

# JSE INTEREST RATE DERIVATIVES MONTHLY VIEW

May 2020

Compiled by the IRC team



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#### HIGHLIGHTS

- The total **IRD contracts traded** ytd in 2020 is almost 6.7m, up 26% in comparison to the same period in 2019. This translates to approximately R650 billion value traded ytd (up from R531m in same period last year)
- The **Govi futures** have seen 134% growth over the same period last year with a total amount of R36 billion value traded ytd.
- Bond options activity down -16% from same period last year.
- The IRD open interest, indicative of the outstanding risk being traded/hedged, is up 36% on same period last year, with Bond futures up 20%, Bond options up 140% and Govi futures up 146%

# **INTEREST RATE DERIVATIVE CONTRACTS**

#### IRD CONTRACTS TRADED

The number of IRD contracts traded YTD is 26% up from 2019 equivalent period. Large growth was seen in the Bond Futures and Govi futures.

| Listed IRD CONTRACTS TRADED |           |          |          |           |           |          |           |  |  |
|-----------------------------|-----------|----------|----------|-----------|-----------|----------|-----------|--|--|
| YTD - Contracts             | Bond Fut  | Bond Opt | Govi Fut | Index Fut | JIBAR Fut | SWAP Fut | Total     |  |  |
| 2019                        | 4,810,738 | 473,440  | 2,221    | 7,989     | -         | -        | 5,294,388 |  |  |
| 2020                        | 6,278,138 | 398,801  | 5,190    | 7,820     | -         | -        | 6,689,949 |  |  |
| Growth                      | 30.5%     | -15.8%   | 133.7%   | -2.1%     | 0.0%      | 0.0%     | 26.4%     |  |  |

# **IRD VALUE TRADED**

The value traded YTD is 22% higher than 2019 equivalent period a total of R649 billion notional.

| IRD VALUE TRADED YTD (Rm) |           |          |          |           |           |          |           |  |  |  |
|---------------------------|-----------|----------|----------|-----------|-----------|----------|-----------|--|--|--|
| Period                    | Bond Fut  | Bond Opt | Govi Fut | Index Fut | JIBAR Fut | SWAP Fut | Total     |  |  |  |
| 2019                      | R 474,811 | R 552    | R 14,479 | R 40,703  | R 0       | R 0      | R 530,544 |  |  |  |
| 2020                      | R 584,897 | R 640    | R 35,571 | R 28,449  | R 0       | R 0      | R 649,556 |  |  |  |
| Growth                    | 23.2%     | 16.0%    | 145.7%   | -30.1%    | 0.0%      | 0.0%     | 22.4%     |  |  |  |

## IRD OPEN INTEREST

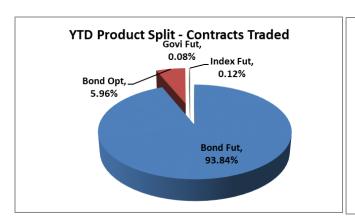
The 2020 Open Interest is 36% up on the equivalent period last year.

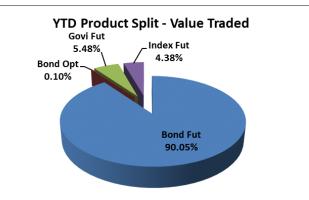
| IRD OPEN INTEREST YTD |          |          |          |           |           |          |           |  |  |
|-----------------------|----------|----------|----------|-----------|-----------|----------|-----------|--|--|
| Period                | Bond Fut | Bond Opt | Govi Fut | Index Fut | JIBAR Fut | SWAP Fut | Total     |  |  |
| 2019                  | 769,139  | 114,402  | 442      | 2,006     | -         | 51       | 886,040   |  |  |
| 2020                  | 923,863  | 275,374  | 1,044    | 1,390     | -         | 51       | 1,201,722 |  |  |
| Growth                | 20.1%    | 140.7%   | 136.2%   | -30.7%    | 0.0%      | 0.0%     | 35.6%     |  |  |



## IRD PRODUCT SPLIT IN CONTRACTS AND VALUE TRADED

While **GOVI** and **Index Futures** account for only 0.2% of contracts booked in the IRD market, they account for 10% of total value traded in the IRD market YTD, due to the large contract size





# 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, volumes for the active close-out month and the preceding month are added to represent a 2-month close-out period.

In the May 2020 (2-mth) close-out period, a total of 3.2 million contracts were traded, 28% higher than those traded during the same close-out period in 2019.

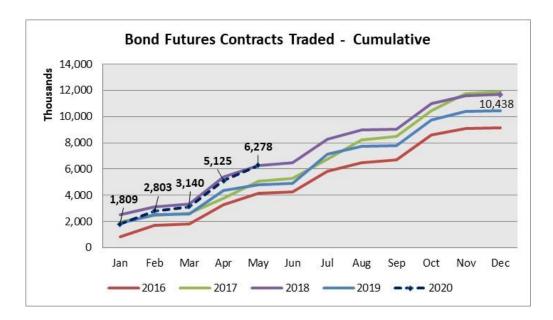
| ALL IRD CONTRACTS (in 2-mth periods) |           |           |           |           |           |               |               |  |  |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|---------------|---------------|--|--|
| Close-Out (2-mth)                    | 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 |           | 18.8%         |               |  |  |
| Close-Out 4 (Nov)                    | 2,399,150 | 3,320,386 | 2,749,042 | 2,786,833 |           | 1.4%          |               |  |  |



# **BOND FUTURES**

# **BOND FUTURES: CONTRACTS TRADED**

The graph below depicts the cumulative contracts traded in Bond Futures over the past few years. The traded contracts year-to-date is 31% higher than equivalent period previous year.



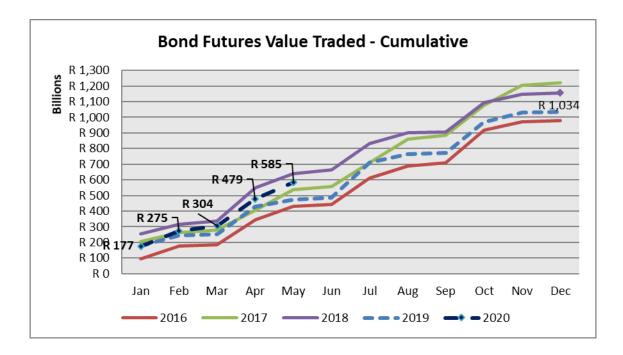
The table below provides a **historical non-cumulative** breakdown in terms of Bond Futures contracts traded per month.

|       | 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    |           | -49.6%    |           |  |  |  |
| Jul   | 1,542,365                     | 1,475,383  | 1,770,507  | 2,232,039  |           | 26.1%     |           |  |  |  |
| Aug   | 691,788                       | 1,497,690  | 706,275    | 550,331    |           | -22.1%    |           |  |  |  |
| Sep   | 207,021                       | 235,816    | 53,904     | 85,331     |           | 58.3%     |           |  |  |  |
| Oct   | 1,903,245                     | 1,947,995  | 1,987,598  | 1,970,014  |           | -0.9%     |           |  |  |  |
| Nov   | 477,584                       | 1,304,500  | 599,247    | 610,292    |           | 1.8%      |           |  |  |  |
| Dec   | 77,224                        | 180,041    | 69,157     | 57,887     |           | -16.3%    |           |  |  |  |
| TOTAL | 9,167,378                     | 11,915,116 | 11,687,870 | 10,438,477 | 6,278,138 | -10.7%    | 30.5%     |  |  |  |



#### **BOND FUTURES: VALUE TRADED**

The graph below highlights the historical cumulative value traded over the past few years. There has been a 23% **increase in value traded** year-to-date compared to value traded in 2019.



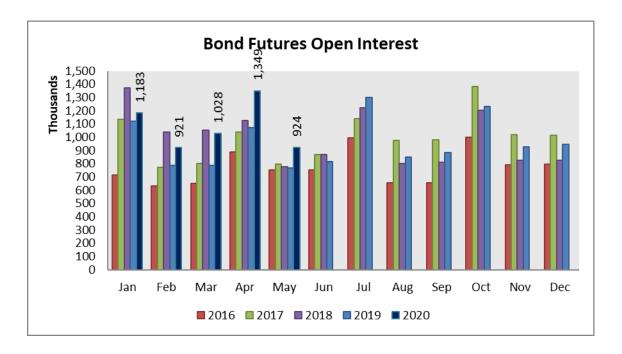
The following table provides a historical **non-cumulative** breakdown in terms of Bond Futures value traded per month.

|       | 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    |           | -46.7%    |           |  |  |  |
| Jul   | R 166,159                    | R 151,742   | R 170,320   | R 225,830   |           | 32.6%     |           |  |  |  |
| Aug   | R 75,809                     | R 152,914   | R 68,472    | R 53,410    |           | -22.0%    |           |  |  |  |
| Sep   | R 20,266                     | R 24,072    | R 5,123     | R 8,239     |           | 60.8%     |           |  |  |  |
| Oct   | R 210,332                    | R 191,314   | R 185,855   | R 194,759   |           | 4.8%      |           |  |  |  |
| Nov   | R 55,648                     | R 126,095   | R 54,306    | R 59,502    |           | 9.6%      |           |  |  |  |
| Dec   | R 7,458                      | R 17,391    | R 6,458     | R 5,516     |           | -14.6%    |           |  |  |  |
| TOTAL | R 980,519                    | R 1,219,888 | R 1,153,345 | R 1,034,049 | R 584,897 | -10.3%    | 23.2%     |  |  |  |



# **BOND FUTURES: OPEN INTEREST**

**Bond Futures Open interest** was 925k contracts as at month end which is 20% more than that at the end of the equivalent month in previous year.



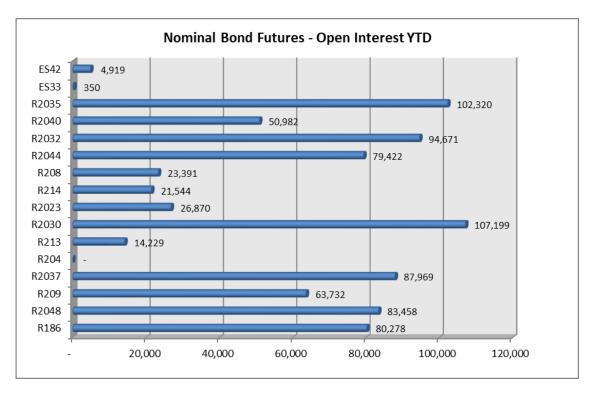
The table provides the total Bond Futures open interest contracts as at the end of each month.

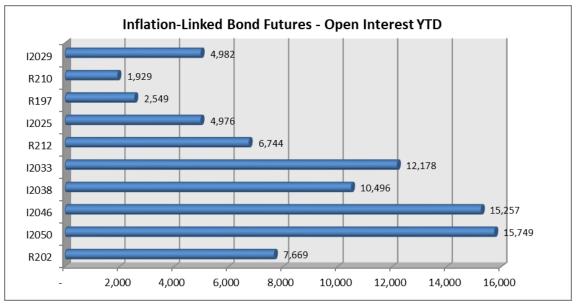
|      | Bond Futures Open Interest |           |           |           |           |           |           |  |  |  |
|------|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|--|
| Date | 2016                       | 2017      | 2018      | 2019      | 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   |           | -6.1%     |           |  |  |  |
| Jul  | 996,943                    | 1,139,985 | 1,222,141 | 1,302,006 |           | 6.5%      |           |  |  |  |
| Aug  | 655,211                    | 977,327   | 798,912   | 849,438   |           | 6.3%      |           |  |  |  |
| Sep  | 657,642                    | 981,713   | 809,221   | 883,920   |           | 9.2%      |           |  |  |  |
| Oct  | 999,507                    | 1,383,649 | 1,201,141 | 1,231,132 |           | 2.5%      |           |  |  |  |
| Nov  | 793,813                    | 1,020,399 | 826,316   | 927,675   |           | 12.3%     |           |  |  |  |
| Dec  | 798,552                    | 1,016,463 | 827,458   | 944,806   |           | 14.2%     |           |  |  |  |



#### **BOND FUTURES: OPEN INTEREST PER INSTRUMENT**

Charts display the open interest for Nominal and Inflation-Linked Bond Futures as at month end. The contract with most open interest is the R2030 and R2035. Total Open Interest is 923k made up of 841k (Nominal) and 83k (inflation-linked).

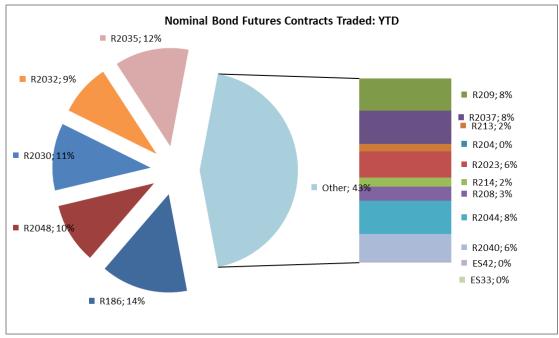


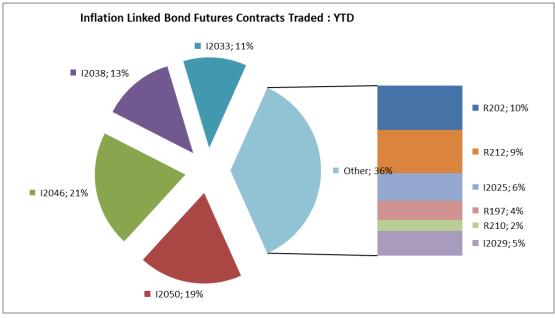




# SINGLE BOND FUTURE CONTRACTS

The chart shows all the single Nominal Bond Futures and Inflation Bond Futures traded year to date and ranks them according to number of contracts traded. The percentage split between Nominal / Inflation Bond Futures contracts traded ytd is about 93% / 7%.



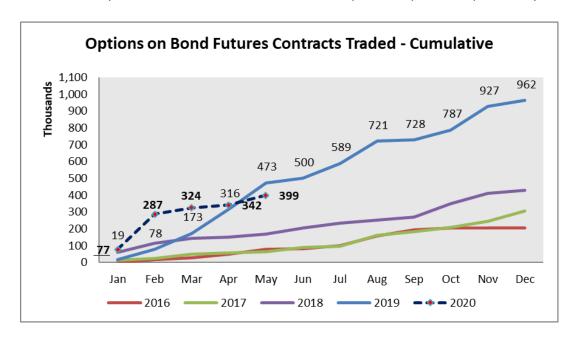




#### **OPTIONS ON BOND FUTURES**

# **OPTIONS ON BOND FUTURES: CONTRACTS TRADED YTD**

The contracts traded year-to-date was down 16% on the equivalent period in previous year.

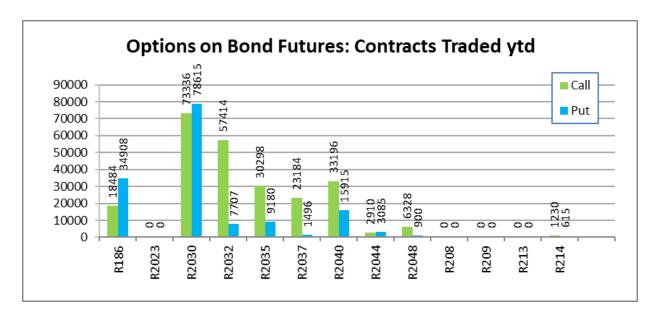


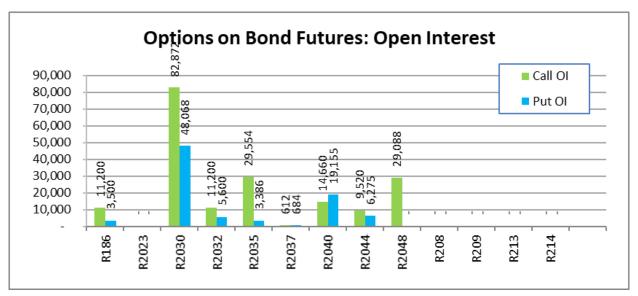
The table below provides a **historical non-cumulative** breakdown in terms of Options on Bond Futures contracts traded per month.

|       | 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  |         | -23.1%    |           |  |  |  |
| Jul   | 18,285                                   | 8,019   | 28,655  | 88,896  |         | 210.2%    |           |  |  |  |
| Aug   | 54,921                                   | 63,882  | 17,260  | 131,864 |         | 664.0%    |           |  |  |  |
| Sep   | 36,208                                   | 22,555  | 19,612  | 7,489   |         | -61.8%    |           |  |  |  |
| Oct   | 12,419                                   | 26,394  | 78,210  | 58,639  |         | -25.0%    |           |  |  |  |
| Nov   | 50                                       | 34,036  | 63,736  | 140,504 |         | 120.4%    |           |  |  |  |
| Dec   | 50                                       | 63,418  | 16,886  | 34,609  |         | 105.0%    |           |  |  |  |
| TOTAL | 205,539                                  | 307,322 | 428,713 | 961,911 | 398,801 | 124.4%    | -15.8%    |  |  |  |

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



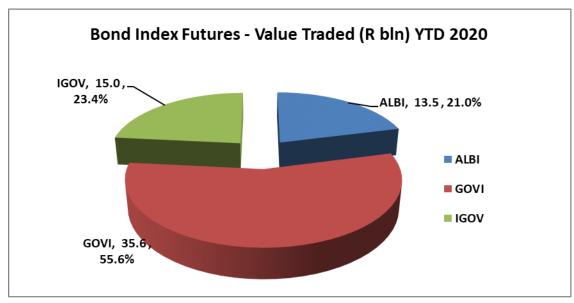


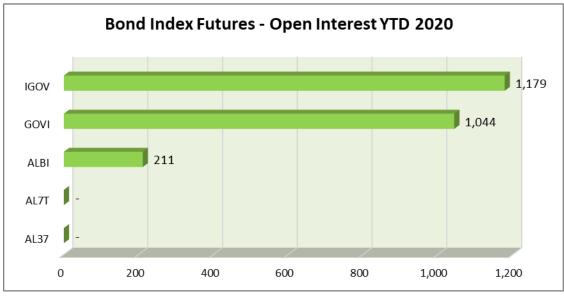


# **BOND INDEX FUTURES**

# **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 56% of trade by value and 43% of open interest contracts.





For any queries, please contact <a href="mailto:irc@jse.co.za">irc@jse.co.za</a>.