

# **JSE**

## **INTEREST RATE DERIVATIVES**

### **MONTHLY VIEW**

*(including February 2021 close-out  
insights)*

February 2021

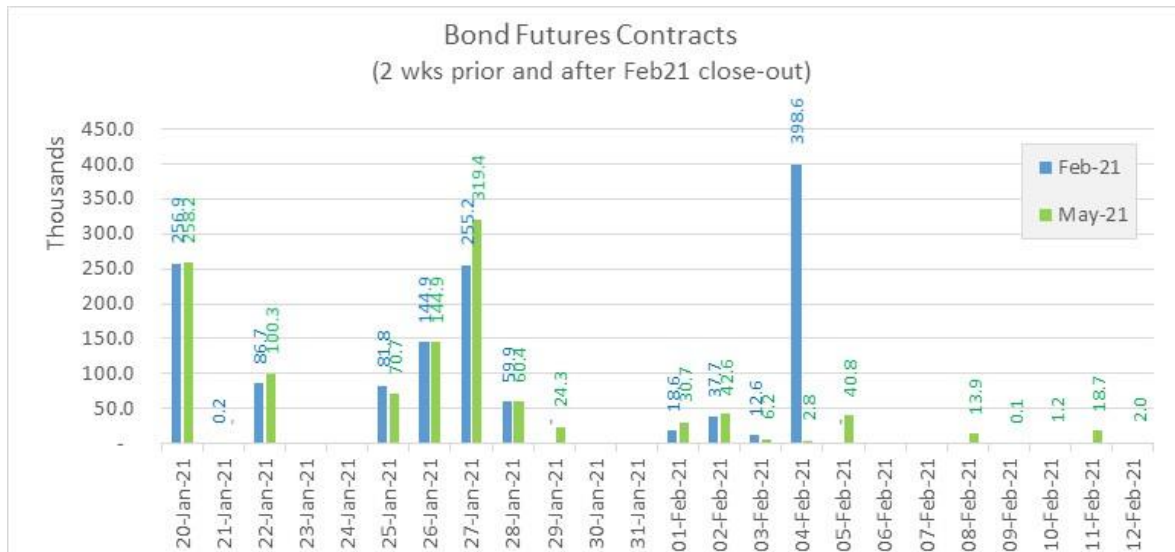
Compiled by the IRC team

## Contents

Contents .....	2
HIGHLIGHTS OF FEBRUARY 2021 CLOSE-OUT .....	3
HIGHLIGHTS .....	4
INTEREST RATE DERIVATIVE CONTRACTS .....	4
IRD CONTRACTS TRADED .....	4
IRD VALUE TRADED .....	4
IRD OPEN INTEREST .....	4
IRD PRODUCT SPLIT IN CONTRACTS AND VALUE TRADED .....	5
TWO_MONTH CLOSE OUT PERIOD VOLUME (ALL IRD CONTRACTS) .....	5
BOND FUTURES .....	6
BOND FUTURES: CONTRACTS TRADED .....	6
BOND FUTURES: VALUE TRADED .....	7
BOND FUTURES: OPEN INTEREST .....	8
BOND FUTURES: OPEN INTEREST PER INSTRUMENT .....	9
SINGLE BOND FUTURE CONTRACTS .....	10
OPTIONS ON BOND FUTURES .....	11
OPTIONS ON BOND FUTURES: CONTRACTS TRADED YTD .....	11
OPTIONS ON BOND FUTURES: CONTRACTS TRADED AND OPEN INTEREST .....	12
BOND INDEX FUTURES .....	13
BOND INDEX FUTURES: VALUE TRADED YTD .....	13

## HIGHLIGHTS OF FEBRUARY 2021 CLOSE-OUT

The market activity prior to close-out is shown below. Large roll activity started on 18-January, which was 2 weeks prior to close-out as can be seen by the similar sized bars in chart below.



The maximum open interest (989k) occurred at about 2 weeks prior to close-out. Over half of the positions were rolled in that period, resulting in 44% of near contracts (436k/989k) closing on expiration. Post the roll, the May-21 open interest (1111k) on expiry was 12% higher than the maximum of the previous contract

## HIGHLIGHTS

- Activity in the 2021 year has been lower than the equivalent period in 2020. The total **IRD contracts traded** at 2.88m is down 7% compared to previous year.
- **Bond futures** activity is mixed with contracts 3% down while open interest is almost 10% up
- **Bond options** is substantially lower from a buoyant 2020
- The **IRD open interest**, indicative of the outstanding risk being traded/hedged, is down 10.5%
- The **Govi and Bond Index Futures value traded** was R29bln, down 13% from last year
- The **Jibar futures** saw 80k contracts traded in the first 2 months
- **In summary, bond futures activity holding steady with higher open interest, while index and option contracts activity lower in 2021**

## INTEREST RATE DERIVATIVE CONTRACTS

### IRD CONTRACTS TRADED

The number of IRD contracts traded YTD is -7% down from 2020 equivalent period. This is largely due to lower activity in the bond option and Govi futures contracts.

Listed IRD CONTRACTS TRADED							
YTD - Contracts	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2020	2,802,967	287,411	2,660	3,784		-	3,096,822
2021	2,711,517	85,221	2,042	3,470	80,471		2,882,721
<b>Growth</b>	<b>-3.3%</b>	<b>-70.3%</b>	<b>-23.2%</b>	<b>-8.3%</b>	<b>-</b>	<b>0.0%</b>	<b>-6.9%</b>

### IRD VALUE TRADED

The value traded YTD is -6% lower than 2020 equivalent period a total of R288bln notional.

IRD VALUE TRADED YTD (Rm)							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2020	R 274,601	R 384	R 18,726	R 14,669	R 0	R 0	R 308,380
2021	R 257,771	R 180	R 15,518	R 13,440	R 1,923	R 0	R 288,830
<b>Growth</b>	<b>-6.1%</b>	<b>-53.2%</b>	<b>-17.1%</b>	<b>-8.4%</b>	<b>-</b>	<b>0.0%</b>	<b>-6.3%</b>

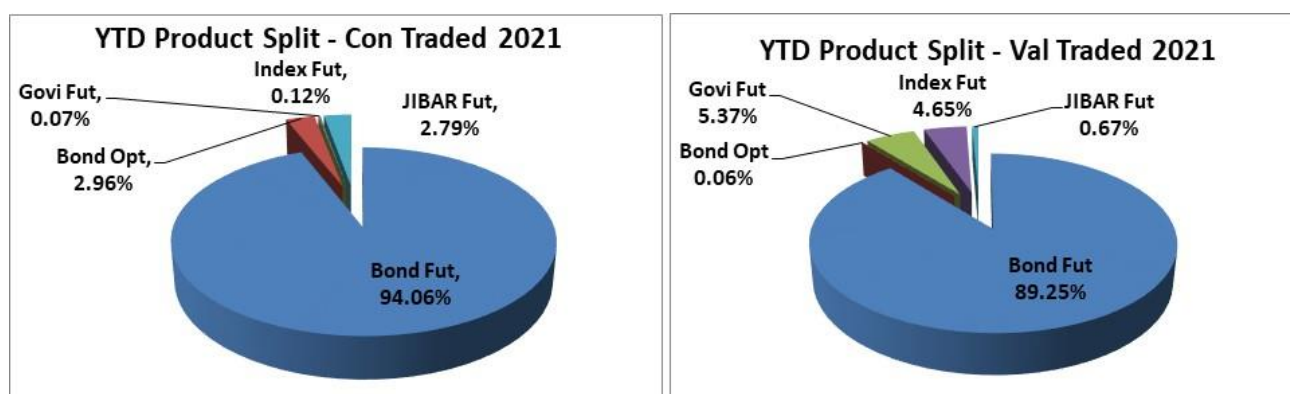
### IRD OPEN INTEREST

The Open Interest is -10.5% down with much lower bond option open interest.

IRD OPEN INTEREST YTD							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2020	921,269	402,713	1,176	1,215		51	1,326,424
2021	1,012,584	141,332	975	1,212	30,471	51	1,186,625
<b>Growth</b>	<b>9.9%</b>	<b>-64.9%</b>	<b>-17.1%</b>	<b>-0.2%</b>	<b>-</b>	<b>0.0%</b>	<b>-10.5%</b>

## IRD PRODUCT SPLIT IN CONTRACTS AND VALUE TRADED

The **GOVI and Index Futures** account for 0.2% of all IRD contracts traded, but, due to the large contract size, 10% of total value traded YTD.



## TWO\_MONTH CLOSE OUT PERIOD VOLUME (ALL IRD CONTRACTS)

Participants usually start to roll positions in the month preceding close-out and, as such, in order to get a complete picture, **seasonal volumes** can be represented by adding together the **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 in excess of 3m contracts. 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

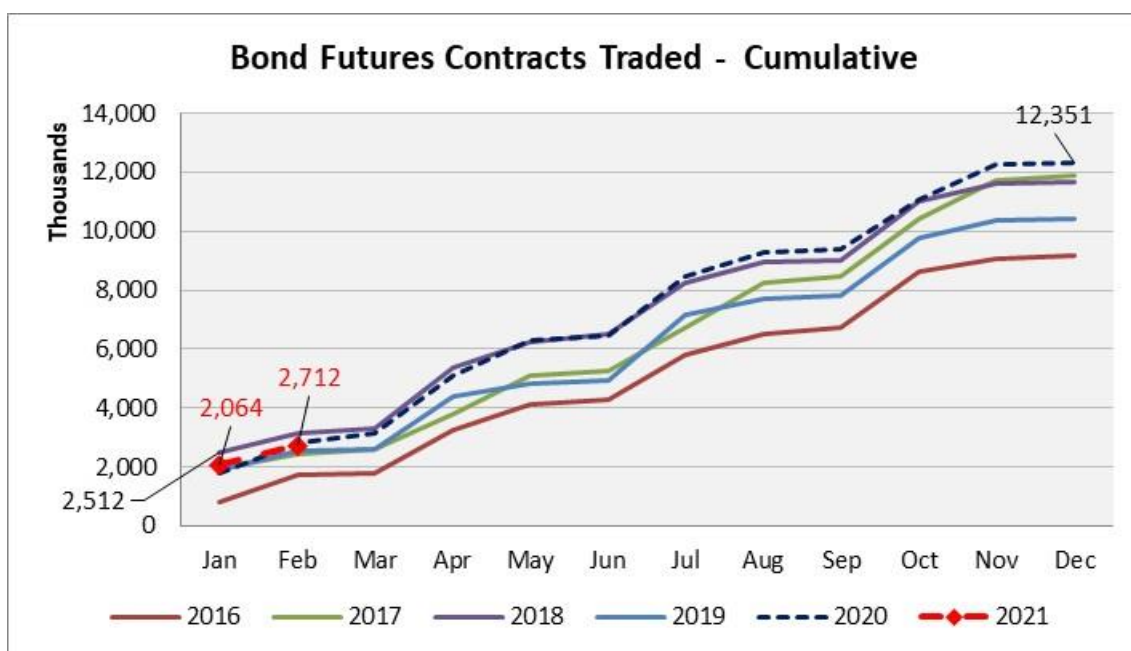
Close-Out (2-mth)	ALL IRD CONTRACTS (in 2-mth periods)						% Chg 2020/19	% Chg 2020/19
	2016	2017	2018	2019	2020	2021		
Close-Out 1 (Feb)	1,732,666	2,454,909	3,291,708	2,609,366	3,096,822	2,882,721	18.7%	-6.9%
Close-Out 2 (May)	2,400,933	2,490,915	2,973,062	2,518,022	3,218,688		27.8%	
Close-Out 3 (Aug)	2,313,032	3,050,960	2,531,742	3,008,502	3,039,576		1.0%	
Close-Out 4 (Nov)	2,399,150	3,320,386	2,749,042	2,786,833	3,081,681		10.6%	

*Further information about close-out can be seen on page 3 of this report*

## BOND FUTURES

### BOND FUTURES: CONTRACTS TRADED

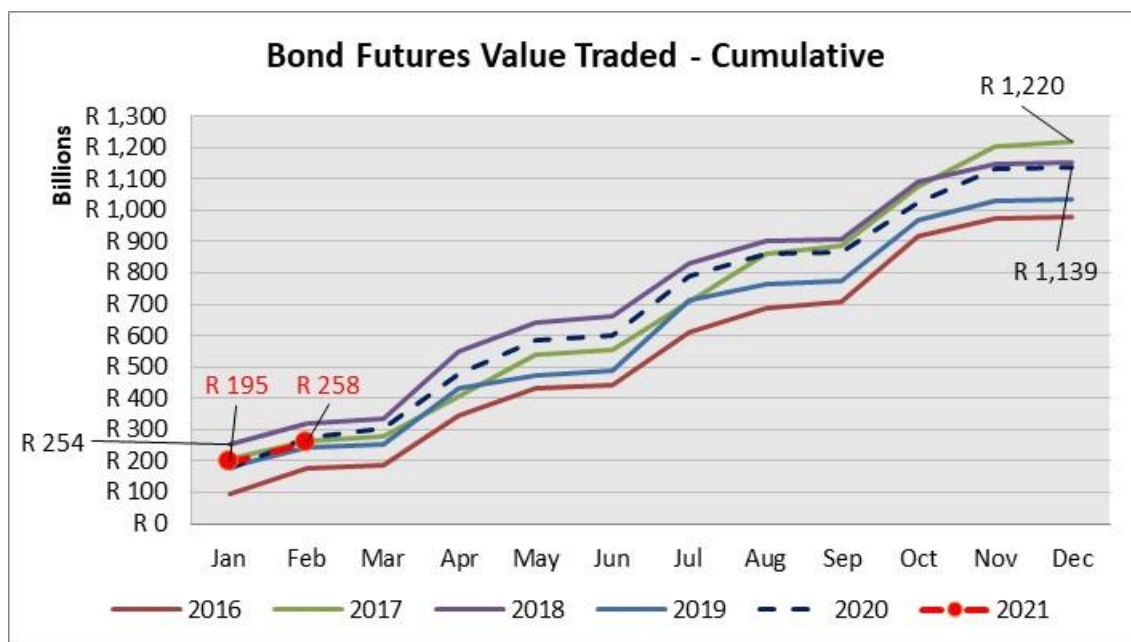
The **total cumulative contracts traded in Bond Futures** year-to-date, at 2.71m contracts, is 3.3% lower than equivalent period previous year. This lower trend is offset by the higher trend in the current open interest (see page 8)



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		373.9%	
Apr	1,490,182	1,168,792	2,071,717	1,778,197	1,984,879		11.6%	
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%	
<b>TOTAL</b>	<b>9,167,378</b>	<b>11,915,116</b>	<b>11,687,870</b>	<b>10,438,477</b>	<b>12,350,538</b>	<b>2,711,517</b>	<b>18.3%</b>	<b>-3.3%</b>
<b>%Chg</b>		<b>30.0%</b>	<b>-1.9%</b>	<b>-10.7%</b>	<b>18.3%</b>			

## BOND FUTURES: VALUE TRADED

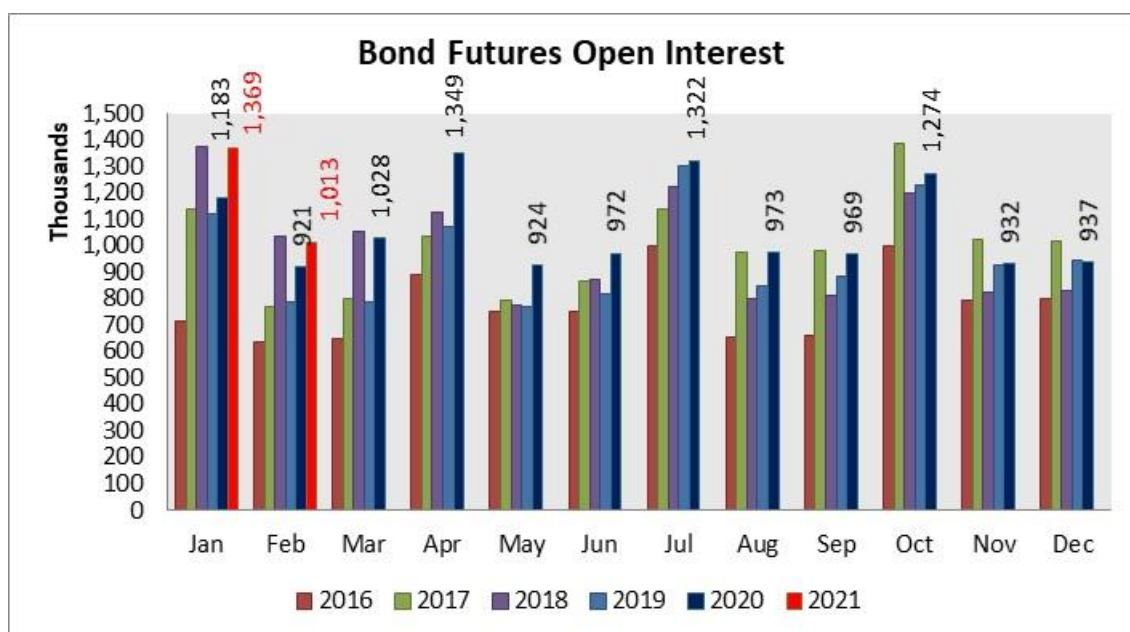
The **cumulative value traded** has seen a **6.1% decline in value traded** year-to-date compared to value traded in 2020.



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		300.8%	
Apr	R 159,522	R 128,361	R 212,944	R 177,545	R 174,397		-1.8%	
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%	
<b>TOTAL</b>	<b>R 980,519</b>	<b>R 1,219,888</b>	<b>R 1,153,345</b>	<b>R 1,034,049</b>	<b>R 1,138,999</b>	<b>R 257,771</b>	<b>10.1%</b>	<b>-6.1%</b>
<b>%Chg</b>		<b>24.4%</b>	<b>-5.5%</b>	<b>-10.3%</b>	<b>10.1%</b>			

## BOND FUTURES: OPEN INTEREST

**Bond Futures Open interest** at month end was 1,013k contracts which is 9.9% higher than that of the equivalent month in previous year. This is in line (and only slightly lower) than the 2018 level. The open positions, indicative of outstanding risk being hedged and traded, is in contrast to the lower total volumes going through the market.

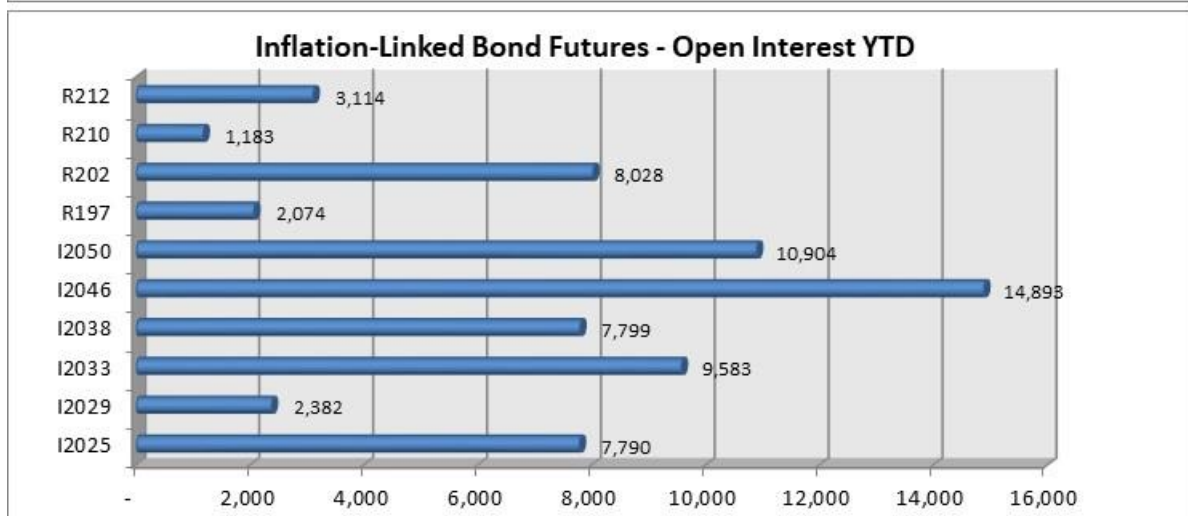
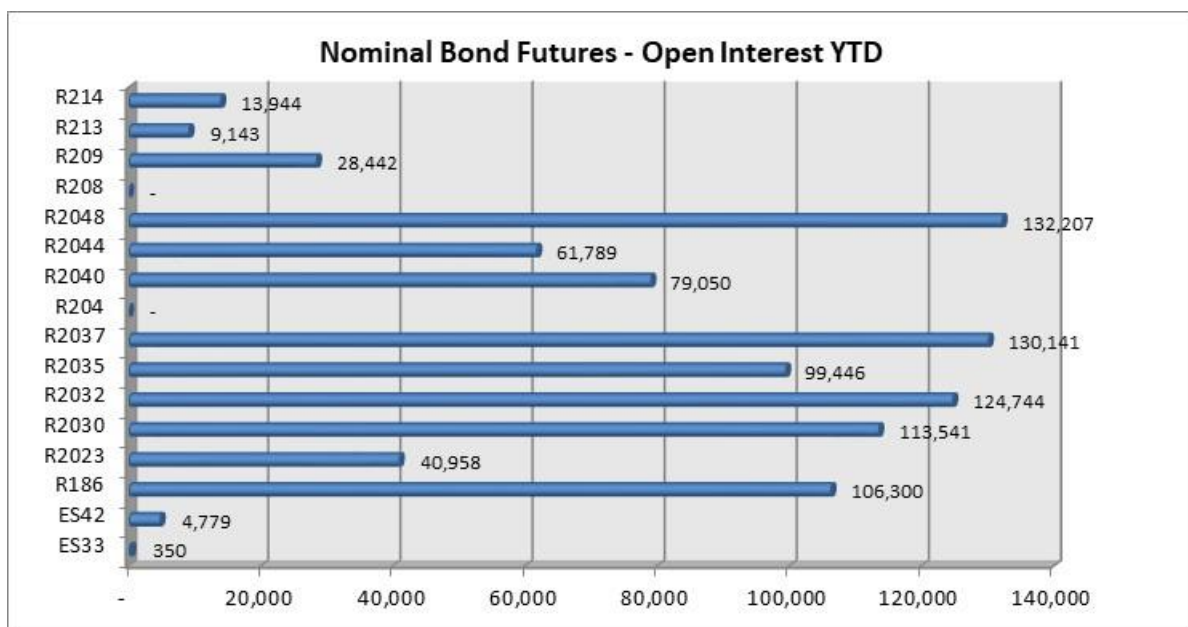


Bond Futures Open Interest								
Date	2016	2017	2018	2019	2020	2021	Chg 20/19	Chg 21/20
Jan	713,913	1,137,425	1,372,543	1,118,795	1,183,158	1,368,771	5.8%	15.7%
Feb	633,062	770,321	1,037,493	784,852	921,269	1,012,584	17.4%	9.9%
Mar	650,335	801,800	1,052,470	787,390	1,027,896		30.5%	
Apr	890,406	1,037,427	1,126,181	1,073,638	1,349,483		25.7%	
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 fairly evenly across a number of contracts, with R2032, R2037 all over 130k open contracts (> R12 bln nominal value).

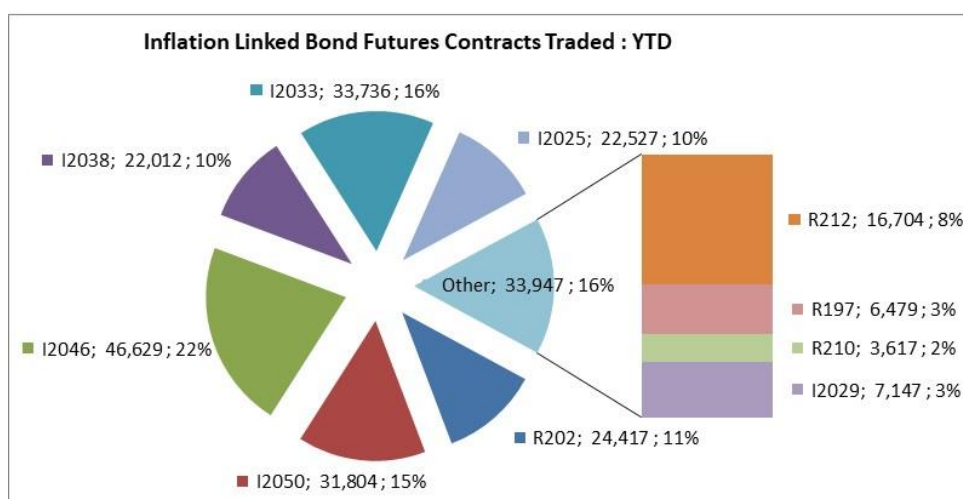
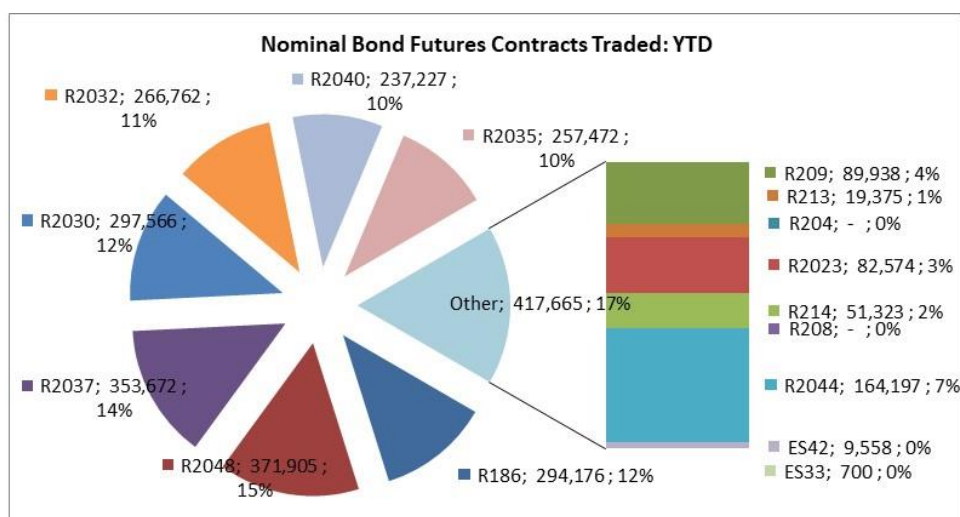
Open Interest Table: YTD		
Nominal Bond	Inflation-Linkers	Total
944,834	67,750	1,012,584
93.3%	6.7%	100.0%



## SINGLE BOND FUTURE CONTRACTS

The chart ranks the contracts traded ytd for single Nominal Bond Futures and Inflation Bond Futures. The percentage split for Nominal / Inflation Bond Futures is 92%/8%

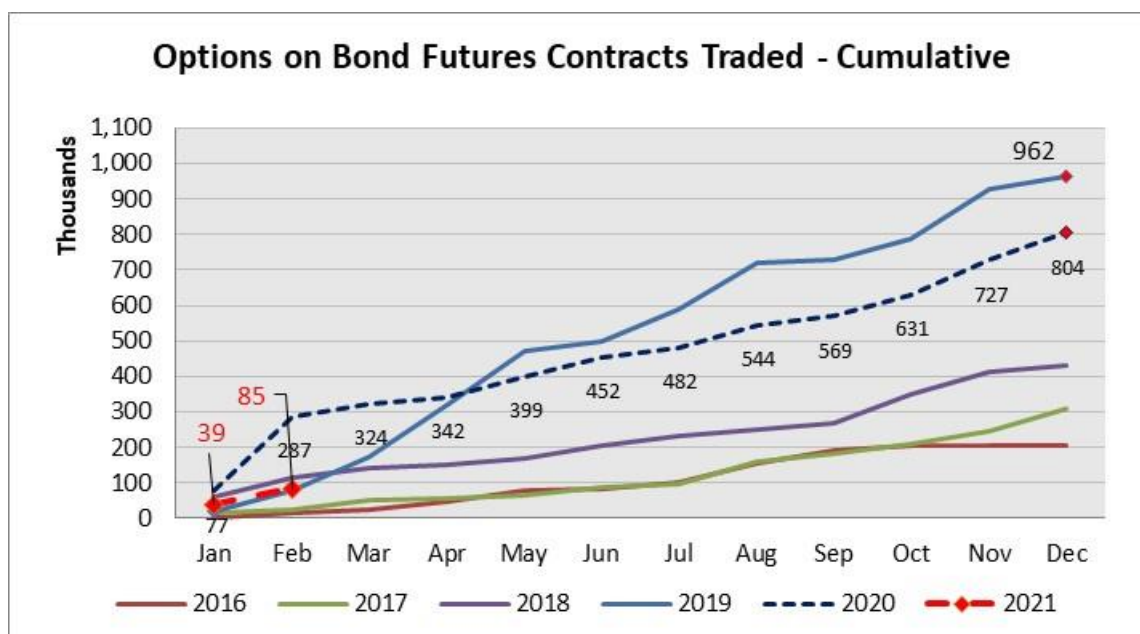
Total Contracts Traded ytd		
Nominal Bond	Inflation-Linkers	Total
2,496,445	215,072	2,711,517
92.1%	7.9%	100.0%



## OPTIONS ON BOND FUTURES

### OPTIONS ON BOND FUTURES: CONTRACTS TRADED YTD

The start of 2021 has seen much lower activity (down 70%) on the equivalent period in the previous year, although that activity was largely in the first quarter of the year

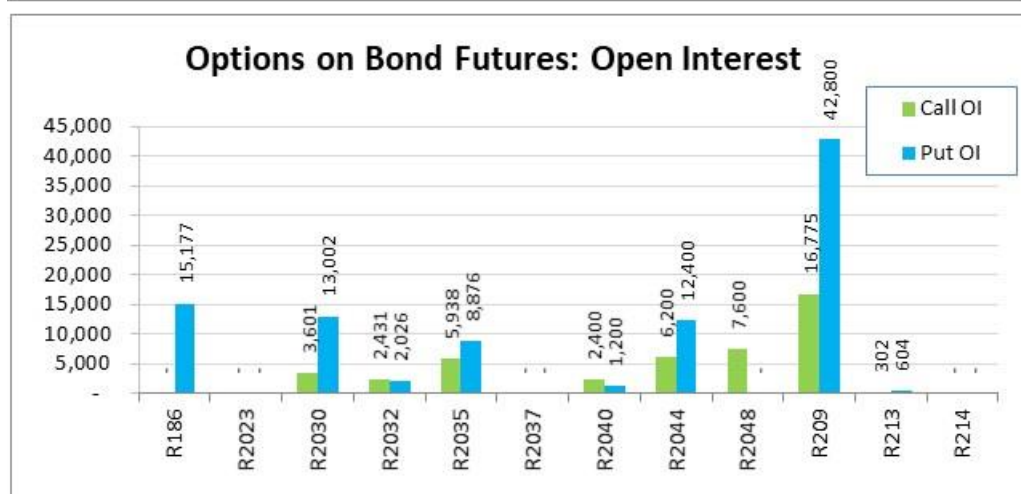
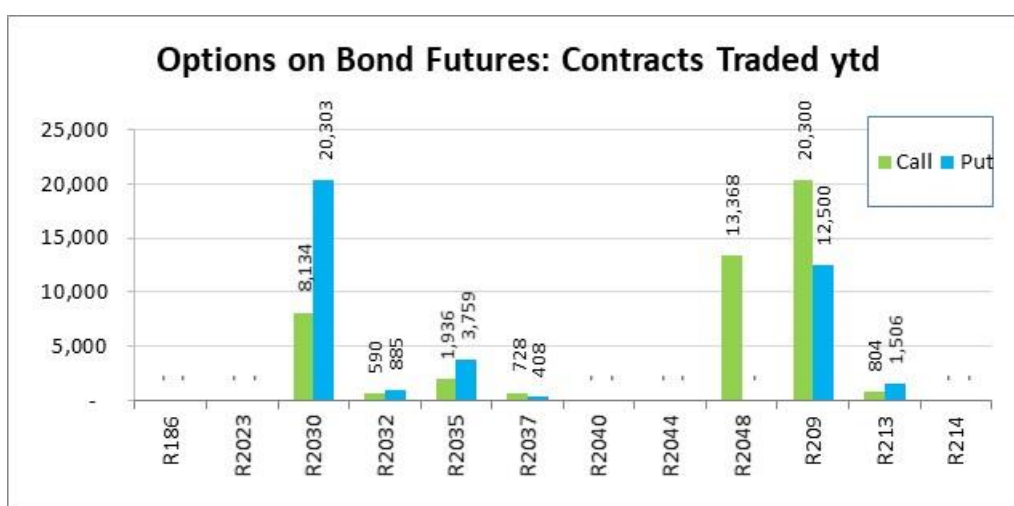


Options on Bond Futures Contracts Traded								
Date	2016	2017	2018	2019	2020	2021	Chg 20/19	Chg 21/20
Jan	-	14,483	60,405	19,110	77,201	38,681	304.0%	-49.9%
Feb	17,536	11,415	54,977	59,033	210,210	46,540	256.1%	-77.9%
Mar	8,812	25,538	28,832	95,276	36,940		-61.2%	
Apr	22,435	5,400	5,558	143,016	17,731		-87.6%	
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%	
<b>TOTAL</b>	<b>205,539</b>	<b>307,322</b>	<b>428,713</b>	<b>961,911</b>	<b>803,665</b>	<b>85,221</b>	<b>-16.5%</b>	<b>-70.3%</b>
<b>%Chg</b>		<b>49.5%</b>	<b>39.5%</b>	<b>124.4%</b>	<b>-16.5%</b>			

## OPTIONS ON BOND FUTURES: CONTRACTS TRADED AND OPEN INTEREST

Activity in options dominated by trade in 3 underlying bonds traded: R2030, R209 and R2048. The option open interest, showing 2x as many open puts compared calls, indicates a protective put bias in the market. The 141k put open interest represents options on R14.1 bln underlying nominal value.

Options on Bond Futures				
	Contracts ytd		Open Interest	
Calls	45,860	53.8%	45,247	32.0%
Puts	39,361	46.2%	96,085	68.0%
Total	85,221	100.0%	141,332	100.0%

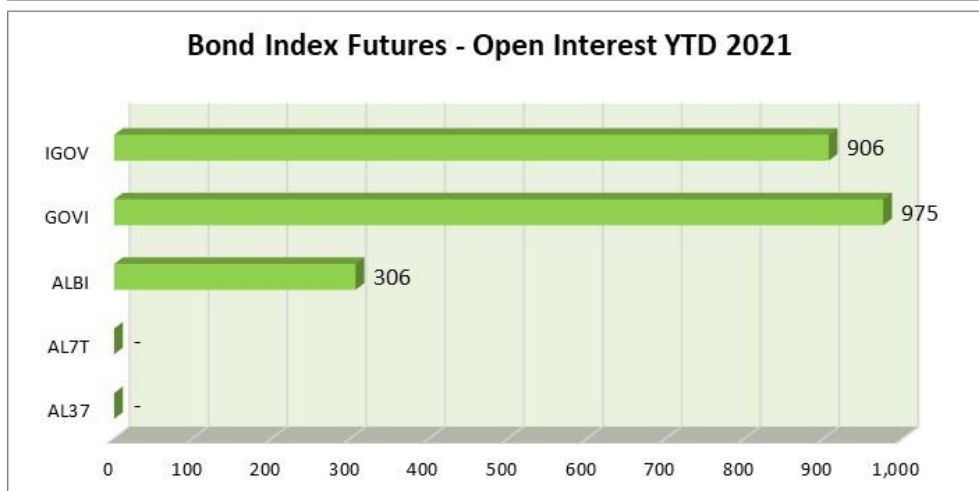
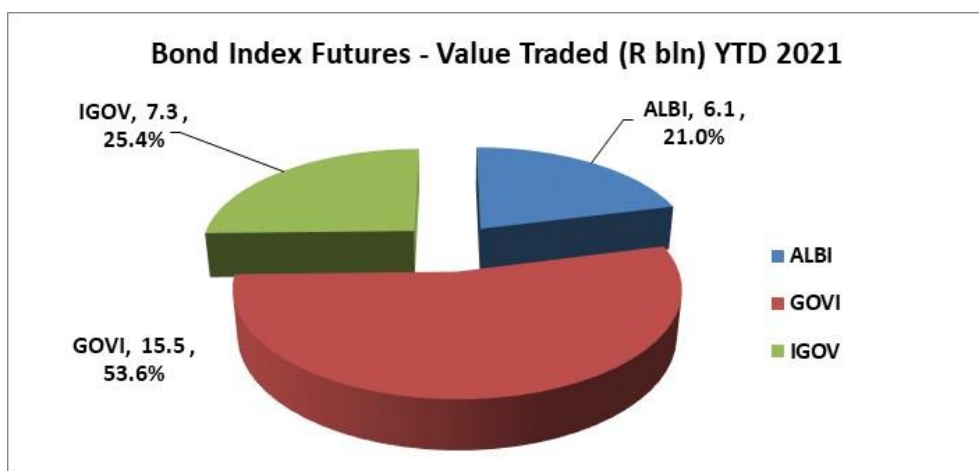


## BOND INDEX FUTURES

### BOND INDEX FUTURES: VALUE TRADED YTD

The total Bond Index futures value traded ytd was R29bln, down from R33bln in equivalent period last year. All index contracts down from same period last year, with the GOVI value traded representing 54% of all bond index futures value traded.

Bond Index Futures - Value Traded Rbln ytd			
	2020	2021	% Change
<b>ALBI</b>	7,582	6,090	-19.7%
<b>GOVI</b>	18,726	15,518	-17.1%
<b>IGOV</b>	7,088	7,349	3.7%
<b>Total</b>	33,396	28,957	-13.3%



For any queries, please contact [irc@jse.co.za](mailto:irc@jse.co.za)