Voya Perspectives

Market Insight

Mike Pagano
Head of Insurance Portfolio Management

Jeff Hobbs, CFA
Senior Insurance Portfolio Manager

Expanding the Search for Yield Amid Growing Volatility:

A Blueprint for Insurance Investors

The Search for Yield Continues, Volatility Returns

The prolonged period of low rates has forced insurers to counter the margin compression resulting from new money rates lagging portfolio book yields. To offset this yield erosion, insurance investors have multiple levers to pull, including credit, duration, structure, illiquidity, leverage, and alternatives. While each offers distinct advantages, insurance investors must also be mindful of the risks in the current market environment. At this stage of the business cycle, volatility has returned, forcing investors to balance the need for current growth with downside protection.

As insurers expand their opportunity set to maximize risk- and capital-adjusted returns in this environment, we believe four key themes have emerged from within the traditional tool set.

Maximizing Risk- and Capital-Adjusted Returns in the Current Market Environment

- **Lever #1: Credit—*Private over public credit***
  - Substituting public bond exposure with unique private issuers can enhance yield and total return potential, provide issuer diversification and help minimize downside risk with embedded structural protections
- **Lever # 2: Illiquidity—*Capturing illiquidity premium through Commercial Mortgage Loans (CMLs)***
  - CMLs offer a pick-up in spread, improved position in capital structure, and advantageous capital efficiency
- **Lever # 3: Structure—*Embracing the full spectrum of securitized assets***
  - Skillful credit selection can unearth opportunities in NAIC 1 securitized credit that offer a meaningful yield advantage to A-rated corporate credit
- **Lever # 4: Leverage—*Levering low volatility assets***
  - Financial leverage, conservatively sized and appropriately deployed, can produce attractive risk-adjusted returns relative to un-levered, higher beta assets

Lever # 1: Credit—*Private over Public Credit*

Given current spread levels for public credit and the potential turn in the credit cycle, we believe private credit provides attractive relative value.

Private placement debt instruments are a hybrid between public corporate bonds and commercial bank loans. Private credit can offer the fixed rate coupons and extended terms typically found in public credit, but also have embedded structural protections from a negotiated covenant package similar to bank debt. As a result of these characteristics, private credit has exhibited significantly higher recovery rates versus public bonds.

Figure 1. Private Credit: Strong Covenants Help Provide Downside Protection

Covenant Types	Private Credit Covenants	Protects
Capital Structure Protections	Liens	Restrict future borrowing with assets and preserve location in the capital structure
	Priority debt	Limits all types of claims that can rank ahead of private credit holders, generally including liens and debt at subsidiaries
	Sale of assets	Limits borrower's ability to sell revenue-generating assets. Generally, a level of asset sales is permitted, after which the borrower must use proceeds for replacement assets or to pay down debt
	Most favored lender	Assures that if the company's main bank facility gets a different or more favorable covenant, the private credit lenders will receive the same benefit
Financial Protections	Leverage or DSCR test	Ensures repayment of debt relative to borrower cash flows
	Interest/ fixed coverage	Ensures limitation of interest relative to cash flows of the company
	Net worth	Ensures repayment of debt relative to value of the company
Event Risk Protections	Merger	Limits types of mergers and restructuring transactions the company may undertake
	Change of control	Generally states that if a third party purchases a majority of the equity of the issuer, the lenders will be able to exit the transaction
	Nonpayment cross-default or acceleration	Stipulates that if the company does not pay another source of debt, or is in default with another source of debt, the private credit facility also will be in default
	Restrictions on distributions	Limits the distributions the company may make to its shareholders

Source: Voya Investment Management

Substituting public bond exposure with unique private issuers also improves issuer diversification in credit portfolios. With spread-to-publics from the 20 -100 basis point (bp) range, private credit offers the rare combination of the potential for higher returns and lower risk due to strong covenants (Figure 1).

Lever # 2: Illiquidity—*Capturing Illiquidity Premium with CMLs*

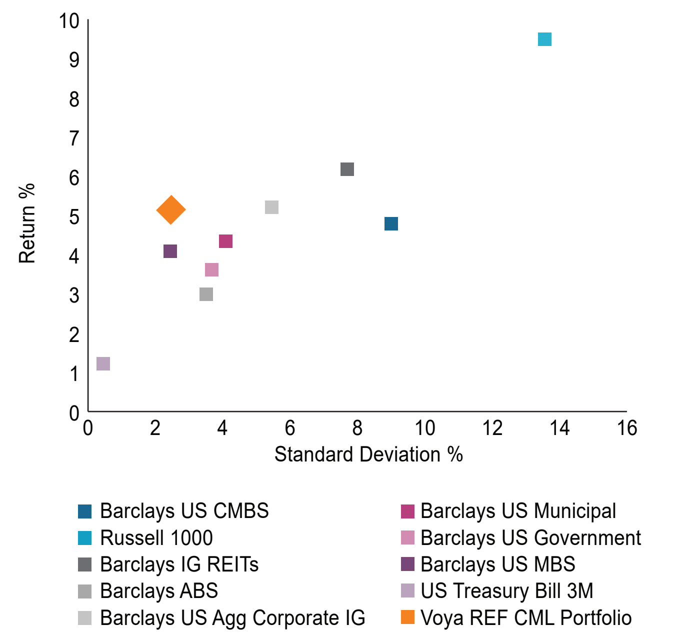
For long duration life insurers with well-matched asset and liability cash flows, sacrificing liquidity for a pickup in earned yield can be an appealing tradeoff versus incremental credit risk or duration. In addition to private credit, we also capture this illiquidity premia in CMLs.

The American Council of Life Insurers collects quarterly data for roughly three-quarters of the assets under management in the industry. In 2017, this subset of the life insurance space committed to $49B of CMLs at a spread of 176 bp. That spread is 66 bp wide to the average 2017 spread on the REIT sub-index of the corporate bond benchmark. Keep in mind, of course, that investment grade exposure to REITs is in an unsecured form whereas the CML exposure is secured. The market for public REIT debt is predominantly NAIC 2 with an average rating between BBB+ and BBB. Meanwhile, the majority of CMLs produced by the industry is designated as CM1 based on loan-to-value and debt service coverage ratios, making CMLs capital efficient versus REITs. To summarize, CMLs offer a pick-up in spread, improved position in capital structure, and advantageous capital efficiency.

Figure 2. Why Commercial Mortgage Loans? Higher upfront yields + back end income + lower credit losses = higher risk-adjusted return potential

The Favorable Return-to-Risk Profile of CMLs is Evident

Risk and Return, 2004-2017



Source: Bloomberg Barclays, Factset, and Voya Investment Management. 2004-2017. Past performance is no guarantee of future results.

Our commercial mortgage and private placement teams also opportunistically extend out the credit spectrum to capture additional risk premia. In our mortgage origination platform, we originate value-add mortgages, which include transitional loans, construction-to-perm loans, mezzanine financing, and B-notes. On the private credit side, we have built out a successful capability in lending to speculative grade credits, select special situations and workouts, and middle market opportunities.

While managing liquidity risk is a key component of effective enterprise risk management, the tendency of life insurer investment portfolios to be long duration and well cash flow matched can provide opportunities to capture structural illiquidity premia. In CMLs, we believe incrementally sacrificing this liquidity can improve risk and capital-adjusted returns.

Lever # 3: Structure—*Investing across the full spectrum of securitized assets*

With floating rate instruments and embedded structural protections, securitized credit has the potential to deliver attractive returns while providing the ballast portfolios need to weather future market turbulence.

While some insurers have eschewed certain securitized sectors given scars from the past cycle, the NAIC's 2009 and 2010 changes in capital requirements for residential mortgage backed securities (RMBS) and commercial mortgage backed securities (CMBS) have made the asset class more capital efficient and capital stable. NAIC ratings are determined by comparing the amortized cost of an investment and pricing breakpoints informed by scenario-based cash flow modelling provided to the NAIC by BlackRock.

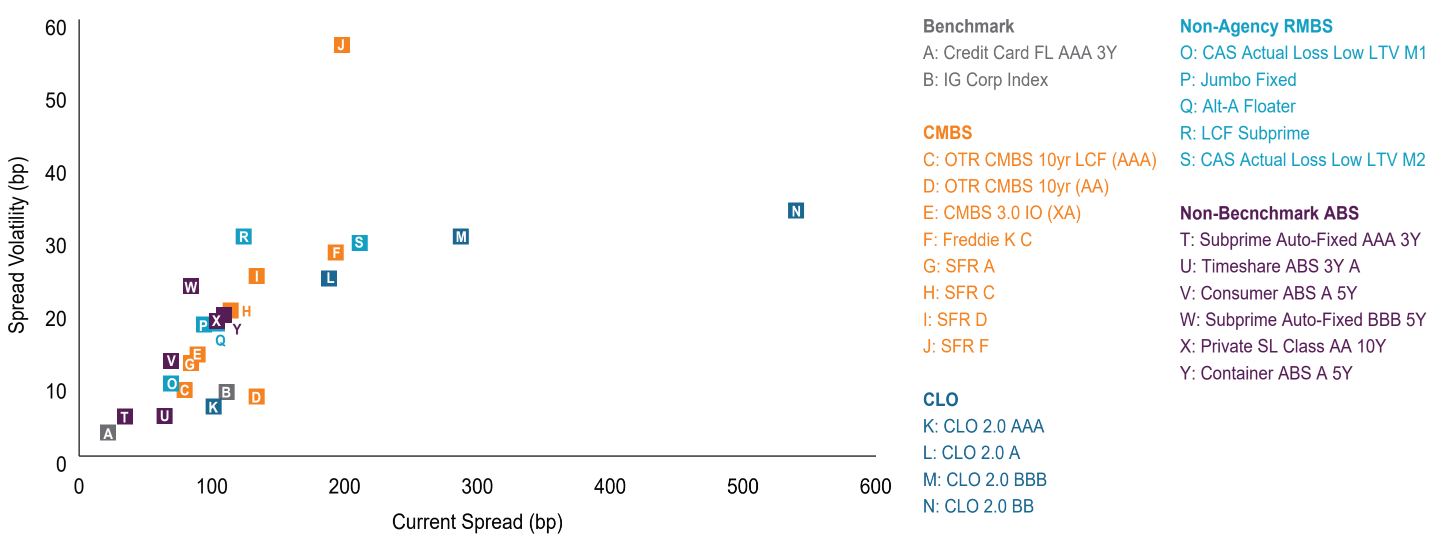
While holdings of investment grade corporate credit by the top U.S. insurance companies were tilted slightly towards NAIC 2 credit in 2016, approximately 95% of all non-agency RMBS holdings of that peer set were at prices that translated into NAIC 1 ratings. For CMBS, the figure was even higher.

In corporate credit, investors are subject to quality migration with the business cycle, secular industry forces, and dynamic capital structure decisions. The source of repayment for securitized credit is limited to a defined and legally segregated pool of assets. Purchasing securitized credit at a price that takes into account a sufficiently severe scenario allows for low risk of loss on that asset, which should lead to low and stable capital consumption over time. In risk-off market environments, the risk of negative ratings migration in corporate credit rises, whereas in RMBS and CMBS, an increase in market risk premia and the resultant lower securities prices, absent any change to the cash flow modelling assumption, may actually make securities more capital efficient.

Outside of RMBS and CMBS, asset-backed securities (ABS) and collateralized loan obligations (CLO) can offer investors opportunities to garner attractive risk- and capital-adjusted spread. The proliferation of non-benchmark ABS in the post-crisis era has expanded collateral types meaningfully. Investors with resources dedicated to analyzing these unique collateral pools can capture attractive spread relative to similarly rated corporate credits. The weighted average life of securitized credit investments also varies within and across subsectors, providing additional diversification benefits in a broader portfolio.

While insurance companies have historically been large participants in corporate credit markets, there has been an increased interest in recent years in CLOs. Insurance buying has predominantly been in the investment grade rated tranches, which are essentially de-levered exposure to speculative grade senior bank loans. The historical loss experience of investment grade CLOs is better than that of similarly rated corporate credits, and these tranches currently offer incremental spread versus corporate alternatives.

Figure 3. Securitized Credit: The opportunity for an attractive long-term allocation across the risk/return continuum



Source: Voya Investment Management.
As of 05/31/2018

Lever # 4: Leverage—*Levering Low Volatility Assets*

Leverage is a familiar concept for insurers who make investment decisions that weigh the attractiveness of securities with differing levels of implied leverage. Examples include public IG credit versus public below IG credit, and CLO exposure versus senior bank loans. Depending on the relative cost of the implied leverage of these assets and the explicit leverage available in the financing markets, introducing explicit leverage to assets with low implied leverage can produce more attractive returns.

Across market cycles, the Federal Home Loan Banks (FHLB) have been reliable and consistent source of cheap, explicit leverage for insurers. FHLB funding is available in the form of secured loans, called advances:

- Tenor and Structure:
  - Maturities range from overnight to 30 years
  - Fixed and floating rate structures funding are available
- Collateralization:
  - Advances are secured by eligible collateral, mainly mortgages[1]
  - The borrowing value is subject to a "haircut" which varies by collateral type
  - All advances require purchase of FHLB activity stock (~5% of advances)[2]
- Pricing:
  - Based on the borrowing costs of the FHLB system, which accesses capital at an attractive cost slightly above comparable maturity Treasury securities
- Financial Treatment
  - Depending on the borrower's state of domicile, the "advance" is treated either as "operating" or "financial" leverage

[1] Government securities, agency mortgage-backed securities, commercial and residential mortgage loans, and high quality private label commercial and residential mortgage backed securities are commonly used securities to collateralize FHLB advances.

[2] Can be part of the reinvested asset portfolios; dividend rates are determined independently by each FHLB

Figure 4. Applying leverage: The ample supply of high quality floating rate assets

Asset Type[1]	Collateral Eligible	Reference Rate	Spread	Estimated Tenor	Rating	RBC C-1 (Pre-Tax)
CMBS AAA	Y/N[2]	1ml	80	2y w/5 1y ext.	AAA	0.40%
CMBS AA	Y/N	1ml	110	2y w/5 1y ext.	AA-	0.40%
CMBS A	Y/N	1ml	130	2y w/5 1y ext.	A-	0.40%
CMBS BBB	N	1ml	205	2y w/5 1y ext.	BBB-	1.30%
Commercial Mortgage Loans	Y/N	1ml/3ml	165	4y	A	0.90%
Transitional CML	N	1ml/3ml	350	4y	BBB-/CM2	1.75%
CRE CLO AAA	N	1ml	75	1y	AAA	0.40%
CRE CLO AA	N	1ml	130	2y	AA-	0.40%
CRE CLO A	N	1ml	190	2y	A-	0.40%
CRE CLO BBB	N	1ml	270	2y	BBB-	1.30%
Single Family Rental ABS AAA	N	1ml	70	2y w/5 1y ext.	AAA	0.40%
Single Family Rental ABS AA	N	1ml	95	2y w/5 1y ext.	AA	0.40%
Single Family Rental ABS A	N	1ml	125	2y w/5 1y ext.	A	0.40%
Single Family Rental ABS BBB	N	1ml	145	2y w/5 1y ext.	BBB	1.30%
CLO AAA	N	3ml	103	6y	AAA	0.40%
CLO AA	N	3ml	145	6y	AA	0.40%
CLO A	N	3ml	175	7y	A	0.40%
CLO BBB	N	3ml	250	7y	BBB	1.30%
Agency RMBS	Y	3ml	30	4y	AAA	0.40%
Non-Agency RMBS	Y/N	1ml/3ml	125	Various	BIG/NAIC 1	0.40%
Credit Risk Transfer	Y/N	1ml	150	4y	BIG/NAIC 1	0.40%
Student Loan ABS	Y/N	1ml	80	5y	AAA	0.40%
Non-Benchmark ABS	N	1ml/3ml	100	3y	NAIC 1	0.40%
IG Private Placements	N	3ml	135	5y	BBB	1.30%
IG Bank Loan	N	3ml	200	3y	BBB-	1.30%
IG FRN	N	3ml	70	5y	A-	0.40%
FHLB Stock	N	N/A	343[3]	Activity-Based	AAA	1.10%

[1] Data as of 02/28/2018;
[2] Y/N: Eligibility requirements differ by bank.
[3] Select bank dividend rates less 3ml

Against a portfolio of floating rate FHLB “advances”, there are ample high quality floating rate assets to buy at attractive spreads. As Figure 4 highlights, these assets fall mainly in the major sub-sectors of the securitized credit markets. Depending on the member-defined risk profile, a diversified portfolio can be constructed with a range of maturities, NRSRO and NAIC rating profiles and sector allocations.

Thoughtfully constructed, prudently implemented and vigilantly monitored, a program that marries customizable FHLB “advances” with low volatility, liquid assets can be an attractive diversifying source of explicit leverage to complement exposure to assets with higher implicit leverage.

Conclusion

While this represents our high-level view, the nuances of applying these four levers will depend on the objectives of each insurer. Taking corporate credit exposure and risk in securitized credit must be informed by the prevailing portfolio allocations. Decisions around illiquidity must be mindful of liability characteristics.

We offer these viewpoints as a basis for discussing how we can meet the unique needs of each insurance investor in what remains a challenging investment environment.

In this still challenging rate and spread environment, insurance investors continue to struggle to deploy new capital into the market where new money yields frequently lag portfolio yields.

Faced with this challenge, we have offered a combination of customizable investment levers, deployable across an array of portfolios, that we feel will help lean against this persistent headwind.

Since the applicability of each of these levers will depend on the unique circumstances of each investor, we look forward to discussing our own experiences using these levers and how our insights might be applicable to your portfolios.

Investment Risks
All investments in bonds are subject to market risks. Bonds have fixed principal and return if held to maturity, but may fluctuate in the interim. Generally, when interest rates rise, bond prices fall. Bonds with longer maturities tend to be more sensitive to changes in interest rates.

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