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Marian

As requested, here are my thoughts on the (non-permanent, non-institutional) alternatives to facilitating the creation of bullet RMBS notes. In the interests of getting this to you before ASIC's presentation tomorrow, I have knocked this up without the usual level of wordsmithing. I'd appreciate it if this was therefore kept reasonably close.

Let me know if anything requires further explanation.

Regards

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GIVING RMBS THE BULLET

This note considers alternative means of achieving bullet structures that are likely to make RMBS securities appeal to a broader set of investors. While inclusion in the UBS Composite All Maturities Index would probably lead to increased demand, fixed rate bullet securities are also likely to appeal to investors seeking to *outperform* the index even if their inclusion is not certain. Bullet securities are thus likely but not guaranteed to enhance liquidity in the RMBS asset class.

A liquid RMBS market would obviate the need for Government intervention in this market. It is therefore worth exploring what, if any, role there is for the Government in re-establishing bullet securities. All else being equal, an intervention that is more consistent with the 3 T's (temporary, timely and targeted) is preferred, provided it is effective.

It follows then that any liquidity-enhancing mechanism, provided it is both temporary and effective, would be preferred to one that requires permanent Government support.

Were RMBS (amortising or bullet structures) to be included in the definition of liquid assets, albeit with some sort of additional feature to guarantee liquidity, this would be the sort of change to the landscape that would provide confidence to real money investors, who are concerned about funding redemptions. Investors would be likely to take comfort from having confidence that they could rely on being able to find a bid from an ADI which in turn can include the asset in its liquidity book and/or readily convert it to cash at little cost.

In terms of relativities, my expectation is that the creation of bullet structures might provide a *fraction* of the improvement in liquidity that would be achieved were RMBS to be included in APRA's definition of a liquid asset and should be viewed as an additional enhancement to liquidity that complements any regulatory-driven effects.

Therefore, further Government intervention should arguably swing on the inclusion or non-inclusion of RMBS in the definition of liquid assets and whether or not to facilitate bullet structures is arguably a bit of a side issue. *If RMBS is not to be included, then we are flogging a dead horse that bullet structures are unlikely to revive.* If they are to be included, then there may be a case for an additional top-up of the investment program to assist with the transition to the new liquidity regime. (Announcing the availability of further funds does not mean the funds will necessarily need to be used, but may actually *slow* the rate of AOFM investment, as it could take the 'last one in is a rotten egg' tone away that is starting to creep into the market.)

After first revisiting why bullet structures are difficult to produce, the rest of this note explores the ways that Government intervention could be used to facilitate the creation of bullet securities. It focuses on the less permanent alternatives and excludes the 'institutional' models proposed by Gans and Joye (AussieMac) and, more recently, ASIC.

Why are bullet notes so hard to produce?

Mortgages, and therefore pools of mortgages, repay principal and interest over time, with a legal maturity of up to 30 years. Bullet bonds on the other hand pay interest only until maturity, at which point all capital is repaid. Forecasting accurately the rate of additional mortgage repayment ('prepayment') thus becomes even more important if we are to put a bullet security into the capital structure.

If repayments are slower than expected, there is not enough cash in the trust issuing the bonds to repay the bonds at maturity. If repayments are faster than expected, there is too much cash in the trust earning a negative carry, making the structure uneconomic.[1]

Getting someone to bear some or all of this risk is the key to creating a bullet security. Ideally this 'someone' would be the market, rather than the Government.

As an aside, pre-GFC RMBS structures would regularly include a call option that, if not exercised, resulted in the so-called "soft-bullet" structure reverting to a floating rate note with a coupon set at a much higher margin than the prevailing funding margin at the time of issuance. This gave investors confidence that the issuer would be suitably motivated to call the bonds and thus effectively created a bullet structure. In the GFC the shortcoming of this approach was revealed, as the general level of funding margins had risen by so much by the 'maturity' date that it was no longer rational for issuers to call the soft bullet securities.

The Minimalist Solution

s45, Breach of confidence

The first model is one proposed by and contains some intellectual property that should be protected.

s47, commercially valuable information

In the event that the underlying mortgages prepay faster than initially expected, we need a way to reduce the negative carry in the trust. This is where the AOFM comes in. , the AOFM can facilitate the transaction by investing in a tranche that other investors may not find appealing. This tranche is unlikely to appeal to other investors because of its necessarily long expected life and its hypersensitivity to prepayment rate changes.

From the AOFM's perspective, it is already purchasing long dated RMBS securities to facilitate the creation of relatively short dated notes (with c. 1.5 year weighted average lives [WALs]) above it in the capital structure. Adding a greater level of sensitivity to prepayment risk which, as a worse case, means the AOFM is repaid *faster* than expected, is not a huge stretch.

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[1] Negative carry means the return earned on surplus funds is below the rate paid by the trust on its liabilities (the RMBS it issues).

[2] Weighted average margin over time (essentially a way of determining the all in cost of the RMBS structure so it can be compared with other forms of funding).

The risk of this approach is that the market becomes welded on to the AOFM purchasing the long dated, hypersensitive piece in the structure.

In terms of its mandate, the AOFM would require no changes to the direction from the Treasurer or to its investment guidelines from the Secretary. Not surprisingly, it is actively considering this structure at the moment. [S 47 commercially valuable information]

Revisit Substitution

Another way to reduce the negative carry associated with high rates of prepayment is to allow the trust to put the money back to work to buy more mortgages from the sponsoring originator (loosely, 'the issuer').

In terms of the capital repayment profile, this has the effect of keeping outstanding capital at 100% for the length of the substitution period, before reverting to the more normal curve associated with repayment of principal and interest.

In the past, substitution periods were effectively used to help facilitate bullet structures. Post GFC investors (including the AOFM) have been reluctant to support them due to the risks associated with essentially 'pre-approving' the future funding of mortgages that cannot be examined at the time the deal closes.

Previously rules were used to ensure that substitution would not lead to a material deterioration in the quality of the underlying pool of mortgages used as collateral. However, applying these rules at the pool level would almost guarantee that the worst possible mortgages would be substituted into the pool. A possible solution to this risk management problem may be to apply the substitution rules at the level of the individual mortgages to be substituted into the pool each month, rather than at the overall pool level.

Other issues with substitution are that APRA may not be prepared to give capital relief to ADIs that use RMBS with a substitution period (however this may be a moot point if they can't obtain capital relief due to the need to retain the first loss pieces in the capital structure in the first place). Ratings agencies may also have changed their views on the risks, as this feature has been untested in recent years and they have become more conservative during this time (yes, the irony isn't lost on me either).

In terms of the AOFM mandate, the direction from the Treasurer would not need to be changed but the additional (albeit manageable) risks may warrant notifying him of such a significant change. The investment guidelines approved by the Secretary would require modification; any modification should include detail on the maximum term of any substitution period and the rules around mortgages that can be substituted into the collateral pools.

The Ziegler Put

A model worked up within the AOFM around a year ago that was considered to perhaps be consistent with the concept of a 'liquidity facility' the Government asked Treasury to explore was the Ziegler Put. [S 47, commercially valuable information] In the minimalist model, the AOFM would facilitate the calling of any soft bullet notes that may not have been able to be funded with cash in the trust at each maturity date. Essentially at the soft bullet date the AOFM would purchase any surplus notes, net of any credit losses that may have occurred. This would typically behave like a standard amortising RMBS note thereafter.

The unknown volume of any contingent funding requirement associated with this option makes it unattractive. Further, any systematic underpricing of this feature would be likely to cause the market to weld itself onto the provider of this option. Consequently, we see it as a positive development that the market is now on the verge of finding a way to price and [S 47 commercially valuable information] as illustrated earlier in the minimalist model.

In a sense, the institutionalisation of this model would seem to be the model that ASIC is proposing, although this contention is worth testing. All of the above shortcomings (as well as some others) are therefore likely to apply with the institutional model.

Michael Bath 7 October 2010.