

## **Bond markets: Operation twist in reverse, or just bowling a wrong 'un?**

The US Federal Reserve System has been conducting operations to reduce the interest yield on long dated US Treasury Bonds, and by so doing attempting to twist the yield curve, that is buying longer dated bonds in order to reduce long term interest rates.

The Fed has been borrowing short from its member banks to buy long dated US government debt. It has committed some US\$400bn to the scheme. The Fed owns about US\$1.675 trillion of US government debt or over 10% of all US debt in issue. It also holds US\$841bn of mortgage backed securities issued by Fannie Mae and Freddie Mac, the government sponsored enterprises that support the mortgage market in the US. The Fed has been buying these securities in the market and the sums paid out have mostly ended up as excess cash reserves (deposits) held by banks with the Fed itself. What the Fed pays out (reflected on the asset side of its balance sheet) has ended back with the Fed. As much larger member bank deposits far in excess of the required cash reserves.

Mortgage loans in the US are typically long dated loans for up to 30 years, at fixed rates of interest linked to the yield on long dated Treasuries. The intention of the Fed is to reduce mortgage rates to encourage demand for homes and house prices. By so doing it would encourage a recovery in home building activity. Higher house prices would also help US households recover some of the equity they have lost in their homes.

### **And so to the reverse**

Meanwhile in SA, we are seeing something of a twist in reverse. The SA Treasury has also been conducting its own intervention in the market for SA government debt. This may be described as the reverse of operation twist in the US. The Treasury has been very busy extending the maturity profile of RSA government debt, actively buying up short dated government securities before due date and issuing much long dated securities of both the conventional and inflation linked variety. With the yield curve in SA upward sloping (short rates well below long rates) this means that for now,

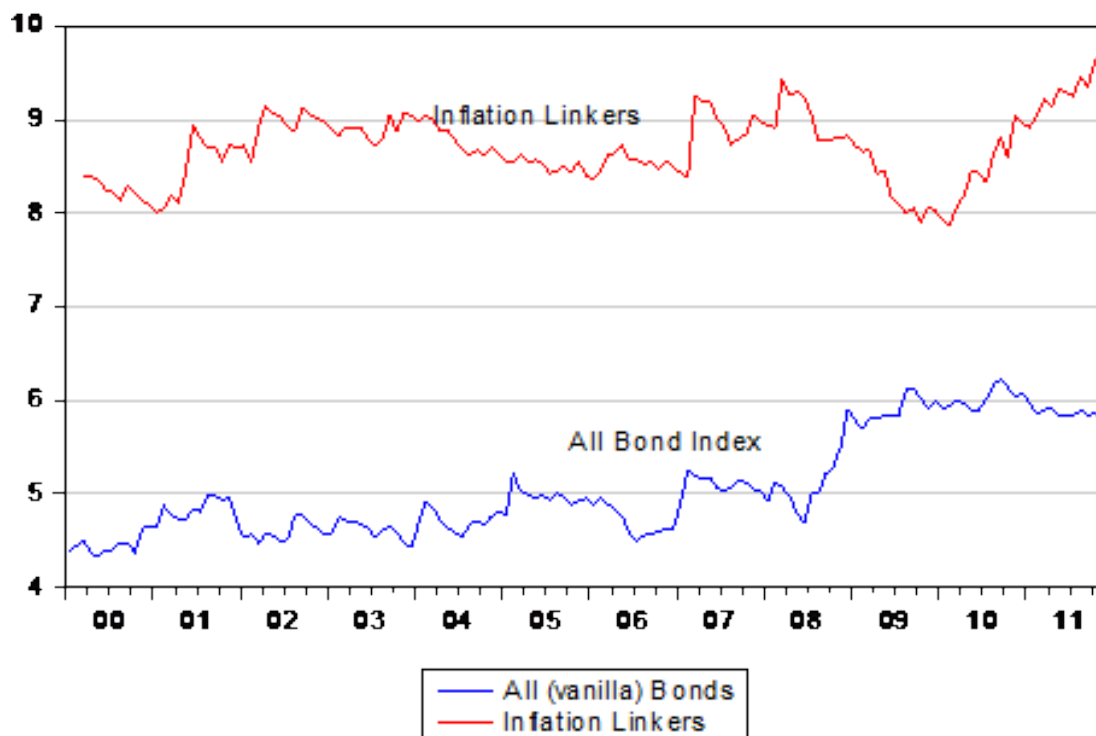
or until the yield curve turns flat or negative, the SA taxpayer is paying up to 2% per annum more for its longer term borrowing. This additional expense of servicing interest bearing domestic debt might well be better incurred helping the poor or giving tax relief to businesses to employ them. Why then the rush to roll over RSA debt before it matures and especially to convert lower interest short term debt to higher longer dated debt, before it is required to do so?

The average duration of SA debt, that is the time it takes for lenders to recover their capital through a mixture of coupon payments and principal repayment, has risen significantly over recent years as we show below. Were these refinancing operations of the SA Treasury being conducted in the vanilla bonds alone, one might conclude that the Treasury, in preferring long to short, had a negative view on the inflation outlook for SA. Borrowing long is a good idea when inflation turns out to be unexpectedly high – borrowing short makes sense when the market overestimates the inflation rate incorporated into long term interest rates.

However the opposite is true when issuing inflation linkers and the Treasury has been especially aggressive converting its short dated inflation linkers into much longer dated inflation linkers. If inflation was expected to rise above expectations, an issuer would much prefer issuing short dated inflation linked securities, rather than the longer dated maturities. These long dated linkers would bring ever higher interest payments and receipts as inflation rose.

At recent auctions the Treasury has been issuing inflation linkers with 20 years to maturity (for example the R202) at real yields of 2.6% to redeem the once dominant R189 that is due to mature in 2013. The R189 is currently priced to offer a negative real yield of -0.16%. Or in other words, the Treasury is now paying out something like 240bps extra to roll over this inflation linked debt, rather than waiting for this shorter term debt to mature in two years time.

## **Average duration of RSA Inflation and Vanilla Bonds**



Source: Investec Securities and Investec Wealth and Investment

## Why Europe is not a good example

Why then would the SA Treasury be undertaking such expensive debt management? Hopefully it is not in response to the difficulties European governments and their debt managers have been seen to have in rolling over their debt with highly bunched maturity schedules. These refinancing difficulties arise because the Greek, Portuguese, Italian and Spanish governments cannot call upon the services of their own central banks to convert, interest bearing government debt to cash. Their European Central Bank (ECB) sits in Frankfurt, and given the treaties under which it is constituted, is not allowed to directly convert longer dated Euro debt into cash. This is not a problem for the US. If faced by any temporary reluctance to bid for longer dated Treasuries, the Fed could come to the rescue with extra cash.

So could the SA Reserve Bank, if called upon, issue rands to the Treasury in exchange for government securities to overcome any refinancing emergency that might show up. Even more obvious would be for the Treasury, in any such an emergency, to utilise the enormous pile of cash it is holding with the Reserve Bank (close to R70b with another R30b plus of

cash held ashore. This cash has been accumulated in sterilization operations designed to neutralise the extra cash in rands received by the banks supplying USD and other forex to the Reserve Bank as it intervenes in the foreign exchange market to acquire foreign exchange to boost its reserves and inhibit rand strength. Sterilization means the Treasury issues more interest bearing debt and holds the proceeds on deposit at the Reserve Bank.

The ECB is however allowed to provide as much cash to its member banks as it wishes in exchange for collateral acceptable to it including distressed Euro government debt. In this way the ECB is preventing a collapse of the European banking under pressure from the declining value of the government securities they own. What was considered the safest form of lending for European banks has become anything but safe- the issue now addressed by the compact on fiscal rules for European governments

Long term interest rates are the geometric average of expected short rates over the same period. To think otherwise is to second guess the market in fixed interest and there is little reason to believe the issuers of debt have superior insight about the direction of interest rates than lenders have. There are however some unintended consequences of longer duration: the longer the duration the more responsive the All Bond Index will be to unexpected changes in interest rates. Adding risks to fixed interest rate bonds in general discourages demand for them.

There is presumably a case for smoothing what may be bunched repayment schedules for maturing government debt. But there is also a case for anticipating them in advance when scheduling debt, to avoid bunched repayments making such smoothing operations unnecessary in the first place. Paying a large interest premium to do so does not make good sense; nor is long dated debt issued by the RSA necessarily a superior option for the SA taxpayer than issuing shorter dated debt.

***Brian Kantor***

