Our approach to investing in Credit Risk Sharing transactions

We get paid to accept losses

Introduction

Pensioenfonds Zorg en Welzijn ('PFZW') invests in loans banks provide to their clients. The focus and approach is a relatively unique one. The loans remain on the balance sheet of the bank and PFZW covers a part of the losses on a selected portfolio of loans, never all the losses. Through these transactions, called Credit Risk Sharing ('CRS') transactions , PFZW shares in credit risks the bank holds as part of its core and successful lending activities. PFZW has given an exclusive mandate to PGGM to invest 2.5% of its assets in CRS transactions, together with a detailed set of guidelines to ensure good diversification of risk, elaborate due diligence and robustly structured investments. This paper elaborates in more detail on the nature of the credit risk taken in CRS transactions, the focus and philosophy of PGGM's strategy and on the characteristics that PGGM deems essential in structuring a robust transaction.

The nature of the credit risk

Credit risk is the risk of a loan not being fully repaid. This is a 'natural' occurrence in the world of credit. Not all credit losses can be avoided in time, also not by banks that monitor their clients very closely. The CRS transactions typically cover the first 5% to 10% of the losses of a well-diversified portfolio of loans, often called 'credit protection'. Most often these loans are to companies, from large to small companies, and there are hundreds, sometimes thousands of loans in such a portfolio, spread across different industries and countries. As credit loss is expected to occur, it is of the utmost importance to make a good assessment of how many losses could occur under various economic circumstances. When a credit loss occurs, not only PFZW takes a hit, the bank always suffers at the same time. Alignment of interest of at least 20% is part of all our

transactions. Any losses that exceed the amount covered by the CRS transaction remain with the bank. As such the CRS transaction can never lose more than the invested amount.

The loans in the risk sharing portfolio are not transferred but remain on the balance sheet of the bank and continue to be serviced by that bank. The credit risk is instead shared through a bilateral contract in which the bank agrees to pay a coupon in return for PFZW covering losses in the risk sharing portfolio, up to a maximum amount equal to the amount invested. This coupon needs to be sufficient to cope with credit losses and deliver an attractive return to PFZW. The coupon PFZW receives has no connection with the interest rate on the loans. PGGM determines the coupon based on the risks it takes and losses it expects to face under different economic circumstances.

1. These transactions are also known as 'balance sheet securitisations' or 'capital relief transactions'

Focus of PGGM's CRS strategy

PGGM's Credit Risk Sharing strategy has a clear focus. We only share in healthy credit risks that are part of a core lending activity of a bank. The banks we partner with have a very strong position in that lending market. Often the bank is one of the national champions with ample experience in the relevant lending market. More on our focus below under 'Our philosophy'. Our principal belief is the importance and value of genuine sharing of risk: any losses PFZW experiences as an investor in the CRS transaction should go hand-in-hand with losses experienced by the bank in their loan book. The first investment dates back to 2006 and new investments have been added every year since. The current invested amount in CRS transactions is over € 5 billion and references loan portfolios of around € 70 billion. We have been paying credit losses to banks throughout these years, as that is part and parcel of the risk consciously taken. Important to note is that the losses paid out are well within expectations, resulting in attractive returns for PFZW. We have become one of the most experienced asset managers worldwide in this segment of the securitisation market and, rather uniquely, for one exclusive and dedicated client, PFZW.

The Credit Risk Sharing mandate is part of PGGM's Private Markets Platform. The strategy has its own strategic allocation in PFZW's asset mix, making PFZW one of few investors that have embraced Credit Risk Sharing transactions as a stand-alone strategy. The strategy is buy-and-hold; we do not sell our transactions in the market.

Our philosophy

For PFZW the asset class is an attractive way to add unique credit risks that cannot be found in public markets, in an investment format that provides a robust return under various economic scenarios. In addition, by engaging in CRS transactions PGGM and PFZW help the banking sector to manage and spread its credit risk exposures in a sound way, leading to less systemic risk and a more sustainable financial system—one of the pillars of the responsible investment philosophy of both PFZW and PGGM.

For PGGM as the asset manager, it is important to focus on the following:

Risk sharing only in core activities of top ranking market players: core activities give the bank a reason to exist and are most likely to receive full attention to ensure ongoing high quality and successful risk management.

- Being a reliable risk sharing partner that values alignment of interest: alignment of interest ensures that loans continue to be extended and risk managed in a prudent fashion.
- Diversify across banks, countries and types of loans: work with different leading banks from around the world, share in the credit risk of different types of loans (such as revolving credit facilities and trade finance products) and different groups of clients of the banks (such as small local companies and large international enterprises).

Furthermore, in our investment process, it is very important to understand all risk aspects of the transaction. This includes, amongst others, the type of loans, the contract terms, the bank's way of extending loans and how it manages the credit risk, the importance and strategy of this lending business to the bank and the credit loss performance the bank has achieved through the economic cycle.

Essential characteristics of the transactions in the CRS portfolio

We aim to diversify investments across a select group of banks and across a variety of credit risks, regions and industries, by focusing on exposures not available in public markets. We currently have more than 20 transactions outstanding, executed with over ten risk sharing partners, referencing over 80 different countries and more than 20 different sectors and various types of credit risk.

When structuring CRS investments we strongly adhere to the following principles:

- Minimum return hurdle as well as maximum risk budget: each potential investment is assessed against the long-term minimum return hurdle and maximum risk budget that PFZW has set for the CRS portfolio.
- Resilient returns in different economic scenarios: each transaction is evaluated on the basis of its ability to perform under normal, slightly stressed and very stressed economic circumstances. We call these 'base case', 'headwind' and 'stress' scenarios. In the base case scenario, a transaction needs to generate a return that is sufficient to sustain credit losses that can be expected over the course of a normal credit cycle. In the headwind and stress scenarios we evaluate the performance of a transaction in scenarios that are several multiples of the losses in the base case scenario, reflecting economic downturns and crises.

- Diversification to mitigate concentration risk: each transaction typically references a very granular and diversified portfolio of loans, thereby aiming to mitigate the concentration risks in the portfolio and reducing the risk of a large negative impact on the return by a substantial loan position defaulting.
- Retention to ensure alignment of interest: we require the risk sharing bank to retain a minimum 20% of each loan referenced in the transaction (and not to hedge it separately). We believe the 20% level helps ensuring continued focus by the bank on every loan position. We value 'feeling the pain together'. In case of a smaller percentage, we feel potential credit losses by the bank are too easily offset by upfront underwriting fees and interest payments received early in the life of the loan.
- No cherry picking: loans in the CRS transactions can only be selected by the bank in a non-discretionary manner and should be a good reflection of the bank's overall loan book.
- Up-to-date credit ratings: we require the bank to ensure credit ratings are up to date before borrowers enter the risk sharing portfolio. In addition, borrowers cannot be subject to review for downgrade or on a credit 'watch list' before they are added to the portfolio.

Independent verification: a verification agent, an independent third party, checks compliance by the bank with the agreed terms of the transaction, including the validity of any loss claims and the actual existence of the alignment of interest.

On pages 4 and 5 of this paper we discuss a hypothetical example of a CRS transaction, which gives further insight into how some of these principles are applied when structuring such transactions.

Conclusion

By entering into credit risk sharing transactions PFZW shares in part of the credit losses a bank experiences in the normal course of business of extending loans to their core clients, both large and small. It is a natural occurrence in the business of lending that throughout the economic cycle loans are not always repaid. Therefore as an investor we expect losses to occur. The analysis that we perform to assess how many losses we may expect in various economic circumstances forms a key part in the investment decision making. It is important that we, when analysing and structuring these transactions, stay close to the strategy, philosophy and principles that we have developed as an investor in the asset class over the past 11 years. This is the best way to safeguard a thorough understanding of the transactions and the risk involved and to strive for a continued strong performance.

Historical performance

The CRS mandate has realised average returns of around 10–12% per annum, both since inception and over the past five years. As such the portfolio has demonstrated resilience through the credit cycle, including during the global financial crisis. With this, our portfolio has produced returns well in excess of base case return expectations. The long-term returns of the CRS mandate have been comfortably ahead of the return target and within the risk parameters set by PFZW.

This holds for performance calculated on an 'accrual' basis as well as on a fair market value basis. When applying an perceive likely to occur in the short term. A fair market value based valuation gives a reflection of the value that could be obtained if an investment is sold or unwound prior to maturity. Whilst measuring performance on an accrual basis is a sensible method from a buy-to-hold perspective, for financial reporting purposes PFZW needs to report the CRS transactions on its balance sheet on a fair market value basis. The unique nature of our transactions means that it is difficult to observe a value in the market. In order to assign a fair market value, PFZW uses a valuation model developed by PGGM specifically for this purpose and validated independently. Until recently, the model only took observable credit spreads and related parameters into account. The model did not factor in that credit risk sharing transactions are illiquid, require a lot of work and time to structure and free up capital for banks. This became more apparent as credit spreads tightened further over the last three years. The significant tightening in credit spreads led to many transactions in the CRS portfolio having a fair market value significantly above the purchase price, also at inception of the transaction. Given this situation persisted for three years, it prompted a decision to reevaluate the valuation methodology and going forward take into account these other factors in the valuation. Under the improved methodology the fair market value of the CRS portfolio decreases considerably, which explains the reduction in the 2017 year-end value as reported by PFZW. Note however, that this change has not impacted the average realised a reflection of a noticeable change in credit quality in the portfolio.

Example of a Credit Risk Sharing transaction

This is a simplified example of a risk sharing transaction PFZW could enter into. In this example the investor shares the first 10% of losses on a diversified portfolio of term loans to large corporates in the European Economic Area, originated by ABC Bank. The loans are not transferred and continue to be held on the balance sheet of ABC Bank. Furthermore, ABC Bank retains an unhedged position of at least 20% of each loan in the portfolio to ensure alignment of interest.

In the example, we have assumed a portfolio consisting of 300 loans with a total loan exposure of ≤ 2.4 billion (after 20% of the risk, or ≤ 600 million, is retained by ABC Bank). The largest loan exposure is 1% or ≤ 24 million, meaning that PFZW can at most lose ≤ 24 million for any single corporate default, when assuming zero recovery. In total, PFZW cannot lose more than the initial investment, which is ≤ 240 million. Assume that on average, ABC Bank is able to recover 50% of a loan after it has defaulted ('Recovery Rate'). This means that around 20% of the portfolio must default in order to lose the full investment (5% per year given this is a 4-year transaction). This corresponds to 60 companies of average size, which is extremely high.

Overview Transaction	
Counterparty bank	ABC Bank
Size of loan portfolio	€ 3 billion
Risk Retention	20% of each loan
Size of portfolio after retention	€ 2.4 billion
Currency	EUR
Tranche type	First Loss
Tranche size	0% - 10%
Investment size	€ 240 million
Term of transaction	4 years

5 largest sectors	
Commercial Services	10.0%
Retailing	9.5%
Consumer Services	9.2%
Telecommunication Services	8.5%
Health Care	8.0%

Underlying Portfolio at Inception

Type of loans	Term loans to Large
	Corporates
Geography	15 countries in the European
	Economic Area
Number of Corporates	300
Average credit rating loans	BBB-
Min. credit rating allowed	B+
Average Recovery Rate	50%
Max. size per corporate (after	1% (€ 24 mln)
retention)	0.5% for <bb (€="" 12="" mln)<="" td=""></bb>
Average term of loans	4 years

5 largest countries	
Germany	15.0%
France	12.5%
Netherlands	12.0%
United Kingdom	10.0%
Switzerland	9.0%

Schematic overview

Below chart gives a schematic illustration of the example risk sharing transaction. Through its investment, PFZW provides the bank with credit protection for the first \notin 240 million losses in the portfolio. Losses above this are taken by the bank, in addition to the \notin 600 million retention.

In return for providing the protection, PFZW receives a coupon that is commensurate to the nature and amount of the credit risk shared in the transaction. The coupon amount is calculated on the outstanding invested notional (adjusted for any credit losses that have already occurred).

At the end of the transaction (in this case after 4 years), the principal amount of the investment, minus credit losses, is returned to the investor.

Return and loss profile

PGGM evaluates the attractiveness of the transaction by making an assessment of the expected loss rate in different scenarios, where 'base case' is reflective of a normal credit cycle, 'headwind' represents an economic downturn and 'stress' a crisis scenario.

The below chart illustrates the risk and loss profile of this example transaction, by showing the amount of the investment (left axis) and annual return (right axis) for several loss scenarios. As losses occur over time and are paid out to the bank, the initial amount of \notin 240 million is reduced, while the bank pays the investor a coupon. At the end of 4 years, depending on which scenario occurred, a smaller amount than \notin 240 million is returned to the investor.

In this example, if base case losses occurred, the total loss amount paid to the bank is around \notin 40 million or 1.5% of the portfolio, in which case \notin 200 million is returned to the investor. In a stress situation the amount of losses could total \notin 140 million, meaning \notin 100 million is left to be returned to the investor, leading to a negative return.

Please note that this is for illustration purposes only.



PGGM

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

