



Beyond Bonds:

Exploring the Matching Adjustment Potential of
Credit-Linked Notes

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The UK life insurance industry continually seeks to utilise innovative methods to optimise Matching Adjustment (MA) portfolios. With approximately £50-60bn of bulk annuity transactions each year, and about half of those allocated to private assets which are offering outsized spreads compared to public markets, insurers face a real challenge in sourcing sufficient supply of assets. Credit-Linked Notes (CLNs) present an interesting format to capture additional spread pick-up, compared to traditional public market solutions, and offer an alternative to private markets for enhancing the MA levels of portfolios. This whitepaper introduces CLNs, exploring their mechanics and benefits, particularly for investors subject to matching adjustment requirements.

What are Credit-Linked Notes (CLNs)?

Credit-Linked Notes (CLNs) are financial instruments that combine one or more bonds with credit default swaps (CDS). The CLN pays a coupon based on the income generated by the underlying instruments and redeems at par upon maturity, provided no credit event occurs with the associated instruments. CLNs are highly customisable, enabling bespoke designs in terms of currency, maturity, and coupon structure. The CLN is issued by a special purpose vehicle, such as the SPIRE SPV¹ or bespoke SPV vehicles from an investment bank of choice.

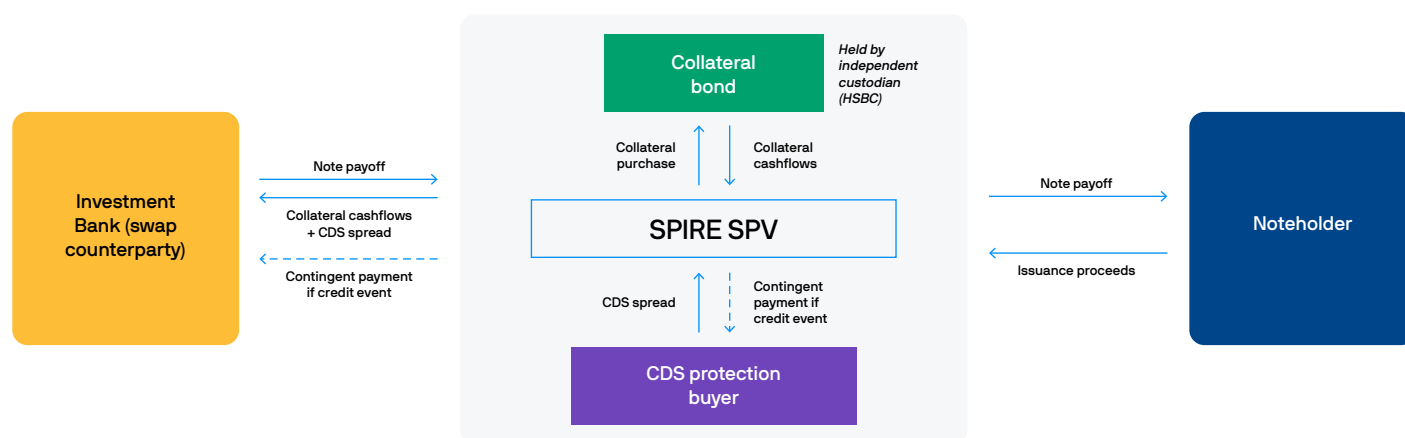
Simplified example of a CLN structure

As previously mentioned, CLNs typically contain at least one bond and a credit default swap (CDS):

- **The bond component** a CLN can contain one or more bonds, with the risk profile influenced by the creditworthiness of the chosen bond(s).
- **The CDS component** the CLN sells protection and thus receives the premium of the CDS. The CDS can be a single name or an index. (In the case of a single-issuer CDS, it is typically preferable to select less-correlated reference entities compared to the one chosen for the bond component within the same CLN to reduce correlation and thus risk).
- **The SPV** a Special Purpose Vehicle (SPV), such as the SPIRE (Single Platform Investment Repackaging Entity) SPV, houses the bond(s) as collateral. It then writes the CDS contract and enters an asset swap with an investment bank to transform the coupon and CDS income into regular coupons paid by a note issued from the SPIRE SPV to the insurance investor. Below is a simplified schematic illustrating the relationship between the investor, SPIRE and the selected investment bank.

¹ See whitepaper titled 'Innovative Fixed Income Solutions: Evaluating the added value of SPIRE Repacks', March 2025, J.P. Morgan Asset Management.

SPIRE SPV issued CLN structure



What benefits do CLNs offer?

CLNs present several advantages that make them attractive to investors seeking yield enhancement and diversification:

- 01 Yield and spread enhancement:** CLNs often offer higher yields and spreads compared to “cash bond-only” solutions due to the positive basis between CDS spreads and bond spreads that is frequently observable (subject to market conditions and pricing for an individual issuer). This yield enhancement feature is particularly appealing in environments with tight spreads. By capturing the CDS-bond positive basis, investors can achieve a significant yield pick-up, which is especially valuable in environments where interest rates decline. This feature enables investors to enhance returns without necessarily increasing credit risk exposure.
- 02 Customisable maturity and coupon:** Investors can tailor the maturity and coupon structure of CLNs to align with their investment strategies. Options include fixed or floating rates, structured coupons indexed to equity features, and maturities extending up to 10 years or beyond. This flexibility enables investors to fill potential gaps in their portfolios or extend the yield curve of an issuer, providing a strategic advantage in managing interest rate risk and cash flow requirements.
- 03 Currency flexibility:** CLNs can be denominated in various currencies, offering investors opportunities to diversify beyond the currencies typically associated with a given issuer’s bonds. This feature enables investors to manage currency risk more effectively and take advantage of favourable currency movements, thereby enhancing the overall return on investment.
- 04 Risk and diversification:** CLNs enable investment in a wide range of credit profiles, regions, and entity types through tailor-made baskets and a broad selection of CDS indices, such as iTraxx Main. This diversification potential assists investors in mitigating concentration risk and achieving a more balanced portfolio. By investing in various credit profiles, including investment-grade and mixed entities, investors can tailor their risk exposure to align with their specific risk tolerance and investment objectives.
- 05 No collateral requirements:** Unlike traditional CDS contracts, CLNs do not require an ISDA/CSA agreement, making them a non-recourse security format. This feature simplifies the investment process and reduces the administrative burden associated with collateral management, offering a liquidity advantage for investors.
- 06 Predictable cash flows:** CLNs offer a simple “one-line” ISIN format, ensuring that investors receive completely predictable cash flows, subject to no defaults, similar to investing in a single bond. This clarity regarding the payout profile from day 1 is particularly appealing to investors seeking stable income streams and reliable returns.

What benefits do CLNs offer? continued

- 07 Rating methodology:** Fitch published a rating methodology² that utilises a two or three way lookup table, providing the rating of a CLN composed of one or two bonds and a CDS contract based on the rating of each bond and the CDS name. This makes rating a CLN simple and formulaic, easing the design and ongoing oversight process. It is possible to receive an external rating or to utilise this methodology for the internal rating process.
- 08 Accounting treatment:** The note issued by the SPIRE SPV can be accounted for as a simple loan note and measured using either amortised cost accounting or fair value accounting, depending on the insurer's preference.

- 09 Capital requirements:** Insurers have several options for calculating the Solvency II capital requirements. The loan note can be considered without look-through using an external credit rating (or internal rating under the Fitch methodology) or look-through could be applied, and the SCR computed for the underlying bond(s) and CDS.
- 10 Matching Adjustment:** The CLN possesses attractive properties for the Matching Adjustment, as the Fundamental Spread will be based on the rating of the CLN, which will remain investment grade while the spread of the CLN exceeds that of similarly rated corporate bonds.

What considerations should investors be aware of?

While CLNs offer numerous benefits, they also come with certain risks and considerations:

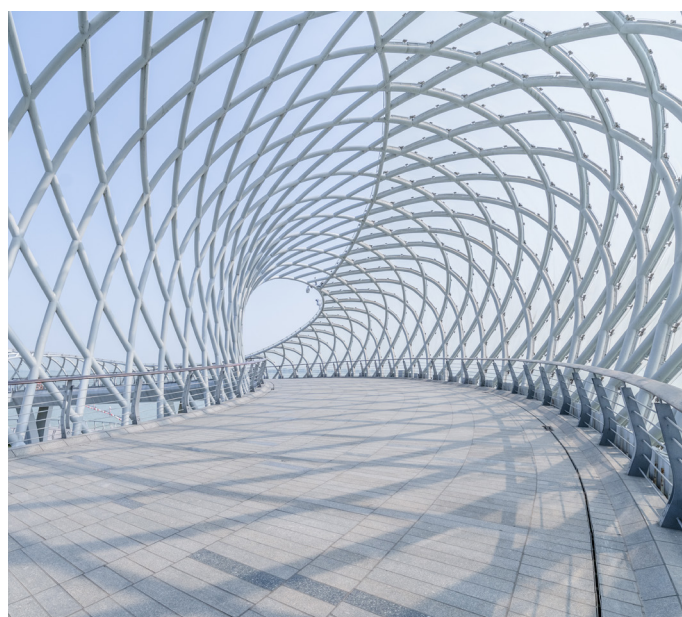
- **Credit risk:** The primary risk associated with CLNs is the credit risk of the underlying reference entities. Both the bond(s) and CDS have credit risk, and thus an event can lead to a loss of both coupon and principal.
- **Gap risk:** In the case of bond repack notes, gap risk occurs as downward market movements significantly impact the valuation of the CDS and the collateral bonds. This risk is accounted for at inception and incorporated into the credit charge.
- **Complexity:** The embedded CDS and bespoke nature of CLNs can introduce complexity to the investment, necessitating a thorough understanding of the underlying mechanics and risks.

Exiting a CLN

An investor can exit a CLN structure by requesting the investment bank to sell the collateral bond(s) and unwind the CDS position(s). Both markets are liquid, and therefore an exit can be completed within a short period of time (subject to prevailing market conditions).

Are there customised solutions available?

For investors seeking even greater flexibility, there are options for more customised solutions involving multiple bonds and multiple CDS. These bespoke structures can be tailored to meet specific investment criteria and risk profiles. Our team is actively working on offering access to these solutions to provide investors.



² See Fitch Single- and Multi-Name Credit-Linked Notes Rating Criteria, 11 January 2023.

Case study: Impact of CLNs on Matching Adjustment Portfolios

To illustrate the potential benefits of including CLNs in MA portfolios, we have carried out a portfolio optimisation exercise that demonstrates the additional value generated by the inclusion of CLNs in the investment universe.

The setup of the case study involves building an optimised and fully MA-compliant portfolio across public and private markets to match a typical UK defined benefit pensioner liability cash flow profile. The starting public investment universe includes government bonds and developed market corporate bonds, while the private investment universe includes public placements and commercial real estate debt.

For the case study, we assume the liabilities are all pensions in payment, and we utilise the Pension Protection Fund pension liability cash flows³ for the purpose of a sample set of liabilities.

The investment universe is extensive and includes over 6,500 individual public market bonds alongside 70 credit-linked note positions (covering a wide range of different collateral and CDS counterparties) and private asset classes. Using our proprietary MA optimisation software, we are able to build portfolios that maximise the theoretical level of MA spread for this investment universe and liability profile, ensuring that all the PRA cash flow tests are automatically satisfied. In addition to standard portfolio management constraints on issuer, sector limits etc. being applied. The model portfolios also take into account issuer-specific bottom up assessments from our portfolio management team.

On the right-hand side table, we present the output of the optimisation, which showcases that CLNs are significantly accretive to the portfolio MA level, with an approximate 15% allocation improving the portfolio MA level by 27 basis points. On a standalone basis, the CLNs considered in the case study have an MA spread level in line with commercial real estate debt at a similar rating and maturity. This provides insurers with an opportunity to support new bulk annuity transactions with a more liquid portfolio and reduced dependence on the ability to continually source high-quality private credit assets.

MA optimised model portfolio characteristics with and without CLNs

Statistics		With CLN	Without CLN
Expected Return (%)		6.33	6.04
Duration (yrs)		8.03	8.06
Seg A Size (%)		97.5	97.44
Seg B Size (%)		2.5	2.56
PRA MA (%)		2.15	1.88
MA Release (%)		16.83	14.7
MA Net Benefit post diversification (%)		9.33	7.3
Fundamental Spread (%)		0.53	0.56
SCR IR (%)		0.85	0.79
PRA test 1		Pass	Pass
PRA test 2		Pass	Pass
PRA test 3		Pass	Pass
Warf		208	212
Warf 10 year		204	207
	Asset Class	Market Value (%) With CLN	Market Value (%) Without CLN
Public	GBP Cash & MM	1.9	2.2
	GBP Gov	5.0	5.0
	GBP Corp A+	2.2	8.4
	GBP Corp BBB	2.2	3.7
	EUR Corp A+	9.0	6.6
	EUR Corp BBB	5.8	4.0
	USD Corp A	4.7	10.9
	USD Corp BBB	4.5	9.2
Private	GBP Private Assets	50.0	50.0
CLN	CLN	14.8	0

Source: J.P. Morgan Asset Management, as at 31 December 2024. Forecasts are not a reliable indicator of future performance.

³ Please see exhibit 12 in Untangling complexity A step-by-step guide to crafting optimal portfolios under the Matching Adjustment (2024 edition), J.P. Morgan Asset Management.

Conclusion

Overall, CLNs are an exciting addition to the asset management toolkit, providing access to attractive spread levels within an investment-grade portfolio relative to public market corporate bonds.

The existing rating methodology from Fitch can be applied to determine the rating of a CLN or used to support an internal rating methodology.

The case study demonstrated how CLNs can significantly improve the MA spread of a bulk annuity portfolio alongside a deep public and private investment universe.

For insurers wishing to enhance their competitive position in the bulk annuity market and complement their existing asset sourcing capabilities, we recommend undertaking a deep dive into the asset class.

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