

JSE
INTEREST RATE DERIVATIVES
MONTHLY VIEW

(including Jibar Futures Snapshot)

April 2021

Compiled by the IRC team

CONTENTS

CONTENTS	2
SNAPSHOT: Trade short term interest rates with JIBAR FUTURES	3
HIGHLIGHTS.....	4
INTEREST RATE DERIVATIVE CONTRACTS.....	5
MONTHLY CONTRACTS SNAPSHOT.....	5
IRD CONTRACTS TRADED	5
IRD VALUE TRADED	5
IRD OPEN INTEREST	5
IRD PRODUCT SPLIT IN CONTRACTS AND VALUE TRADED	6
TWO_MONTH CLOSE OUT PERIOD VOLUME (ALL IRD CONTRACTS).....	6
BOND FUTURES.....	7
BOND FUTURES: CONTRACTS TRADED	7
BOND FUTURES: VALUE TRADED.....	8
BOND FUTURES: OPEN INTEREST	9
BOND FUTURES: OPEN INTEREST PER INSTRUMENT.....	10
SINGLE BOND FUTURE CONTRACTS.....	11
OPTIONS ON BOND FUTURES.....	12
OPTIONS ON BOND FUTURES: CONTRACTS TRADED YTD.....	12
OPTIONS ON BOND FUTURES: CONTRACTS TRADED AND OPEN INTEREST.....	13
BOND INDEX FUTURES	14

SNAPSHOT: Trade short term interest rates with JIBAR FUTURES

Market participants can **hedge and obtain interest rate exposure** via the listed and cleared Jibar Futures contract. There are 12 contracts available, extending out 2 years and expiring on standardized IMM dates. These contracts are tradeable on a central order book screen as well as available to be traded and reported to the JSE. All contracts are **listed, margined, and cleared via JSE Clear, with appropriate margin offset** between contracts

While the Jibar rate does not vary very much from day-to-day, the Jibar futures are sensitive to short term interest rate and policy expectations, and do adjust along the curve as shown below



The Jibar futures curves at the beginning and end of the month, as well as the changes in levels (red) is shown below:



HIGHLIGHTS

- Activity in the 2021 year has been lower than the equivalent period in 2020. The total **IRD contracts traded** (5mln) is down 7% compared to previous year. Recall that 2020 H1 was particularly volatile with SA sovereign downgrades and WGBI bond exclusions driving activity
- **Bond futures** activity is mixed with contracts 5.7% down while open interest is 10.7% up. This open interest represents a **record month-end open position**
- **Bond options activity** is substantially lower at 52% down from a buoyant 2020. The open interest represents positions on R16.3 bln underlying nominal value
- The **IRD open interest**, indicative of the outstanding risk being traded/hedged, is down 4.6% in contrast to the higher bond futures open interest
- The **Govi and Bond Index Futures value traded** was R48bln ytd, down 18% from previous year
- The **Jibar futures** saw 80k contracts traded in the first 2 months
- **In summary, heading into the May close-out saw slightly higher bond futures activity than the previous year (+0.5%) with a record month-end open interest (1.49m). The bond options and bond index contracts activity lagged the previous year with overall contracts down 7%**

INTEREST RATE DERIVATIVE CONTRACTS

MONTHLY CONTRACTS SNAPSHOT

Monthly Snapshot								
	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
Grand Total	4,833,637	81,044	82,689	3,588	5,250	80,871	-	5,087,079

IRD CONTRACTS TRADED

The number of IRD contracts traded YTD is -7% down from 2020 equivalent period. This lower activity is across the board and more pronounced in the bond option activity.

Listed IRD CONTRACTS TRADED							
YTD - Contracts	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2020	5,125,206	342,082	4,756	6,981	-	-	5,479,025
2021	4,833,637	163,733	3,588	5,250	80,871	-	5,087,079
Growth	-5.7%	-52.1%	-24.6%	-24.8%	-	0.0%	-7.2%

IRD VALUE TRADED

The value traded YTD is -6% lower than 2020 equivalent period with a total of R504bln notional.

IRD VALUE TRADED YTD (Rm)							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2020	R 478,568	R 548	R 32,605	R 25,799	R 0	R 0	R 537,519
2021	R 454,287	R 353	R 27,405	R 20,582	R 1,932	R 0	R 504,559
Growth	-5.1%	-35.5%	-15.9%	-20.2%	-	0.0%	-6.1%

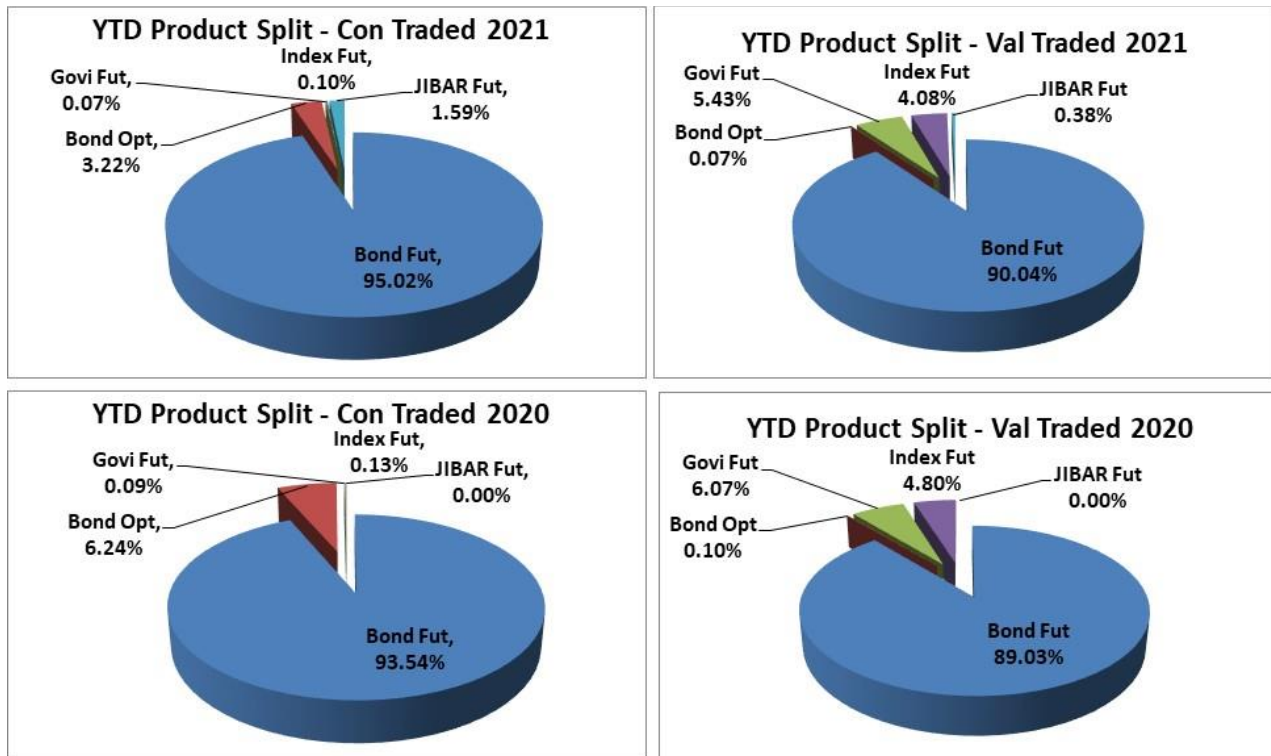
IRD OPEN INTEREST

The overall Open Interest is -5% down, while bond futures are almost 11% up as compared to previous year

IRD OPEN INTEREST YTD							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2020	1,349,483	432,117	1,428	977	-	51	1,784,056
2021	1,493,709	175,805	1,003	1,270	30,471	51	1,702,309
Growth	10.7%	-59.3%	-29.8%	30.0%	-	0.0%	-4.6%

IRD PRODUCT SPLIT IN CONTRACTS AND VALUE TRADED

The **GOVI and Index Futures** represent 0.17% of all contracts traded and 10% of value traded YTD.



TWO_MONTH CLOSE OUT PERIOD VOLUME (ALL IRD CONTRACTS)

The roll activity normally starts in the month preceding close-out. Hence seasonal volumes can be represented by consolidating **volumes for the active close-out month and the preceding month as a 2-month close-out period**.

All (two-month) close-out periods in 2020 reported greater than 3m contracts and double-digit growth from previous year. However, the latest **Feb 2021 (2-mth) close-out period**, saw a total of 2.88 million contracts traded, 7% lower than the same close-out period in 2020

ALL IRD CONTRACTS (in 2-mth periods) Rm								
Close-Out (2-mth)	2016	2017	2018	2019	2020	2021	% Chg 2020/19	% Chg 2020/19
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	-	27.8%	
Close-Out 3 (Aug)	2.313	3.051	2.532	3.009	3.040	-	1.0%	
Close-Out 4 (Nov)	2.399	3.320	2.749	2.787	3.082	-	10.6%	

BOND FUTURES

BOND FUTURES: CONTRACTS TRADED

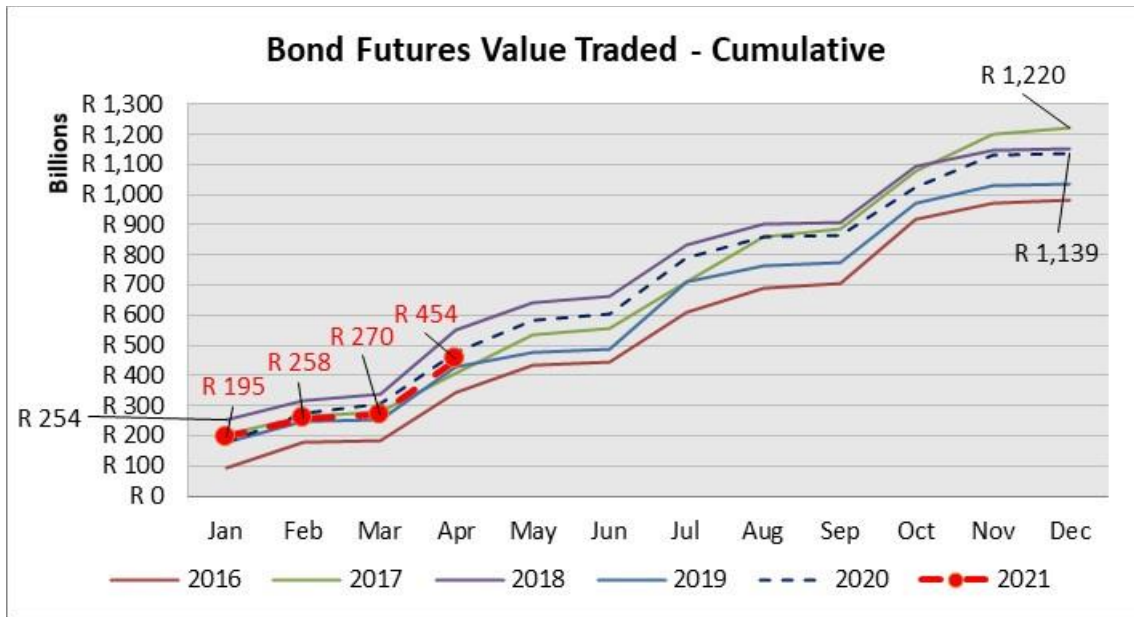
The total cumulative contracts traded in Bond Futures year-to-date, at 4.8m contracts, is 6% lower than equivalent period previous year. This lower trend contrasts the flat to slightly higher trend in the current open interest (see page 9)



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		165.3%	
Jun	134,452	177,529	241,609	121,845	187,670		54.0%	
Jul	1,542,365	1,475,383	1,770,507	2,232,039	2,022,009		-9.4%	
Aug	691,788	1,497,690	706,275	550,331	820,119		49.0%	
Sep	207,021	235,816	53,904	85,331	59,877		-29.8%	
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	4,833,637	18.3%	-5.7%
%Chg		30.0%	-1.9%	-10.7%	18.3%			

BOND FUTURES: VALUE TRADED

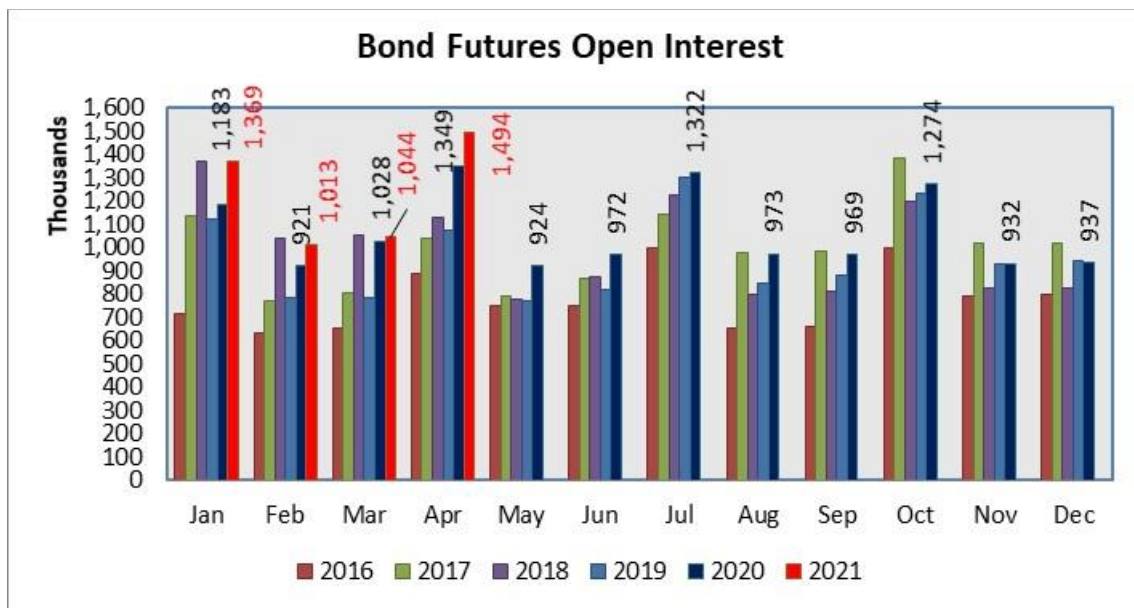
The **cumulative value traded** has seen a **5.3% decline in value traded** to R454 bln year-to-date compared to value traded in 2020.



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	-	139.3%	-
Jun	R 13,129	R 19,049	R 22,502	R 11,983	R 17,525	-	46.2%	-
Jul	R 166,159	R 151,742	R 170,320	R 225,830	R 185,667	-	-17.8%	-
Aug	R 75,809	R 152,914	R 68,472	R 53,410	R 73,391	-	37.4%	-
Sep	R 20,266	R 24,072	R 5,123	R 8,239	R 5,882	-	-28.6%	-
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	454,287	10.1%	-5.1%
%Chg		24.4%	-5.5%	-10.3%	10.1%			

BOND FUTURES: OPEN INTEREST

Bond Futures Open interest at month end was 1,494k contracts which is 11% higher than that of the equivalent month in previous year. This represents a **record bond futures open interest (over a month-end)**. The high open positions, indicative of outstanding risk being hedged and traded, contrasts with the slightly lower volumes going through the market (Down 5% ytd)

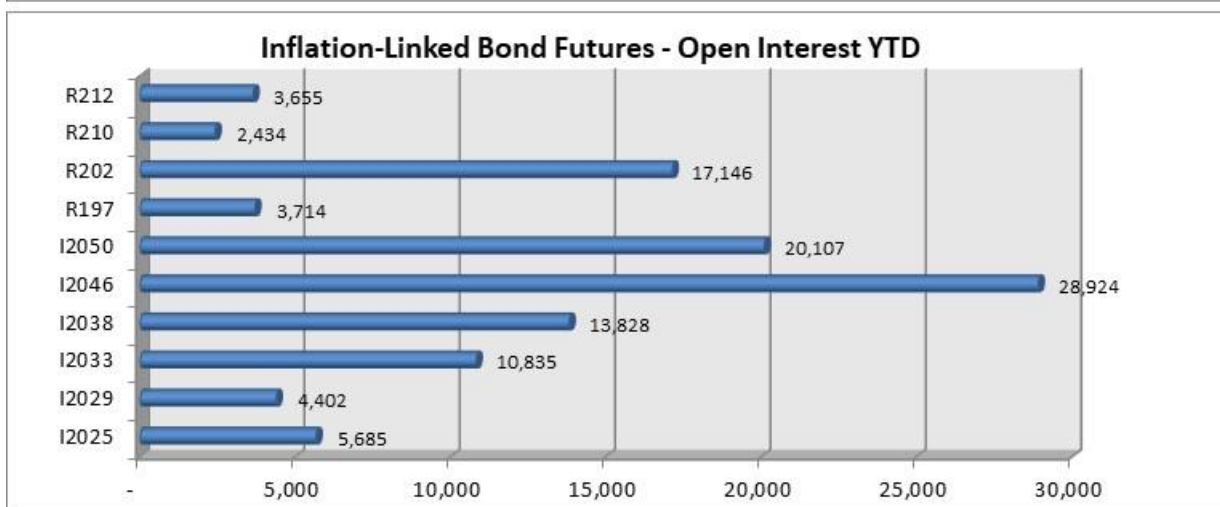
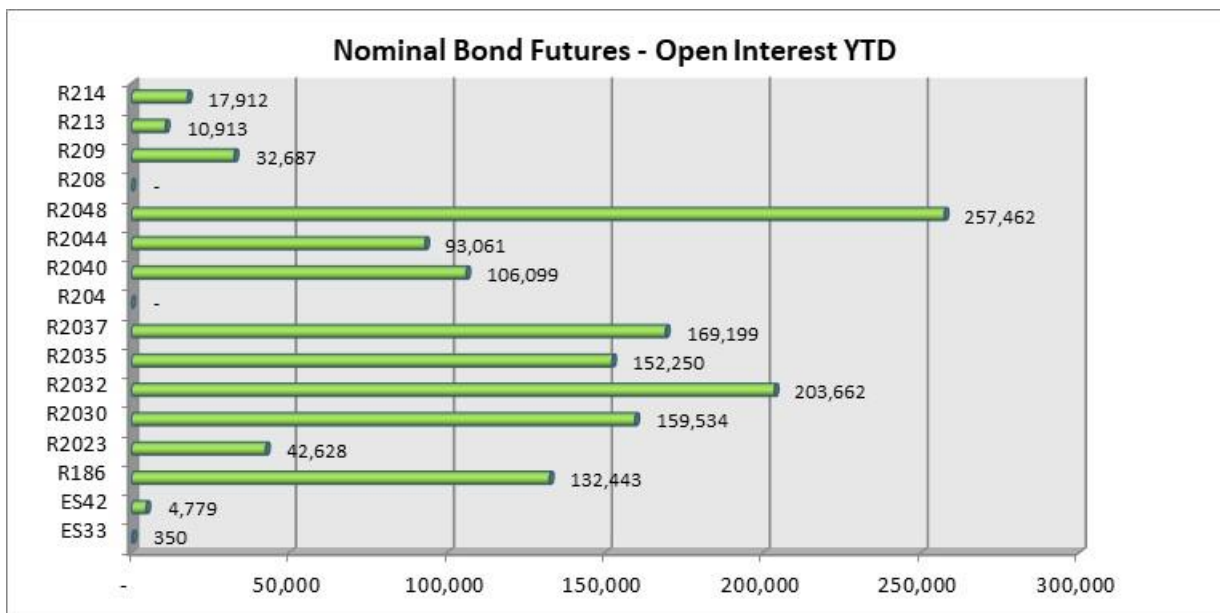


Bond Futures Open Interest								
Date	2016	2017	2018	2019	2020	2021	Chg 20/19	Chg 21/20
Jan	713,913	1,137,425	1,372,543	1,118,795	1,183,158	1,368,771	5.8%	15.7%
Feb	633,062	770,321	1,037,493	784,852	921,269	1,012,584	17.4%	9.9%
Mar	650,335	801,800	1,052,470	787,390	1,027,896	1,043,823	30.5%	1.5%
Apr	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		20.1%	
Jun	753,049	868,162	870,652	817,539	971,675		18.9%	
Jul	996,943	1,139,985	1,222,141	1,302,006	1,321,763		1.5%	
Aug	655,211	977,327	798,912	849,438	973,254		14.6%	
Sep	657,642	981,713	809,221	883,920	969,022		9.6%	
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%			

BOND FUTURES: OPEN INTEREST PER INSTRUMENT

The open interest is spread across several contacts, with R2030, R2032, R2035, R2037 and R2048 all above 150k open contracts (> R15 bln nominal value).

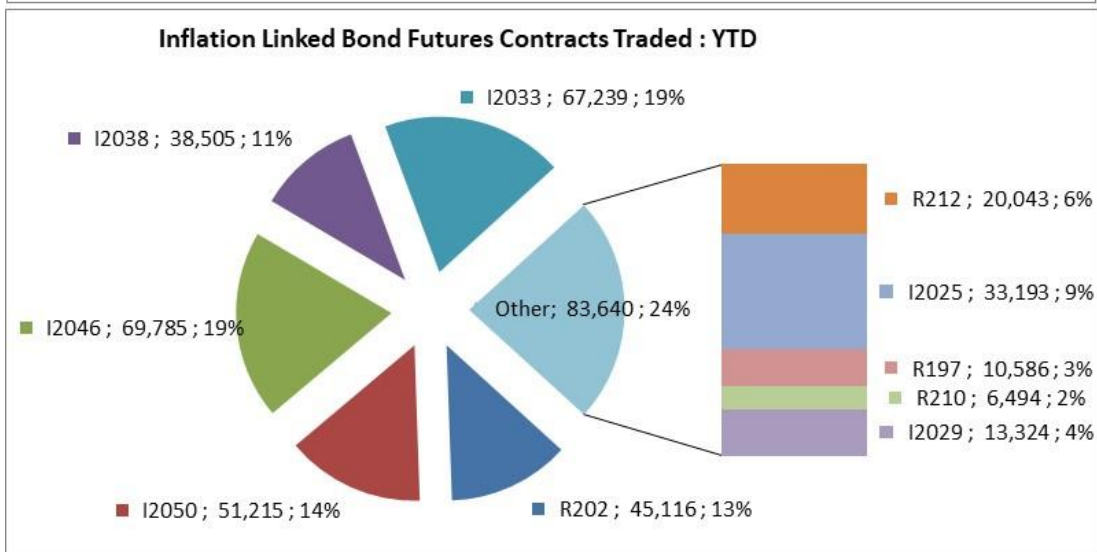
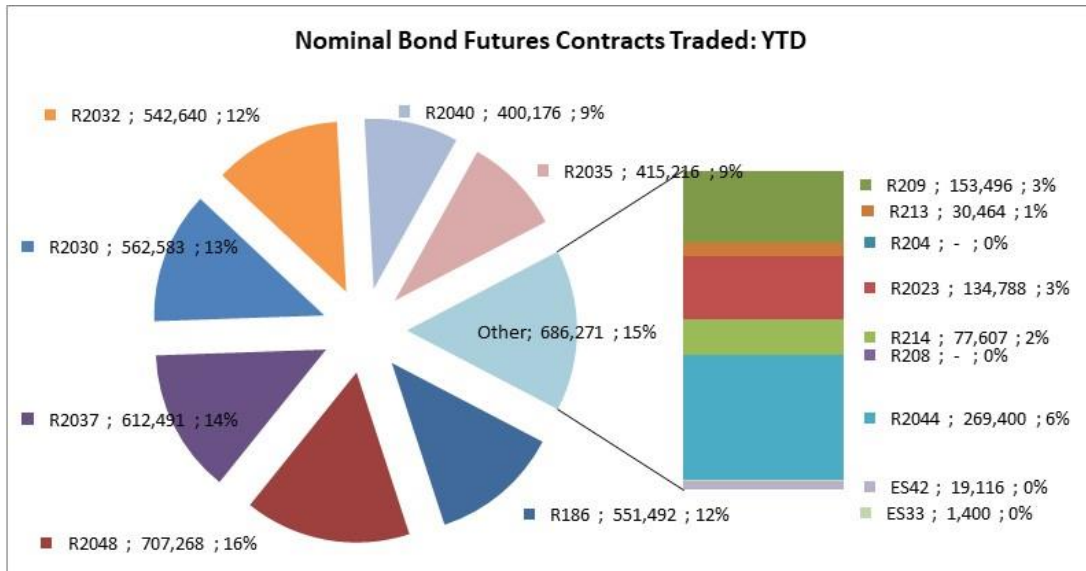
Open Interest Table: YTD			
	Nominal Bond	Inflation-Linkers	Total
Contracts	1,382,979	110,730	1,493,709
Nominal Value Rm	138,298	11,073	149,371
% Split	92.6%	7.4%	100.0%



SINGLE BOND FUTURE CONTRACTS

The chart ranks the total contracts traded ytd for single Nominal Bond and Inflation Bond Futures.

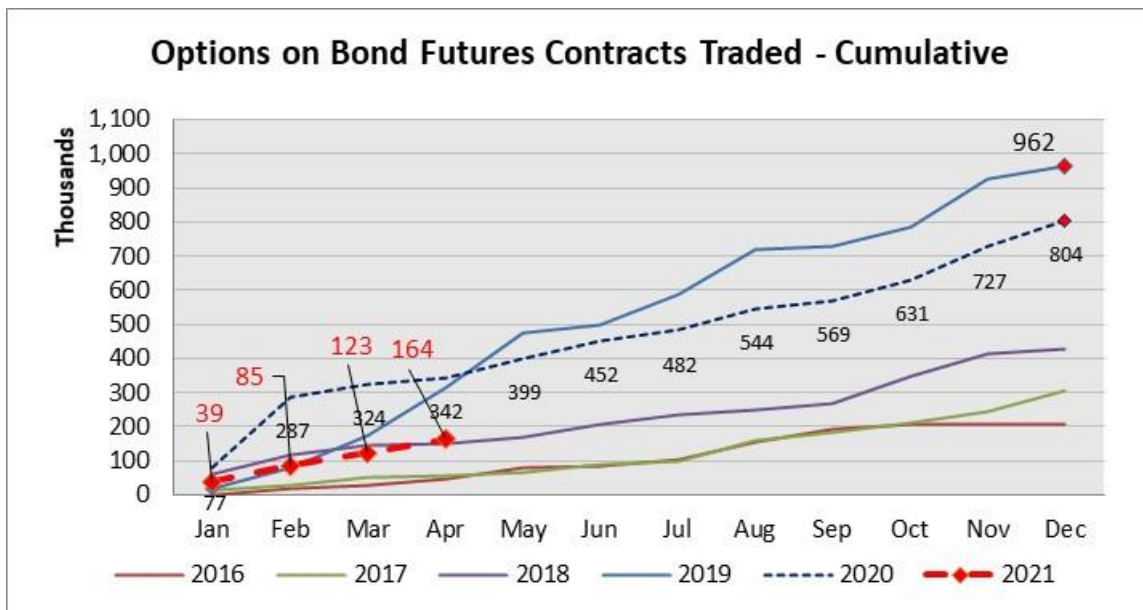
Total Contracts Traded ytd			
	Nominal Bond	Inflation-Linkers	Total
Contracts	4,478,137	355,500	4,833,637
Nominal Value Rm	447,814	35,550	483,364
% Split	92.6%	7.4%	100.0%



OPTIONS ON BOND FUTURES

OPTIONS ON BOND FUTURES: CONTRACTS TRADED YTD

The start of 2021 has seen much lower activity (down 52%) on the equivalent period in the previous year. This was a result of the high activity seen in Q1 2020, with a more normalised activity through the rest of 2020.

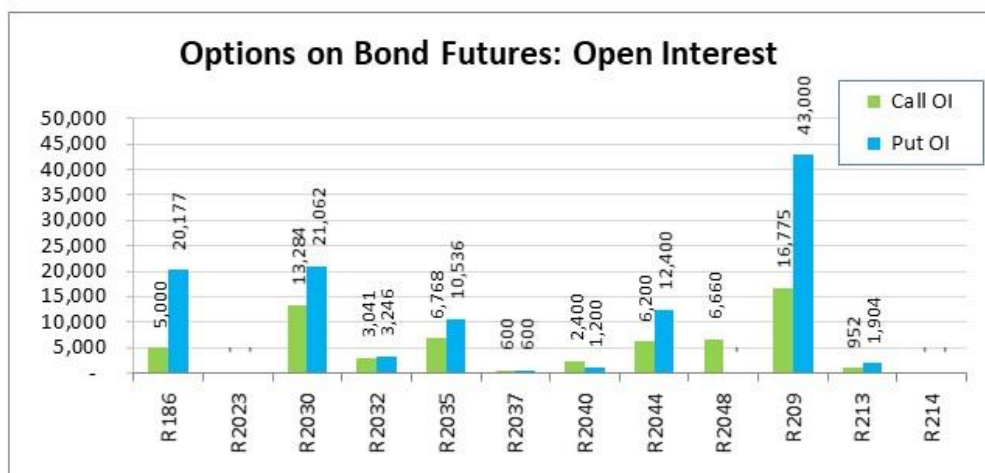
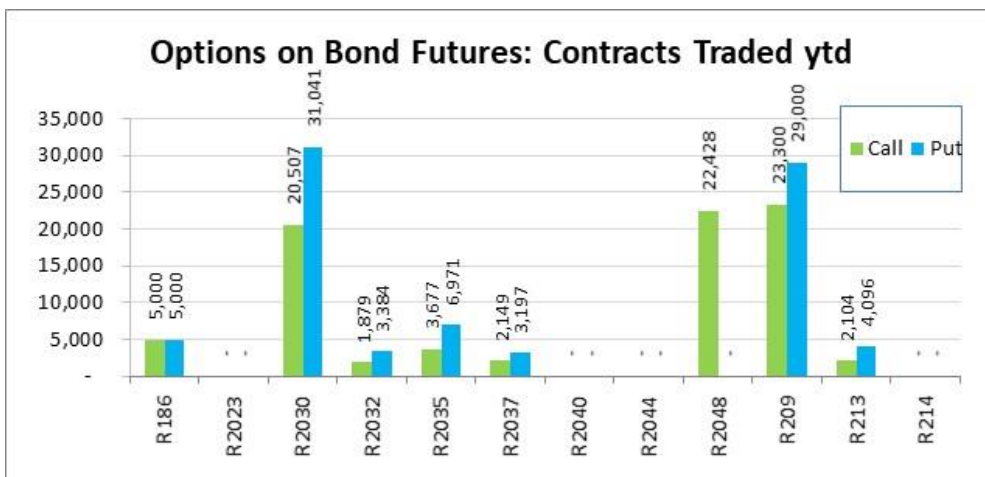


Options on Bond Futures Contracts Traded								
Date	2016	2017	2018	2019	2020	2021	Chg 20/19	Chg 21/20
Jan	-	14,483	60,405	19,110	77,201	38,681	304.0%	-49.9%
Feb	17,536	11,415	54,977	59,033	210,210	46,540	256.1%	-77.9%
Mar	8,812	25,538	28,832	95,276	36,940	37,707	-61.2%	2.1%
Apr	22,435	5,400	5,558	143,016	17,731	40,805	-87.6%	130.1%
May	29,048	8,862	20,150	157,005	56,719	-	-63.9%	-
Jun	5,775	23,320	34,432	26,470	53,416	-	101.8%	-
Jul	18,285	8,019	28,655	88,896	30,101	-	-66.1%	-
Aug	54,921	63,882	17,260	131,864	61,600	-	-53.3%	-
Sep	36,208	22,555	19,612	7,489	25,183	-	236.3%	-
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	163,733	-16.5%	-52.1%
%Chg		49.5%	39.5%	124.4%	-16.5%			

OPTIONS ON BOND FUTURES: CONTRACTS TRADED AND OPEN INTEREST

The option activity is focussed on the medium to longer term bonds R2030, R209 (exp 2036) and R2048. The option open interest reflects twice as many open puts relative to open calls, with the largest open contracts in the R209 (the 15yr bond expiring 2036). The 163k open interest represents options on R16.3 bln underlying nominal value.

Options on Bond Futures				
	Contracts ytd		Open Interest	
Calls	81,044	49.5%	61,680	35.1%
Puts	82,689	50.5%	114,125	64.9%
Total	163,733	100.0%	175,805	100.0%



BOND INDEX FUTURES

The total Bond Index futures value traded ytd was R48bln, down 18% from last year

CONTRACTS				
	ALBI	GOVI	IGOV	Contracts
2020 YTD	1,841	4,756	5,140	11,737
2021 YTD	1,205	3,588	4,045	8,838
% Change	-35%	-25%	-21%	-25%
VALUE TRADED Rm				
	ALBI	GOVI	IGOV	Val Traded
2020 YTD	12,650	32,605	13,149	58,404
2021 YTD	9,291	27,405	11,291	47,987
% Change	-27%	-16%	-14%	-18%



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

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