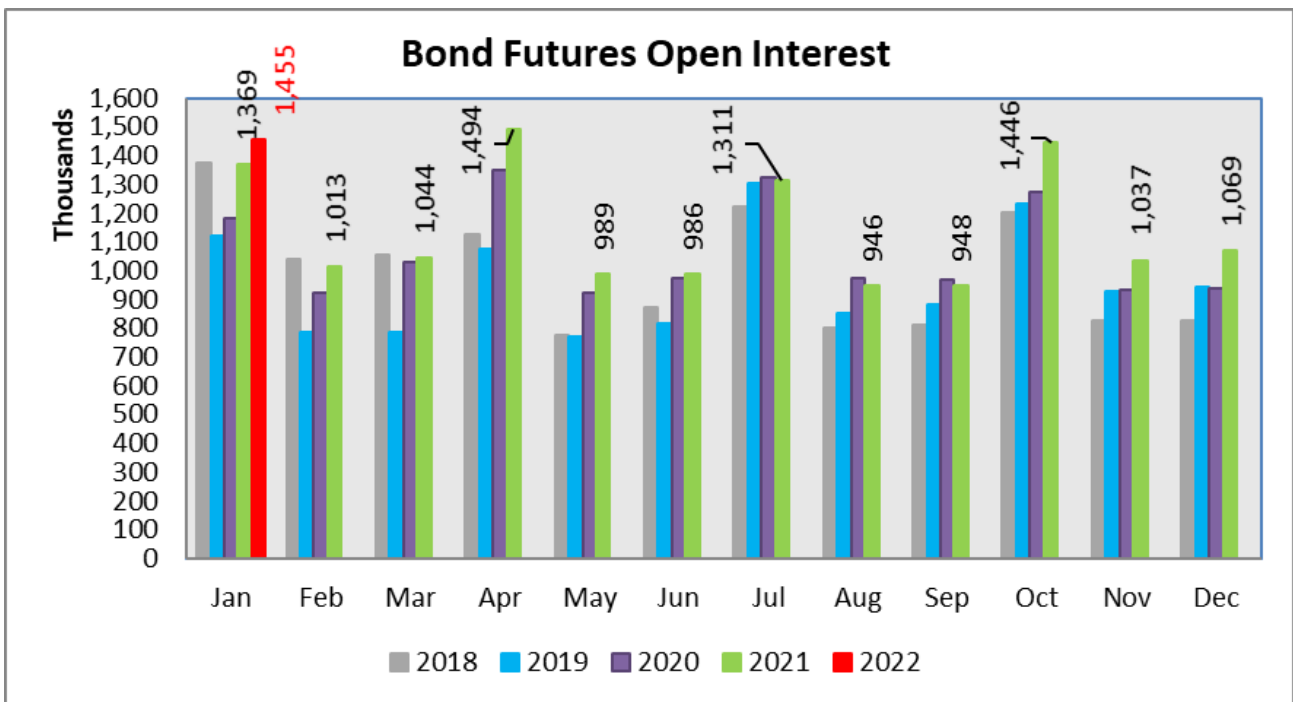
The January 2022 value traded was 5.1% higher at R204bln compared to value traded in 2021.



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		-35.7%	
Mar	R 8,122	R 15,689	R 18,820	R 7,378	R 29,570	R 12,063		-59.2%	
Apr	R 159,522	R 128,361	R 212,944	R 177,545	R 174,397	R 184,453		5.8%	
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	204,686	-3.6%	5.1%
%Chg		24.4%	-5.5%	-10.3%	10.1%	-3.6%			

BOND FUTURES: OPEN INTEREST

Bond Futures Open interest at month end was 1,455m contracts, up 6.5% on the equivalent month in previous year. *This was in line with upper end of expectations for January of between 1.33m and 1.5m contracts. Over past 5 years, Feb open interest has been about 22-32% lower than January indicating an expected 0.98m-1.13m open interest.*

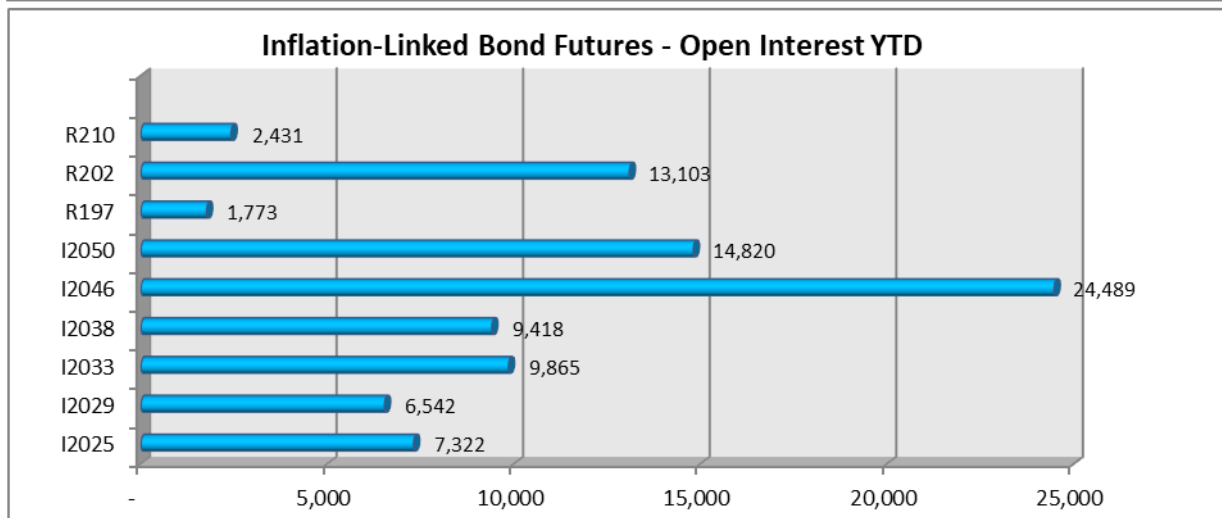
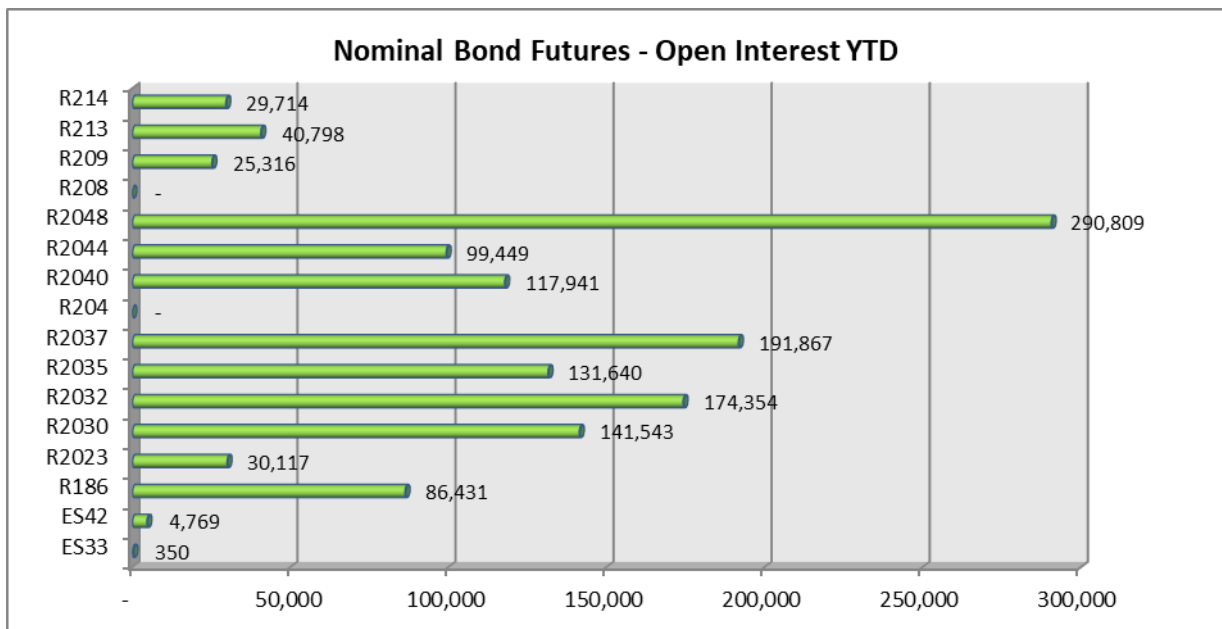


Bond Futures Open Interest									
Date	2016	2017	2018	2019	2020	2021	2022	Chg 21/20	Chg 22/21
Jan	713,913	1,137,425	1,372,543	1,118,795	1,183,158	1,368,771	1,454,861	15.7%	6.3%
Feb	633,062	770,321	1,037,493	784,852	921,269	1,012,584		9.9%	
Mar	650,335	801,800	1,052,470	787,390	1,027,896	1,043,823		1.5%	
Apr	890,406	1,037,427	1,126,181	1,073,638	1,349,483	1,493,709		10.7%	
May	752,370	794,207	777,714	769,139	923,863	989,485		7.1%	
Jun	753,049	868,162	870,652	817,539	971,675	986,432		1.5%	
Jul	996,943	1,139,985	1,222,141	1,302,006	1,321,763	1,311,466		-0.8%	
Aug	655,211	977,327	798,912	849,438	973,254	946,280		-2.8%	
Sep	657,642	981,713	809,221	883,920	969,022	948,396		-2.1%	
Oct	999,507	1,383,649	1,201,141	1,231,132	1,273,672	1,445,779		13.5%	
Nov	793,813	1,020,399	826,316	927,675	931,839	1,036,547		11.2%	
Dec	798,552	1,016,463	827,458	944,806	936,762	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 contacts, with R2032, R2037 and R2048 ranging from ~R17 bln to R29 bln nominal (170k - 290k open contracts). Largest linker open interest is the I2046 at R24bln nominal

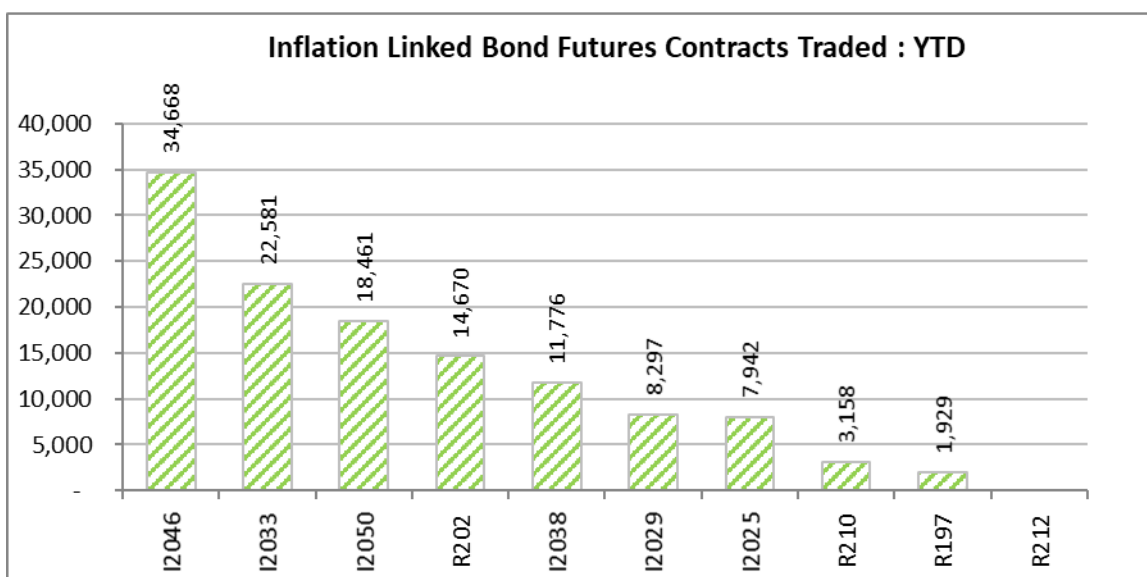
Open Interest Table: YTD			
	Nominal Bond	Inflation-Linkers	Total
Contracts	1,365,098	89,763	1,454,861
Nominal Value Rm	136,510	8,976	145,486
% Split	93.8%	6.2%	100.0%



SINGLE BOND FUTURE CONTRACTS

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

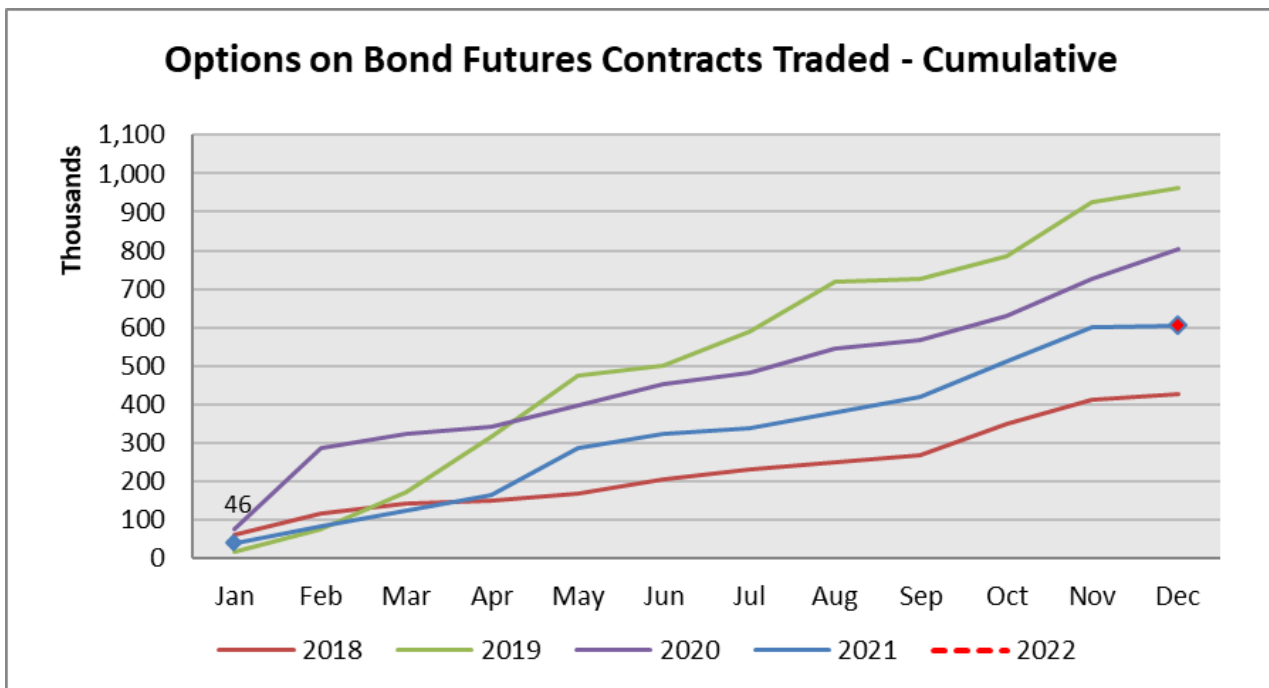
Total Contracts Traded ytd			
	Nominal Bond	Inflation-Linkers	Total
Contracts	2,074,812	123,482	2,198,294
Nominal Value Rm	207,481	12,348	219,829
% Split	94.4%	5.6%	100.0%



OPTIONS ON BOND FUTURES

OPTIONS ON BOND FUTURES: CONTRACTS TRADED YTD

After a 25% decline in option contracts traded in 2021 from 2020; January 2022 has seen an increase of 20% over the same period last year. Its too early to tell whether this trend will continue.

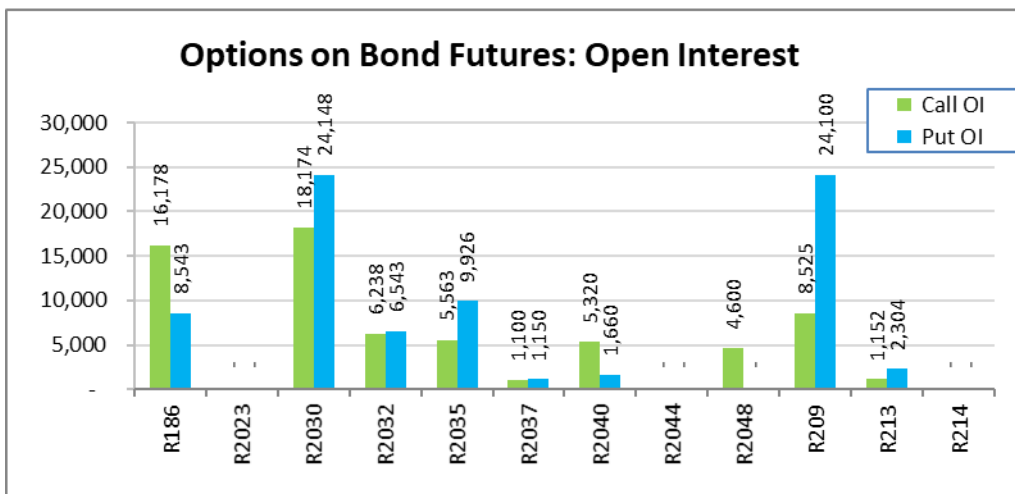
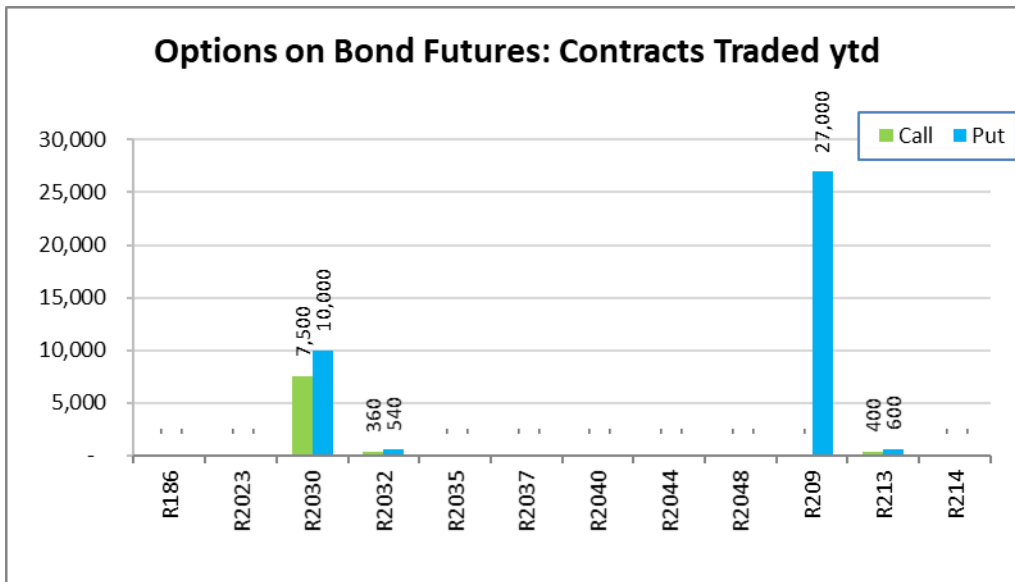


Options on Bond Futures Contracts Traded									
Date	2016	2017	2018	2019	2020	2021	2022	Chg 21/20	Chg 22/21
Jan	-	14,483	60,405	19,110	77,201	38,681	46,400	-49.9%	20.0%
Feb	17,536	11,415	54,977	59,033	210,210	46,540		-77.9%	
Mar	8,812	25,538	28,832	95,276	36,940	37,707		2.1%	
Apr	22,435	5,400	5,558	143,016	17,731	40,805		130.1%	
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	46,400	-24.8%	20.0%
%Chg		49.5%	39.5%	124.4%	-16.5%	-24.8%			

OPTIONS ON BOND FUTURES: CONTRACTS TRADED AND OPEN INTEREST

The activity in January was dominated by 2 option contracts: R2030 and R209, with over 80% of the volume traded in put options. However, overall open interest is still fairly even for puts and calls

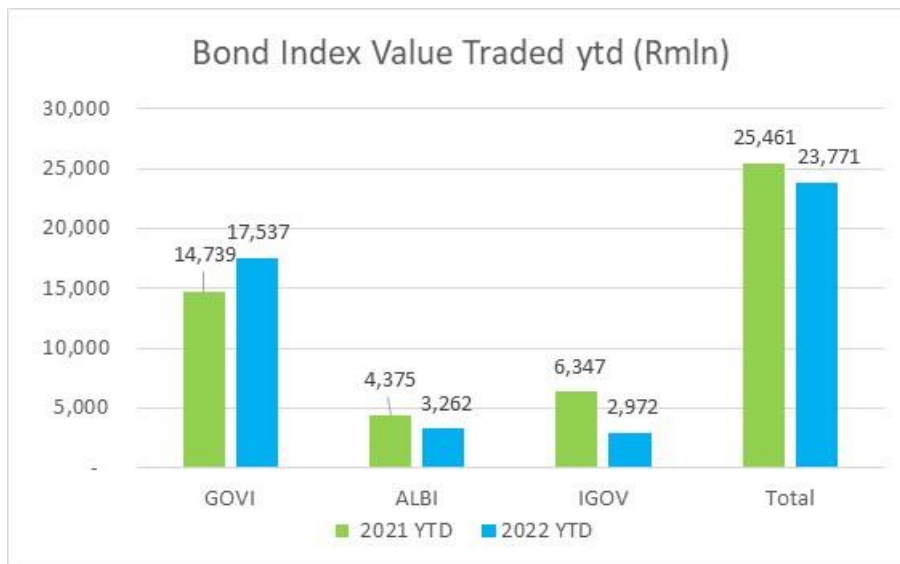
Options on Bond Futures				
	Contracts ytd		Open Interest	
Calls	8,260	17.8%	66,850	46.0%
Puts	38,140	82.2%	78,374	54.0%
Total	46,400	100.0%	145,224	100.0%



BOND INDEX FUTURES

Total Bond Index futures value traded in 2021 was down 17% from last year and trend continues with January value traded down 6.6% over previous January. The rolling 12m value traded is R100bIn down from R118bIn at end January 2021.

VALUE TRADED Rm				
	GOVI	ALBI	IGOV	Total
2021 YTD	14,739	4,375	6,347	25,461
2022 YTD	17,537	3,262	2,972	23,771
% Change	19.0%	-25.4%	-53.2%	-6.6%



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

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