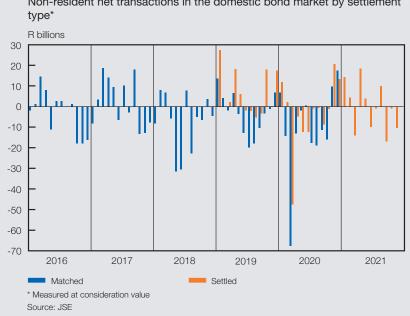
## Box 2 Understanding non-resident bond statistics and recent changes<sup>1</sup>

The underlying principle on which non-resident bond statistics is based, as published by the JSE Limited (JSE), changed from a matched-trade<sup>2</sup> approach to a settled-trade<sup>3</sup> approach in November 2020.



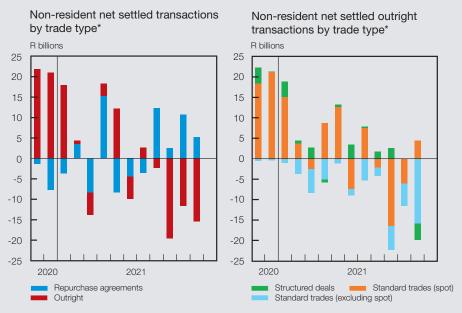
## Non-resident net transactions in the domestic bond market by settlement

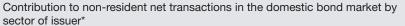
<sup>1</sup> This box discusses the interpretation of non-resident bond statistics, as published by the JSE Limited.

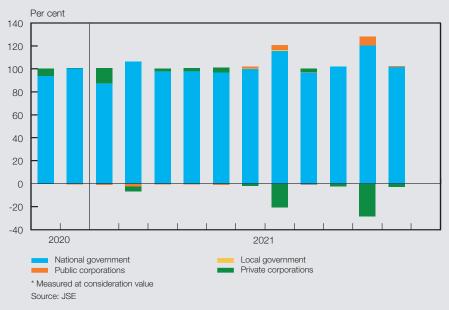
<sup>2</sup> Matched trades are trades which have been booked but the transfer of ownership as well as the payment has not taken place. 3 Settled trades are trades where the transfer of ownership of the security to the buyer and payment to the seller has taken place. Settlement mostly occurs three days after the trade date.

Historical statistics based on the principle of settled trades are available as from January 2019. The daily value of non-residents' net transactions in bonds is now derived as the difference between aggregated non-resident purchases and sales of domestic listed bonds on the JSE that settled on that specific day, regardless of when the original matched trade occurred.

Matched and settled trade statistics are therefore not comparable. The most obvious difference between the matched and settled trade statistics is timing, as matched trade statistics are measured on the trade date, whereas settled trade statistics are measured on the settlement date. The difference between these two dates is generally around three days. Furthermore, matched trades that did not settle could be rolled over or even cancelled before settlement. The matched trade statistics therefore include trades that could have been cancelled prior to settlement. The significance of this difference is illustrated by the outcome of non-resident net *sales* of listed bonds of R39.1 billion in 2019 on a matched-trade basis versus *net purchases* of R76.8 billion on a settled-trade basis. The difference remained substantial in 2020, although both measures recorded net sales; R126 billion on a matched-trade basis compared with R39.9 billion on a settled-trade basis.



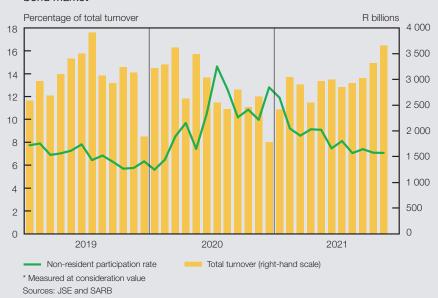




In addition to clarifying the methodological change in JSE-listed non-resident bond statistics, this box also reflects on the various dimensions of non-resident activity in the domestic market based on settled trade statistics and non-resident holdings of South African national government bonds.

By trade type, although non-residents were net buyers of repurchase agreements<sup>4</sup> in the 13 months to November 2021, they generally participated largely in outright trades<sup>5</sup> and mostly standard spot trades.<sup>6</sup> Non-residents' net transactions are dominated by national government bonds.

The non-resident participation rate<sup>7</sup> in the domestic bond market of, on average, 6.8% in 2019 increased to a high of 14.6% in July 2020. The increase in 2020 reflected the impact of the coronavirus disease 2019 (COVID-19) pandemic on volatility and perceived risk. Subsequently, non-residents' trading activity relative to total turnover declined to around pre-pandemic levels in 2021.



Non-resident settled transactions relative to turnover in the domestic bond market\*

The noticeable difference between the change in non-residents' holdings of national government bonds and their matched net transactions in these bonds, prior to 2019, narrowed as from 2019 when based on settled trades. The persistence of the difference is attributable to non-resident off-exchange transactions<sup>8</sup> that are reflected in the holding statistics. The nominal value of non-residents' holdings of domestic national government bonds increased from R713 billion at the end of 2018 to R838 billion in November 2021, while the percentage of their holdings relative to total national government bond holdings declined from a high of 42.8% in March 2018 to 28.2% at the end of November 2021, as the stock of national government's bonds increased significantly.

<sup>4</sup> Repurchase agreements are contracts to sell and subsequently repurchase securities at a specified date and price, also known as buyback agreements.

<sup>5</sup> Outright trades are the outright purchases and sales of securities in the market, with no reverse transfer of ownership. Outright consideration transactions consist of standard spot trades, other standard trades, structured deals and options exercised.

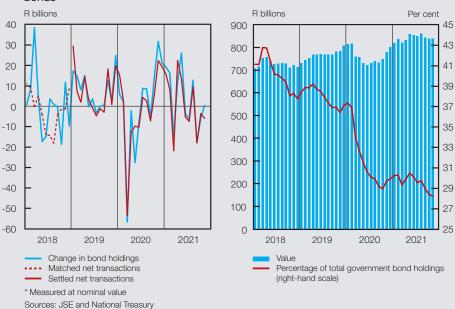
<sup>6</sup> Standard spot trades settle at T+3 days.

<sup>7</sup> The participation rate measures non-residents' settled purchases and sales of bonds as a percentage of total purchases and sales of bonds.

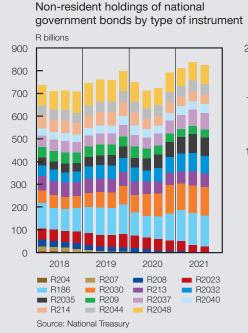
<sup>8</sup> Off-exchange transactions are direct transactions between resident and non-resident counterparties that are not reflected in the trading statistics but only in the holding statistics.

Non-resident holdings of, and net transactions in, national government bonds\*

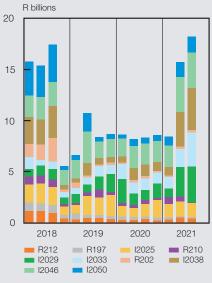
Non-resident holdings of national government bonds\*

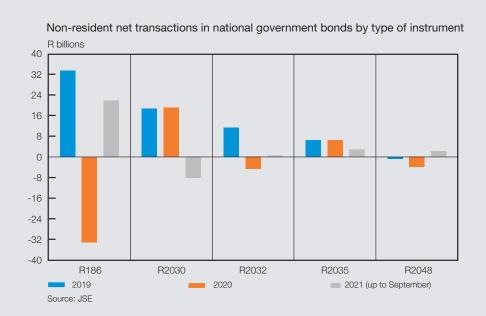


Non-residents' holdings of national government bonds in terms of value were mostly concentrated in the most liquid five-year *R186* government bond, followed by the longer-dated *R2030*, *R2048*, *R2035* and *R2032* bonds. Meanwhile, the value of non-residents' holdings of inflation-linked government bonds remained subdued, along with a preference for the longer-dated *I2038* and *I2029* bonds. Similarly, net transactions in the *R186* government bond accounted for most of the total net transactions in national government bonds by non-residents.



Non-resident holdings of inflationlinked bonds by type of instrument





The yield on South African rand-denominated government bonds issued and traded in the domestic market, as reflected by the *R186* bond, increased significantly in early 2020 at the onset of the COVID-19 pandemic, which negatively affected global financial markets and impacted non-resident participation in the domestic bond market and in emerging market economies in general. The increase in yield was therefore largely associated with non-resident net sales of bonds, whereas net purchases towards the end of 2020 and early 2021 occurred alongside the noticeable decline in the yield of the *R186* bond. Non-resident interest in the South African bond market is supported by the positive yield differential and total returns, both in local currency and in US dollar, on a relative basis to other bond markets, for both developed and emerging markets.

