

JSE INTEREST RATE DERIVATIVES MONTHLY VIEW

(including November close out period)

November 2020

Compiled by the IRC team



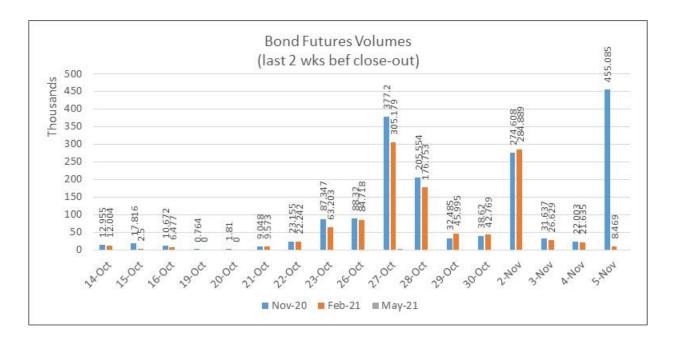
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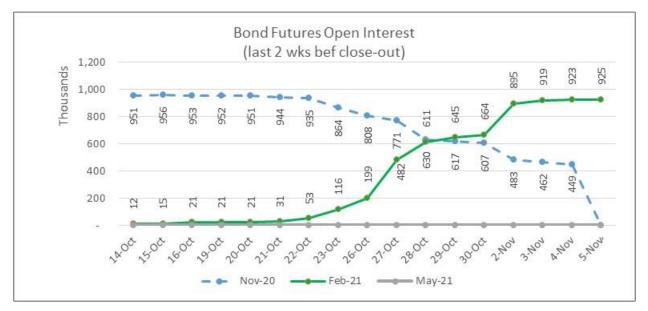
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HIGHLIGHTS OF NOVEMBER CLOSE-OUT

The end of October signals the arrival of the <u>November 2020 close-</u>out in the first week of November. The **contracts traded and open interest time series** is shown below:





Spire Awards Update

Due to the impact of covid-19 and wanting to ensure the health and safety of our clients, the JSE has taken the decision to postpone the 2020 Spire Awards which the JSE usually hosts in October/November each year. The event will take place at the end of the first quarter of 2021. The JSE will communicate the new date to market participants when finalised.

To view the Market Notice please click on the following link: Market Notice 584/2020 Spire Awards 2020 Update

HIGHLIGHTS OF THE MONTH

- The total **IRD contracts traded** ytd in 2020 is 13.1m, up 16% in comparison to same period in 2019. This equates to about R1,259 billion value traded ytd (2019: R1,154bln)
- The **Bond futures** up 18% while **options** down 21% in volumes over same period last year
- The **Govi futures** contracts up 38% over the same period last year (~R67bln value traded)
- The IRD open interest, indicative of the outstanding risk being traded/hedged, is flat on same period last year as the end of year approaches
- With the recent re-launch of **Jibar futures**, the market has traded just 110k contracts with an open interest of 60k, equivalent to a nominal value of R6bln

INTEREST RATE DERIVATIVE CONTRACTS

IRD CONTRACTS TRADED

The number of IRD contracts traded YTD is 16% up from 2019 equivalent period, attributable to double digit growth in the Bond Futures, Govi futures and more recently Jibar futures.

| | Listed IRD CONTRACTS TRADED | | | | | | | |
|-----------------|-----------------------------|----------|----------|-----------|-----------|----------|------------|--|
| YTD - Contracts | Bond Fut | Bond Opt | Govi Fut | Index Fut | JIBAR Fut | SWAP Fut | Total | |
| 2019 | 10,380,590 | 927,302 | 6,998 | 16,386 | - | - | 11,331,276 | |
| 2020 | 12,285,727 | 727,009 | 9,670 | 15,180 | 110,085 | - | 13,147,671 | |
| Growth | 18.4% | -21.6% | 38.2% | -7.4% | - | 0.0% | 16.0% | |

IRD VALUE TRADED

The value traded YTD is 9% higher than 2019 equivalent period a total of R1,259 billion notional.

| | IRD VALUE TRADED YTD (Rm) | | | | | | | |
|--------|---------------------------|-----------------|----------|-----------|-----------|----------|-------------|--|
| Period | Bond Fut | Bond Opt | Govi Fut | Index Fut | JIBAR Fut | SWAP Fut | Total | |
| 2019 | R 1,028,533 | R 1,226 | R 47,400 | R 76,858 | R 0 | R 0 | R 1,154,016 | |
| 2020 | R 1,132,730 | R 1,427 | R 67,371 | R 55,083 | R 2,654 | R 0 | R 1,259,265 | |
| Growth | 10.1% | 16.4% | 42.1% | -28.3% | - | 0.0% | 9.1% | |

IRD OPEN INTEREST

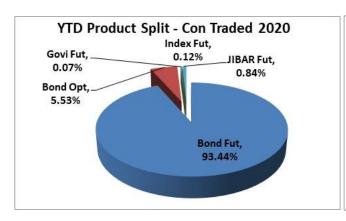
The 2020 Open Interest is 5% down on the equivalent period last year.

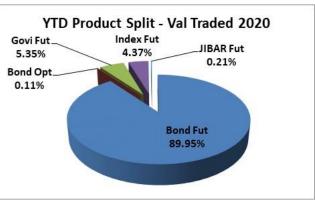
| | IRD OPEN INTEREST YTD | | | | | | | |
|--------|-----------------------|----------|----------|-----------|-----------|----------|-----------|--|
| Period | Bond Fut | Bond Opt | Govi Fut | Index Fut | JIBAR Fut | SWAP Fut | Total | |
| 2019 | 927,675 | 240,676 | 1,243 | 1,472 | - | 51 | 1,171,117 | |
| 2020 | 931,839 | 122,370 | 968 | 1,341 | 60,010 | 51 | 1,116,579 | |
| Growth | 0.4% | -49.2% | -22.1% | -8.9% | - | 0.0% | -4.7% | |



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, <u>seasonal volumes</u> 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.

The **November 2020 (2-mth) close-out period**, saw a total of 3.08 million contracts traded, 11% higher than those traded during the same close-out period in 2019.

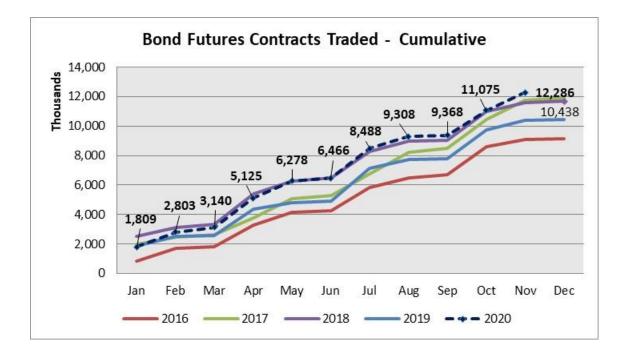
| ALL IRD CONTRACTS (in 2-mth periods) | | | | | | | | |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|---------------|---------------|--|
| Close-Out (2-mth) | 2016 | 2017 | 2018 | 2019 | 2020 | % Chg 2019/18 | % Chg 2020/19 | |
| Close-Out 1 (Feb) | 1,732,666 | 2,454,909 | 3,291,708 | 2,609,366 | 3,096,822 | -20.7% | 18.7% | |
| Close-Out 2 (May) | 2,400,933 | 2,490,915 | 2,973,062 | 2,518,022 | 3,218,688 | -15.3% | 27.8% | |
| Close-Out 3 (Aug) | 2,313,032 | 3,050,960 | 2,531,742 | 3,008,502 | 3,039,576 | 18.8% | 1.0% | |
| Close-Out 4 (Nov) | 2,399,150 | 3,320,386 | 2,749,042 | 2,786,833 | 3,081,681 | 1.4% | 10.6% | |



BOND FUTURES

BOND FUTURES: CONTRACTS TRADED

The graph below depicts the **cumulative contracts traded in Bond Futures**. The traded contracts year-to-date is 18% higher than equivalent period previous year and is the highest cumulative volume for past 5 years.



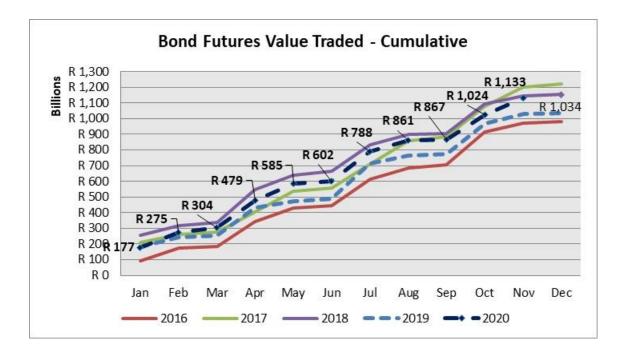
The historical non-cumulative breakdown in Bond Futures contracts traded per month is:

| | Bond Futures Contracts Traded | | | | | | | |
|-------|-------------------------------|------------|------------|------------|------------|-----------|-----------|--|
| Date | 2016 | 2017 | 2018 | 2019 | 2020 | Chg 19/18 | Chg 20/19 | |
| Jan | 826,485 | 1,963,456 | 2,512,043 | 1,872,040 | 1,808,945 | -25.5% | -3.4% | |
| Feb | 883,377 | 493,725 | 622,760 | 654,730 | 994,022 | 5.1% | 51.8% | |
| Mar | 79,520 | 148,066 | 184,080 | 71,194 | 337,360 | -61.3% | 373.9% | |
| Apr | 1,490,182 | 1,168,792 | 2,071,717 | 1,778,197 | 1,984,879 | -14.2% | 11.6% | |
| May | 854,135 | 1,322,123 | 868,973 | 434,577 | 1,152,932 | -50.0% | 165.3% | |
| Jun | 134,452 | 177,529 | 241,609 | 121,845 | 187,670 | -49.6% | 54.0% | |
| Jul | 1,542,365 | 1,475,383 | 1,770,507 | 2,232,039 | 2,022,009 | 26.1% | -9.4% | |
| Aug | 691,788 | 1,497,690 | 706,275 | 550,331 | 820,119 | -22.1% | 49.0% | |
| Sep | 207,021 | 235,816 | 53,904 | 85,331 | 59,877 | 58.3% | -29.8% | |
| Oct | 1,903,245 | 1,947,995 | 1,987,598 | 1,970,014 | 1,707,398 | -0.9% | -13.3% | |
| Nov | 477,584 | 1,304,500 | 599,247 | 610,292 | 1,210,516 | 1.8% | 98.4% | |
| Dec | 77,224 | 180,041 | 69,157 | 57,887 | | -16.3% | | |
| TOTAL | 9,167,378 | 11,915,116 | 11,687,870 | 10,438,477 | 12,285,727 | -10.7% | 18.4% | |



BOND FUTURES: VALUE TRADED

The graph below highlights the historical **cumulative value traded** over the past few years. There has been a **10% increase in value traded** year-to-date compared to value traded in 2019.



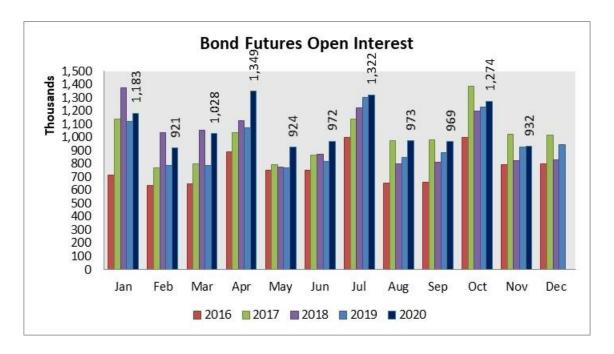
The historical **non-cumulative** breakdown in terms of Bond Futures value traded per month:

| | Bond Futures Value Traded Rm | | | | | | | |
|-------|------------------------------|-------------|-------------|-------------|-------------|-----------|-----------|--|
| Date | 2016 | 2017 | 2018 | 2019 | 2020 | Chg 19/18 | Chg 20/19 | |
| Jan | R 93,017 | R 207,419 | R 253,621 | R 180,384 | R 176,702 | -28.9% | -2.0% | |
| Feb | R 83,446 | R 54,107 | R 63,521 | R 65,075 | R 97,898 | 2.4% | 50.4% | |
| Mar | R 8,122 | R 15,689 | R 18,820 | R 7,378 | R 29,570 | -60.8% | 300.8% | |
| Apr | R 159,522 | R 128,361 | R 212,944 | R 177,545 | R 174,397 | -16.6% | -1.8% | |
| May | R 87,612 | R 131,736 | R 91,403 | R 44,429 | R 106,329 | -51.4% | 139.3% | |
| Jun | R 13,129 | R 19,049 | R 22,502 | R 11,983 | R 17,525 | -46.7% | 46.2% | |
| Jul | R 166,159 | R 151,742 | R 170,320 | R 225,830 | R 185,667 | 32.6% | -17.8% | |
| Aug | R 75,809 | R 152,914 | R 68,472 | R 53,410 | R 73,391 | -22.0% | 37.4% | |
| Sep | R 20,266 | R 24,072 | R 5,123 | R 8,239 | R 5,882 | 60.8% | -28.6% | |
| Oct | R 210,332 | R 191,314 | R 185,855 | R 194,759 | R 156,245 | 4.8% | -19.8% | |
| Nov | R 55,648 | R 126,095 | R 54,306 | R 59,502 | R 109,123 | 9.6% | 83.4% | |
| Dec | R 7,458 | R 17,391 | R 6,458 | R 5,516 | R 0 | -14.6% | | |
| TOTAL | R 980.519 | R 1.219.888 | R 1.153.345 | R 1.034.049 | R 1.132.730 | -10.3% | 10.1% | |



BOND FUTURES: OPEN INTEREST

Bond Futures Open interest was 932k contracts as at month end which is 0.4% more than that at the end of the equivalent month in previous year. The period April-July has seen record high open interest, while August and September was just below the record high.



The table provides the total Bond Futures open interest contracts as at the end of each month.

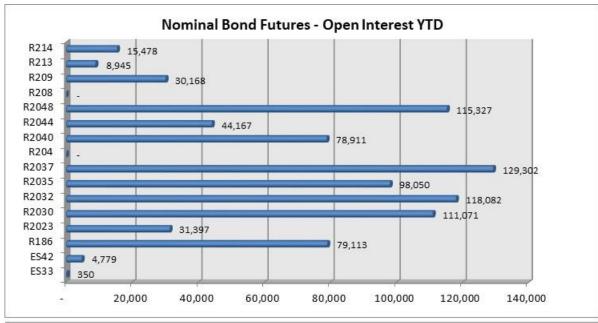
| | Bond Futures Open Interest | | | | | | | | |
|------|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| Date | 2016 | 2017 | 2018 | 2019 | 2020 | Chg 19/18 | Chg 20/19 | | |
| Jan | 713,913 | 1,137,425 | 1,372,543 | 1,118,795 | 1,183,158 | -18.5% | 5.8% | | |
| Feb | 633,062 | 770,321 | 1,037,493 | 784,852 | 921,269 | -24.4% | 17.4% | | |
| Mar | 650,335 | 801,800 | 1,052,470 | 787,390 | 1,027,896 | -25.2% | 30.5% | | |
| Apr | 890,406 | 1,037,427 | 1,126,181 | 1,073,638 | 1,349,483 | -4.7% | 25.7% | | |
| May | 752,370 | 794,207 | 777,714 | 769,139 | 923,863 | -1.1% | 20.1% | | |
| Jun | 753,049 | 868,162 | 870,652 | 817,539 | 971,675 | -6.1% | 18.9% | | |
| Jul | 996,943 | 1,139,985 | 1,222,141 | 1,302,006 | 1,321,763 | 6.5% | 1.5% | | |
| Aug | 655,211 | 977,327 | 798,912 | 849,438 | 973,254 | 6.3% | 14.6% | | |
| Sep | 657,642 | 981,713 | 809,221 | 883,920 | 969,022 | 9.2% | 9.6% | | |
| Oct | 999,507 | 1,383,649 | 1,201,141 | 1,231,132 | 1,273,672 | 2.5% | 3.5% | | |
| Nov | 793,813 | 1,020,399 | 826,316 | 927,675 | 931,839 | 12.3% | 0.4% | | |
| Dec | 798,552 | 1,016,463 | 827,458 | 944,806 | | 14.2% | | | |

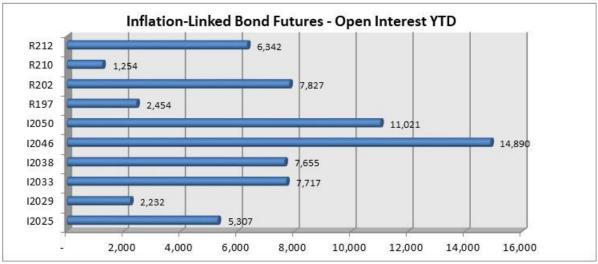


BOND FUTURES: OPEN INTEREST PER INSTRUMENT

The open interest is spread fairly evenly across many contracts with R2030, R2032, R2037 and R2048 all over 100k contracts open.

| Open Interest Table: Nov2020 | | | | | |
|--------------------------------------|--------|---------|--|--|--|
| Nominal Bond Inflation-Linkers Total | | | | | |
| 865,140 | 66,699 | 931,839 | | | |
| 92.8% | 7.2% | 100.0% | | | |



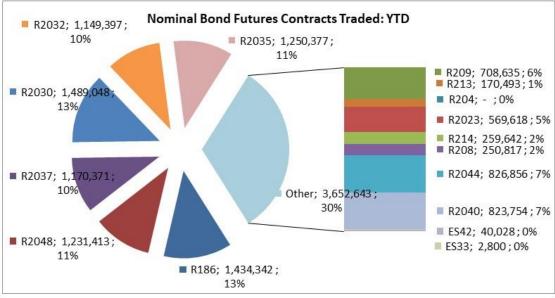


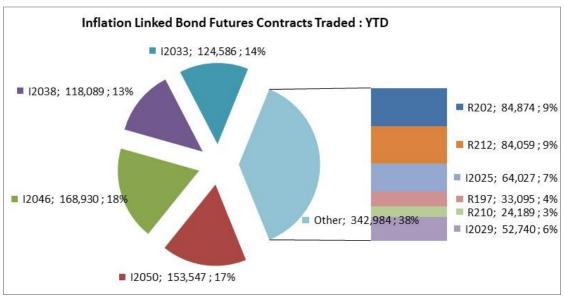


SINGLE BOND FUTURE CONTRACTS

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 93%/7%

| Total Contracts Traded ytd | | | | | |
|--------------------------------------|---------|------------|--|--|--|
| Nominal Bond Inflation-Linkers Total | | | | | |
| 11,377,591 | 908,136 | 12,285,727 | | | |
| 92.6% | 7.4% | 100.0% | | | |



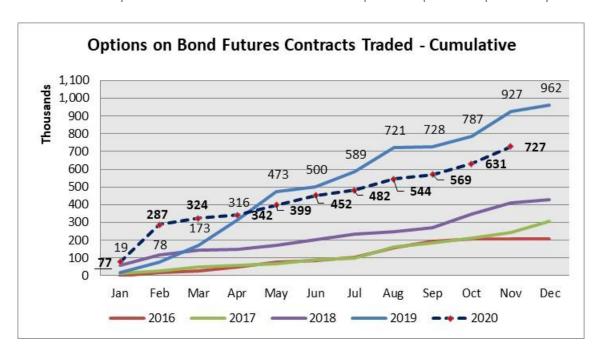




OPTIONS ON BOND FUTURES

OPTIONS ON BOND FUTURES: CONTRACTS TRADED YTD

The contracts traded year-to-date was down 21% on the equivalent period in previous year.



The **historical non-cumulative** breakdown in terms of Options on Bond Futures contracts:

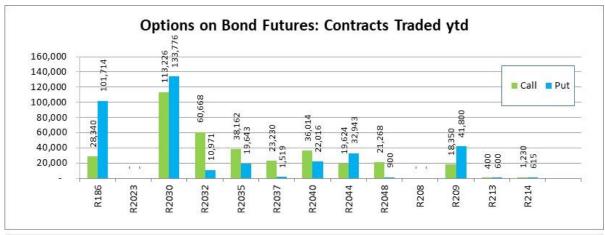
| | Options on Bond Futures Contracts Traded | | | | | | | |
|-------|--|---------|---------|---------|---------|-----------|-----------|--|
| Date | 2016 | 2017 | 2018 | 2019 | 2020 | Chg 19/18 | Chg 20/19 | |
| Jan | - | 14,483 | 60,405 | 19,110 | 77,201 | -68.4% | 304.0% | |
| Feb | 17,536 | 11,415 | 54,977 | 59,033 | 210,210 | 7.4% | 256.1% | |
| Mar | 8,812 | 25,538 | 28,832 | 95,276 | 36,940 | 230.5% | -61.2% | |
| Apr | 22,435 | 5,400 | 5,558 | 143,016 | 17,731 | 2473.2% | -87.6% | |
| May | 29,048 | 8,862 | 20,150 | 157,005 | 56,719 | 679.2% | -63.9% | |
| Jun | 5,775 | 23,320 | 34,432 | 26,470 | 53,416 | -23.1% | 101.8% | |
| Jul | 18,285 | 8,019 | 28,655 | 88,896 | 30,101 | 210.2% | -66.1% | |
| Aug | 54,921 | 63,882 | 17,260 | 131,864 | 61,600 | 664.0% | -53.3% | |
| Sep | 36,208 | 22,555 | 19,612 | 7,489 | 25,183 | -61.8% | 236.3% | |
| Oct | 12,419 | 26,394 | 78,210 | 58,639 | 61,600 | -25.0% | 5.0% | |
| Nov | 50 | 34,036 | 63,736 | 140,504 | 96,308 | 120.4% | -31.5% | |
| Dec | 50 | 63,418 | 16,886 | 34,609 | | 105.0% | | |
| TOTAL | 205,539 | 307,322 | 428,713 | 961,911 | 727,009 | 124.4% | -21.6% | |

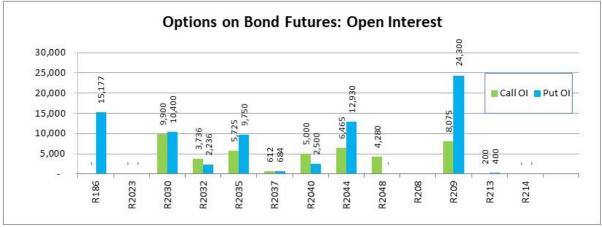


OPTIONS ON BOND FUTURES: CONTRACTS TRADED AND OPEN INTEREST

Option contracts traded and open interest showing split between calls and puts. The dominant option contract is the R2030 in terms of trading and the R209 in terms of open interest.

| Options on Bond Futures | | | | | | | |
|-----------------------------|---------|--------|---------|--------|--|--|--|
| Contracts ytd Open Interest | | | | | | | |
| Calls | 360,512 | 49.6% | 43,993 | 36.0% | | | |
| Puts | 366,497 | 50.4% | 78,377 | 64.0% | | | |
| Total | 727,009 | 100.0% | 122,370 | 100.0% | | | |



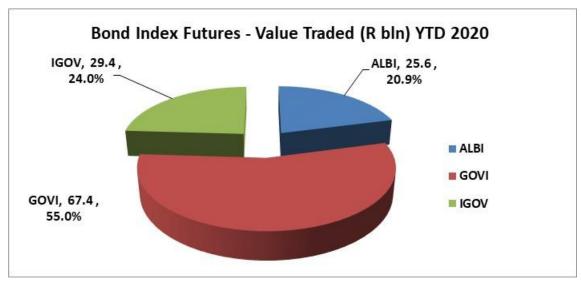


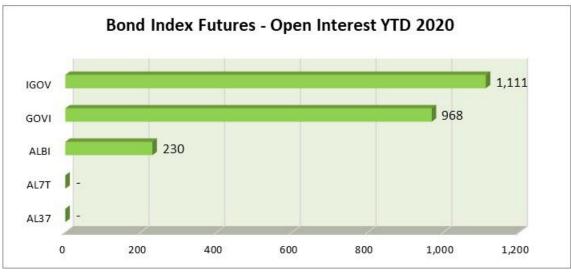


BOND INDEX FUTURES

BOND INDEX FUTURES: VALUE TRADED YTD

The GOVI and Bond Index futures value traded and open interest year-to-date are shown. The GOVI represents 55% of the bond index value traded.





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