Credit Risk Sharing

September 2020

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The information contained herein can be changed without notice.

Table of contents

All figures in the presentation refer to amounts as at 31 December 2019, unless stated otherwise.
For all figures in the presentation the source is PGGM NV (PGGM), unless stated otherwise.

Section 1

PGGM Overview

A permanent fixture in health and welfare

We work for good, affordable and sustainable pensions for pension funds - our clients - and their participants. We also contribute towards a liveable world, occupational health and retaining vitality in old age.

Introduction

PGGM is an independent pension fund service provider in The Netherlands with assets under management of € 252 billion

- Largest client is Pensioenfonds Zorg en Welzijn ('PFZW'), the Dutch pension fund for the health care and welfare sector, with € 238 billion total assets belonging to 2.9 million participants
- Other clients include Pension Funds for Architects, Private Security, Painters, General Practitioners, Smurfit Kappa and Volo, together with € 14 billion total assets

PGGM adds value by focusing on two clear objectives

- Realising a **valuable future** by investing with a long-term focus and taking sustainability into account across all asset categories
- Generating a **high and stable return** for our clients: realised average annual return for PFZW since 1971 of **8.2%**

Section 2

Risk Sharing Transactions

Sharing in core credit risks banks have on their balance sheets

Focus on long-term partnership

Mutual benefits

PGGM

- ✓ Attractive risk-return profile
- ✓ Exposure to illiquid and unique credit risks
- ✓ Close cooperation with high-quality credit originator

Partner Bank

- ✓ Efficient capital management
- ✓ Perfect hedge of credit risks
- ✓ Applicable across multiple loan books

Multiple risk sharing transactions over time

Pricing and structuring will benefit from gained experience as the relationship develops

Our philosophy

Portfolio of **high-quality** CRS transactions

Understand the underlying

In-depth knowledge of the underlying type of credit risk

Successful core activity

The underlying portfolio represents a successful core activity of the bank

Bilateral & Significant

Deals of size with a relevant and simple set of terms

Alignment of interest

Partner bank shares in the same credit risks

Robust structures

Robust risk-return profile in adverse scenarios

Reliable partner

PGGM is willing to amend deal terms to ensure continuing effectiveness of the transaction

Due diligence

Thorough independent assessment, both quantitative and qualitative, including ESG policies

Market leaders

Focus on a select number of high-quality credit originators

Our objectives

Objectives

Long-term partnership

Aiming to build a long-term partnership focused on closing multiple transactions over time

Unique exposures

Different types of credit risk from geographies across the globe

Meaningful size

€ 100 – € 750 million per investment

Strong alignment of interest

Minimum 20% of credit losses retained by partner bank

Following banks' processes

Using banks' internal ratings and settling actual realised losses following workout by the bank

Long-term returns

Seen as alternative to equity: equal return for less risk

Strategy

Buy-and-hold

Asset allocation of PFZW

As of December 2019 € 5.7 billion, equalling 2.4% of PFZW's assets and continuing to grow

Main benefits for partner bank

Benefits for a bank of entering into a risk sharing transaction with PGGM:

- ***Reliable and experienced long-term*** *partner familiar with different legal structures*
- ***Risk capital provider*** *to* ***core & successful activities***
- *Provides a means* ***to efficiently manage capital*** *and to* ***perfectly hedge illiquid credit exposures***
- ***Tailor-made transactions:*** *working together to define effective set of portfolio criteria and deal structure*
- ***Flexible****: willing to adapt to new situations by amending existing deal contracts or investigate better fitting solutions*
- *Dedicated to a* ***sustainable regulatory environment and market*** *for risk sharing transactions*

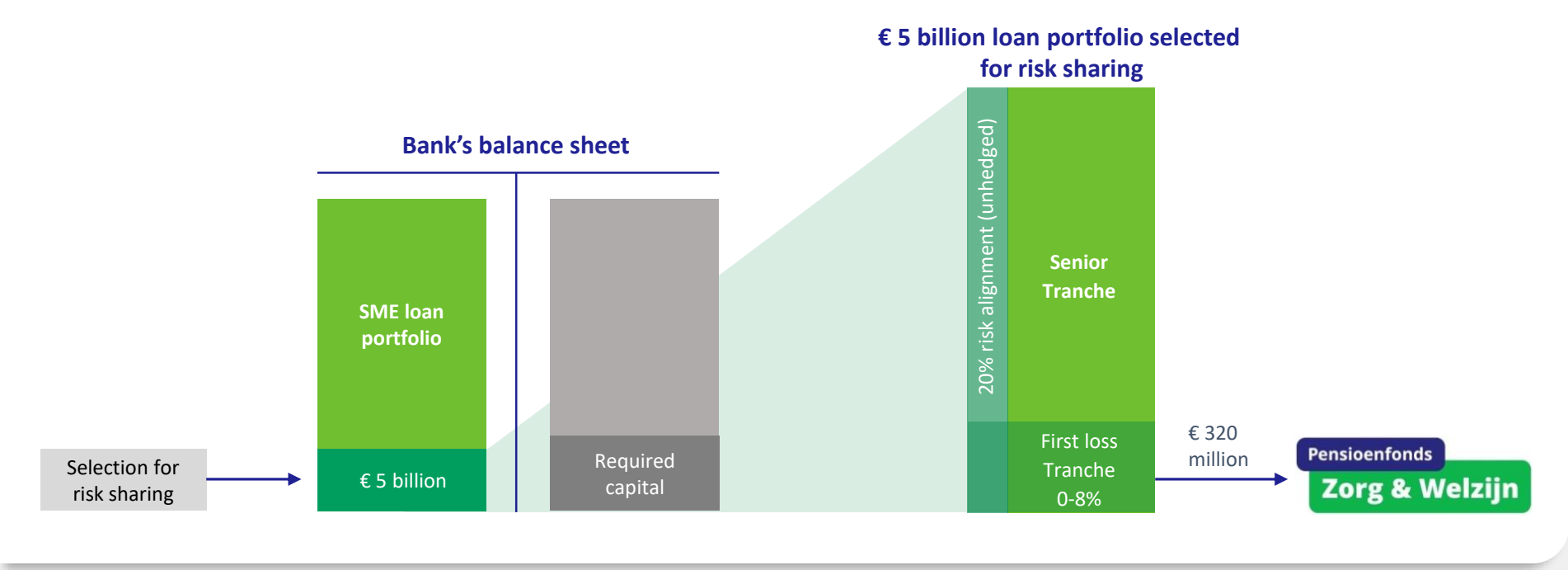
Section 3

Timeline and Structures

Working together to find the optimal structure

General structure

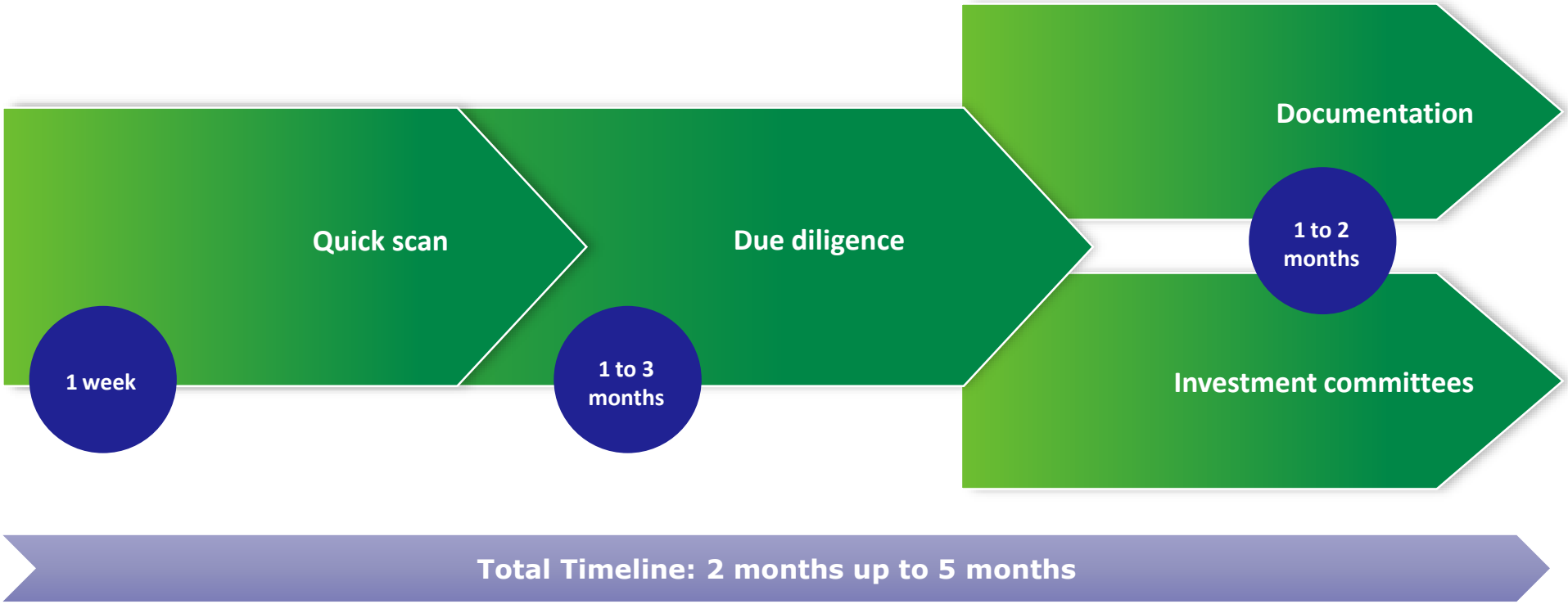
Example first loss tranche



The bank transfers the first loss position to PGGM's client PFZW:

- ✓ **Perfect hedge** for credit events such as bankruptcy, failure to pay, and restructuring
- ✓ **Up to 20% first loss position**: for each credit event resulting in a loss, a maximum of 80% is covered by PFZW and at least 20% of the realised loss affects the bank's P&L account

Timeline


Quick scan
1 week
Due diligence
1 to 3 months
Documentation
1 to 2 months
Investment committees
Total Timeline: 2 months up to 5 months

Timeline: Quick scan

Requirements

PGGM's requirements to be adhered to:

- Portfolio represents core activity of the partner bank
- Alignment of interest is at least 20%
- Fully funded upfront with cash safely invested or collateralised (investing cash in short-dated high-quality securities, enter into a reverse repo, or invest in a money-market fund; no unsecured cash deposit)

Initial analysis

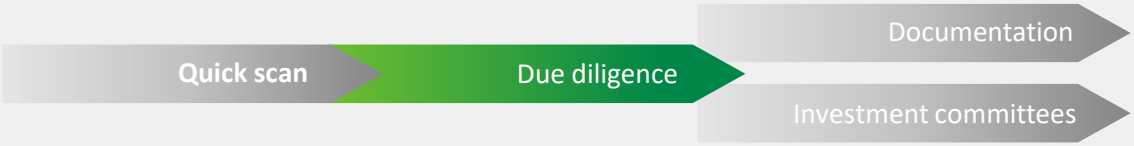
PGGM performs initial analysis on:

- Partner bank
- Type of credit risk
- Transaction size
- Proposed transaction structure
- Fit of proposed transaction in overall portfolio

1 week

Approval of PGGM team to allocate capacity to continue the due diligence of potential risk sharing transaction

Timeline: Due diligence



PGGM performs a thorough **independent assessment** of the bank through:

1 to 3 months

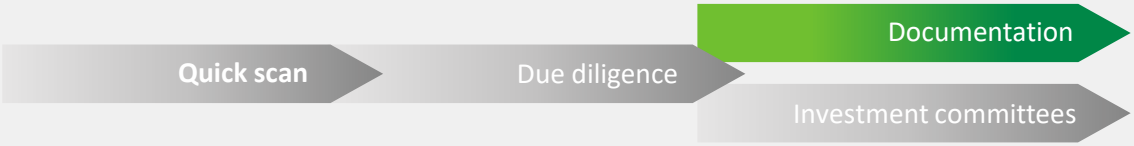
Qualitative analysis

- Processes regarding credit origination, monitoring and recovery management
- Business strategy for the credit risk generating activity
- Division of roles and responsibilities across different parts of the organisation
- Role of Credit Portfolio Management team
- ESG/Sustainability policies

Quantitative analysis

- Long-term track record in credit risk management
- Internal credit rating models and procedures
- Selection process for and composition of risk sharing portfolio

Timeline: Documentation



Initial agreement and finalising legal documentation

- Initial structure and economics agreed between the bank and PGGM needs to be approved by up to three investment committees. In parallel, work will commence on legal documentation
- During due diligence the bank and PGGM have reached initial agreement on:
  - Form of contract (for example direct CDS, Credit Linked Note or Financial Guarantee Note)
  - Tranche size, alignment of interest, price and collateralisation of cash
  - Composition of initial portfolio including replenishment rules and exclusion list of PFZW

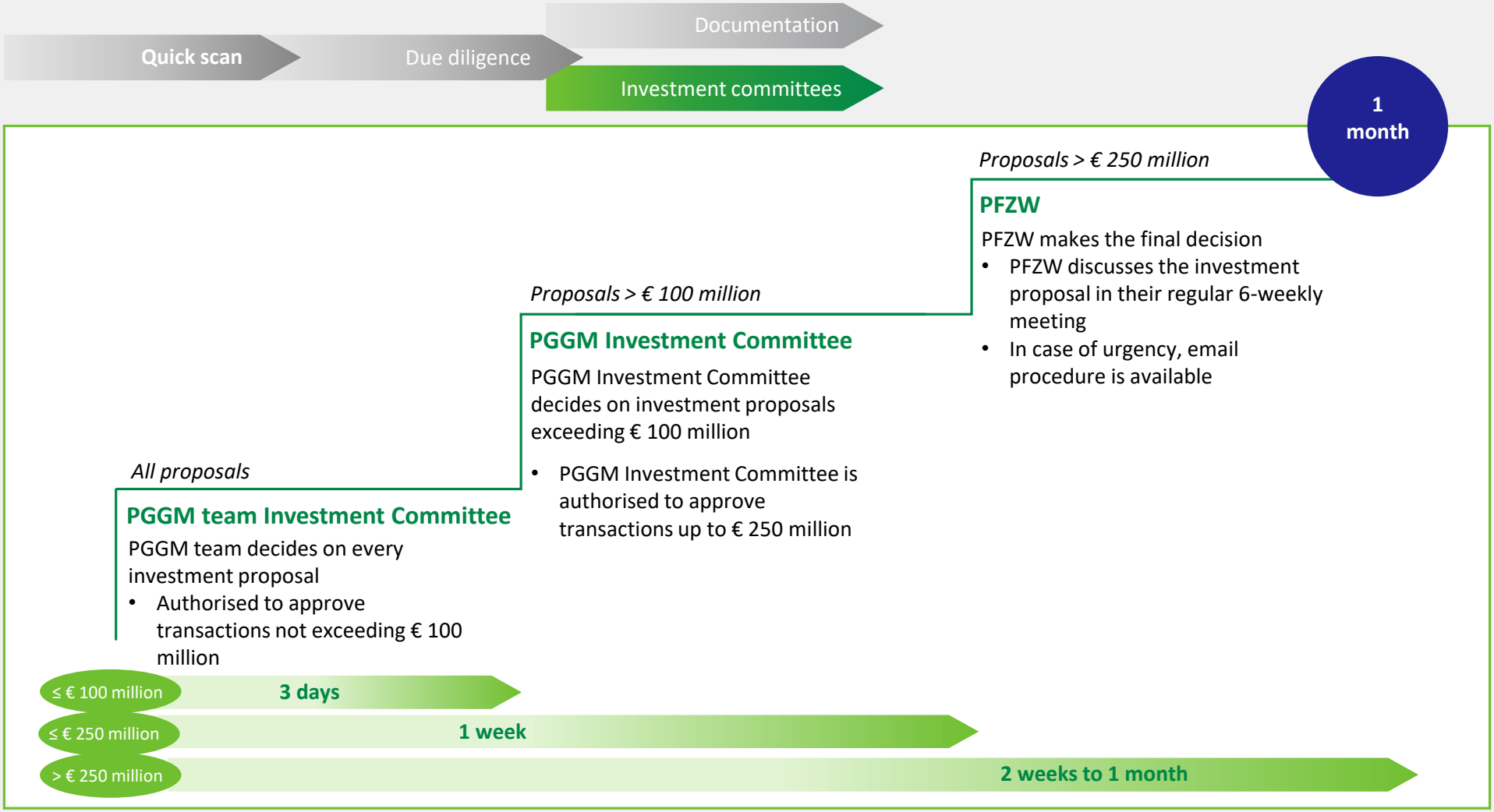
Verification agent procedures

Verification agent procedures consist of the following steps:

- Check the eligibility of the credit event
- Check the eligibility of the referenced loan, if included:
  - in initial portfolio adhering to agreed portfolio guidelines at inception
  - in replenished portfolio adhering to agreed portfolio guidelines during replenishment
- Check the alignment of interest is at least 20%
- Check if initial loss is equal to contractually agreed initial loss determination
- Check if loss rate at work-out completion corresponds to the loss booked in bank's P&L account

1 to 2 months

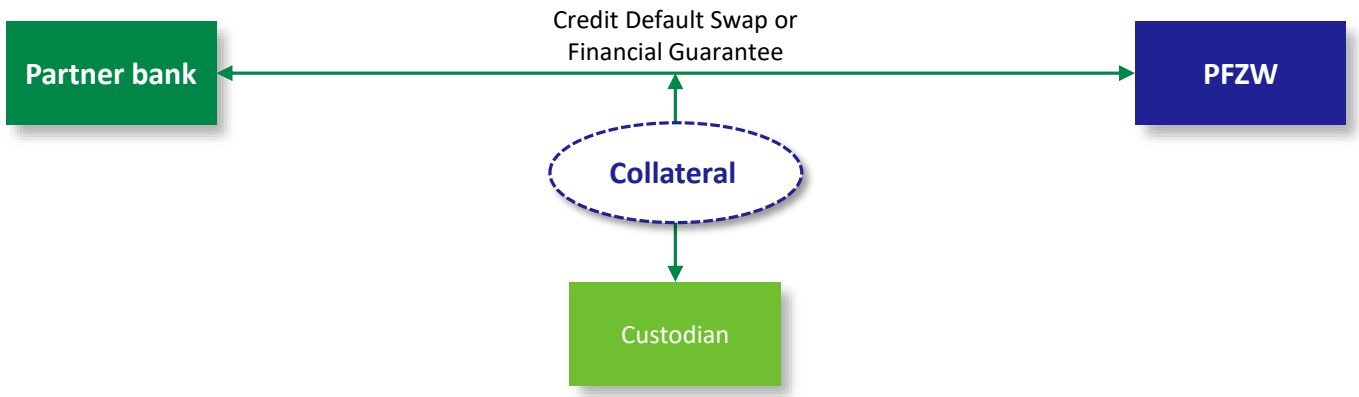
Timeline: Investment committees



Different options available for structuring transactions

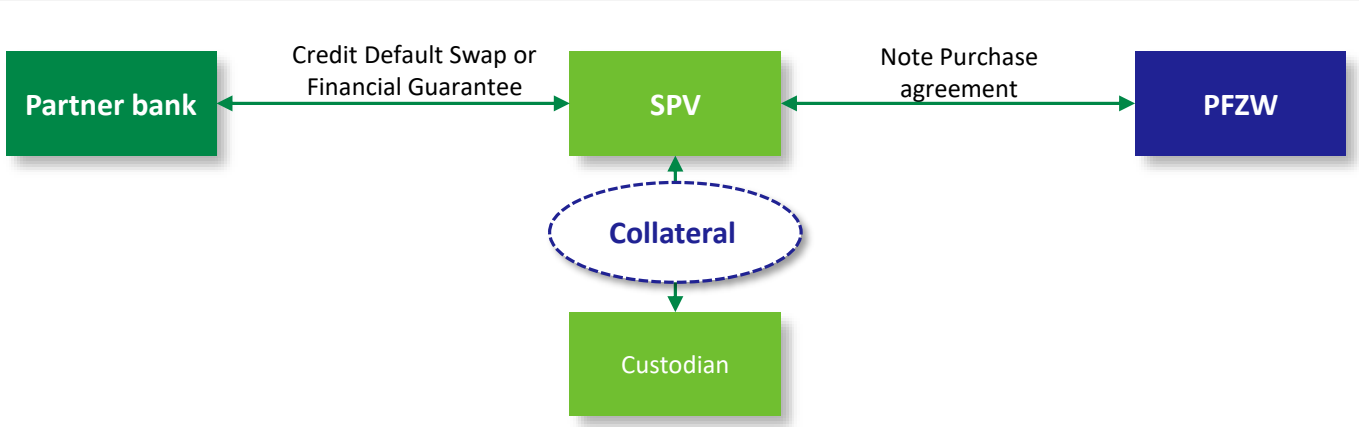
Direct Credit Default Swap (CDS)

The bank enters into a protection agreement directly with PFZW. PFZW fully funds the transaction.

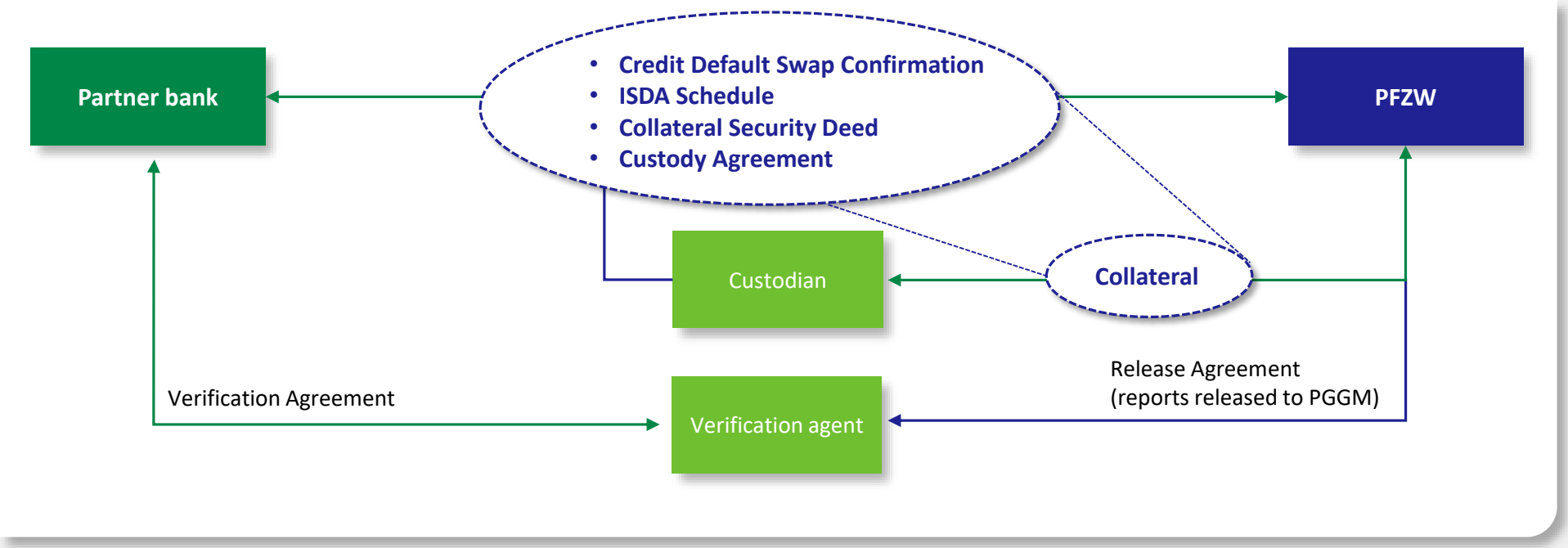


Credit Linked Note with Financial Guarantee / CDS

The bank enters into a protection agreement (CDS or Financial Guarantee) with the SPV. The SPV is funded through the sale of credit-linked notes, which are purchased by PFZW. PFZW fully funds the transaction.



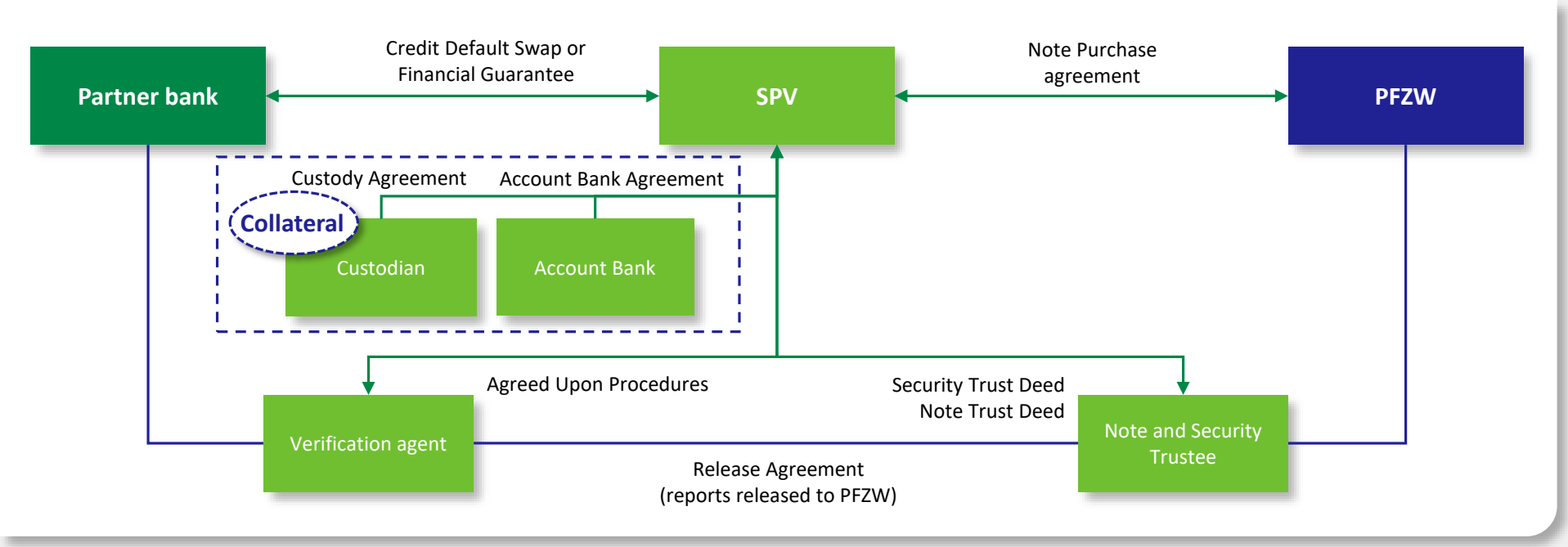
Direct CDS



Basic process

- Bank buys protection from PFZW through a direct CDS contract
- Custody and cash account specifically for transaction in name of PFZW and pledged to risk sharing bank
- PGGM (on behalf of PFZW) transfers notional cash as initial margin to cash account, 100% funded
- Cash proceeds are invested in 3-month high-quality collateral, reinvested every quarter, held in the custody account
- Verification agent verifies eligibility of referenced loan, credit event and loss amount
- Custodian pays credit event claims after verification. No separate approval by PFZW or PGGM is required.

Credit Linked Note with Financial Guarantee/CDS



Basic process

- Bank buys protection through CDS or Financial Guarantee entered into with SPV
- SPV issues notes (listed if required), PFZW buys the notes and SPV receives cash
- SPV deposits cash at Account Bank, which uses cash to buy 3-month high-quality collateral each quarter
- Custodian holds collateral in custody account. Collateral is pledged to the Partner bank (to cover loss claims) and PFZW (to cover note principal)
- Verification agent verifies eligibility of referenced loan, credit event and loss amount
- Note and Security Trustee receives credit event notification from risk sharing bank and, after checking, provides instructions to Account Bank and Custodian to pay the risk sharing bank the appropriate amount. No separate approval by PFZW is required.

Avoiding counterparty risk for partner bank and PFZW

The transaction is always structured in a way that avoids counterparty risk for both the partner bank and PFZW.

This has three reasons:

1. The bank needs certainty that they can successfully claim losses in the portfolio in a timely manner
2. Counterparty risk for both sides would complicate the risk-return profile and should then be priced in separately
3. On the side of PFZW counterparty risk would consume counterparty lines on the bank, which PFZW prefers to use for different purposes

Therefore, the full notional is invested in repo or in high-quality securities in the base currency of the transaction.

Example

Start of risk sharing transaction

1. The full amount of the investment notional (initial margin) is transferred into a cash account opened in name of the transaction.
2. This cash is used to purchase high-quality collateral that matures at next payment date.
3. The collateral is held by a highly-rated Custodian and segregated from other assets, ensuring virtually no counterparty risk for partner bank and PFZW.

Upon (any) payment date

1. The collateral securities are redeemed.
2. This cash is used to pay the bank for any claims related to verified (initial or final) credit losses in the risk sharing portfolio. This ensures timely settlement of losses.
3. Interest proceeds of collateral securities are paid out to PFZW (in case of negative interest rates, CDS premium is partially used to repair the remaining notional amount).
4. The remainder of the cash will be reinvested in new 3-month high-quality securities.

Multi-currency risk sharing portfolio

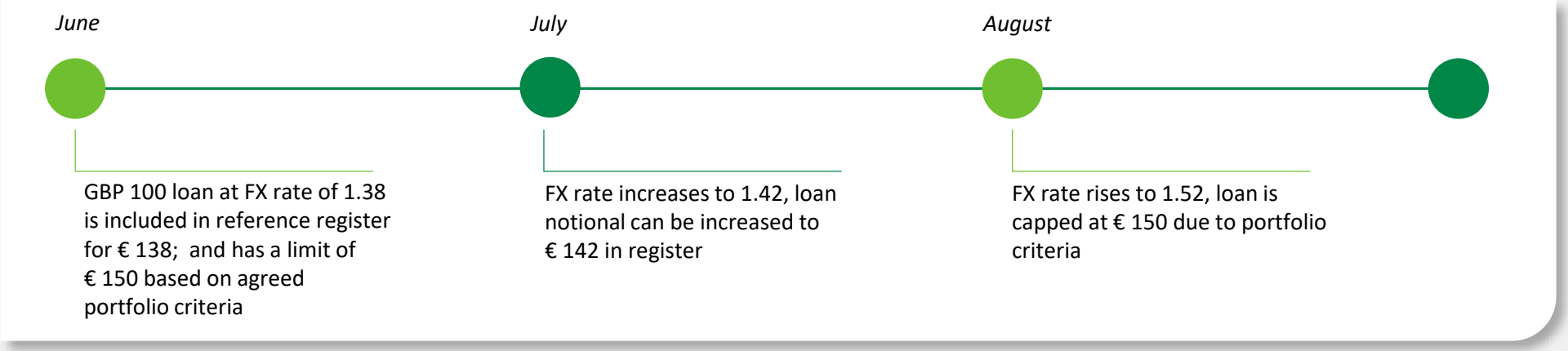
Many banks wish to hedge multi-currency portfolios

- Exposure to an international portfolio of borrowers
- Exposure in a multitude of currencies to existing (domestic) clients, for the purpose of international business and trade finance

Risk sharing transactions are ideally suited

- Underlying loans are not sold, therefore no currency risk at time of inclusion
- CDS premium is paid in base currency and not dependent on cash flows of underlying loans
- Agreed limitations such as single obligor limits, country limits and sector limits are determined in base currency
- The notional in base currency per obligor group can fluctuate with the FX rates within the ranges of the agreed portfolio guidelines
- At time of default FX rates of defaulted loans are fixed, and that rate is used during work-out, avoiding complicated and imperfect currency hedging arrangements

Example



Credit Risk Sharing Fund and PFZW

PGGM CRS Fund

- **As of Q1 2020 a PGGM CRS Fund (CRS FGR) has been set up for future investments.**
  - **FGR is a Dutch concept which means fund for joint account in English.**
- **PFZW is the sole participant in this fund. PGGM is the asset manager of the fund.**
- **The PGGM CRS Fund has entered into a co-investment agreement with Alecta.**
- **PFZW will settle new CRS transactions in the CRS Fund when these are co-investment transactions with Alecta. Existing transactions will remain on PFZW's balance sheet until maturity.**

Co-Investment Agreement

Alecta enters into co-investment agreement with CRS FGR. The co-investment agreement makes clear that Alecta makes its own decision on a deal-by-deal basis whether it will invest or not. Alecta will settle its own investment directly and hold the CRS transactions on its own balance sheet.

Transactions Alecta decides not to co-invest in will settle directly on PFZW's balance sheet.

About Alecta

Alecta, one of Sweden's largest pension funds, manages occupational pension funds of 2.5 million people and 35,000 businesses across Sweden. It was established in 1917, and like PGGM it is a mutual company, owned by its customers. As of end of June 2019 Alecta's assets under management amounted to SEK 917 billion (approximately equal to € 85 billion).

alecta

Section 4

Track Record and Team

Since inception PGGM has realised over 50 transactions and has been building long-term relationships with partner banks

Introduction

Over 50 risk sharing transactions since inception in 2006

- PFZW has given PGGM an exclusive mandate to invest up to 3% of its assets in risk sharing transactions
- PFZW allocates to risk sharing transactions as an alternative to equity, hence the long-term target return is similar to that of an allocation to equity, for less risk
- Since December 2006 executed new risk sharing transactions every year, now totalling over 50 transactions

High-quality transactions with good performance

- For every risk sharing transaction, a base case, head wind and stress return is determined at start
- The portfolio has been delivering a better return than expected in base case thanks to experiencing fewer credit event losses than expected
- Realised average annual return of around 12%
- Since inception the cumulative amount invested in new risk sharing transactions is about € 11 billion

ABN·AMRO

€ 15.5 billion

PRAR
Corporate Loans

December 2006

"First risk sharing transaction executed by PGGM"

"Received 2016 Securitisation Award"

Examples of risk sharing transactions executed by PGGM

Santander	Santander	NatWest	citi	BARCLAYS	HSBC
€ 2.3 billion	€ 1.9 billion	£ 4.6 billion	US$ 3.5 billion	£ 3.5 billion	US$ 5 billion
Boadilla III European Project Finance	Victoria I Spanish SME Loans	Nightingale UK SME and IPRE	Terra VI EM Corporate Loans	Colonnade UK Corporate Loans	Metrix I Corporate Loans
December 2017	December 2015	November 2017	March 2015	December 2016	December 2015

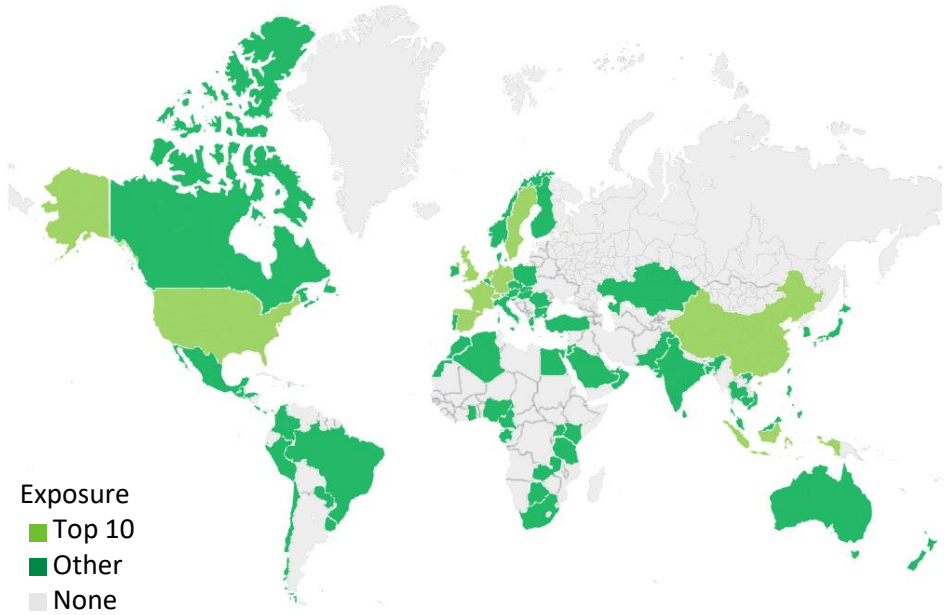
Standard Chartered	Standard Chartered	Rabobank	Rabobank	BNP PARIBAS	BNP PARIBAS
US$ 4 billion	US$ 3 billion	€ 3 billion	€ 3.2 billion	€ 7.7 billion	€ 5 billion
Shangren IV EM Trade Finance	Sumeru III EM Corporate Loans	Pommes II European and US Corporate Loans	Pommes I European Corporate Loans	Resonance III Corporate Loans	Resonance II Corporate Loans
September 2018	June 2018	July 2017	January 2014	December 2018	June 2016

CREDIT SUISSE	CREDIT SUISSE	CREDIT SUISSE	Nordea	UBS	Deutsche Bank	MUFG
CHF 4.5 billion	US$ 3.7 billion	US$ 2.4 billion	€ 8 billion	US$ 2 billion	€ 4.5 billion	US$ 1 billion
Elvetia XI Swiss SME and IPRE	Guilden XVI + XVII European and US Corporate Loans	Orient I Asian Corporate Loans	Archean I Corporate Loans	Aries III Corporate Loans	Darts III Corporate Loans	Monolith I Corporate Loans
September 2019	December 2018	September 2017	August 2016	November 2015	December 2016	March 2019

- End of December 2019 the total portfolio references approximately **€ 67 billion notional** of underlying portfolios
- **Multiple** risk sharing transactions with the majority of our partners

Portfolio of risk sharing transactions spread across the globe

Exposure to loans in more than 90 countries



Different types of credit risk financing the real economy

- Corporate Credit
  - Emerging and Developed Markets
  - (Sub)Investment grade
  - Large, mid and small cap
- Trade Finance
- Infrastructure
- Real Estate
- Consumer Credit

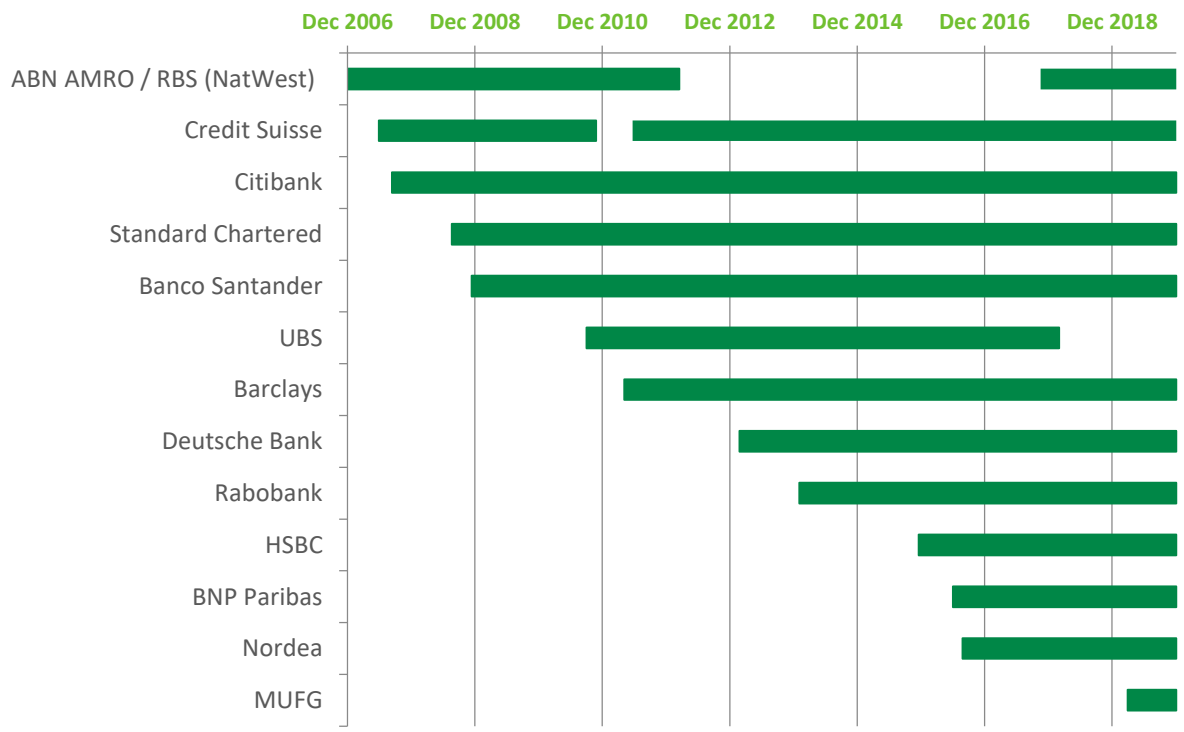
Diversified exposure across sectors

- Exposure to the real economy
- Well diversified over many different economic sectors
- Three largest sector exposures < 10% each

Long-term relationships

PGGM values long-term relationships with risk sharing partners. Upon maturity most transactions are rolled over into new transactions, ensuring continued credit protection for PGGM's partner banks.

Period in which deals have been outstanding with each counterparty



Dedicated Team

Team Head

Senior Directors

Directors

Associate Directors

Quant – Associate Director

Quant – Associate

Associates

Investment Analysts

1 Team Head
2 Senior Directors
4 Directors

3 Associate Directors
3 Associates
2 Investment Analysts

Qualifications

10 years average work experience
Ranging from 1 to over 25 years

International working experience
Netherlands, London, Singapore, Italy, France, Malaysia, Germany, China

Diverse professional backgrounds
Asset Management, Banking, Law, Physics,
Quantitative Analytics, Credit Structuring, Fixed Income Sales,
Frontier Markets, (Re)insurance, Risk Modelling

Broad (post-) academic background
Business Administration, Finance, Economics, Econometrics, Physics
Law, Aerospace Engineering, Management, PhD, CFA

7 different nationalities
Dutch, Italian, Russian, French, Moroccan, Indian, Chinese

9 different languages
Dutch, English, Italian, Russian, Spanish, French, Arabic, Hindi, Chinese

Recognition and press

IPE AWARDS 2017

Winner: Best In-House Manager

Winner: Best Specialist Manager

Nominee: Best Alternatives Manager

Terra I: Emerging Market transaction with Citi in 2007

THE WALL STREET JOURNAL.

U.S. Politics Economy Business Tech Markets Opinion Arts Life

Places Most Unsettled by Rapid Demographic Change Are Drawn to Trump

Valeant in Talks to Sell Stomach-Drug Business

EUROPEAN BUSINESS NEWS

Pensions Help Smooth Bumpy Credit Market

Funds Provide Hedge Against Risky Loans; 'A Natural Savior'

Winner: 2016 IIR Securitisation Award

IIR

fd. het financieele dagblad

MOEILIJKE TIJDEN

Na harde ingrepen klimt adviesbureau BoerCroon weer uit het dal

Nieuwsoverzicht

PENSIOENGELD

Zorgfonds belegt in bedrijfskrediet van Rabobank

Pommes transaction with Rabobank in 2014

Pensioenfonds Zorg en Welzijn + Add to myFT

PGGM to agree €2.3bn synthetic securitisation deal with Santander

Dutch pension fund manager to sell credit insurance against potential losses

Victoria: Spanish SME transaction with Banco Santander in 2015

PGGM MASCHA CANIO

Winner

Personal Contribution to the Industry

SCI Capital Relief Trades Awards 2019

SCI

Heading up a team responsible for one of the largest investment portfolios in the sector that has driven market growth while setting a benchmark that others follow would perhaps be enough. But Mascha Canio's personal contribution extends further as one of the most long-standing and visible investors and an advocate for a focus on risk-sharing and transparency to ensure the capital relief trade market's future sustainability.

Winner: Personal Contribution to the Industry – Mascha Canio

PROFESSIONAL PENSIONS

Admin/Tech Benefits Buzz DB DC Investment Law & regulation Risk re

Netherlands

PGGM, ABN AMRO enter loan deal worth €15.5bn

Damian Clarkson

15 December 2006

PRAR: 1st CRS with ABN AMRO Bank in 2006

Papers

Sustainable Financial System

Risk sharing transactions add value to the real economy and contribute to a sustainable financial system:

- Risk sharing transactions free up capital for banks enabling them to lend more to the real economy
- Credit risks are shared outside of the banking system, leading to a more stable banking sector

Promoting a growing securitisation market

As an experienced investor PGGM is committed to promoting a growing and safe securitisation market through:

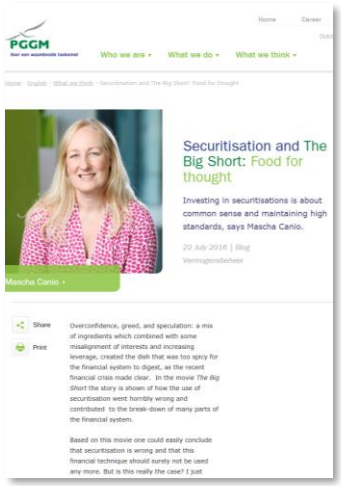
- Actively sharing knowledge and beliefs via our position papers, to contribute to the development of sound standards for the CRS market
- Engaging in dialogue with peers and regulators to develop simple, transparent and standard securitisations

Unique approach and focus

Investing in Credit Risk Sharing Transactions with:

- Focus on successful core lending activities of a select number of high-quality credit originators
- Strong alignment of interest, with the partner bank sharing the same credit risk
- Thorough independent assessment, both quantitative and qualitative, including ESG policies
- Shared objective of building a long-term relationship

Papers



Papers are available on PGGM's website:

https://www.pggm.nl/media/5aek3m10/pggm-position-paper-synthetic-securitisations_november_2015.pdf

https://www.pggm.nl/media/da1e3kpi/pggm-credit-risk-sharing-uk.pdf

https://www.pggm.nl/media/t5rlaehq/joint-paper-the-benefits-of-securitisation-june-2016.pdf

https://www.pggm.nl/english/what-we-think/Pages/Securitisation-and-The-Big-Short-Food-for-thought.aspx

https://www.pggm.nl/media/quifc0jm/pggm-paper-esma-templates-not-fit-for-risk-sharing-transactions-november-2019.pdf

Transparency List

On PFZW's website you can find the Transparency List which provides information on the outstanding credit risk sharing transactions:

https://www.pfzw.nl/over-ons/zo-beleggen-we/waarin-we-beleggen/transparantielijst-credit-risk-sharing.html

PGGM Vermogensbeheer B.V.

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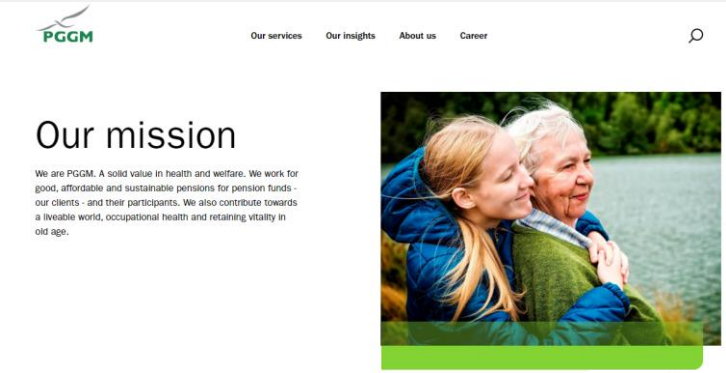
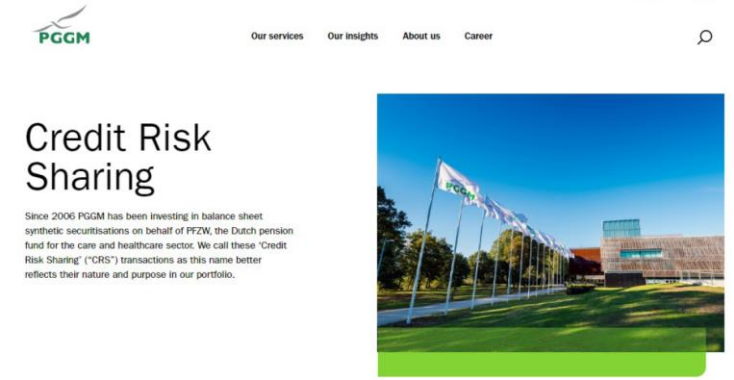
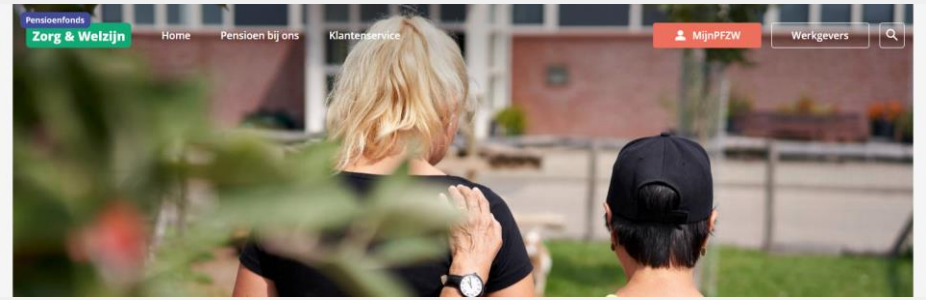


Information on PGGM:
www.pggm.nl/english/what-we-do

Information on Credit Risk Sharing:
www.pggm.nl/en/our-services/credit-risk-sharing/





Information on PFZW:
www.pfzw.nl/over-ons/about-us/Paginas/default.aspx