The machines are here to help

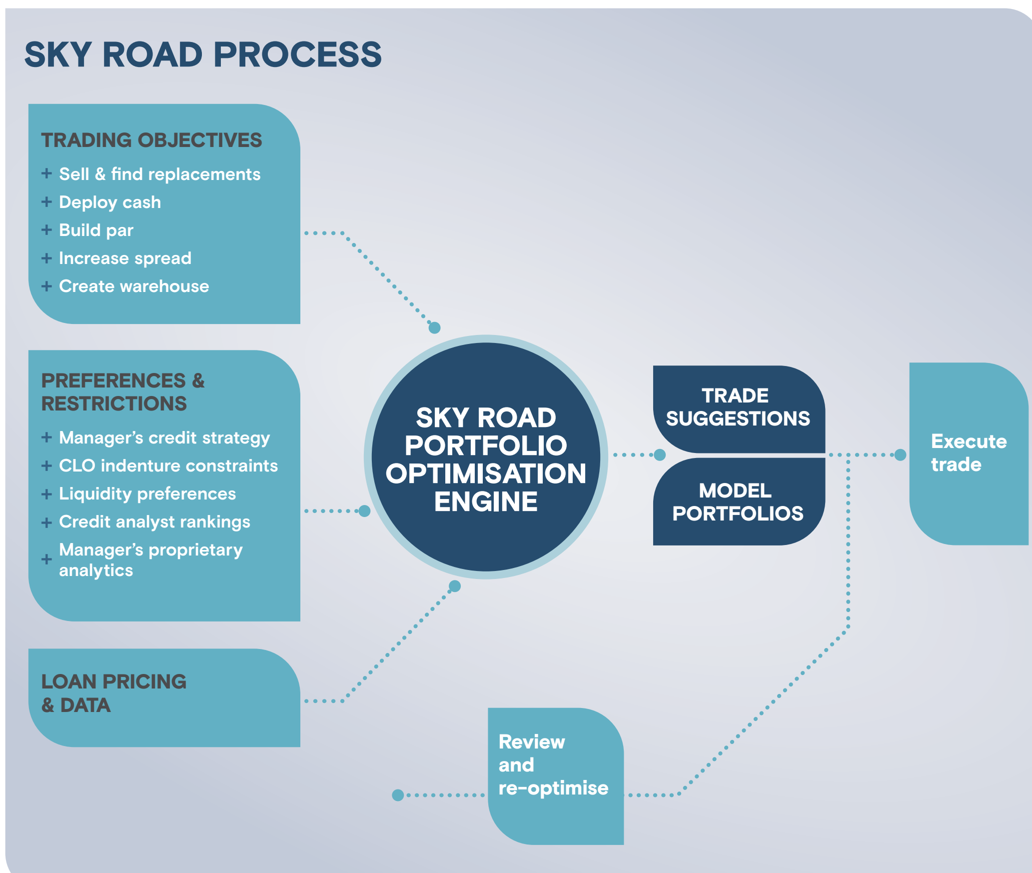
A new generation of AI tools is helping CLO managers optimise their portfolio selection and trading strategies. Sky Road has made great strides in this area by creating a tool which helps identify trades

Managing a CLO is never easy. Even in the best of times, finding good names in an illiquid asset class makes ramping up a new CLO difficult. Ongoing trading, whether to build par or reduce credit risk, is even more of a challenge as replacement names have to achieve the objectives of the trade whilst also complying with a myriad of tests and limits on factors such as spread, rating, diversity and so on.

None of that has changed, but according to Levoyd Robinson, managing principal of CFI Partners, deteriorating underwriting standards have become an issue. "The big challenge now is the constraint of quality. It's being paid enough for the risk of the less attractive paper in the market currently," he says.

The difficulty in finding good par-building trades seems to be reflected in CLO performance metrics. According to CLO-i, the average junior OC cushion for US CLOs has fallen from 5.36% in 2015 to 4.18% this year. Over that four year span, warf levels have deteriorated (by 168), weighted average spread has slumped (66 basis points), and triple C exposures have shot up (92bp). Thankfully for managers, the percentage of defaulted assets within CLOs has dropped sharply: going from 0.96% in 2015 to just 0.2% today.

Problems with portfolio optimisation are not confined



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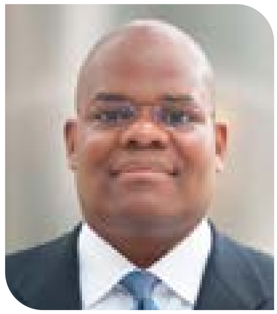
> John Borse, Sky Road

to the CLO world of course, but for other asset classes new technologies, such as artificial intelligence, have stepped in to make life easier for beleaguered portfolio managers.

In the long/short equity space the use of automated portfolio optimisers has been a standard for hedge funds for many years. These tools combine market data, portfolio constraints and risk models to create model portfolios. The fixed income market has been much slower to embrace AI but new products have been appearing recently, both for portfolio optimisation and for bond pricing.



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Bringing AI to CLOs

Many large CLO portfolio managers have been building proprietary tools to reduce the manual workload their PMs face in optimising trades for several years. But more recently a new generation of AI-powered optimisation tools from external providers such as KPMG and Sky Road have been taking shape. These are now able to provide more comprehensive solutions to optimisation.

Why has it taken so long for CLOs to catch up? According to John Borse, Chicago-based president and founder of Sky Road, it isn’t just that CLOs have more tests and constraints built in than hedge funds or mutual funds, it is also a reflection of the liquidity of the loan market itself.

“It’s counterintuitive but mathematically it is much more difficult to find the best combination of say, 10 trades to optimise an existing portfolio, than to re-balance the entire portfolio,” he says. “Unlike the classic equity optimisation problem, it isn’t practical, desirable or even allowed to turn over the portfolio continuously.”

CLOs do go through one situation which closely mimics rebalancing an entire portfolio – when they build their warehouses – and portfolio optimisers can assist managers with that. But as computers have become more powerful, and software more iterated, they can now help with those more challenging situations, like identifying par-build trades or finding replacement trades as well.

Sky Road’s approach is built around taking the reference data and proprietary analytics a CLO manager has on hand and adding in a customisable set of constraints to combine all of those inputs and present suggestions to the PM. Levoyd Robinson, managing principal of CFI Partners, points out that “tools like SkyRoad allow you to bring your own thoughts to bear and customise the metrics you screen with, instead of just relying on warf or weighted average spread or diversity”.

One of the added intricacies of the CLO market for optimisers is that of manager style. Investors are increasingly focused on the many distinct approaches a PM can take to managing their CLO, and have a deep dislike for style drift.

This complexity is creating a growing diversity among portfolio optimisers and raising the question of whether AI should help PMs develop an improved CLO strategy or deliver their existing one better.

According to Borse, Sky Road are firmly in the latter camp. “Our approach isn’t to define the strategy for the manager, rather we aim to assist the manager to implement and express their strategy in the most effective way. This puts the manager in full control of the trading preferences and objectives, while the machine combines that input with current market conditions to recommend trade ideas.”

For Sky Road the next development for their software will be to expand from offering trade suggestions for a single CLO, to looking across multiple deals and suggesting where the limited daily liquidity the loan market often offers can best be put to work.

FEWER DEFAULTS & LOWER RETURNS: 2015 vs. 2019 CLO COMPARISON

	US CLOs		European CLOs	
	Q3 2015	Q3 2019	Q3 2015	Q3 2019
Average junior OC cushion	5.36	4.18	4.41	4.26
Warf	2,715	2,883	2,806	2,942
WAS	4.20%	3.54%	3.87%	3.84%
Average annualised returns to equity*	20.77%	13.47%	17.53%	15.70%
Average % of portfolio rated Caa/CCC	4.55%	5.47%	2.58%	5.34%
Average % of portfolios in default	0.96%	0.20%	1.29%	0.33%

**Only active 2.0 CLOs were counted in the average*