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Developments in debt issuance costs of South African banks

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Developments in debt issuance costs of South African banks

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Abstract

This paper describes bank debt issuances in South Africa and estimates the cost of these issuances, at both aggregate and individual bank levels. Issuance costs are an important indicator of conditions in debt markets and can be used to assess the impact of regulations on bank funding costs. Since debt issuance makes up about a quarter of marginal bank funding (i.e. funding for new loans) issuance costs are also useful for assessment of the transmission of funding conditions to lending rates. We show that debt issuance costs have risen meaningfully since the global financial crisis. However, the increase is less than has been the case for other forms of funding (such as long-term retail and wholesale deposits). We show banks have increased the average tenor of debt issuances, which has tended to raise the cost of issuance because rates have been higher on longer maturity issuances than on short maturity issuances.

Keywords: Bank funding costs, issuance costs, funding spreads.

JEL classification: G12, G21.

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1. Introduction⁴

This paper describes bank debt issuances in South Africa and estimates the cost of these issuances, at both aggregate and individual bank levels. Debt issuances represent about a quarter of marginal bank funding in South Africa (the other common forms of funding for new loans include retail and wholesale deposits). These estimates are therefore useful for tracking how market conditions and regulations have affected developments in bank funding costs. But they also enable assessment of the transmission of funding conditions to lending rates.

There are very few papers that directly estimate actual issuance costs for individual banks. Most papers use very simple proxies of bank funding costs. Examples include ratios of interest expenses over liabilities or debt (Aymanns et al. 2016 or Gambacorta and Shin 2018), Credit Default Swap spreads (Babihuga and Spaltro 2014 or Schmitz et al. 2017), or either bond yield to maturity themselves or their spread over another instrument with similar maturity such as sovereign yield or swap rates (Bonfim and Santos 2004, Elyasiani and Keegan 2017, Cook and Steenkamp 2018, Black et al. 2020 or Arnould et al. 2020). As far as we are aware, our paper is the first to estimate bank debt issuance costs using individual issuance data to approximate the actual costs of bank debt as measured on issuance date. We use two definitions of bank issuance cost, the first is the level of issuance costs in percentage terms, and the second is in funding spread terms. The latter describes, for a particular tenor (i.e. duration), how much more yield pick up a bank issuance offers over an interest rate swap yield of the same tenor.⁵ The former is the sum of the risk-free (zero-rate) and bank funding spread. Our paper is focused on estimating debt issuance costs, for detailed discussion of overall aggregate bank funding costs in South Africa see Rapapali and Steenkamp (2020).

We show that like banks in other economies, South African banks have increased the maturity of their debt issuances since the Global Financial Crisis (GFC) and the introduction of Basel III regulations.⁶ This has tended to raise the cost of issuance because rates have been higher on longer maturity issuances than on short maturity issuances.

⁴ We are grateful for comments from JF Mercier and Mpho Rapapali for assistance with data.

⁵ The most appropriate approach would be to compare bank funding costs over an equivalent risk free curve. However, there are no truly risk-free interest rate benchmarks currently available in South Africa. The most commonly used reference rate in the interest rate swap market (amongst other derivatives markets and cash markets) in South Africa is the 3 month Johannesburg Interbank Agreed Rate (JIBAR).

⁶ For discussion in a European context see Van Rixtel et al. (2015) or in a Canadian context see Truno et al (2017).

2. Methodology for estimating issuance costs

Bank debt issuances are volume weighted based on Johannesburg Stock Exchange (JSE) data for a sample between March 2007 and September 2019. We focus on the banking sector's domestic debt issuance, which represents about 20 percent of total issuance in value terms and 23 percent in terms of number of issuances in South Africa over the period.

The relative cost of issuing from floating rate debt instruments linked to the 3 month Johannesburg Interbank Average Rate (JIBAR) are easily observable, however for fixed rate debt instruments, we estimate issuance costs as a spread over a rate on an interest rate swap of similar maturity as the debt instrument.

Our methodology assumes that all non-zero coupon fixed rate debt instruments had vanilla bullet profiles and that they had no embedded optionality, i.e. they paid fixed coupons on regular intervals before maturity and final coupon and principal at maturity.

The drawback to this methodology is that amortising or accreting profiles will also be treated as bullet profiles and that nominal spreads on debt instruments with embedded options are taken as is, without adjusting for optionality, which might overstate the funding spreads for callable debt instruments and understate the funding spreads for puttable debt instruments.⁷

The spreads on zero coupon debt instruments (representing only 1.6 percent of total issuance) are estimated as the difference between the rate on the zero coupon debt instrument and the zero coupon swap rate of a corresponding maturity. The zero coupon swap curve is calculated by bootstrapping the interest rate swap curve at issue date into zero coupon swap rates, with cubic splines used for interpolation. When expressed as fixed rates instead, rates are calculated as the sum of the funding spread for a particular debt instrument and the rate on the interest rate swap with a similar maturity.

Debt issuances with complex issuance terms are excluded from our sample. Nevertheless, our estimates cover 98 percent of the volume of bank debt issuances over the sample.

⁷ Since optionality makes callable bond prices cheaper, it tends to be associated with higher yields (thus higher funding spreads), the opposite applies for puttable bonds.

Box 1: Estimating implied issuance costs

Let

$\mathbf{S} = [s_1, s_2, \dots, s_{29}, s_{30}]$ be the market observable swap curve, where s_x is the swap rate at x year point of the swap curve, and let

$\mathbf{F} = [f_{0x3}, f_{3x6}, f_{6x9}, f_{9x12}]$ be the select points on the Forward Rate Agreement (FRA) curve. We estimate a smoother swap curve with quarterly points (i.e. we take \mathbf{S} and add intermediate points):

$$\mathbf{S}^* = [s_{0.25}, s_{0.5}, s_{0.75}, s_1, s_{1.25}, s_{1.5}, s_{1.75}, s_2, \dots, s_{29}, s_{29.25}, s_{29.5}, s_{29.75}, s_{30}]$$

that ensures that we have swap rates at each point where there will be cash flows. We add quarterly points because a standard ZAR interest rate swap references 3 month JIBAR and thus has quarterly cash flows. The points are defined as:

$s_{0.25}$ is the f_{0x3} which is the 3 month JIBAR

$s_{0.5}$ is the geometric average of f_{0x3} and f_{3x6}

$s_{0.75}$ is the geometric average of f_{0x3} , f_{3x6} and f_{6x9} .

The rest of the points are interpolated using cubic splines.

We also estimate a zero coupon curve:

$$\mathbf{Z} = [z_{0.25}, z_{0.5}, z_{0.75}, z_1, z_{1.25}, z_{1.5}, z_{1.75}, z_2, \dots, z_{29}, z_{29.25}, z_{29.5}, z_{29.75}, z_{30}] \text{ where}$$

$z_{0.25}$ is 3 month JIBAR or $s_{0.25}$.

The \mathbf{Z} curve is the transformation of the coupon curve that allows us to discount individual cash flows of the fixed rate leg of the swap into par. This transformation is done using a bootstrapping methodology, which starts off by calculating zero coupon rates at the short end of the curve and thereafter iteratively use the output as input to calculate the longer end zero coupon rates.

The shortest point of our curves above is 3 months (i.e. 0.25 years). There is already an observable zero coupon rate for this point, which is 3 month JIBAR or $z_{0.25}$. Thus, as described above, this point is used to calculate the next point (6 months) as follows:

given a 6 month swap with a fixed rate $s_{0.5}$ and notional of 100, such a swap has 2 cash flows $(s_{0.5} * 100)/4$ at the end of year 0.25 (i.e. 3 months) and $100 + (s_{0.5} * 100)/4$ at the end of year 0.5 (i.e. 6 months). The present value of these cash flows will be 100 if discounted at $s_{0.5}$ (i.e. the value of a vanilla bond with a yield that is equivalent to its coupon is a 100). Similarly, the present value of these cash flows discounted at a zero coupon curve derived from the same swap curve should be 100. Thus, if we let $c = (s_{0.25} * 100)/4$:

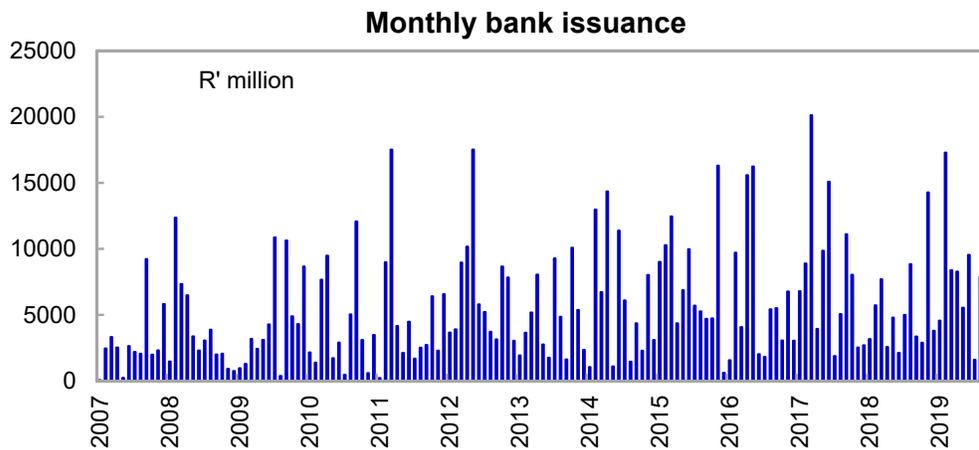
$$100 = c/(1 + z_{0.25}/4) + (c + 100)/(1 + z_{0.5}/4)^2$$

$z_{0.25}$ is known and thus $z_{0.5}$ is the only unknown to be calculated from this equation. Given $z_{0.25}$ and $z_{0.5}$, we can calculate $z_{0.75}$ using the $s_{0.75}$ cash flows, and we iteratively calculate the next zero coupon rate using the same methodology for the whole zero coupon curve.

3. Bank Issuances

Debt issuances are an important source of new funding for banks. Debt with residual maturity of greater than 12 months represent approximately 10 percent of total bank liabilities and a quarter of marginal funding (i.e. new debt issuance and new bank deposits), down slightly from average pre-GFC levels. Since 2007, the annual nominal debt issuance by banks has increased from R31.7 billion to R66.6 billion in 2019 (Figure 1).⁸ The share of fixed rate notes in total issuance has fallen significantly since the GFC, with the share of floating rate notes growing steadily (Figure 2). In total, 71.8 percent of the R66.6 billion nominal amount issued in 2019 (R66.6 billion) referenced a floating rate, while 28.2 percent had a fixed (non-zero) rate.⁹

Figure 1: Issuances of new bank debt



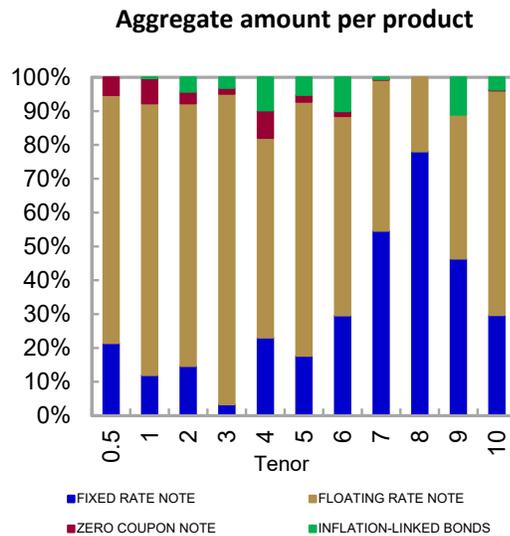
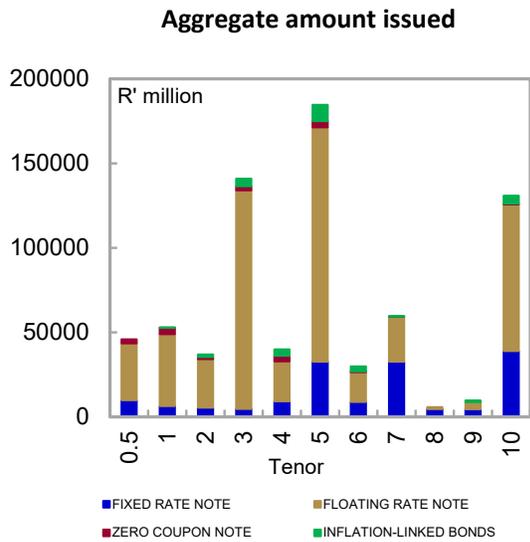
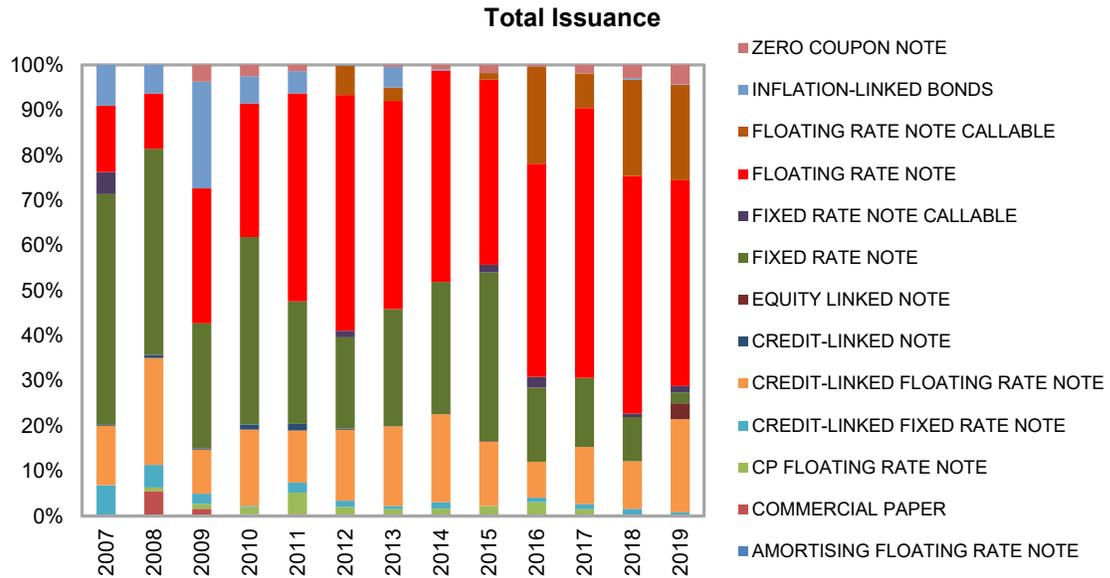
Source: JSE, authors' calculations.¹⁰

⁸ There is no seasonal pattern in the monthly issuances: the data fails a combined F-test for seasonality using X13.

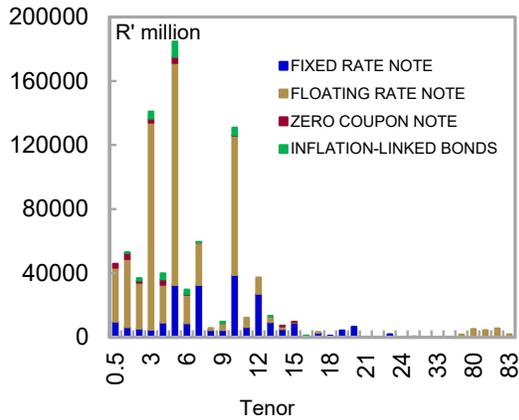
⁹ Non-zero coupon or bullet outstanding items include 2536 issuances. In terms of volume, this had a nominal value of R843.9 billion or 98 percent of total issuance. These instruments either had fixed, floating or inflation linked coupons. Only R13.43 billion in issuance are part of zero coupon bullets (211 instruments), which either are part of a series for a structure, credit linked, equity index linked, linked to a reference entity, having embedded options, commodity linked or currency linked structures. This is equivalent to 7.6 percent of total issuances or 1.57 percent of total volume of transactions. These transactions were excluded from our analysis.

¹⁰ An Appendix providing more detailed analysis of issuances by category of issuance is available upon request.

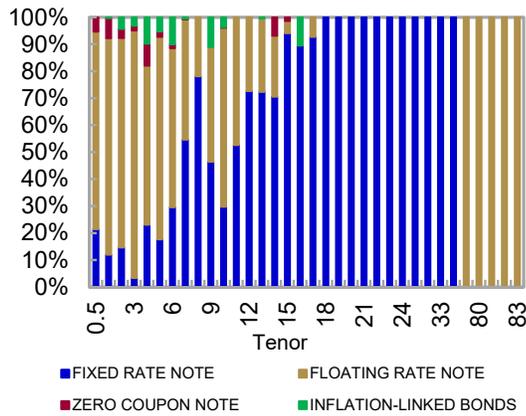
Figure 2: Composition of issuances



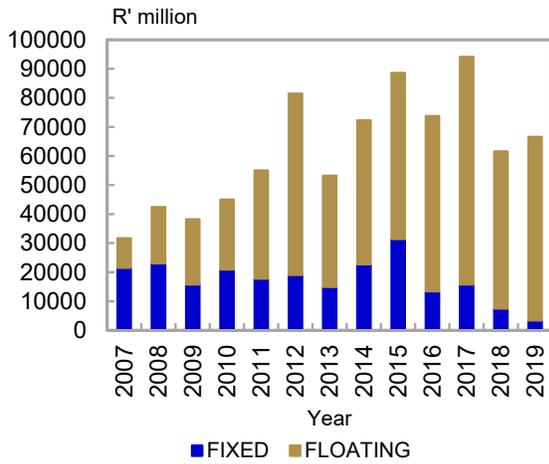
Aggregate amount issued



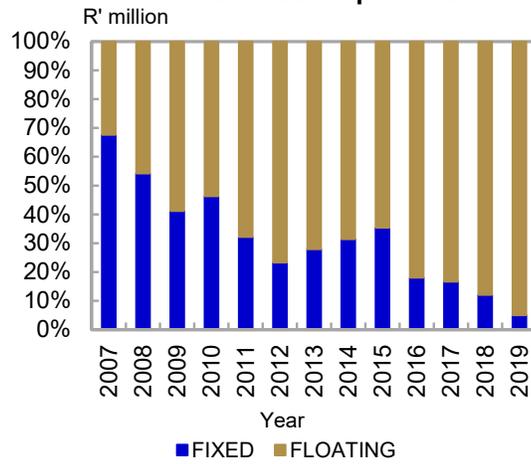
Aggregate amount per product



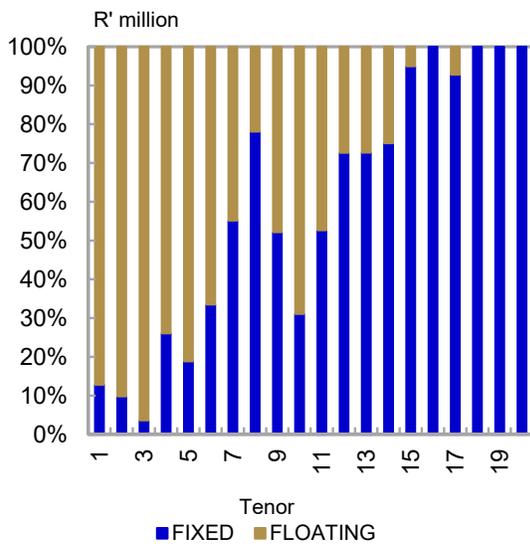
Total issuance



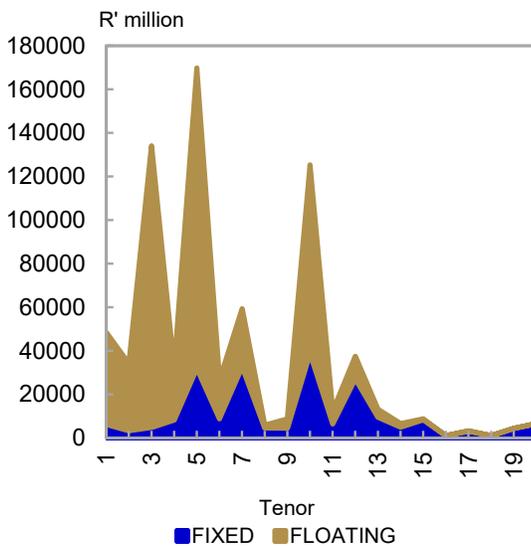
Total issuance per Year



Total debt issuance per Tenor



Total debt issuance per Tenor



Source: JSE, authors' calculations.

Issuances are concentrated in standard maturities of 3, 5, and 10 year points (Figure 2). The majority of floating rate bonds are issued with shorter tenors (within 5-years) while fixed rate issuances tend to dominate longer tenor issuance. In part, this reflects changing interest rate cycles, in which floating rate instruments protect the buyer (of the bond) against interest rate risks. Rational investors would prefer buying fixed rate bonds if they expected interest rates to fall, while preferring floating rate bonds in periods of interest rate hikes or uncertainty about interest rate expectations. As noted above, floating rate notes constituted a significant percentage of the total issuance since 2011 and has somewhat increased in the past 5 years. This could be attributable to attractive short term real yields, which have meant that investors (mostly multi-asset income funds and interest bearing money market funds) would have likely preferred allocating their investments into relatively low risk floating rate notes, as opposed to allocating to fixed rate notes which would have exposed them to duration risk (i.e. that the value of their investment could fall owing to a change in future interest rates).

All things equal, the level of bank debt funding costs is largely a function of the tenor of issuance, market conditions that affect the balance between supply and demand for bank debt, the stage of the interest rate cycle, and bank funding and liquidity regulatory standards. Banks have increased the tenor of their issuance significantly since 2007 (Figure 3). The weighted average tenor of bank issuance increased from 4.5 years in 2010 to over 7.5 years in 2019. The lengthening of the maturity profile of issuances is in part a reflection of the introduction of Net Stable Funding Ratio (NSFR) requirements that commercial banks have to comply with under Basel III. The NSFR was aimed at reducing commercial bank balance sheet funding mismatches, thereby requiring banks to fund longer term assets using longer term stable funding. While terming out debt tends to increase funding costs, there is also a benefit of tending to lower rollover risk.

Figure 3: Issuance tenor (2007:2019)

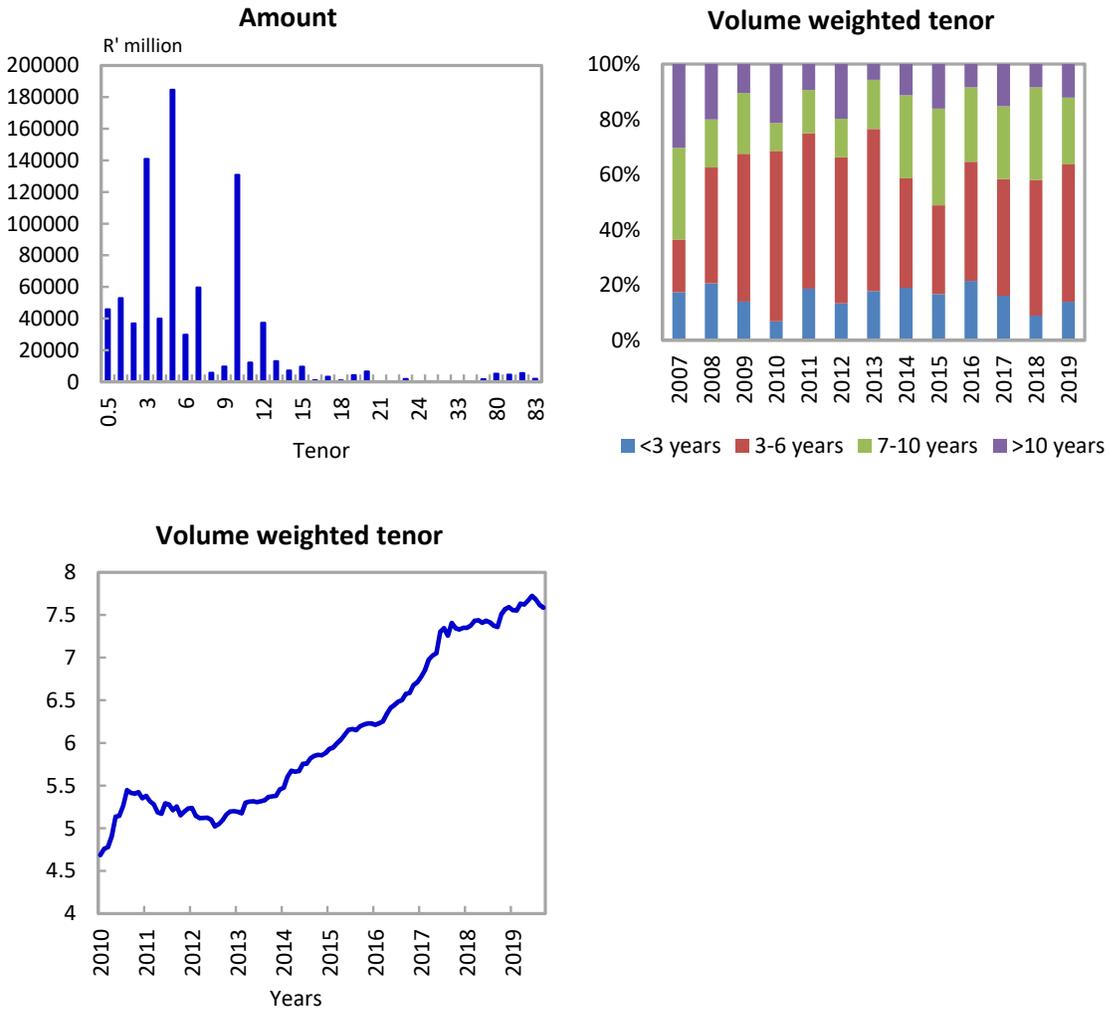
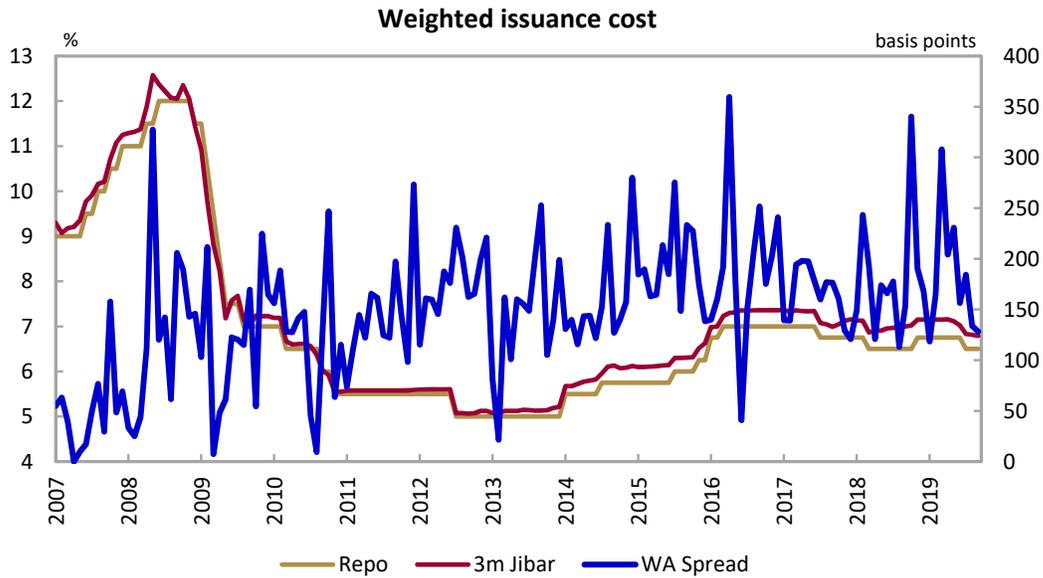


Figure 4 plots the composite volume-weighted average spread from bootstrapped curves on every issuance date. Since the GFC, aggregate funding spreads have been volatile, ranging between close to 0 and 350 basis points. Funding spreads were on a rising trend from 2007 to 2016, and have been fluctuating around a higher average level over recent years. Although the policy rate is lower at the end of the sample than its level in mid-2017, bank funding cost did not fall to the same extent.

Figure 4: Issuance costs estimates (volume weighted)



The easing bias in monetary policy around the start of 2017 saw forward rate agreement (FRA) rates decline and later converge across short maturities on market expectations of relatively stable short rates (Figure 5). Although funding spreads at all maturities are now lower in level terms than in 2017, the shift in funding to the back end of the curve has raised funding costs in spread terms. As a result, lower policy rates have not passed through fully to lower aggregate funding costs. Figure 6 shows that the increase in average tenor of debt issuance has tended to raise the cost of issuance because rates have been higher on longer maturity issuances than on short maturity issuances, both over the full sample and over recent history, in line with the upward sloping yield curve.

Figure 5: Funding cost spreads vs FRA rates

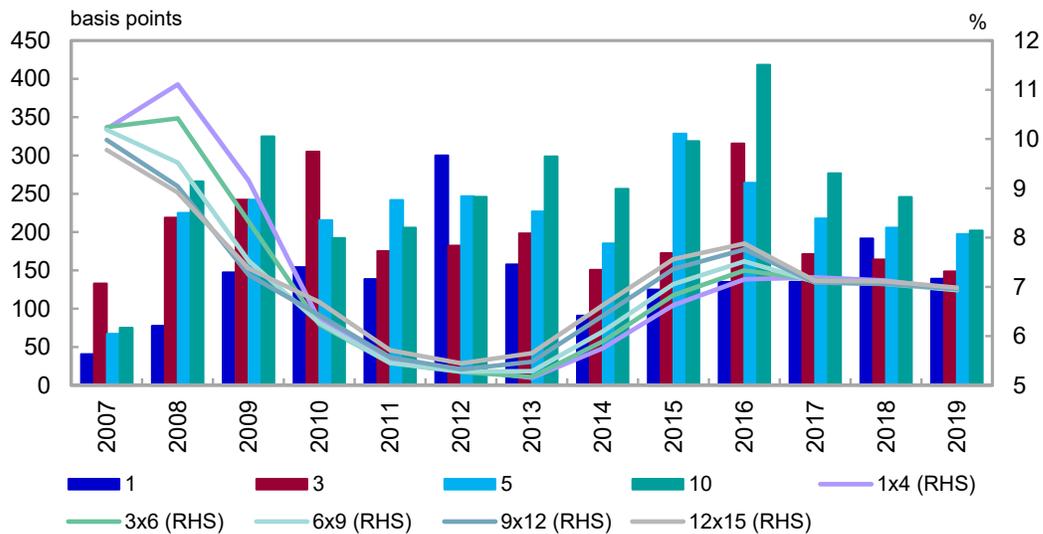
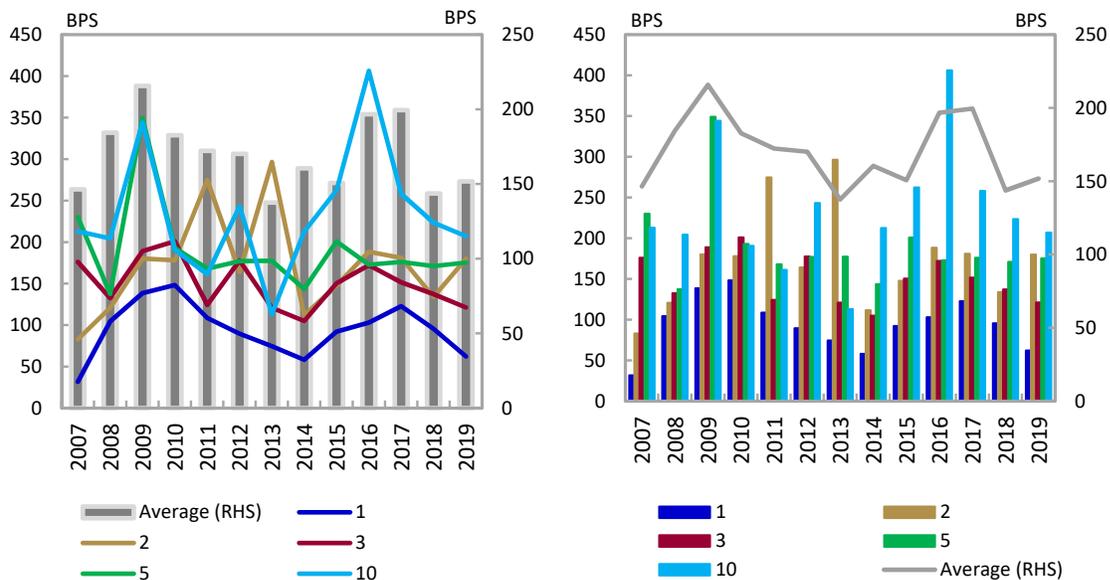


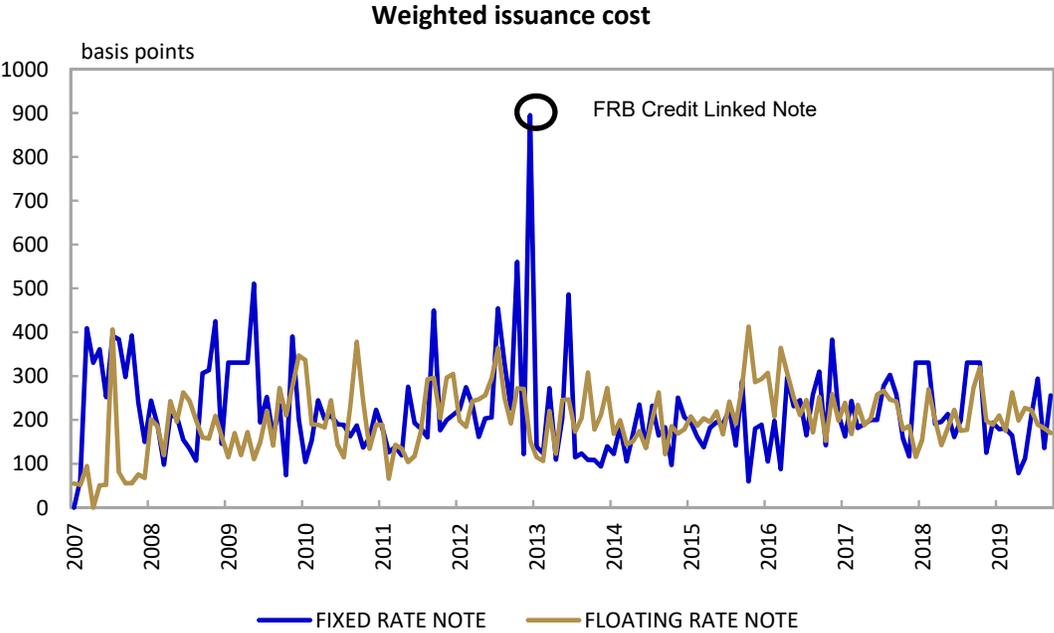
Figure 6: Issuance costs estimates (volume weighted, by tenor)



There have not been significant differences between issuance costs for floating and fixed instruments (Figure 7). The most meaningful exception is an issuance in December 2012 of a Credit Linked Note (CLN) by FirstRand. The nominal amount was just R40 million and it paid a fixed rate of 14 per cent for a tenor of less than one year (while the equivalent swap rate at that time was 5.05 per cent). The rates on CLNs are higher than vanilla instruments with similar maturity and cash flows as they are inclusive of the credit spread of the underlying credit whose level is dependent on the credit quality, thus the heightened level of the FirstRand CLN is not an indication of funding pressures at FirstRand but likely indicates that the quality of the underlying credit was very low.

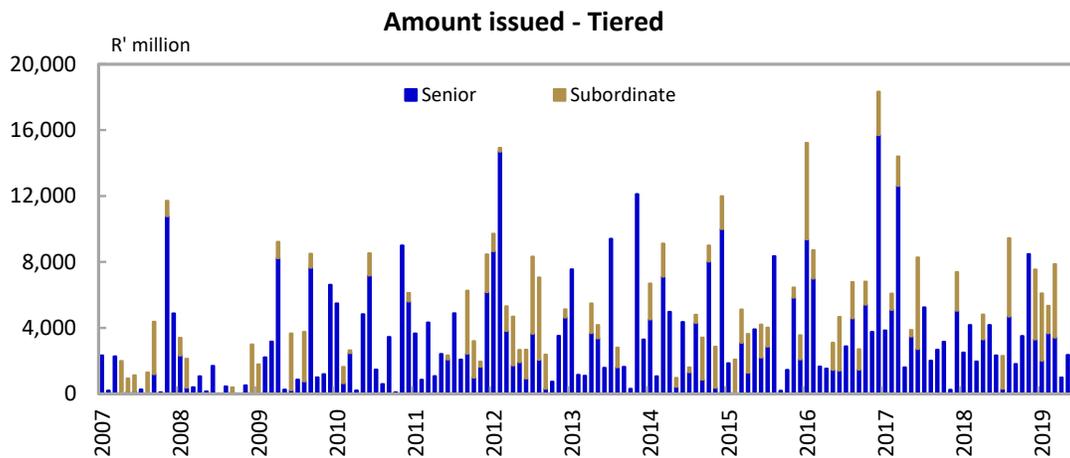
Subordinated debt typically has a lower credit rating and higher issuance cost than senior debt because senior debt ranks ahead of it in the case of liquidation or bankruptcy. There have been relatively few issuances of subordinated debt over the sample period. In total, there were only 159 issuances since 2007 with a nominal value of R146.7 billion (Figure 8), possibly reflecting low levels of securitisation of assets. Senior issuances have totalled 1570 with a total nominal value of R471.4 billion, of which 1514 of the senior issuances were unsecured (R462.7 billion or 98 percent) and 56 secured (R8.7 billion or 2 percent of senior issuances). In terms of volume, senior debt totalled roughly three and a half times the subordinate debt issuances over the sample.¹¹

Figure 7: Issuance costs estimates: Floating vs Fixed (volume weighted)



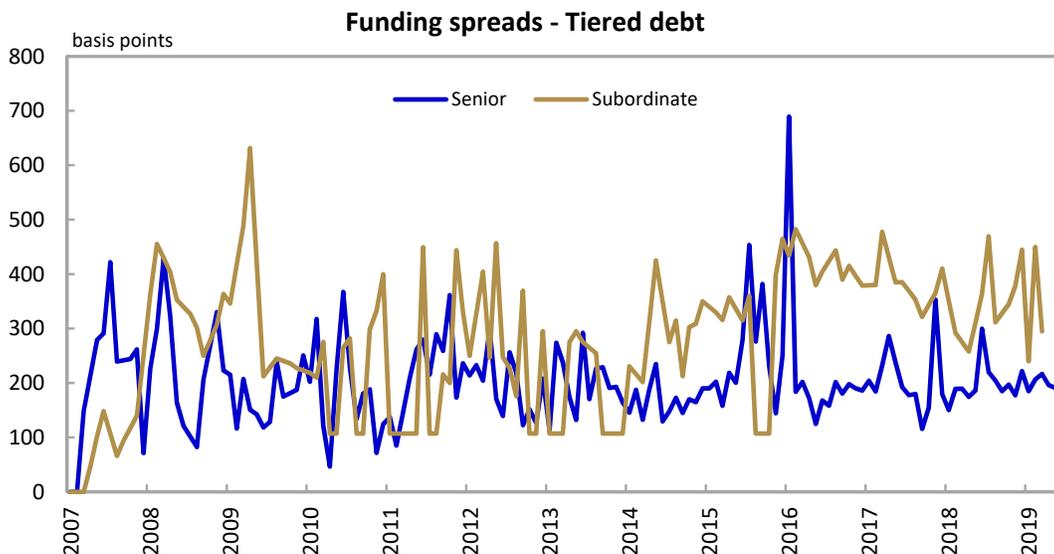
¹¹ Senior debt is most often secured by collateral, also making it relatively less risky. An issuer may pledge specific financial or tangible assets such as treasury bills, government paper, buildings, machinery or equipment to secure the bond. Senior unsecured debt refers to debt that is not backed by a specific asset and that has priority over other debts in case of bankruptcy.

Figure 8: Composition of issuances: Senior vs Subordinate



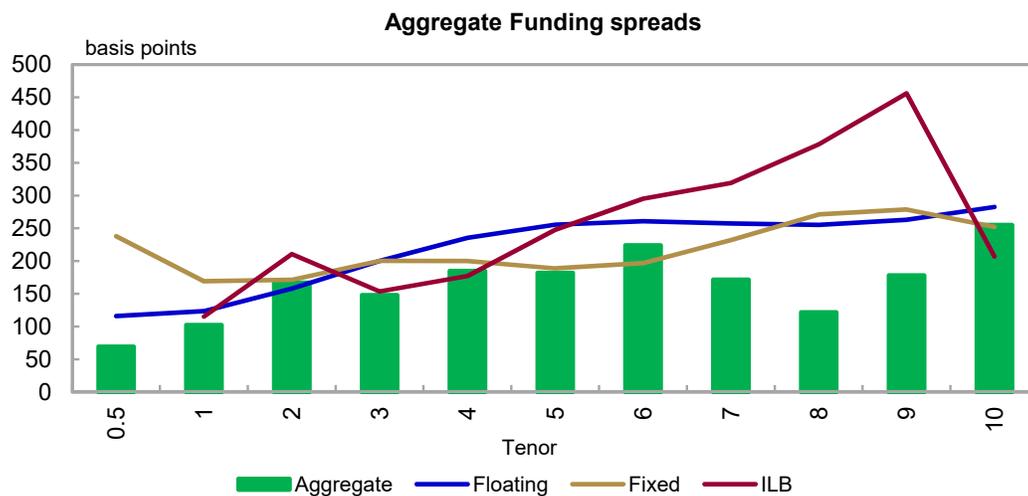
Senior debt funding costs traded relatively close to subordinated debt funding costs before 2011, despite subordinated debt having a relatively higher credit risk compared to senior debt. There was a brief spike in the cost of issuing both forms of debt in the second quarter of 2016, a period of increased funding spreads, but senior spreads quickly reverted back, whereas subordinated debt has stayed relatively costly. Investors were likely complacent about the credit risk inherent in the subordinated debt instruments ahead of this spike. However, investors started demanding differentiated pricing between the two types of debt instruments following the collapse of African Bank, as this left subordinated debt holders with significant losses, compared to senior debt holders.

Figure 9: Issuance costs estimates: Senior vs Subordinate (volume-weighted)



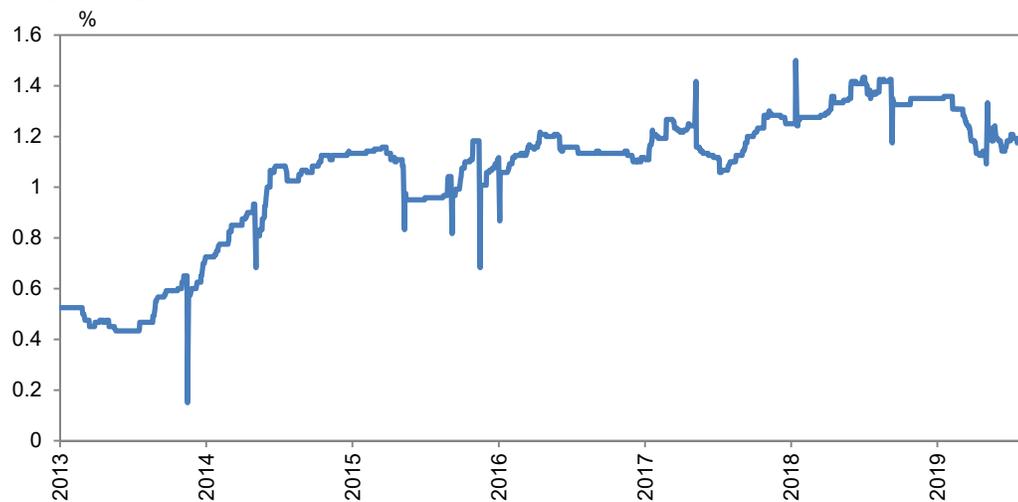
Over the full sample, fixed debt has tended to be more expensive to raise than floating debt for maturities shorter than 3 years and at the 10 year maturity point, but cheaper for maturities between 4 and 7 years. Overall, short dated funding (particularly under one year maturity) has tended to have the lowest issuance costs (Figure 10), as such funding competes with other money market instruments. There was very low issuance at non-standard tenors (such as 7 or 8 year maturities, Figure 3) even though they also had relative low funding spreads. Inflation-linked bonds (ILBs) had considerably higher spreads on average than fixed or floating issuances.

Figure 10: Issuance costs by tenor (2007:2019)



Another important explanation for the recent increase in issuance costs, despite lower short rates, is that liquidity premia embedded in funding costs have risen. Figure 11 shows, for example, how a proxy of the liquidity premium embedded in 12 month rates has risen relative to overnight rates since 2013. It is difficult to disentangle how much of this increase in the liquidity premium could reflect credit considerations, given that government funding costs in the short term have, at times, traded higher than bank funding costs. There is unfortunately no reliable short term risk free curve that can be used to extract credit spreads from short term bank funding costs.

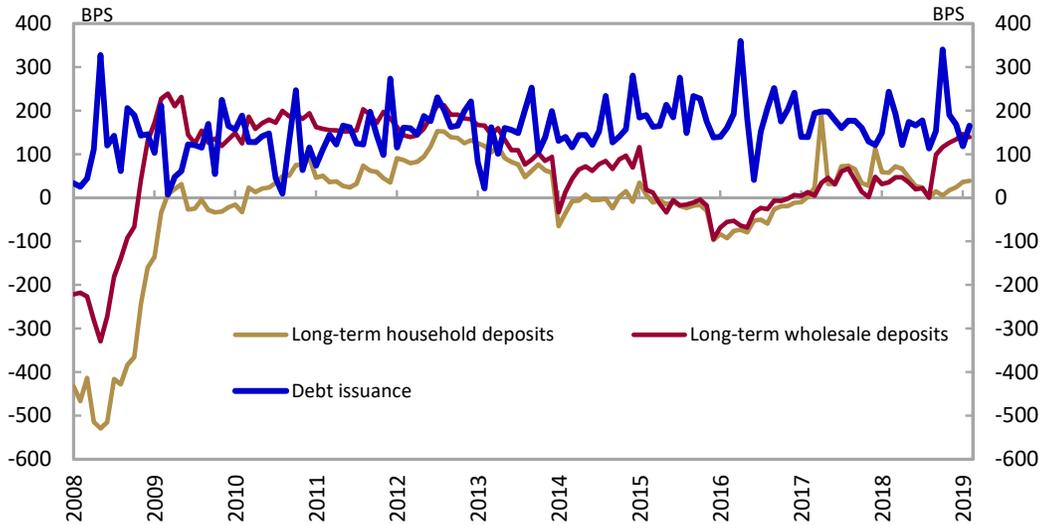
Figure 11: Liquidity premium estimate (0-12 months)



Source: Bloomberg, authors' calculations. Calculated by aggregating the spread between 3 month JIBAR and repo, the 12 month NCD spread over an equivalent swap rate and a volume adjustment to account for an immediacy premium applying to large trades.

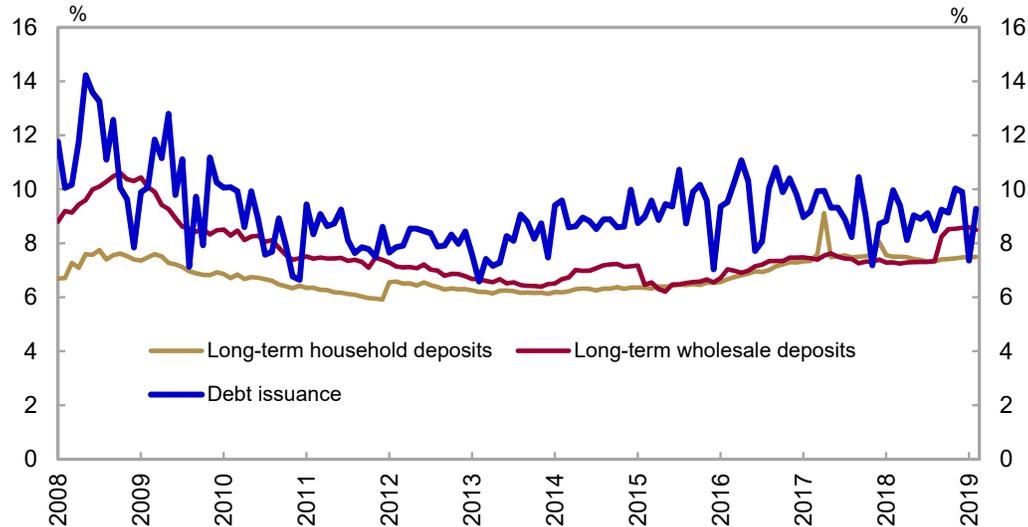
Changes to Basel regulations required banks to source more stable funding. Figures 12 and 13 show that the relative costs of other forms of stable funding (such as long-term retail and wholesale deposits) have risen by slightly more, since the GFC, than our estimates of debt issuance costs, both in spread and level terms. Since the implementation of the Basel regulations from 2015 onwards, long-term deposit rates have risen meaningfully, while debt issuance costs have been relatively stable, on average. Commercial banks likely increased their efforts to improve their long term liquidity profiles by paying highly attractive rates to raise stable funding from both retail and wholesale clients. Debt issuance costs were already elevated, thus it is likely that the banks had little incentive to allow their debt issuance costs to rise (i.e. by choosing not to enter the market when the pricing guidance was outside their target issuance costs). Given the limited supply of commercial banks debt instruments in South Africa, investors might also not have had bargaining power to demand higher rates relative to the rates that were observed during the GFC.

Figure 12: Comparison to other components of funding (spreads)



Note: Retail deposit spreads are relative to three month JIBAR, and wholesale is an aggregation of NCD spreads to maturity matched interest rate swaps from (Rapapali and Steenkamp 2020). ‘Long term’ is defined as issuances with a residual maturity of greater than 12 months.

Figure 13: Comparison to other components of funding (level)



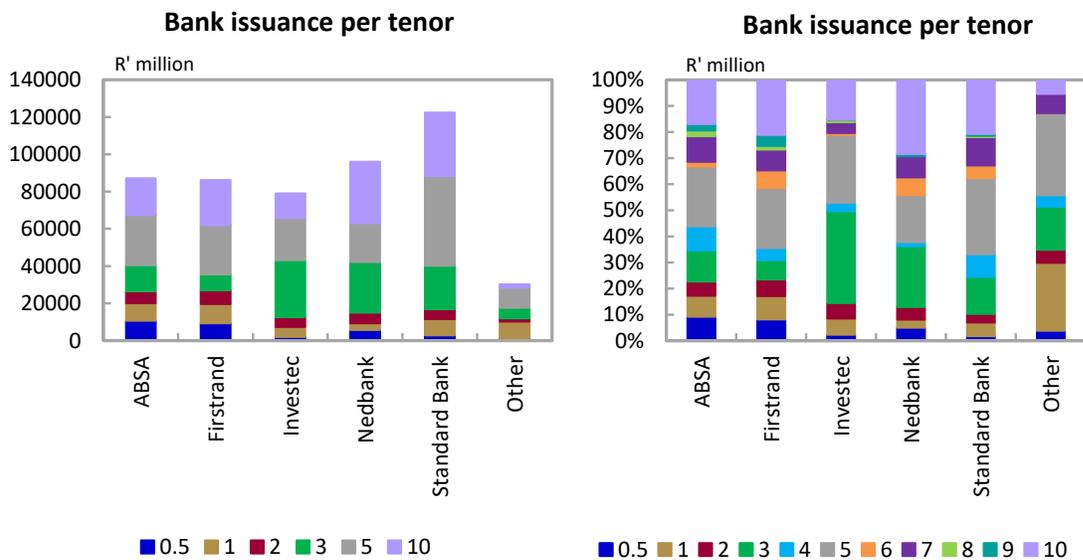
Note: ‘Long term’ is defined as issuances with a residual maturity of greater than 12 months. Source: Rapapali and Steenkamp (2020), authors’ calculations.

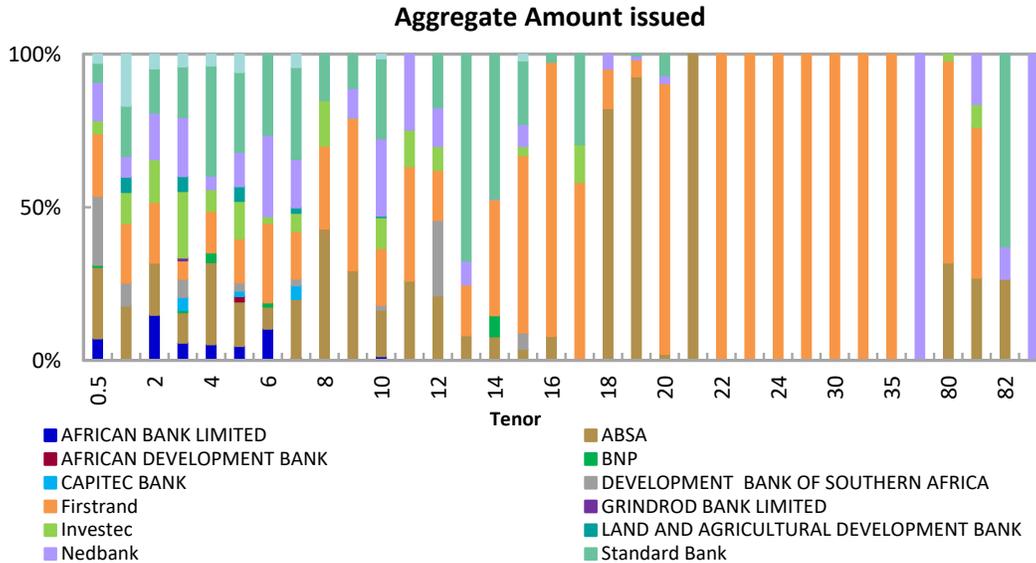
4. Which Bank issued the most debt?

Focusing first on the big five South African banks, Figure 14 shows that Standard Bank was the largest issuer of debt at a nominal value of R190.5 billion since 2007. FirstRand has been the second largest issuer, having issued a nominal value of R154.9 billion, followed by ABSA in third with a nominal value of R139.8

billion debt issued. Nedbank and Investec issued a nominal value of R131.2 billion and R92.6 billion, respectively. Other banks issued debt with a total nominal of value R34.6 billion. Focusing on tenor specific issuances, Standard Bank issuances totalled R34.2 billion, followed by Nedbank at R33.1 billion at the 10 year tenor. Standard Bank issued the highest nominal value, worth R48.1 billion at the 5-year tenor compared to other banks. The next highest issuance in this tenor was by ABSA (R26.9 billion). Investec issued the highest nominal amount of bonds in the 3-year tenor (R30.7 billion). FirstRand issued the most in the 2-year space (R7.3 billion). Above a 35 year tenor, only R19.33 billion has been issued (about 2.2 percent of total debt). There were, for example, 14 instruments issued with maturities between 79-83 years, all of which were floating rate bonds referencing 3m JIBAR. Most of these were subordinate and unsecured. Tenor preference is a function of commercial banks' target funding profile and the relative size of their balance sheets. However this ultra-long tenor is very interesting, given that the average duration of commercial banks assets is between 2 and 5 years. Although banks do issue mortgage loans with maturities of over 20 years, the behavioural duration of typical mortgage loan books are much shorter. The ultra-long tenors are most likely driven by bespoke investor investment structures, such as Liability-Driven Investment funds with ultra-long liabilities for the life insurance industry.

Figure 14: Issuance by banks and tenor (2007:2019, years)





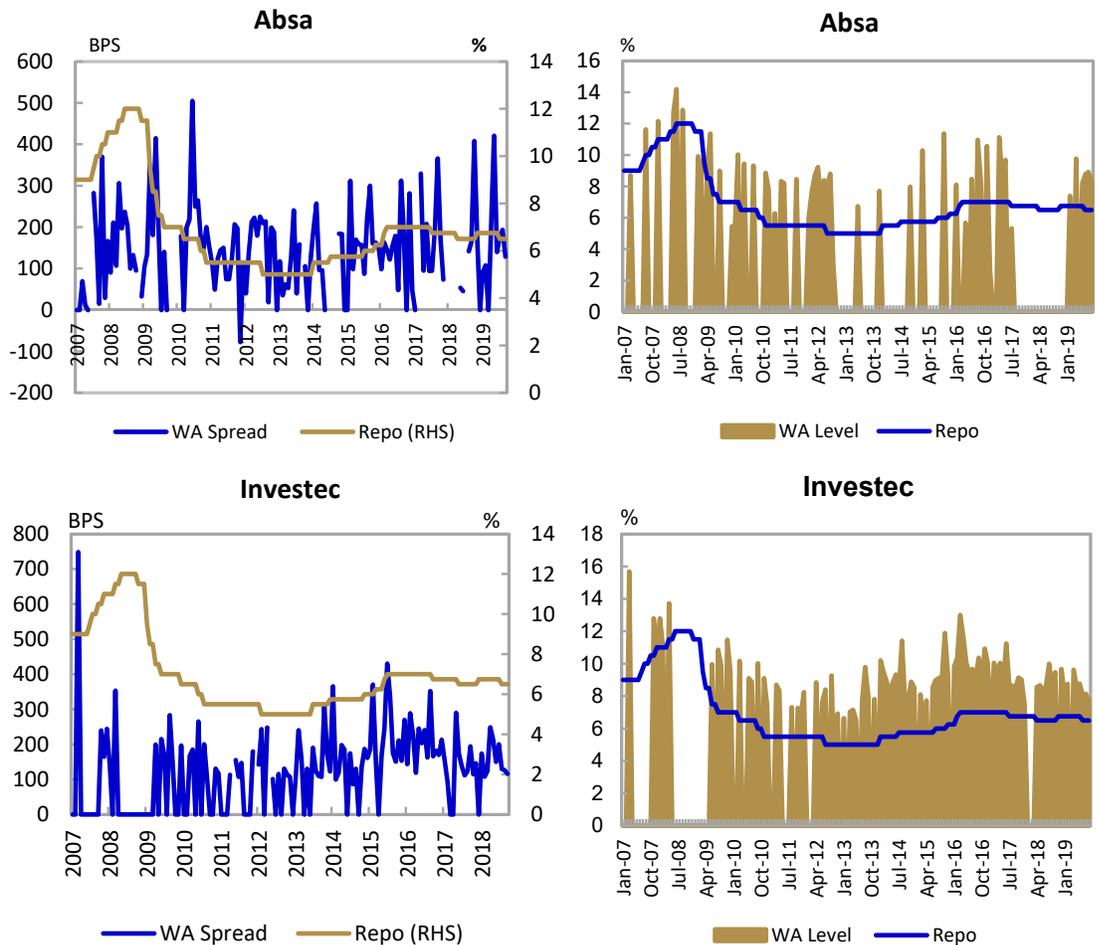
5. How much do issuance costs differ across banks?

We next compare the issuance costs for the five largest banks (Absa, FirstRand, Investec, Nedbank and Standard Bank) separately and the small banks grouped together (labelled as ‘other’ banks).¹² The trend in weighted average fixed rate debt issuance costs were relatively similar across all banks and tracked the decline in the repo rate following the GFC. Absa Bank’s funding spreads ranged between -77 basis points to 505 basis points over our sample, with a steady rise from 150 basis points to 420 basis points between 2011 and 2019. The average level in the funding rate for Absa Bank peaked closer to 14% but declined in line with the level of the policy rate following the GFC. Investec Bank’s funding spreads were well contained below 350bps between 2008 and 2013. The data suggests that there was no activity in listed debt funding instruments at Investec in some parts of 2007, as well as between 2008 and 2009. After 2013, funding spreads for Investec rose to reach a peak of 430 basis points in March 2016, and thereafter declined to closer to 100 basis points by the end of 2019. FirstRand Bank’s funding spreads were very volatile and ranged between -100 basis points to 600 basis points. There were spikes in FirstRand’s funding spreads to about 560 and 600 basis points in November 2009 and January 2016, respectively. Nedbank’s funding spreads ranged between 400 basis points and 625 basis points, and apart from a small number of spikes, they were otherwise well contained under 300 basis points. Standard Bank’s funding spreads were also very volatile, with a unique spike of 1100 basis points in March 2016. The same spike can be observed in the

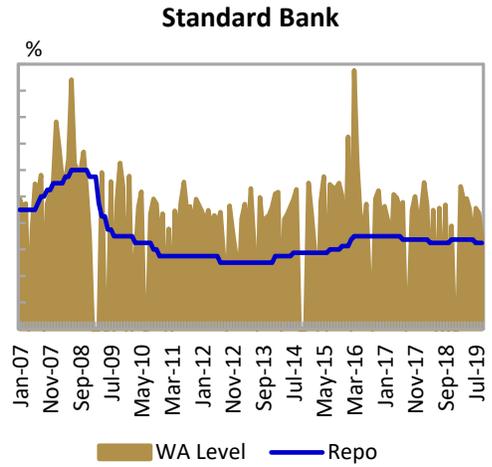
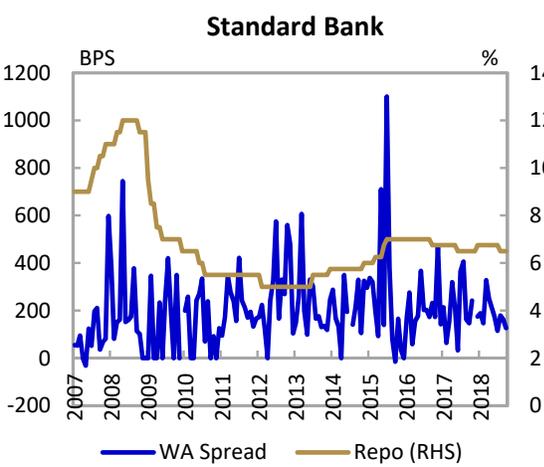
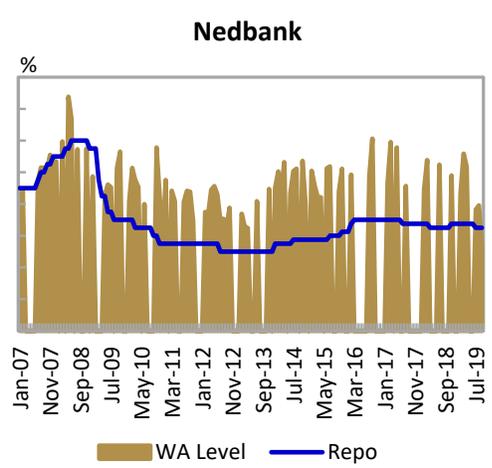
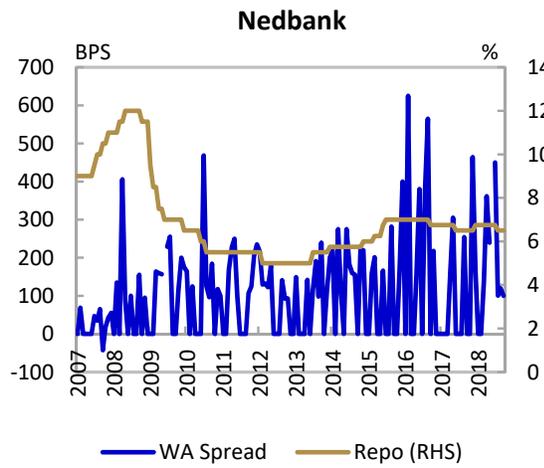
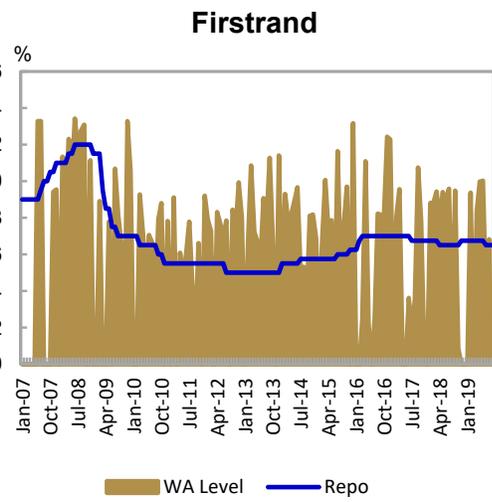
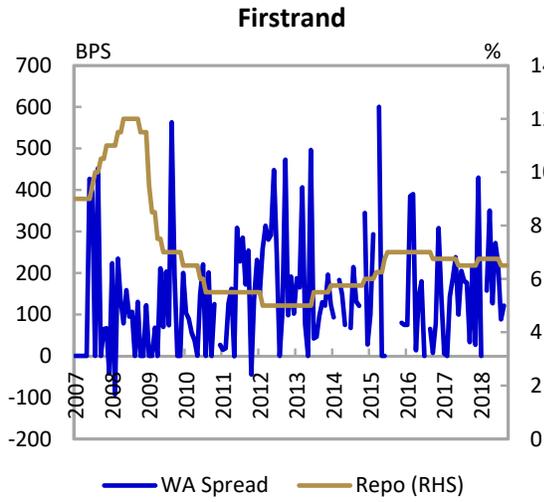
¹² We ignore negative funding spreads larger than -200 basis points as they are likely part of a derivative structure and likely to understate the issuance costs. Also, as before, zero-coupon bullet instruments are ignored.

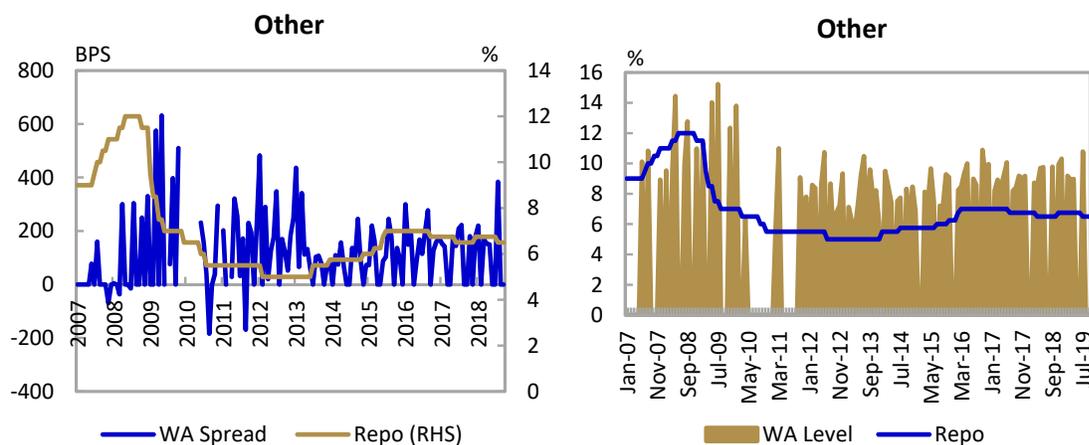
weighted average fixed rate level, where rates spiked to over 18%.¹³ For smaller banks, funding spreads rose sharply during the GFC, but later declined alongside the decrease in the repo rate. Small bank funding spreads rose again between 2011 and 2013, but fell to below 300 basis points from 2014 onwards. The low funding spreads for small banks is largely attributable to the relatively shorter tenor of their issuances, as well as the smaller frequency and size of issuances, which may be associated with better take-up.

Figure 15: Issuance costs bank-by-bank



¹³ This rate was at least 10% above the repo rate and thus it is highly likely that it was a structured product with an embedded yield enhancement that was responsible for the specific spike.





Note: Small bank issuances were volume weighed into the 'other banks' category.

6. Conclusion

We estimate the cost of bank debt issuances, at both aggregate and individual bank levels. These estimates have important implications for monetary policy. Changes in funding spreads tend to affect lending rates and therefore the transmission of repo rate changes. Although lending-deposit spreads have not changed much over recent years, the lending-policy rate spread has widened. These estimates suggest that some of this widening reflects an increase in marginal bank funding costs, since debt issuances makes up about a quarter of funding for new loans. We show banks have increased the average tenor of debt issuances, which has tended to raise the cost of issuance because rates have been higher on longer maturity issuances than on short maturity issuances. The estimates produced in this paper will be used in future work to formally assess impacts on monetary policy transmission in South Africa.

Because funding spreads tend to widen when financial conditions deteriorate they also serve as an indicator of financial market conditions. This paper has focused on measurement, but there are several related policy questions that future research should address. These include: What do funding spread changes mean for monetary policy? What has been the impact of Basel regulations on issuance costs? How has sovereign debt issuance affected bank funding cost dynamics? What is the relative role of tenor extension versus other factors (such as credit and liquidity risk) in explaining the trend rise in average bank funding spreads?

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Appendix

1. List of issuers:

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| ABSA BANK LIMITED |
| ABSA GROUP LIMITED |
| AFRICAN BANK LIMITED |
| AFRICAN DEVELOPMENT BANK |
| BANK OF CHINA LIMITED |
| BANK WINDHOEK LIMITED |
| BARCLAYS BANK PLC |
| BNP PARIBAS |
| BNP PARIBAS ARBITRAGE ISSUANCE B.V. |
| CAPITEC BANK |
| DEVELOPMENT BANK OF SOUTHERN AFRICA |
| FIRST NATIONAL BANK OF NAMIBIA LIMITED |
| FIRSTRAND BANK LIMITED |
| GRINDROD BANK LIMITED |
| IMPERIAL BANK LIMITED |
| INDUSTRIAL DEVELOPMENT CORPORATION OF SOUTH AFRICA |
| INVESTEC BANK LIMITED |
| INVESTEC LIMITED |
| LAND AND AGRICULTURAL DEVELOPMENT BANK |
| MAURITIUS COMMERCIAL BANK LIMITED |
| NEDBANK GROUP LIMITED |
| NEDBANK LIMITED |
| STANDARD BANK GROUP LIMITED |
| STANDARD BANK NAMIBIA LIMITED |
| THE STANDARD BANK OF SOUTH AFRICA LIMITED |