JSE
INTEREST RATE DERIVATIVES
MONTHLY VIEW

(including statistics to H1 2023)

June 2023

Compiled by the IRC team

CONTENTS

HIGHLIGHTS

Month to Prev Year Comparison					
	Bond Fut.	Bond Opt.	Index Fut.	Swap/JibarF	TOTAL
2022.06	286,875	59,483	19	-	346,377
2023.06	703,927	33,263	218	-	737,408
% Move	145%	-44%	1047%		113%

The traditionally quiet June period was more active this year with 737k contracts trading, largely due to some early roll activity in the bond futures market. The year-to-date (YTD) stats representing H1 2023 are as follows:

- The total IRD contracts traded ytd is 7.4m, an increase of 17% over same period last year. The IRD Open interest at 1.5m contracts, is up 7% compared to the last year.
- Bond futures at 7.0m contracts ytd is up 17% with Open interest at 1.3m contracts, up 3%
- The volume in Bond options increased substantially in May resulting in contracts traded ytd up 13% with open Interest up 43% over same period last year.
- Activity in Inflation-linked bond index futures is up 54% in H1 albeit off a low base and represents a larger activity than that traded on the ALBI. However, the overall Bond Index Future value traded at R49.7bln, is DOWN 3.8% over same period previous year. Open Interest is 29.1% down compared to same period.

The 2022 full-year stats revisited (previous year) (Details in the December 2022 newsletter)

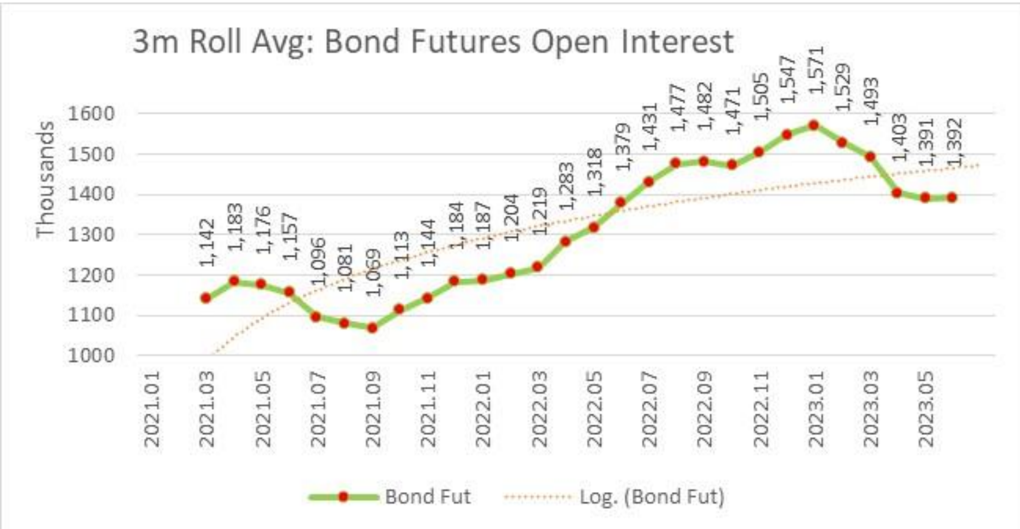
Listed IRD CONTRACTS TRADED							
YTD - Contracts	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2021	11,749,191	604,424	8,004	9,271	261,815	51	12,632,756
2022	13,705,750	655,620	9,017	7,492	1,456	-	14,379,335
Growth	**16.7%**	**8.5%**	**12.7%**	**-19.2%**	**-99.4%**	**0.0%**	**13.8%**

IRD OPEN INTEREST CONTRACTS							
Period	Bond Fut	Bond Opt	Govi Fut	Index Fut	JIBAR Fut	SWAP Fut	Total
2021	1,069,111	126,584	987	721	215	-	1,197,618
2022	1,441,149	131,744	848	798	415	-	1,574,954
Growth	**34.8%**	**4.1%**	**-14.1%**	**10.7%**	**93.0%**	**-**	**31.5%**

CURRENT TRENDS IN BOND FUTURES ACTIVITY

Bond Futures tend to be traded as term instruments which results in large volumes trading around expiry dates and lower volumes in other periods and manifests as a "see-saw" activity in the monthly volumes. Rolling Average activity allows us to smooth the trends.

Bond Futures Trends: Contracts Traded and Open Interest



Volumes in Bond futures (based on 3m rolling avg contracts traded) flattening out after downward trend this year, but above the 2022 levels. Open Interest in 2023 maintaining a flat trend over past 3 months after a long upward trend since Sep-21.

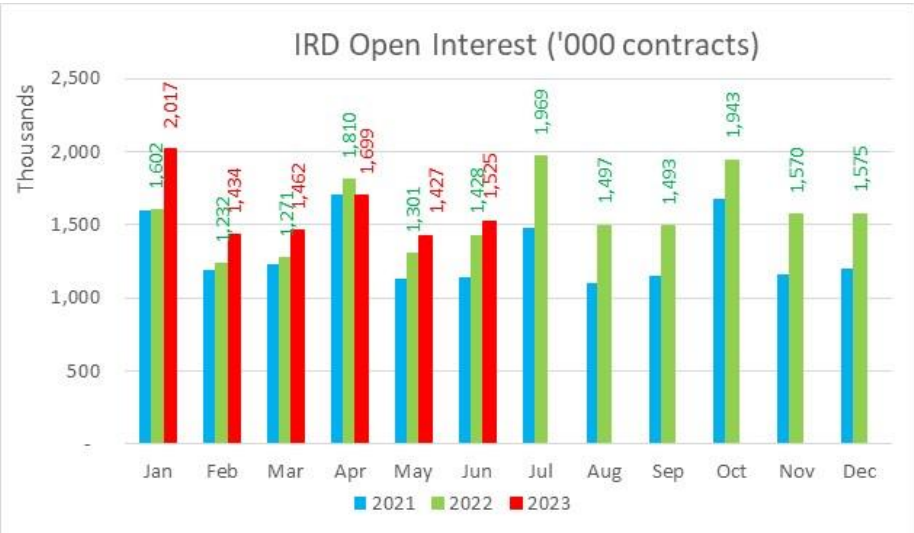
MONTHLY SNAPSHOT

CONTRACTS TRADED

Monthly Snapshot Contracts Traded								
	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
2022.05	683,749	13,140	8,420	10	332	100	-	705,751
2022.06	286,875	26,900	32,583	6	13	-	-	346,377
2022.07	2,699,371	36,982	18,065	2,318	1,926	100	-	2,758,762
2022.08	1,319,225	59,807	61,514	19	43	-	-	1,440,608
2022.09	168,100	21,851	14,895	54	281	-	-	205,181
2022.10	2,457,306	5,500	19,022	2,110	1,639	-	-	2,485,577
2022.11	867,642	55,433	30,891	38	354	415	-	954,773
2022.12	151,727	45,220	-	15	73	619	-	197,654
2023.01	2,506,348	32,900	19,235	1,825	1,601	-	-	2,561,909
2023.02	767,485	34,206	26,980	113	190	-	-	828,974
2023.03	692,216	-	-	6	10	-	-	692,232
2023.04	1,814,305	16,080	500	1,805	1,540	830	-	1,835,060
2023.05	590,911	83,272	76,774	98	308	-	-	751,363
2023.06	703,927	16,263	17,000	8	210	-	-	737,408

OPEN INTEREST

Monthly Snapshot Open Interest								
	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
2022.05	1,195,046	50,178	53,524	1,111	909	315	-	1,301,083
2022.06	1,297,146	66,578	62,424	1,111	913	315	-	1,428,487
2022.07	1,800,421	94,508	72,185	875	856	415	-	1,969,260
2022.08	1,332,947	84,705	77,297	870	839	415	-	1,497,073
2022.09	1,313,187	93,252	84,742	874	825	415	-	1,493,295
2022.10	1,767,793	89,752	83,742	866	931	415	-	1,943,499
2022.11	1,432,909	70,250	65,114	835	786	415	-	1,570,309
2022.12	1,441,149	66,630	65,114	848	798	415	-	1,574,954
2023.01	1,838,132	93,530	82,849	937	923	415	-	2,016,786
2023.02	1,306,934	58,044	66,733	834	755	415	-	1,433,715
2023.03	1,335,393	58,044	66,733	840	753	415	-	1,462,178
2023.04	1,566,458	64,044	66,233	932	1,028	-	-	1,698,695
2023.05	1,271,056	88,096	65,851	838	756	-	-	1,426,597
2023.06	1,338,828	103,096	81,851	832	603	-	-	1,525,210



YEAR-TO-DATE STATISTICS

IRD CONTRACTS TRADED

Listed IRD CONTRACTS TRADED							
YTD - Contracts	**Bond Fut**	**Bond Opt**	**Govi Fut**	**Index Fut**	**JIBAR Fut**	**SWAP Fut**	**Total**
YTD 2022	6,042,379	286,440	4,463	3,176	322	-	6,336,780
YTD 2023	7,075,192	323,210	3,855	3,859	830	-	7,406,946
Growth	**17.1%**	**12.8%**	**-13.6%**	**21.5%**			**16.9%**

IRD VALUE TRADED

IRD VALUE TRADED YTD (Rm)							
Period	**Bond Fut**	**Bond Opt**	**Govi Fut**	**Index Fut**	**JIBAR Fut**	**SWAP Fut**	**Total**
2022	556,434	473	36,850	14,785	8	-	608,549
2023	618,493	493	33,950	15,709	19	-	668,664
Growth	**11.2%**	**4.3%**	**-7.9%**	**6.2%**	**152.9%**		**9.9%**

IRD TRADED NOMINAL EXPOSURE*

LISTED IRD UNDERLYING NOMINAL EXPOSURE Rbln							
YTD - Nominal	**Bond Fut**	**Bond Opt**	**Govi Fut ValTr**	**Index Fut ValTr**	**JIBAR Fut**	**SWAP Fut**	**Total**
Contract size	100k	100k	1	1	100k	100k	
YTD 2022	604.2	28.6	36.9	14.8	0.0	-	684.5
YTD 2023	707.5	32.3	33.9	15.7	0.083	-	789.6
Growth	**17.1%**	**12.8%**	**-7.9%**	**6.2%**			**15.3%**
% Split	89.6%	4.1%	4.3%	2.0%	0.0%	0.0%	100.0%

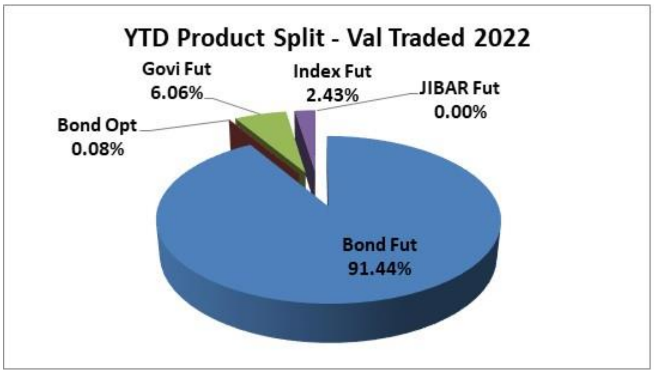
**Effective nominal exposure (and value traded for indices) is used as comparable metric for activity across markets. Underlying nominals traded are represented by the contract size multiplied by the contracts traded, except for the Govi and Index futures which are represented by the actual value traded.*

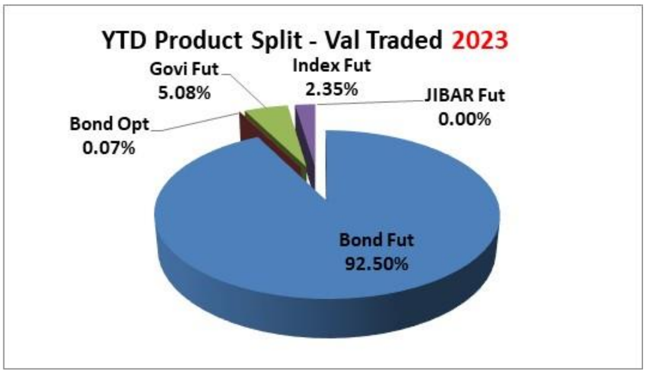
IRD OPEN INTEREST

IRD OPEN INTEREST CONTRACTS							
Period	**Bond Fut**	**Bond Opt**	**Govi Fut**	**Index Fut**	**JIBAR Fut**	**SWAP Fut**	**Total**
2022	1,297,146	129,002	1,111	913	315	-	1,428,487
2023	1,338,828	184,947	832	603	-	-	1,525,210
Growth	**3.2%**	**43.4%**	**-25.1%**	**-34.0%**	**-100.0%**		**6.8%**

VALUE TRADED PRODUCT SPLIT

The **GOVI and Index Futures represent 7.4% of all IRD value traded YTD (down from 8.5% previous year) but only** a small percentage (<1%) of all contracts traded due to the high nominal underlying per contract.





CLOSE OUT VOLUME OVER TWO-MONTH PERIOD

Roll activity typically 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) (millions of contracts)									
Close-Out (2-mth)	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**% Chg 22/21**	**% Chg 23/22**
Close-Out 1 (Feb)	2.455	3.292	2.609	3.097	2.883	2.936	3.391	1.8%	15.5%
Close-Out 2 (May)	2.491	2.973	2.518	3.219	3.082	2.888	2.586	-6.3%	-10.5%
Close-Out 3 (Aug)	3.051	2.532	3.009	3.040	2.769	4.199	-	51.7%	
Close-Out 4 (Nov)	3.320	2.749	2.787	3.082	3.287	3.440	-	4.7%	

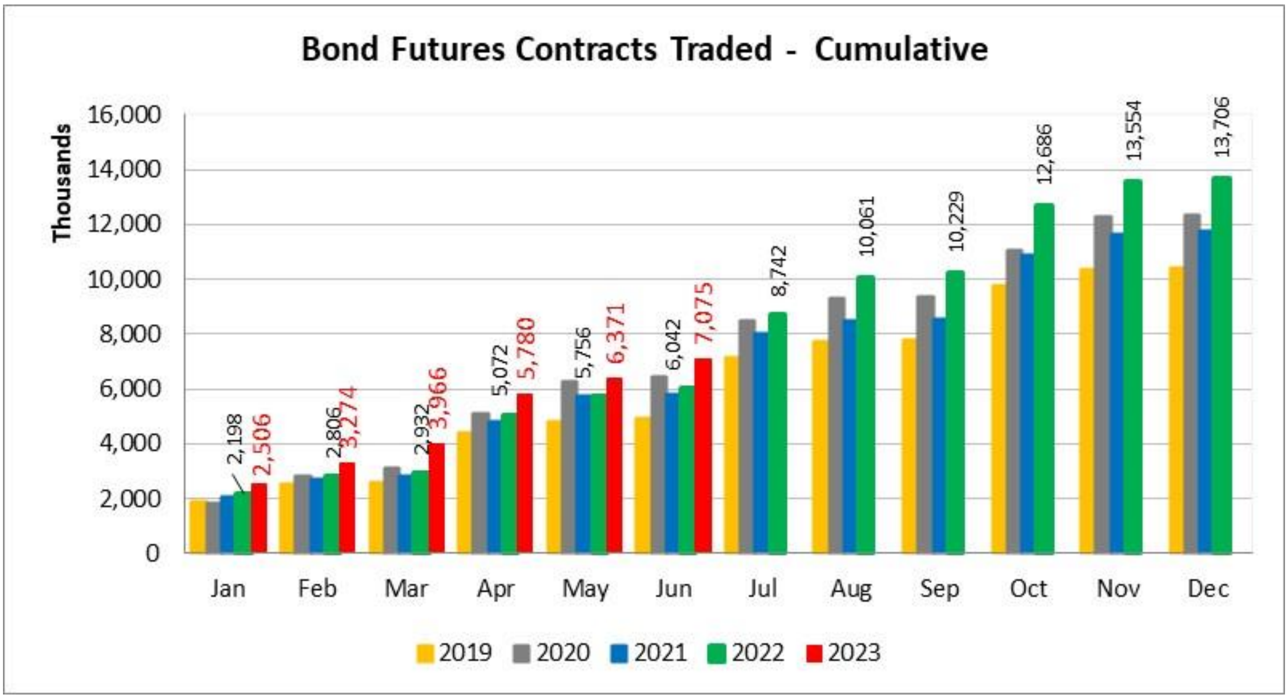
The May 2023 close-out period saw a total of 2.59m contracts traded, down 10.5% over same period last year. This decline was partly due to roll activity starting in March, as opposed to April, which was not counted in the 2-month period.

BOND FUTURES

BOND FUTURES: CONTRACTS TRADED

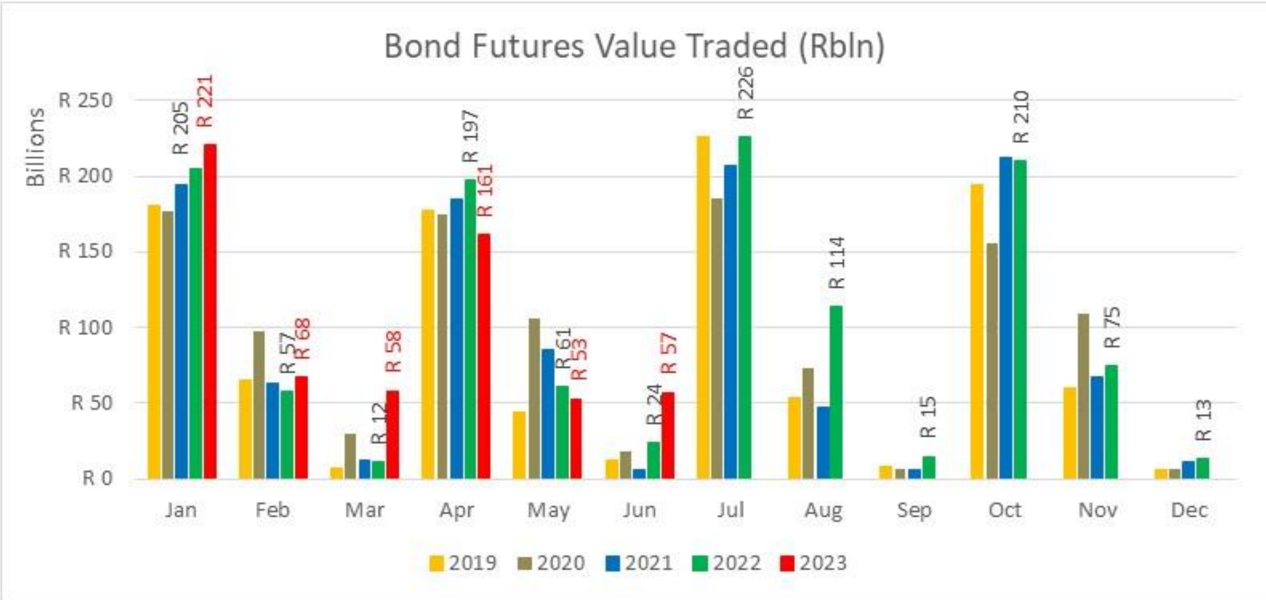
The Bond Futures contracts traded in June were 145% higher than last year, albeit off a low base. This is largely due to some early roll activity taking place at month end. Overall, the activity ytd is up 17%.

Bond Futures Contracts Traded										
Date	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Chg 22/21**	**Chg 23/22**
Jan	826,485	1,963,456	2,512,043	1,872,040	1,808,945	2,064,147	2,198,294	2,506,348	*6.5%*	*14.0%*
Feb	883,377	493,725	622,760	654,730	994,022	647,370	607,540	767,485	*-6.2%*	*26.3%*
Mar	79,520	148,066	184,080	71,194	337,360	127,022	126,385	692,216	*-0.5%*	*447.7%*
Apr	1,490,182	1,168,792	2,071,717	1,778,197	1,984,879	1,995,098	2,139,536	1,814,305	*7.2%*	*-15.2%*
May	854,135	1,322,123	868,973	434,577	1,152,932	920,233	683,749	590,911	*-25.7%*	*-13.6%*
Jun	134,452	177,529	241,609	121,845	187,670	50,847	286,875	703,927	*464.2%*	*145.4%*
Jul	1,542,365	1,475,383	1,770,507	2,232,039	2,022,009	2,210,468	2,699,371		*22.1%*	
Aug	691,788	1,497,690	706,275	550,331	820,119	497,888	1,319,225		*165.0%*	
Sep	207,021	235,816	53,904	85,331	59,877	61,417	168,100		*173.7%*	
Oct	1,903,245	1,947,995	1,987,598	1,970,014	1,707,398	2,316,337	2,457,306		*6.1%*	
Nov	477,584	1,304,500	599,247	610,292	1,210,516	734,640	867,642		*18.1%*	
Dec	77,224	180,041	69,157	57,887	64,811	123,724	151,727		*22.6%*	
TOTAL	**9,167,378**	**11,915,116**	**11,687,870**	**10,438,477**	**12,350,538**	**11,749,191**	**13,705,750**	**7,075,192**	***16.7%***	***17.1%***
%Chg		**30.0%**	**-1.9%**	**-10.7%**	**18.3%**	**-4.9%**	**16.7%**			


Bond Futures Contracts Traded - Cumulative
Thousands
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
2,198
2,506
2,806
3,274
2,932
3,966
5,072
5,780
5,756
6,371
6,042
7,075
8,742
10,061
10,229
12,686
13,554
13,706
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2019
2020
2021
2022
2023

BOND FUTURES: VALUE TRADED

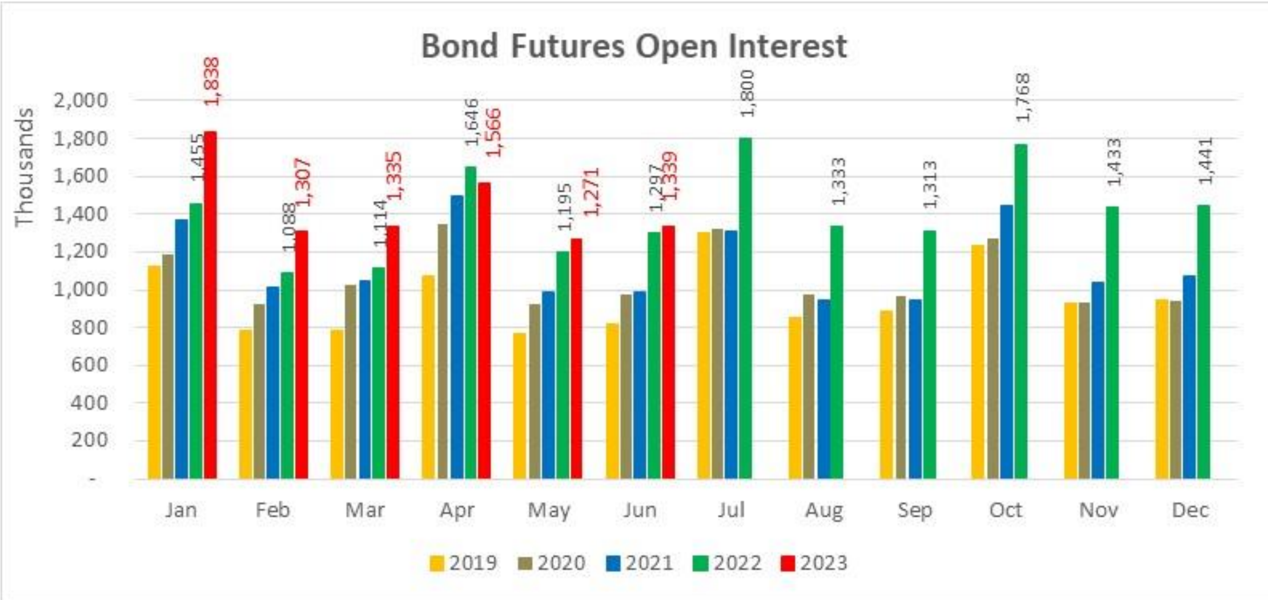
The bond futures value traded year-to-date is 11.2% UP compared to same period last year.



Bond Futures Value Traded Rm										
Date	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Chg 22/21**	**Chg 23/22**
Jan	R 93,017	R 207,419	R 253,621	R 180,384	R 176,702	R 194,789	R 204,686	R 221,224	*5.1%*	*8.1%*
Feb	R 83,446	R 54,107	R 63,521	R 65,075	R 97,898	R 62,982	R 57,288	R 67,617	*-9.0%*	*18.0%*
Mar	R 8,122	R 15,689	R 18,820	R 7,378	R 29,570	R 12,063	R 11,528	R 58,227	*-4.4%*	*405.1%*
Apr	R 159,522	R 128,361	R 212,944	R 177,545	R 174,397	R 184,453	R 197,483	R 161,332	*7.1%*	*-18.3%*
May	R 87,612	R 131,736	R 91,403	R 44,429	R 106,329	R 85,790	R 61,213	R 52,945	*-28.6%*	*-13.5%*
Jun	R 13,129	R 19,049	R 22,502	R 11,983	R 17,525	R 5,349	R 24,236	R 57,148	*353.1%*	*135.8%*
Jul	R 166,159	R 151,742	R 170,320	R 225,830	R 185,667	R 207,191	R 225,996		*9.1%*	
Aug	R 75,809	R 152,914	R 68,472	R 53,410	R 73,391	R 47,531	R 113,556		*138.9%*	
Sep	R 20,266	R 24,072	R 5,123	R 8,239	R 5,882	R 6,139	R 14,741		*140.1%*	
Oct	R 210,332	R 191,314	R 185,855	R 194,759	R 156,245	R 212,448	R 210,025		*-1.1%*	
Nov	R 55,648	R 126,095	R 54,306	R 59,502	R 109,123	R 67,490	R 74,688		*10.7%*	
Dec	R 7,458	R 17,391	R 6,458	R 5,516	R 6,269	R 11,623	R 12,765		*9.8%*	
TOTAL	**980,519**	**1,219,888**	**1,153,345**	**1,034,049**	**1,138,999**	**1,097,847**	**1,208,205**	**618,493**	***10.1%***	***11.2%***
%Chg		**24.4%**	**-5.5%**	**-10.3%**	**10.1%**	**-3.6%**	**10.1%**			

BOND FUTURES: OPEN INTEREST

Bond Futures Open interest at month end was 1.34m contracts, up 3.2% over equivalent period last year. The July period is expected to see open interest about 30-40% higher as per trends over this period in past years.



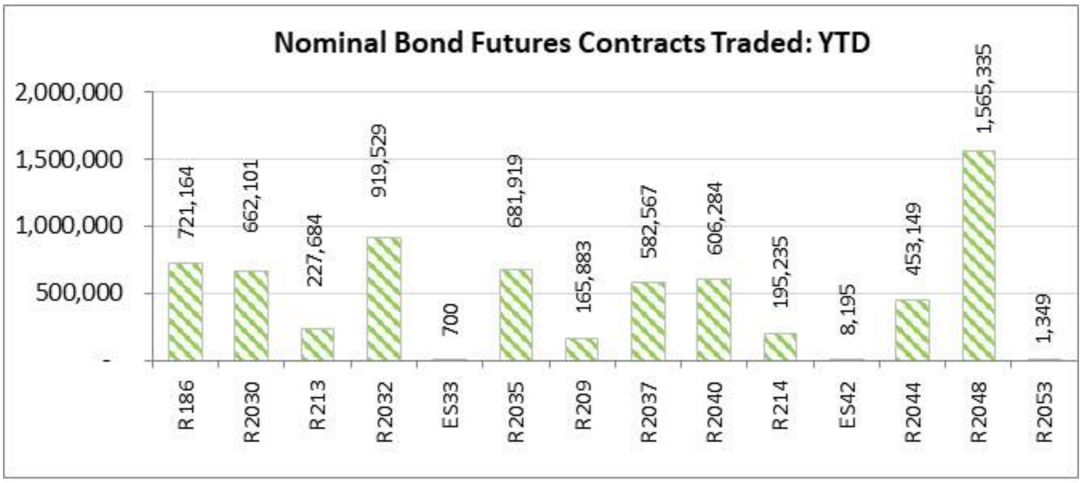
Bond Futures Open Interest										
Date	2016	2017	2018	2019	2020	2021	2022	2023	Chg 22/21	Chg 23/22
Jan	713,913	1,137,425	1,372,543	1,118,795	1,183,158	1,368,771	1,454,861	1,838,132	6.3%	26.3%
Feb	633,062	770,321	1,037,493	784,852	921,269	1,012,584	1,088,101	1,306,934	7.5%	20.1%
Mar	650,335	801,800	1,052,470	787,390	1,027,896	1,043,823	1,114,292	1,335,393	6.8%	19.8%
Apr	890,406	1,037,427	1,126,181	1,073,638	1,349,483	1,493,709	1,645,940	1,566,458	10.2%	-4.8%
May	752,370	794,207	777,714	769,139	923,863	989,485	1,195,046	1,271,056	20.8%	6.4%
Jun	753,049	868,162	870,652	817,539	971,675	986,432	1,297,146	1,338,828	31.5%	3.2%
Jul	996,943	1,139,985	1,222,141	1,302,006	1,321,763	1,311,466	1,800,421		37.3%	
Aug	655,211	977,327	798,912	849,438	973,254	946,280	1,332,947		40.9%	
Sep	657,642	981,713	809,221	883,920	969,022	948,396	1,313,187		38.5%	
Oct	999,507	1,383,649	1,201,141	1,231,132	1,273,672	1,445,779	1,767,793		22.3%	
Nov	793,813	1,020,399	826,316	927,675	931,839	1,036,547	1,432,909		38.2%	
Dec	798,552	1,016,463	827,458	944,806	936,762	1,069,111	1,441,149		34.8%	
%Chg		**27.3%**	**-18.6%**	**14.2%**	**-0.9%**	**14.1%**	**34.8%**			***3.2%***
Max OI	*999,507*	*1,383,649*	*1,372,543*	*1,302,006*	*1,349,483*	*1,493,709*	*1,800,421*	*1,838,132*		

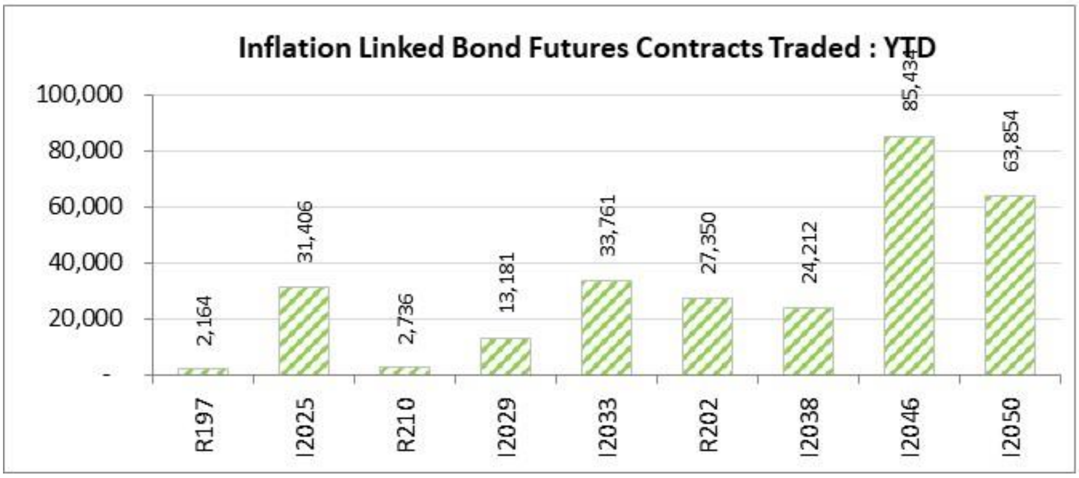
SINGLE BOND FUTURES ACTIVITY

SINGLE BOND FUTURES: CONTRACTS TRADED PER INSTRUMENT

The most actively traded bond futures traded YTD are the R2048, R3032 and R2035 futures. *The R2053 bond future has also started trading.*

Total Contracts Traded ytd			
	Nominal Bond	Inflation-Linkers	Total
Contracts	6,791,094	284,098	7,075,192
Nominal Value Rm	679,109	28,410	707,519
% Split	96.0%	4.0%	100.0%

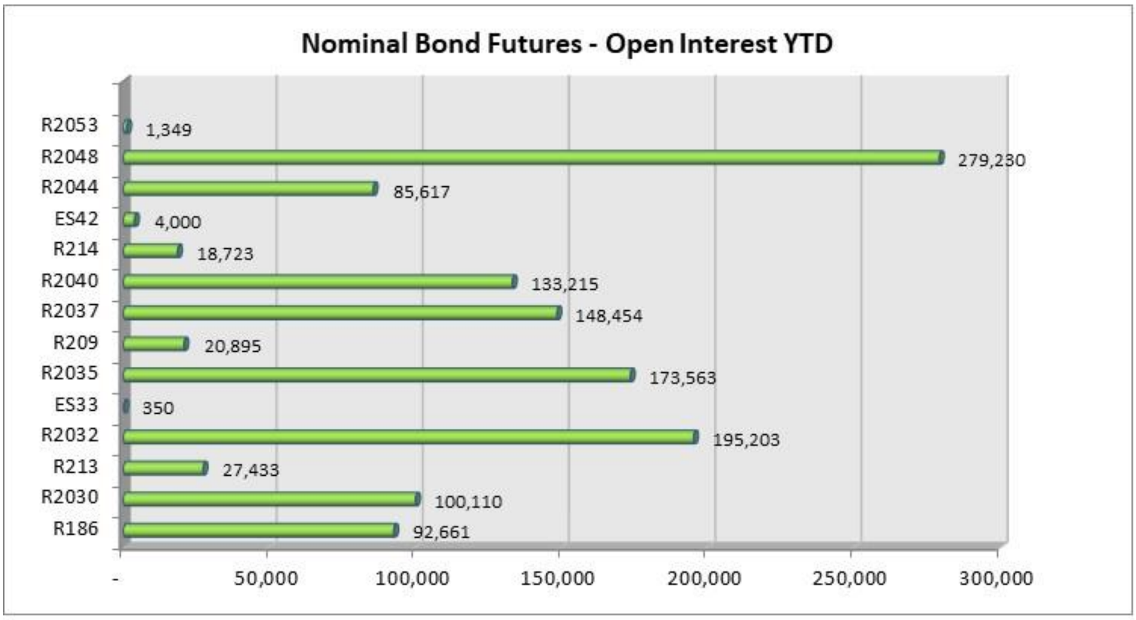


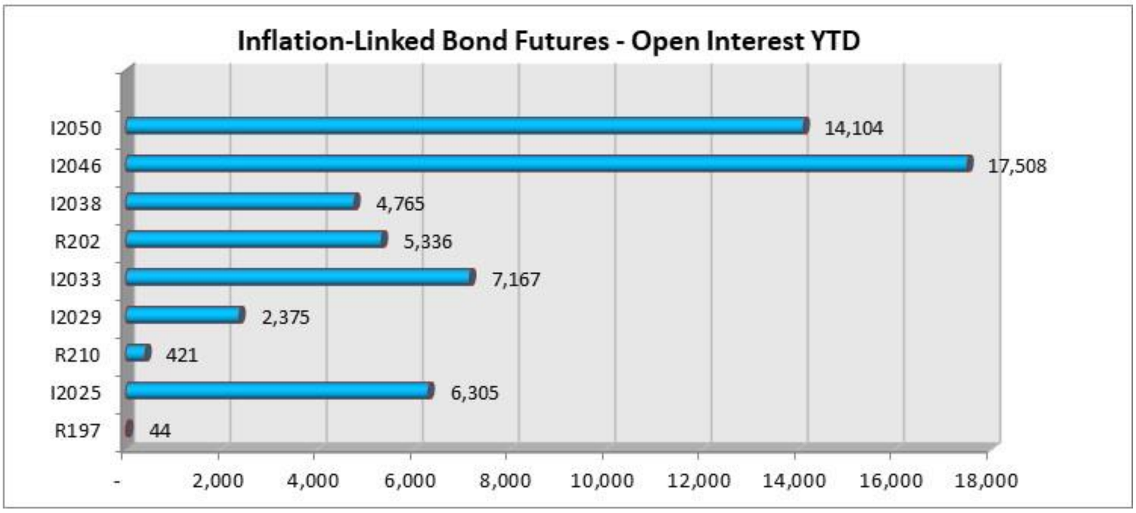


SINGLE BOND FUTURES: OPEN INTEREST PER INSTRUMENT

The total bond futures open interest for H1 2023 was R134bln underlying notional. The largest open position is in the R2048 at R26bln nominal, the R2032 and R2035 above R17bln nominal.

Open Interest Table: YTD			
	Nominal Bond	Inflation-Linkers	Total
Contracts	1,280,803	58,025	1,338,828
Nominal Value Rm	128,080	5,803	133,883
% Split	95.7%	4.3%	100.0%

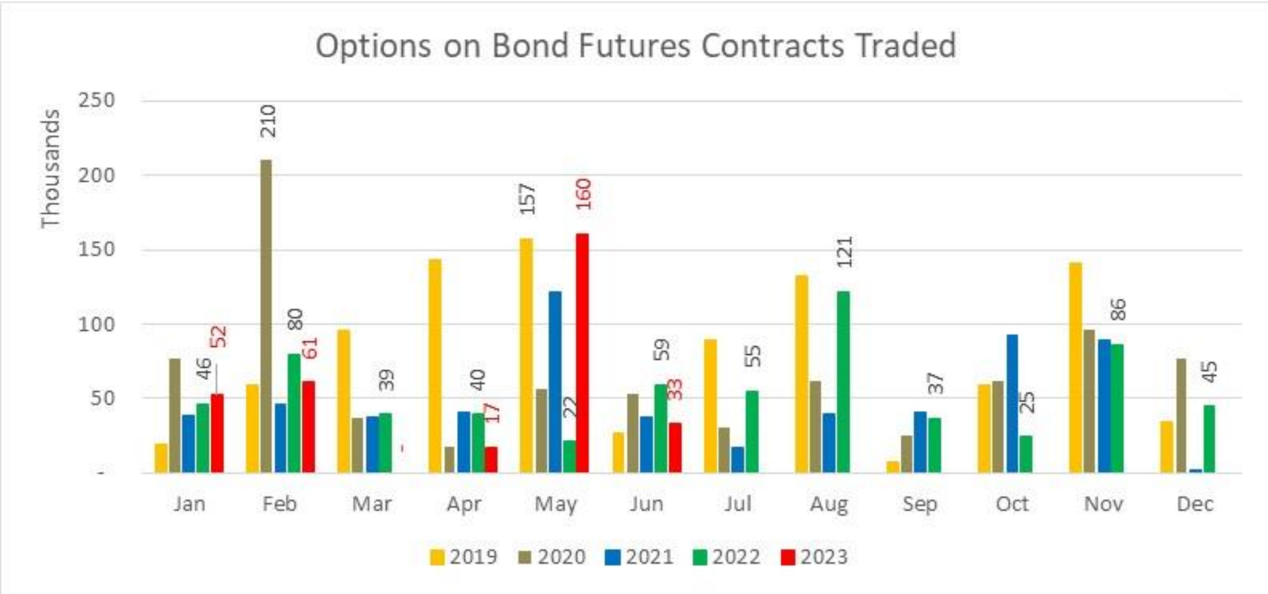




OPTIONS ON BOND FUTURES

OPTIONS: TOTAL CONTRACTS TRADED

June was quiet month after the large increase on options volume seen in May 2023. This increase has resulted in contracts traded ytd up 12.8% over the same period last year, but still lags the volumes traded in 2019/20.

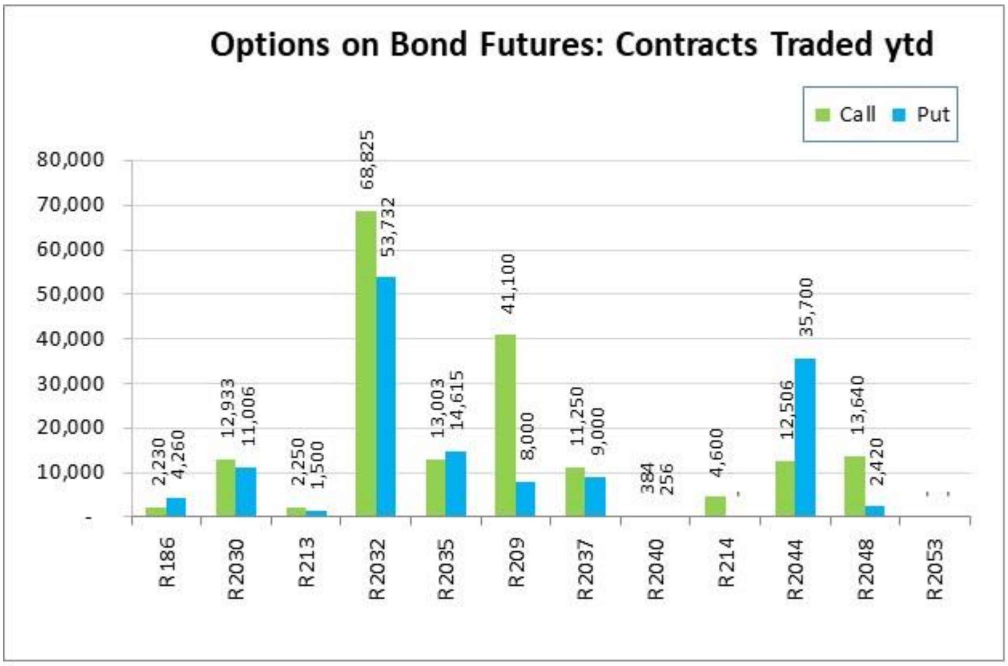


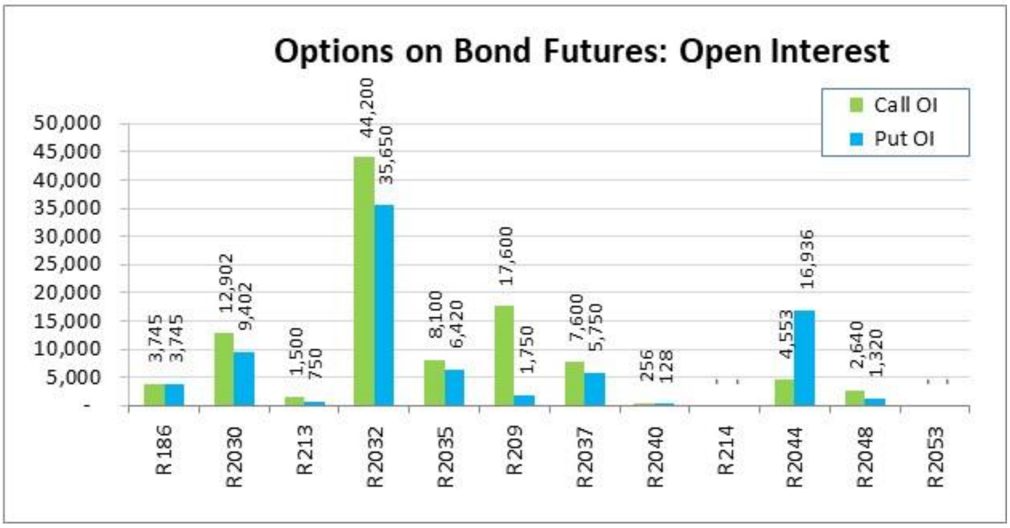
Options on Bond Futures Contracts Traded										
Date	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Chg 22/21**	**Chg 23/22**
Jan	-	14,483	60,405	19,110	77,201	38,681	46,400	52,135	*20.0%*	*12.4%*
Feb	17,536	11,415	54,977	59,033	210,210	46,540	79,967	61,186	*71.8%*	*-23.5%*
Mar	8,812	25,538	28,832	95,276	36,940	37,707	39,461	-	*4.7%*	*-100.0%*
Apr	22,435	5,400	5,558	143,016	17,731	40,805	39,569	16,580	*-3.0%*	*-58.1%*
May	29,048	8,862	20,150	157,005	56,719	121,920	21,560	160,046	*-82.3%*	*642.3%*
Jun	5,775	23,320	34,432	26,470	53,416	37,576	59,483	33,263	*58.3%*	*-44.1%*
Jul	18,285	8,019	28,655	88,896	30,101	16,850	55,047		*226.7%*	
Aug	54,921	63,882	17,260	131,864	61,600	39,951	121,321		*203.7%*	
Sep	36,208	22,555	19,612	7,489	25,183	41,050	36,746		*-10.5%*	
Oct	12,419	26,394	78,210	58,639	61,600	92,483	24,522		*-73.5%*	
Nov	50	34,036	63,736	140,504	96,308	88,761	86,324		*-2.7%*	
Dec	50	63,418	16,886	34,609	76,656	2,100	45,220		*2053.3%*	
TOTAL	**205,539**	**307,322**	**428,713**	**961,911**	**803,665**	**604,424**	**655,620**	**323,210**	***8.5%***	***12.8%***
%Chg		**49.5%**	**39.5%**	**124.4%**	**-16.5%**	**-24.8%**	**8.5%**			

OPTIONS: ACTIVITY PER INSTRUMENT

The current Open Interest is on R18.5 billion notional underlying (185k contracts) with most of the volume in H1 on the R2032.

Options on Bond Futures				
	Contracts ytd		Open Interest	
Calls	182,721	56.5%	103,096	55.7%
Puts	140,489	43.5%	81,851	44.3%
Total	323,210	100.0%	184,947	100.0%

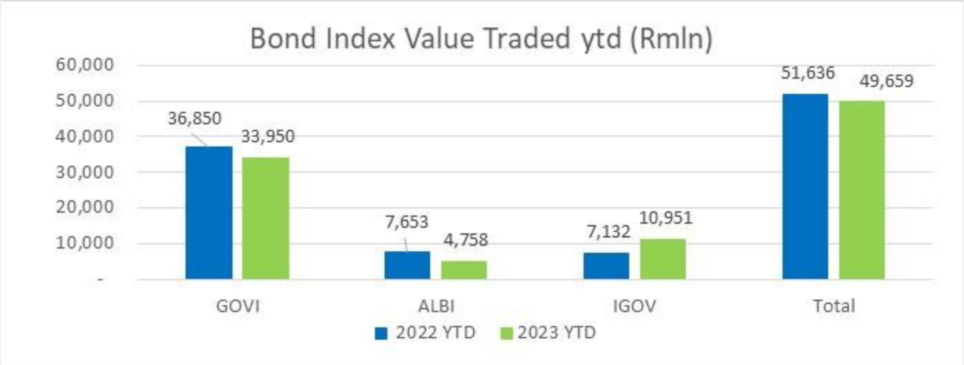


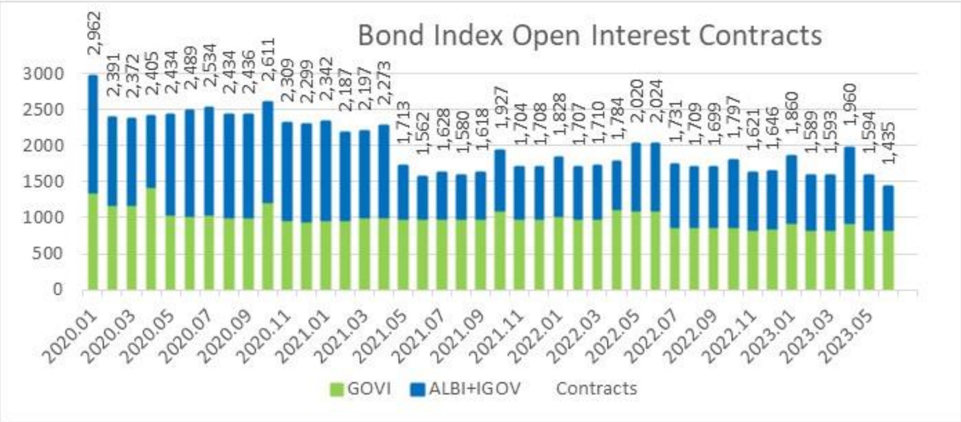


BOND INDEX FUTURES

Activity in Inflation-linked bond index futures is up 54% in H1 albeit off a low base and represents a larger activity than that traded on the ALBI. However, the overall Bond Index Future value traded[1] at R49.7bln, is DOWN 3.8% over same period previous year. Open Interest is 29.1% down compared to same period.

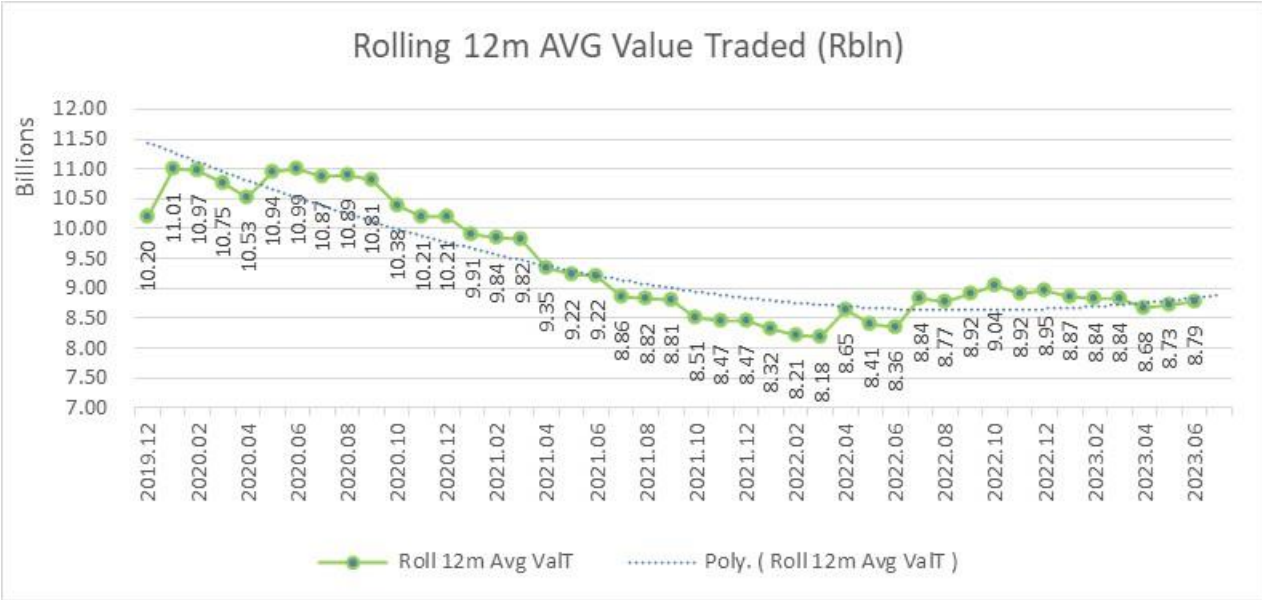
Value Traded Rm				
	GOVI	**ALBI**	**IGOV**	**Total**
2022 YTD	36,850	7,653	7,132	51,636
2023 YTD	33,950	4,758	10,951	49,659
% Change	-7.9%	-37.8%	53.5%	-3.8%
Open Interest Contracts				
	GOVI	**ALBI+IGOV**		**Total**
2022 YTD	1111	913		2,024
2023 YTD	832	603		1,435
% Change	-25.1%	-34.0%		-29.1%





[1] Bond index activity is represented by value traded rather than contracts. The contracts have a large nominal exposure contract equivalent to (100k * Index level).

VALUE TRADED Rm					
	GOVI	ALBI	IGOV	Val Traded	*Roll 12m Av*
2019.01	5,683	11,086	2,674	19,442	
2019.02	497	4,005	327	4,828	
2019.03	2,086	1,092	118	3,296	
2019.04	5,676	16,580	4,658	26,914	
2019.05	538	115	50	702	
2019.06	74	138	-	211	
2019.07	11,167	11,628	4,418	27,214	
2019.08	797	482	271	1,550	
2019.09	339	21	878	1,238	
2019.10	18,183	5,601	7,265	31,049	
2019.11	2,362	2,695	884	5,941	
2019.12	55	14	-	69	*10,205*
2020.01	17,443	5,266	6,425	29,134	*11,012*
2020.02	1,283	2,316	663	4,262	*10,965*
2020.03	73	624	74	771	*10,755*
2020.04	13,806	4,444	5,987	24,237	*10,532*
2020.05	2,966	805	1,845	5,616	*10,941*
2020.06	300	50	461	812	*10,991*
2020.07	14,676	4,597	6,436	25,710	*10,866*
2020.08	349	915	552	1,816	*10,888*
2020.09	43	238	39	320	*10,811*
2020.10	14,608	5,155	6,094	25,857	*10,379*
2020.11	1,824	1,228	868	3,920	*10,210*
2020.12	67	30	8	105	*10,213*
2021.01	14,739	4,375	6,347	25,461	*9,907*
2021.02	778	1,715	1,003	3,496	*9,843*
2021.03	216	181	100	498	*9,821*
2021.04	11,671	3,020	3,841	18,532	*9,345*
2021.05	667	2,130	1,351	4,149	*9,223*
2021.06	134	274	372	780	*9,220*
2021.07	15,780	2,933	2,711	21,424	*8,863*
2021.08	239	1,073	18	1,330	*8,822*
2021.09	88	-	92	181	*8,811*
2021.10	16,282	2,948	3,056	22,286	*8,513*
2021.11	1,703	1,510	193	3,406	*8,470*
2021.12	49	-	-	49	*8,466*
2022.01	17,537	3,262	2,972	23,771	*8,325*
2022.02	399	1,753	3	2,155	*8,213*
2022.03	25	17	9	51	*8,176*
2022.04	18,758	2,199	3,207	24,164	*8,645*
2022.05	83	324	937	1,343	*8,412*
2022.06	48	99	3	151	*8,359*
2022.07	18,825	3,675	4,710	27,210	*8,841*
2022.08	158	232	51	441	*8,767*
2022.09	447	1,058	499	2,005	*8,919*
2022.10	17,243	1,946	4,507	23,695	*9,037*
2022.11	314	982	762	2,058	*8,924*
2022.12	125	69	203	397	*8,953*
2023.01	16,021	2,287	4,440	22,749	*8,868*
2023.02	990	295	501	1,787	*8,837*
2023.03	53	18	26	96	*8,841*
2023.04	15,968	1,796	4,429	22,194	*8,677*
2023.05	849	284	904	2,037	*8,735*
2023.06	69	78	650	797	*8,789*



End of report.