Securitisation swaps book launched

New publication aims to quench knowledge draught

Spotting a gap in the market, a team of structured finance veterans have collaborated on a new publication on an under-explored topic, which bridges the gap between credit derivatives and securitisation. Titled Securitisation Swaps, the book is aimed at all securitisation and derivatives industry participants and is set to be published by Wiley on 18 February, with the e-book available online now.

The authors consist of Mark Aarons, currently head of investment risk at a leading Australian funds manager, Andrew Wilkinson, senior legal counsel at National Australia Bank and Vlad Ender, director and owner of Kauri Solutions. Aarons explains how part of his early years in securitisation, working through the financial crisis, helped build up the experience and the inspiration needed to write Securitisation Swaps.

"I was transferred by the National Australia Bank from Melbourne to London in 2007, just before the financial crisis started," says Aarons. "After Lehman's defaulted, our UK subsidiary, Clydesdale Bank, needed a highly rated swap provider for its RMBS programme to replace investment banks who were downgraded. I was in the right place at the right time and was asked to look at the problem. There was no information I could find on how to price a securitisation swap, let alone advise on structuring options and risk mitigation techniques. We had to work it all out ourselves – which we did."

He continues: "That's what started a fruitful decade of work building-out a securitisation swaps business. In 2010 I transferred back to Melbourne where I headed-up the derivative structuring team for the next seven and a half years.

The work for Clydesdale turned out to be really useful for NAB's extensive securitisation client base in Australia and also to other UK banks. Over the years we transacted an extensive variety of swaps for different types of RMBS programmes and tranche paydown styles, covered bonds and auto ABS. After leaving banking in 2017 to move to the buy side, I still found that there was no resource for practitioners on securitisation swaps."

Aarons comments that that the face value of these swaps is valued at trillions of dollars - a surprise given the difference in nature to other derivatives. This realisation, he says, was the genesis for the book and his friends and colleagues, Ender and Wilkinson, then agreed to work on it with him.

Wilkinson also worked through the financial crisis in 2008 on the legal side, in the structured finance group at Linklaters. While a period of immense upheaval, he says, it was during this time that the emphasis on swaps in securitisations became more important to the viability of deals, as well as becoming quite specialised.

Just before the financial crisis, in 2007, Ender was head of new product implementation at NAB and, while looking for new products to work on, Aarons asked for his assistance with securitisation swaps. This was good timing, says Ender, and adds that he “ended up joining the structuring team, supporting transactions through their entire lifecycle, which was fun. Securitisation swaps are very bespoke products, so you need to understand a whole range of issues to do them well."

A major motivator for the book is that, while there are a number of people that understand swaps and a number that also understand securitisation, there aren’t many that understand both well, which is important for executing securitisation swaps efficiently, stresses Aarons. He adds that there are many “pricing optimisation opportunities, risk mitigation techniques and structuring options which are clear once swaps and securitisation knowledge become integrated”.

Wilkinson seconds this and says that, in securitisation, the focus is typically on originators and how the deal prices in relation to previous deals, but with little transparency as to the landed cost of funds. He adds: “This can be materially affected by the cost of securitisation swaps. As a result, having more knowledge with regard to swap pricing is really useful to understanding – and controlling – the overall cost of a secured funding trade.”

Securitisation swaps differ from other derivatives, Aarons says, because they are linked to the inner workings of the underlying structured funding and so the dynamics of the underlying loan pool and cash flow waterfalls need to be incorporated into the modelling of the swaps. This impacts pricing, structuring, risk management and legal documentation, says Aarons, making it an exercise in bespoke tailoring which *embeds* securitisation swaps in the transaction structure.

He elaborates: “This is in contrast to derivatives used by corporations, fund managers and other entities to manage risk. For example, consider a fund manager who owns US$200m of offshore assets and hedges them back to domestic currency with foreign exchange (FX) forwards. It doesn’t matter if the offshore asset is a portfolio of stocks or a power station, the FX forward is a simple currency risk management overlay, which can be easily bolted-on."

Securitisation swaps are also designed to remove market risk from funding deals typically at a point when the underlying cash flows change, says Ender. He adds that this can be due to a trigger feature in a cash flow waterfall or if the originator hasn't called its bonds at a call date, so then the swap will alter cash flows in lockstep.

One of the great benefits of this de-risking procedure, says Aarons, is that it enables a structured finance transaction to receive a very high credit rating, often at triple-A, boosting the cost-effectiveness of a deal for lenders. Ender illustrates the point, with the example of a structured funding issuance of USD bonds from a GBP denominated loan pool, whereby currency volatility could expose US investors to significant loss, without deterioration in the credit risk of the underlying pool of assets.

It is therefore vital, Ender says, to remove this currency risk to achieve a triple-A rating on the bonds. This is, however, "far from an ordinary vanilla cross-currency swap if there's prepayment risk or an issuer call option on the bonds."

Wilkinson says that the book also looks at the "other side of any securitisation swap" – where the provider of the swap is assuming complex risk and needs a significant amount of expertise to safely manage the exposure. He notes that there are many different parts in a securitisation swap which can be "moving all the time, such as FX rates, interest rates and basis curves" and the necessary quantitative modelling, structuring and legal mechanisms used to reflect this are all equally important.

While they can be used to de-risk transactions, securitisation swaps can also create new risks in structured funding transactions, says Aarons. This is because a credit rating downgrade of the swap provider can lead to a downgrade of the associated bonds, without any change in the creditworthiness of the underlying loan pool.

Ender notes that investors should be interested in securitisation swaps as they can be dangerous if not fully understood. He adds: "Northern Rock's Granite RMBS swaps were with RBS, which suffered significant ratings downgrades. RBS couldn't novate the swaps which they were required to do.

"As a result," continues Ender, "the rating agencies downgraded some of the Granite bonds and investors suffered. In the US, the Maiden Lane III sale got very complicated because of the underlying securitisation swap, which took a lot of people by surprise at the time."

Consequently, the book devotes three chapters to the key risks involved in securitisation swaps: swap prepayment risk, swap extention risk and downgrade risk. Swap prepayment risk involves the risk of simultaneously adverse moves in both loan pool prepayment rates and market risk factors.

Swap extention risk, says Wilkinson, involves the extention on the WAL of the underlying ABS or RMBS, which is a result of originators not calling their bonds as expected. Downgrade risk arises from swap providers having to comply with strict obligations linked to their own credit ratings, as defined by the rating agencies, and arising from the fact that swap providers can be rated lower than the structured funding they are supporting.

The book also details the many types of securitisation swaps available. These include, says Aarons, "liability swaps, swaps with pass-through prepayment risk versus controlled amortisation prepayment risk and the unique risks associated with these. This final chapter also covers how to put a securitisation swap deal together from start to finish."

Additionally, Wilkinson says that the book shows how securitisation swaps can be applied to certain asset classes, highlighting the fact that in a pass-through RMBS you get certain risks that can help mitigate a balance guarantee swap. These are structured in such a way, he says, to get rid of prepayment risk which – in turn – can impact the rating a transaction receives.

In addition, says Ender, each swap needs to be modelled very carefully with risk management "in the forefront of one's thinking to ensure that the transaction takes on the right amount of risks and passes on the others through swaps. This has a material impact on the cost of funding."

In terms of the timing of the publication, Aarons says that it was in part a result of moving on from the sell-side and generally feeling that there is a "real gap in the market" on the subject. Likewise, he decided it was an opportune moment to pass-on his accumulated experience and to dispel some of the mystery behind securitisation swaps.

Wilkinson seconds this point and says that the book has "something for everyone" in the securitisation sector, from the structuring, legal and even the issuance side. Aarons agrees, stating that it is important when modelling complex structured finance products, to have a holistic understanding of the risks involved - if the swap isn't done well, he says, "the deal doesn't get off the ground, or ends up costing the swap provider dearly."

Ender adds that with a continued "comeback" for securitisation expected, so more people will deal with the swaps and that, during the crisis, a lack of understanding of the risks involved in securitisation swaps caused "a lot of pain" for originators, investors and banks. He concludes that this was "because few people were able to see, understand and act on all the aspects of these complicated transactions" – a problem this book aims to solve.

This article was written by Richard Budden and first published in SCI on 30 January 2019.