Simple synthetic securitisation

Why and how we invest in synthetic balance sheet securitisations

Introduction

On 30 September 2015 the European Commission (the 'EC') presented its Action Plan on the Capital Markets Union. In it, the EC has included regulations to stimulate high quality securitisations. The stimulus comes through preferential capital treatment of securitisations that meet a set of criteria. The criteria focus on making securitisations simple, transparent and standardised ('STS' criteria). After careful study and consultation with the industry, regulation on STS criteria has been drafted for true sale securitisations and ABCP securitisations. In the meanwhile the EC has asked the European Banking Authority ('EBA') to do a similar study for synthetic securitisations.

We strongly support the initiative to draft STS criteria for synthetic balance sheet securitisations as we believe these synthetic securitisations can contribute to a more sustainable financial system, add value to the real economy, are conceptually simple and appropriate for standardization. In this position paper we will explain this conviction by highlighting why we invest in synthetic securitisations, what our core investment philosophy is and how we get comfortable with specific risks involved.

PGGM and PFZW

PGGM is a leading pension fund service provider in The Netherlands and currently manages € 181 billion (September 30, 2015) of pension assets for a number of Dutch pension funds, including € 161 billion (September 30, 2015) for the pension fund for the care and healthcare sector ('PFZW'). PGGM and PFZW are both not-for-profit organisations and strongly believe that financial return and social responsibility go hand in hand. Consequently, we have developed a social agenda and a responsible investment philosophy in which we invest in companies, projects and assets in which environmental, social and governance standards are met. Through these initiatives we try to take our responsibility as a financial institution and actively contribute to a more sustainable financial system.

PFZW has given PGGM an exclusive mandate to invest up to 2.5% of their assets in balance sheet securitisations, with a focus on synthetic securitisations. We typically invest in first loss tranches and call these 'risk sharing transactions'. We have started investing in 2006, executing new transactions every year since inception. Adding all transactions together, the amount invested in such risk sharing transactions to date exceeds € 5 billion, relating to loan portfolios of over € 80 billion. We have thus become one of the most experienced and largest active investors worldwide in this segment of the securitization market. Our current portfolio is invested in transactions referencing approximately € 37 billion notional of underlying portfolios with exposure to geographies across the world. By engaging in risk sharing transactions PGGM and PFZW help the banking sector to manage their credit risk exposures, leading to less systemic risk and a more sustainable financial system – one of the pillars of PGGM's responsible investment philosophy.

What are synthetic securitisations?

In a synthetic securitisation a bank buys credit protection on a portfolio of loans from an investor. This means that when a loan in the portfolio defaults, the investor reimburses the bank for the losses incurred on loans in that portfolio up to a maximum, which is the amount invested. This amount therefore provides credit protection for a slice of the portfolio, which is often called the 'first loss tranche'. The size of this tranche is typically chosen in a way to cover at least the expected losses on the portfolio as well as a share of unexpected losses. The bank usually retains the rest of the risk, which is called the 'senior tranche'.

Before closing, the bank and the investor agree on the terms of the transaction, such as the amount the investor is at risk for, the duration of the contract and the loans that are eligible for inclusion in the portfolio. Choosing which loans are eligible can be on a disclosed basis, where the investor knows the exact names of the borrowers of these loans, or on a blind pool basis, where the investor does not know the identities of the borrowers. In the latter case the loans are chosen based on criteria, such as the type of loans, sector, geography, credit risk, et cetera.

The term 'synthetic' comes from the fact that, unlike in a true sale transaction, the loans being securitised are not sold by the bank but are referenced, which means they remain on the bank's balance sheet. This way, the bank reduces the credit risk on the securitised loans and remains in charge of managing the loans and the lending relationship with their client itself. Synthetic securitisations are often used for hedging the credit risk on loans that cannot easily be sold[1]. Examples are revolving credit facilities, SME lending and trade finance, as these often require a large amount of operational handling that a bank is uniquely set up for and which cannot easily be taken over by a non-bank.

Synthetic vs true sale securitisation

Synthetic securitisation serves a different purpose than true sale securitisation. In a true sale securitisation, the bank sells the loans to a Special Purpose Entity ('SPE') and therefore receives **funding** at the closing of the transaction. The bank usually retains the first loss tranche. The investor usually only bears the risk on the less risky senior tranche.

In a synthetic securitisation, typically the first loss tranche is transferred to the investor, while the bank retains the remainder of the risk. The amount invested is typically larger than the amount of capital the bank would be required to hold for that portfolio. Because the securitisation offers a perfect hedge, the bank can benefit from **capital relief** thanks to the synthetic securitisation transaction. However, as the loans are not sold, the only payments a bank can receive are when a loss occurs in the portfolio. Consequently, synthetic securitisation is primarily for credit risk hedging and capital management purposes; and not for funding purposes.

True Sale vs Synthetic Securitisation

	True Sale Securitisation	Synthetic Securitisation
Sale of assets	Yes	No
Purpose for bank	Funding	Credit risk hedging/Capital management
SPE required?	Yes	Possible, not required
Ownership of assets	SPE	Originating bank
Typical asset types	Consumer loans, credit card receivables, mortgages	Corporate exposures, SME lending, trade finance
Investor's return	Based on cash flows from underlying loans	Based on pre-agreed credit risk premium
Interest rate risk on underlying loans	Hedged separately	Not applicable
Currency risk on underlying loans	Hedged separately	Not applicable

1 This is called 'balance sheet securitisation' as the securitised loans remain on the bank's balance sheet. The technique of synthetic securitisation can also be used to buy credit protection for assets that the buyer does not actually own; these are called arbitrage securitisations. The benefits of synthetic securitisation that come from the fact that the bank retains ownership of the securitised loans are thus not applicable to arbitrage securitisations. We do not invest in arbitrage securitisations but only in balance sheet securitisations. Hence, all explanations in this paper are only applicable to balance sheet securitisations.

Complexity

A predominant concern regarding synthetic securitisations is that they are complex. This is not entirely unjustified; the legal mechanism of the credit risk transfer of synthetic securitisations can be structurally intimidating and difficult to fully grasp at first sight. Because of this, we take the appropriate structure for the transaction into careful consideration (see below for detail).

That said, we believe synthetic balance sheet securitisations or 'risk sharing transactions' are **conceptually quite simple:** an investor takes credit risk on a selected portfolio of loans from a bank up to a pre-agreed amount. For this credit risk the investor gets a commensurate return in the form of a periodic coupon payment. In its essence, this is all there is to it.

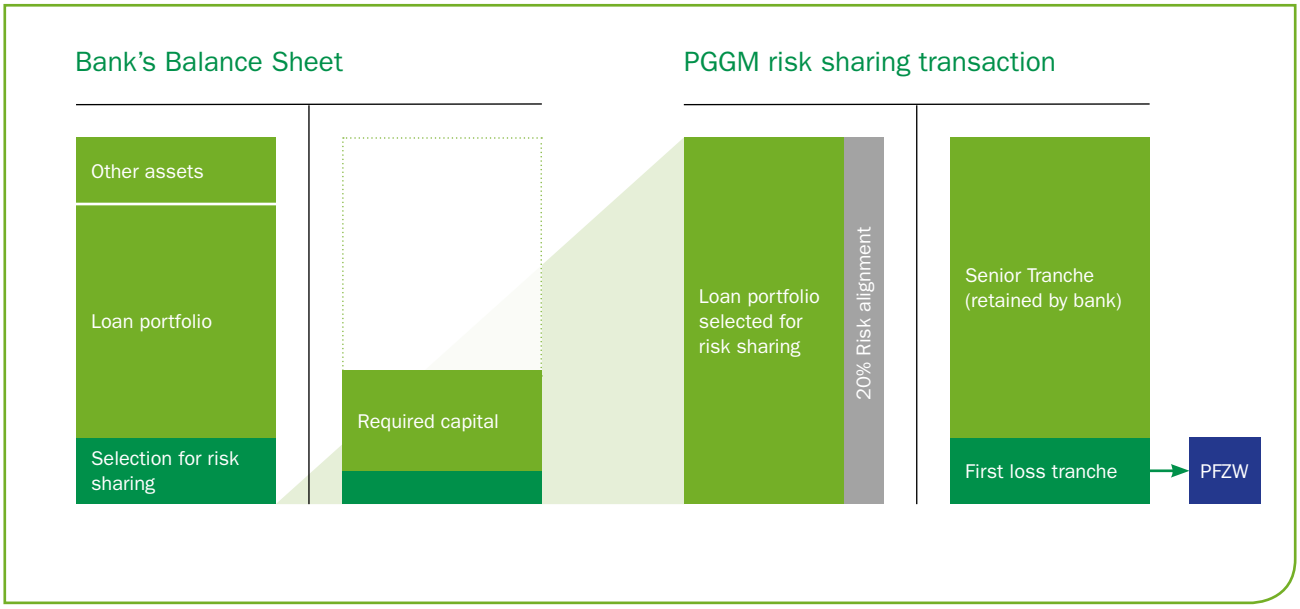
The figure below shows the typical outline of our risk sharing transactions. Together with the bank, we agree on a selection of loans from a particular lending book on the bank's balance sheet that is eligible for the risk sharing portfolio (left side of the figure). Of this loan portfolio, we typically invest in the first loss tranche and the bank retains the senior tranche. In addition, we ensure there is a strong alignment of interest. We structure this by requiring the bank to continue to hold at least 20% exposure to the same credit risks as us. This way, both parties 'feel the pain' when there is a credit loss. Our belief is that this provides for a relatively simple and easy-to-understand risk-return profile.

Concerns

Nonetheless, there are certain justifiable concerns that remain. From the bank's perspective, the main concern is whether the credit risk is adequately transferred through the structure[2]. From an investor's perspective, particular concerns exist over:

- **credit risk:** what type of credit risks is the investor exposed to?
- **moral hazard:** will the bank still service the loans after they are hedged?
- **adverse selection:** will only bad loans be included in the securitisation?
- **operational risk:** will the securitisation structure work?
- **counterparty risk:** is the investor exposed to default risk of the bank?
- **structural risk:** which other risks are created by the structure?

We understand these concerns, and as an investor we share these concerns. In the section below we will first outline our core beliefs, after which we discuss how we address the different elements involved and how we – and our client – become comfortable with these risks.



2 This concern is addressed in the guidelines on significant risk transfer and will not be separately discussed here.

Our core beliefs

As mentioned, internally we refer to our investments in synthetic balance sheet securitisations as 'risk sharing transactions'. The use of this term emphasises our principal belief that the transaction should be a genuine sharing of credit risk: any losses we experience as investor under the transaction should be as similar as possible to the losses experienced by the originating bank on loans in the securitised pool.

From this basis follow some of our core beliefs:

- Creating a long-term partnership with the bank;
- In which we share the credit risk regarding their core businesses only;
- In which activities the bank has a well-recognised market position;
- investing in a risk sharing portfolio that is a fair reflection of the underlying loan book;
- with true alignment of interest ensuring losses are shared; and
- no significant counterparty risk for either side.

Addressing the concerns

As an experienced investor in synthetic securitisations we have given considerable thought to addressing the concerns listed earlier, in order to be comfortable that we structure robust transactions with an attractive and simple risk-return profile for our client.

Firstly, what we strive for is a **long-term partnership**, in which we share the losses of the bank on their core credit portfolios in the same way as they are experienced by the bank. Therefore, we always aim to settle final losses in the risk sharing portfolio at the same level as the bank reports them on their profit & loss account, which is in line with how shareholders face such losses. Additionally, as a long-term partner we become very well acquainted with the risk sharing bank. As such, when a transaction matures, we are always available to negotiate a new transaction and ensure that the bank can enjoy continuous credit protection on the relevant loan books. In our almost 10 years' experience, we have built up several such relationships in which we roll over maturing transactions and we continue to strive to build more.

As a starting point for an individual transaction, we believe in **sharing purely the credit risk** of the loan portfolio. We price the credit risk as a simple fee that should be paid periodically. We have a strong preference for **simple pricing** by avoiding excess spread or other complex mechanisms. The price we demand therefore is completely separate from the interest rate on the underlying loans[3], and purely a risk premium related to the perceived credit risk of the loans. The net result for the investor is then, in essence, the risk premium over the outstanding pool minus expected losses. Other risks, such as currency risk, interest rate risk and counterparty risk are mitigated through the structure. How we deal with these risks will be explained below.

To understand the **credit risk** of the transaction we conduct in-depth due diligence on the loan portfolio and the bank and take careful consideration when structuring the transaction. Firstly, understanding the underlying type of credit risk is key. If we do not understand the underlying risk, we will not invest.

Secondly, we focus on credit risk that is forthcoming from a successful **core activity** of a bank in which it has a **well-recognised market position**. To us it is relevant that the activity is strongly embedded in the bank's DNA, gets a lot of attention from senior management and that the bank has the means to ensure it is properly (risk) managed in the firm.

Moreover, we pay significant attention to the bank's **processes** that relate to the (lending) activity we intend to share the credit risk of. We invest a lot of time to fully understand all relevant processes within the bank, who the key people involved are and the bank's track record in these processes. Areas of particular attention are origination, monitoring, work-out, risk management, fit within overall strategy, et cetera. In effect, we 'subscribe' to these processes by entering into a risk sharing transaction with the respective bank.

Knowing the actual individual names of the underlying entities in the risk sharing portfolio is not important to us. What we need to know are the risk characteristics of each line item, such as internal credit rating, industry sector, country, tenor, et cetera. From this perspective, we prefer to start with a reference portfolio that is a **fair reflection** of the bank's total portfolio, which we then tailor to reduce certain concentration risks[4]. The resulting risk sharing portfolio is diversified and the majority of the positions are illiquid names.

We insist there is a strong **alignment of interest** between parties, resulting in the bank holding at least 20% of the same credit risk on their books unhedged. This alignment of interest requirement is of such a size that potential

3 We want to separate the price of the transaction from the interest rates of the underlying loans. A bank may price a loan on the basis of the whole package of services that the bank offers to a client. Accordingly there may be discounts involved that are compensated through other business of the bank.

4 Single obligor group limits, sector limits, rating bucket limits and geographical limits are examples of criteria that a reference portfolio has to adhere to.

losses are not easily covered by upfront underwriting fees and an interest payment. The undesired effects of the 'originate to distribute' model are significantly reduced by insisting the underwriter holds sufficient 'skin in the game'. Furthermore, ensuring that the reference portfolio loans are a reflection of a core activity of the bank provides assurance that the bank will continue to service the whole book that is being referenced. At the same time, the alignment of interest requirement safeguards the bank's commitment on the level of the reference portfolio loans. Together these mitigate **moral hazard**.

To ensure **adverse selection** is reduced as much as possible, we require that the internal credit rating of each loan that enters the reference portfolio is up to date. In addition, we insist on a pre-agreed set of selection criteria used to add new exposures to the risk sharing portfolio, typically executed by an automated software program or algorithm. Cherry picking by individuals should at all times be avoided.

To address **operational risk**, the algorithm of this automated program is subject to further due diligence by our specialized operational due diligence team. Furthermore, any credit event in the portfolio that results in a loss claim by the bank will be verified by an independent verification agent to ensure that the claim was validly made before any settlement of losses takes place.

We structure the transaction in a way that avoids **counterparty risk** for either side. Firstly, we always fund the transaction fully by transferring an amount equal to the full notional of the investment at inception of the transaction into a separate account. Consequently, when a credit event occurs, the bank is ensured that cash is available to settle the claim regardless of the solvability of the investor. To further ensure that we, as investor, do not run counterparty risk to the bank, this prefunded cash is typically held at a third party custodian and invested in highly rated, virtually riskless short-term collateral securities: usually 3-month commercial paper of AAA or AA+ rated issuers in the appropriate currency. Examples are German or US T-bills or CP issued by KfW or EIB. If the bank defaults on the credit protection payment, the credit protection ends and the investor receives the remaining investment amount from the proceeds of the collateral, after deduction of claimed losses for credit events. As the collateral securities mature every 3 months, there is also no liquidity risk associated with this structure.

Finally, in terms of **structural risks**, we find that synthetic securitisations are actually easier to assess than **true sale securitisations**. As the loans themselves are not transferred but only referenced in the transaction, and the hedge concerns only credit risk, the investor is not exposed to interest rate risk or currency risk on the underlying loans. The actual size and timing of the cash flows on the underlying loans do not matter to the investor in a synthetic securitisation as long as there is no credit event. Also, operational and legal risks with regard to the ownership transfer of loans are avoided. Through this approach, we have become comfortable with the perceived structural complexity of synthetic balance sheet securitisations. The standards we have developed internally have proved to create robust and attractive investments for our client in various economic circumstances.

Why develop STS criteria for synthetics

Balance sheet securitisations in general are a risk management tool for banks used to hedge existing exposures. Synthetic securitisation enables the bank to hedge exposures that are difficult or even impossible to sell and therefore cannot be hedged via a true sale securitisation, such as revolving credit facilities, SME lending and trade finance. Synthetic securitisations often hedge credit risks related to an entirely different segment of lending than true sale securitisations do. As such they are complementary to the currently proposed set of STS criteria.

Moreover, the preferential treatment to be provided to true sale securitisations through the STS criteria may disrupt the level playing field between true sale securitisations and synthetic securitisation. This could shift the focus towards true sale securitisations and thereby harm not only the synthetic securitisation market, but also segments of core lending that are unsuitable for securitisation through true sale, including types of SME lending and trade finance as mentioned above. Furthermore, through these transactions a substantial part of credit risk is removed from the banking industry as it is shared by non-bank investors. As such it can reduce systemic risk and contribute to a more sustainable financial system. To ensure that the synthetic securitisations do indeed meet these objectives, it is crucial that they are structured adequately. STS criteria can help meet this goal.

Finally, STS criteria can further help create a more accessible, standardised and transparent market for synthetic securitisations. While the fundamentals of many synthetic securitisations are similar, variation still exists in the implementation. This is partly due to different preferences from investors and banks, as well as varying requirements from the respective regulators of the banks. We believe a more harmonised approach would benefit investors, banks and regulators alike.

Concluding remarks

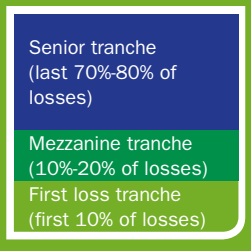
Our experience has been that the risk sharing transactions we have entered into are mutually beneficial for the banks and our client. The banks receive a perfect hedge on the names in the reference portfolio and often capital relief as well. This strengthens their balance sheet and enables the bank to recycle the capital into new loans and make use of their organisational network and resources in an optimal way. PFZW as investor gets a diversifying investment, through access to credit risks not available in the public market, with an attractive risk-return profile. The returns over the past 10 years have been strong, even during the financial crisis. Finally, society can benefit from an increase in lending to core banking relationships and a decrease in systemic risk in the banking sector, with a stronger economy and a more sustainable financial system as result.

In this paper, we have given our view on synthetic balance sheet securitisations and how these 'risk sharing transactions' can be adequately structured to mitigate the main concerns. We hope that it gives insight in how to become comfortable with synthetic securitisations and how standardisation can address the public concerns regarding these transactions. **We believe that through a relatively limited number of criteria synthetic balance sheet securitisations can be standardised into simple and transparent investments.**

Demystifying synthetic securitisations: terminology

A large part of the perceived complexity of synthetic securitisations stems from the jargon used in the industry. This annex strives to demystify some of this jargon.

Credit protection	Protection for credit risk, which is the basis for synthetic securitisations.
Protection buyer	The party that wants to receive credit protection on loans they hold, typically a bank.
Protection seller	The party that offers the credit protection, in short the investor(s).
Credit event	When a borrower cannot repay its obligations. Usually this is separated in three categories: 'Failure to Pay', 'Bankruptcy' and 'Restructuring'.
Credit default swap	A financial contract through which synthetic securitisations are typically structured. In this contract the protection buyer pays a fixed rate of interest (the 'CDS premium') in exchange for a 'floating' payment from the protection seller. Such a 'floating payment' would be the loss amount claimed by the protection buyer, following a credit event on a loan in the portfolio. Abbreviated as CDS.
Reference portfolio	The portfolio of loans that is being referenced in the synthetic securitisation. Any losses in this portfolio will be compensated by the investor, up to a pre-agreed maximum amount.
Tranche	The slice of risk that is being taken in a securitisation. The 'first loss' or 'equity' tranche takes the initial losses and the 'senior' tranche will take the last losses, if any. In between you may have additional tranches, which can be called 'second loss', 'mezzanine' or other terms. Together the loans make up the liability structure of the transaction. To the right is an example tranched structure.



PGGM
Corporate Communicatie
Noordweg Noord 150
P.O. box 117, 3700 AC Zeist
T +31 (0)30 277 99 11
www.pggm.nl

PGGM
Voor een waardevolle toekomst

15-7494 november 2015