What We Really Mean When We Talk About Collateral For Funded Re

In our previous articles, we gave an overview of what funded reinsurance is. We would now like dive deeper into what actually goes into the collateral account backing funded re transactions. Does it evolve over the lifetime of the reinsurance arrangement, and if so, how? In this mini "collateral guidelines series", we look under the bonnet into the collateral account itself.

What drives the collateral make-up

The way the collateral account is invested and managed is driven by its purpose – to serve as security in for the cedant in case of a recapture. Therefore, key considerations for the cedant will be:

- **Investment guidelines:** What assets would be recaptured? Considering the insurer's existing investments and their regulatory and risk frameworks, would these recaptured assets sit well on the cedant's balance sheet? Alternatively, could they be transformed into a suitable portfolio in a reasonable timeframe and at a reasonable cost?
- **Collateral amount required:** How much asset would be recaptured? At the time of recapture, considering that this may be during a period of wider market distress, would they be sufficient for meeting the block of liabilities recaptured?
- **Asset substitution and replacement:** Should the reinsurer have flexibility to replace or adjust collateral assets in response to market conditions? What if the reinsurer appears to be experiencing distress, e.g. has a reduced level of solvency?
- **Termination:** What mechanism would be used to transfer assets to the cedant in the event of a termination? Would such exit mechanisms allow the insurer to mitigate against adverse financial impacts and maintain regulatory compliance?

The PRA's 2024 supervisory statement, SS5/24, brought a formal regulatory framework to these considerations, cementing existing risk management practices. The statement reinforced the need for high-quality collateral portfolios, taking into account Matching Adjustment and asset liability management (ALM) considerations, and clarified the expectation for insurers to demonstrate an understanding of and ability to model and, if needed, manage the underlying assets. The PRA has also formalised the need for insurers to consider the financial consequences of a recapture event through the so-called "immediate recapture" metrics, notably the insurer's SCR coverage ratio in such an event.

Finally, it is also important to be aware of the economic implications of these investment and operational guidelines. For insurers and trustees, risk management does not mean risk avoidance at all costs. Rather, market participants need to a strike a balance between robust risk management and competitive pricing in order to deliver the best value to pensioners.

Investment guidelines

In this first article of the mini-series, we will focus on the first point – investment guidelines.

In the event of a recapture, insurers need confidence that they will be able to accept the collateral assets onto their own books. There are three broad considerations: asset eligibility, investment limits, and ALM.

However, before we start, it is worth remembering that collateral guidelines will not be the only guidelines driving the implementation and management of the collateral account. Reinsurers, who are taking on the asset and liability risks, will have their own investment and ALM guidelines. These will reflect the reinsurer's investment and risk management policies, with consideration for their own economic, accounting and regulatory balance sheets, including the constraints placed on them by their own insurance regulator. These can in some cases be more prudent than the insurer's collateral guidelines, at least in certain aspects, and the final portfolio will be invested in a way which meets the investment guidelines of both counterparties.

Asset Eligibility

The starting point is to define a list of permitted asset classes. This will typically include

- government bonds,
- corporate bonds,
- emerging market sovereign and corporate bonds,
- private placements, infrastructure debt, residential and commercial mortgage loans and other (typically investment grade) private credit.

Insurers have also been exploring the use of repack vehicles as a practical means to pledge private assets, and assets which require hedging through derivatives (for example cross-currency hedging). In some cases, letters of credit from highly rated banks may also be permitted. For reference, we have outlined a number of core asset classes commonly used in Matching Adjustment (MA) portfolios and in Funded Re transactions in the appendix.

Fixed income assets are generally required to be investment grade, with specific clauses setting out actions required in case of downgrades. In the UK, it is rare to see equities, real estate and other non-fixed-income asset classes permitted in guidelines, although this is sometimes seen in other countries.

To varying extents, firms may align collateral guidelines with their Matching Adjustment (MA) approvals so that in case of recapture, a majority of assets can be brought into their Matching Adjustment portfolios. This has become particularly important following the PRA's SS5/24 and the introduction of the immediate recapture metrics. Under these rules, firms are permitted to assume some level of trading following a recapture event – taking into account liquidity and transaction costs – so firms may be more flexible around liquid asset MA eligibility than on illiquid assets.

Investment Limits

Although a broad range of asset classes can be admissible, insurers typically impose maximum allocation limits at both an asset class level and within each asset class. An example would be that the portfolio may invest, say, no more than 40% in illiquid assets, and no more than 10% per illiquid asset class (with clear definitions). These could be driven by a combination of portfolio-level considerations and the cedant's wider portfolio exposures. If the cedant were already highly exposed to real estate, for example, they may have no appetite for further exposure in real estate debt.

Similarly to other insurance fixed income investments, collateral investment guidelines will set out limits on country, currency and sector exposures at varying levels, for example country-specific limits as well as overall emerging market limits, and sector limits at different levels of granularity. Sector limits are likely to differ between developed and emerging markets, and for some emerging markets, investments may be restricted to sovereigns only.

Finally, there will be issuer and position limits. Issuer limits typically vary by the type of issuer and rating, for example 3% for AAA-rated corporate issuers, 2% for AA-rated and so on. In some cases, there can also be position limits in relative or absolute terms, either in terms of the amount purchased or as a proportion of the amount outstanding on the bond.

As mentioned above, fixed income assets are typically required to be investment grade. At a portfolio level, there may also be a target weighted average credit quality, and/or limits on specific credit ratings or notches, for example a maximum permitted level of BBB- exposure.

Asset-Liability Management

ALM guidelines are there to ensure that the collateral portfolio can support – within certain trading parameters – the underlying insurance liabilities in case of recapture. Typically, this will cover aspects such as FX hedging, duration matching, and in some cases key rate duration or cash flow matching. The stringency of these guidelines will depend on the cedant's overall ALM position, the materiality of funded re at a deal and overall level, as well as the cedant's overall risk appetite and operational readiness to re-establish Matching Adjustment compliance should the assets be recaptured. Where there is greater such risk appetite, insurers may allow more ALM mismatch risk on the reinsurer's side to access better pricing.

However, it is worth highlighting again that while collateral guidelines typically originate from the cedant, they are not the only guidelines driving the collateral portfolio. In the "best estimate" scenario, where the reinsurance contract is not recaptured, the asset and liability risks sit with the reinsurer and not with the insurer. In other words, the flexibility permitted by the cedant in collateral guidelines may not be maximally utilised in practice.

In subsequent articles, we will cover substitution and replacement, termination clauses, as well as the calculation for the collateral amount.

Appendix

Below, we outline a number of core asset classes commonly used in Matching Adjustment (MA) portfolios and in Funded Re transactions. We additionally include an asset class which we believe is a potential candidate for assets with Highly Predictable (HP) cash flows.

This list is intended to be neither comprehensive nor definitive. It is for illustrative purposes only as each insurance company defines MA eligibility in its own MA approvals. Outside of the HP bucket, while we typically associate MA assets with cash flow fixity, it is worth acknowledging that firms can also include assets with non-fixed cash flows in their portfolios – they simply cannot recognise those cash flows which are not fixed[1] for MA calculation purposes.

It is also worth pointing out upfront that any assets denominated in a different currency to the liabilities they are backing must be cross-currency hedged back to fixed cash flows in the liability currency. Further, to allocate MA funds to assets which are not externally rated (i.e. most private assets), insurers must also have the ability and regulatory permission to apply internal ratings.

Matching Adjustment (MA) eligible assets typically constitute a significant proportion of collateral assets in UK Funded Re transactions. However, it is not uncommon for non-MA eligible assets to be permitted within collateral investment guidelines, albeit usually in small proportions and subject to additional haircuts.

Public IG

Investment grade bonds are the most commonly used assets in Matching Adjustment portfolios. These include gilts, corporate bonds, quasi-government bonds (including US municipal bonds) and emerging market debt. Public bond investors benefit from the liquidity and transparency of the core IG markets.

Expanding the investment universe from the UK to Europe and the US provides insurers with more opportunities for diversification, particularly if allocating large amounts. However, non-GBP assets need to be cross-currency hedged back to GBP fixed cash flows if backing sterling liabilities, which can pose practical challenges in terms of derivative collateral management and, in funded re, recapture scenarios especially under a funds transferred arrangement.

Both bullet and amortising bonds can be MA-eligible and considered fixed cash flow assets as long as the payment schedule is fixed.[2] Typically, this means:

- Non-callable bonds;

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[1] Except for inflation linkage.
[2] Or inflation-linked to hedge liability inflation linkage.

- Bonds with a first call date shortly (e.g. up to one year) before maturity; or
- Callable bonds with a make-whole clause and sufficiently low make-whole spread over an appropriate reference yield.

Firms define maximum acceptable make-whole spreads (which typically vary at least by rating), and acceptable reference yields, in their MA applications.

Private Placements

Corporate private placements are corporate debt securities directly placed with investors rather than through public markets. Like corporate bonds, private placements span a wide range of industries, with tenors ranging from 3 to 30 years. However, due to the market's reduced liquidity and transparency, private placements generally trade at a premium to public corporates. While some private placements are externally rated, many are not.

Prepayment options are common in private placements, however there is typically strong make-whole protection, making the asset class generally suitable for MA portfolios.

Infrastructure Debt

Infrastructure debt refers to lending against physical assets in essential sectors such as energy, utilities, transport, telecommunications and social infrastructure. Due to the essential nature of the services provided by the underlying assets, infrastructure debt is a defensive asset class providing stable, predictable cash flows throughout economic cycles. Although generally known as a long-term asset class, infrastructure debt tenors can range from 3 to 30 years. In the US, infrastructure debt can be accessed through the private placements market (as well as through private origination).

Infrastructure debt typically has two phases: construction and operational phase. During construction, infrastructure projects carry construction risk which can introduce cash flow uncertainty to lenders (e.g. due to delays or cost overruns). Infrastructure debt with construction risk would therefore generally only be suitable as HP assets. On the other hand, infrastructure debt on operational assets with adequate prepayment protection would be considered MA eligible (with fixed cash flows).

Real Estate Debt

Real estate debt refers to private lending collateralised by real estate assets. The asset class is sometimes known as commercial mortgage loans (CMLs) or commercial real estate loans to differentiate it from residential mortgages, and securitised real estate lending such as Commercial Mortgage-Backed Securities (CMBS). Real estate debt is usually used to finance the construction, renovation or maintenance of real estate assets. Depending on the conditions of the real estate and the nature of the project, real estate debt can therefore have a variety of risk and return characteristics. Within MA portfolios, insurers typically use high-quality loans with conservative loan-to-value (LTV) and high debt service coverage ratios (DSCR).

Similarly to infrastructure debt, real estate debt needs to have strong prepayment protection to be MA eligible. While fixed rate CMLs with strong prepayment protection do exist in the UK, they are more commonly accessed on the US market and hedged back to sterling if backing sterling liabilities. Construction risk and significant business plan risk can introduce cash flow non-fixity.

ERMs

Equity release mortgages (ERMs) are financial products that allow homeowners (typically aged 55+) to access the equity in their property without having to sell or move. They are also known as "Lifetime Mortgages". These are loans secured against the borrower's property, with interest typically rolling up over time and repaid with the principle when the homeowner dies or moves into long-term care.

One of the key benefits offered to the borrower is the “No Negative Equity Guarantee” (NNEG), which stipulates that the amount of the loan due for repayment is capped by the property value at the time the loan is repaid (one death or transfer to care but not on voluntary repayment). This asset class typically has longer duration than infrastructure debt or CMLs, and is considered one of the key asset classes for annuity products for ALM suitability and illiquidity premium generation.

Typically, unstructured ERMs pose challenges for MA eligibility due to uncertainty in repayment timing and the repayment amount (which is linked to the property value due to the NNEG). However, insurers use structured solutions (e.g., securitisation or restructuring) to make ERMs MA-eligible. The Prudential Regulation Authority (PRA) has issued guidance on Effective Value Tests (EVT) and Appropriate Credit Risk Adjustments to ensure firms hold adequate capital against ERMs.

Investment Grade Collateralised loans obligations (CLOs)

Securitised credit such as RMBS, CMBS, ABS and CLOs are not typically MA eligible assets due to the level of prepayment optionality present. However, fulfilling certain criteria, they can be considered HP. Importantly, UK investors (and by extension, funded re providers to UK insurers) need to consider UK risk retention compliance when investing in securitised assets. Further, for inclusion in the HP bucket, insurers continue to need to demonstrate relatively high-quality cash flow matching despite some level of cash flow non-fixity.

For brevity, we focus on investment grade CLOs as an example asset class which we believe are suitable for MA portfolios as HP allocations. CLOs are structured securities backed by a pool of loans. Typically, these are either leveraged loans issued by large corporations (Broadly Syndicated Loan CLOs or BSL CLOs) or private direct lending (private credit CLOs). Investors access CLOs through debt and equity “tranches”, typically referred to as senior (AAA, AA), mezzanine (A to BB) and equity tranches. Cash flows from the underlying loans are distributed to tranche investors according to a defined waterfall which is designed to protect senior tranche cash flows. While CLOs command a spread over corporates, debt tranches have also historically exhibited lower default losses than equivalently-rated corporates bonds due to the diversification, active management and structural protections of CLOs, giving them the cash flow security that insurers look for when investing policyholder assets.

Most CLO tranches are floating rate and prepayable without prepayment protection post an initial non-call period. However, cash flows are contractually bound, and bounded in timing and amount, making the asset class a candidate for assets with HP cash flows.

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