New Frontiers:
Helping Insurers Find Investment Opportunities During Periods of Market Volatility

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The current volatility in global markets has been challenging for many insurance companies. As a result, it is now more important than ever before that insurers make sure they are considering the broadest investment opportunity set possible – including assets found in the private markets. Private market assets have long been a key ingredient within the largest insurance companies' general fund portfolios. Given their attractive risk-adjusted returns and diversification benefits, we believe insurers of all sizes should seek more optimal strategic asset mixes by including private market assets.

Portfolio Optimization

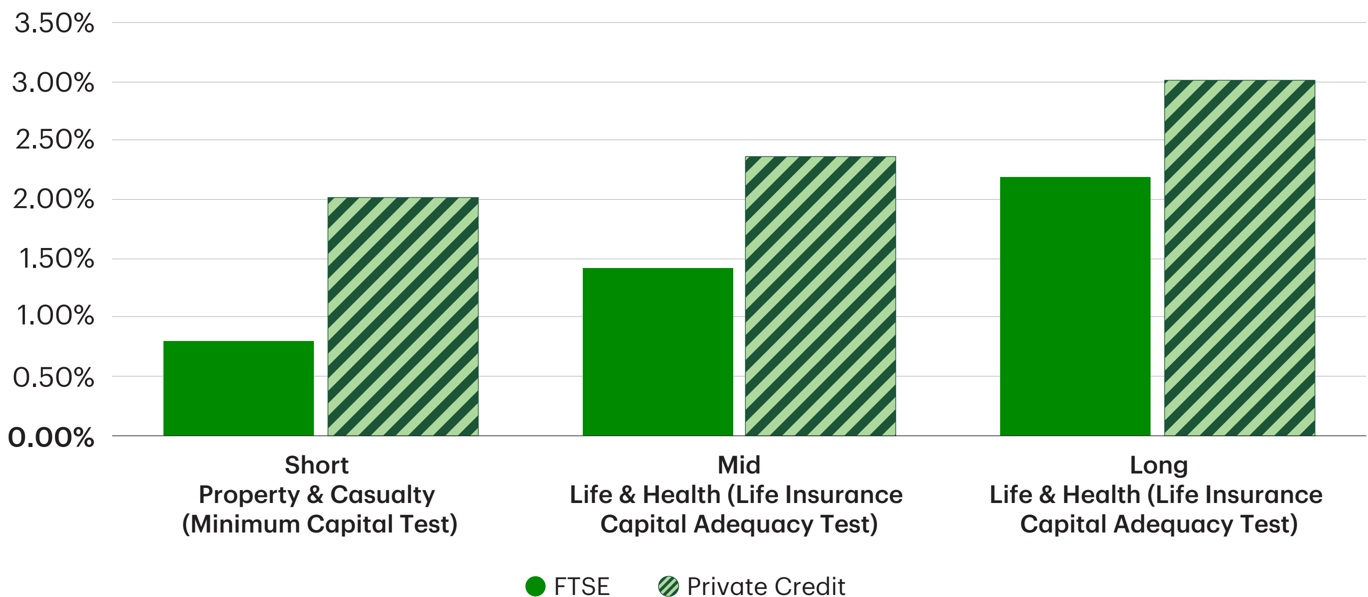
It's important to begin any strategic asset mix work with a deep understanding of the insurer's approach to managing its balance sheet. The required analysis often differs from more traditional portfolio optimization techniques such as mean-variance optimization. When structuring the insurance portfolio's strategic asset mix, the liability-backing and surplus portfolios should seek optimization on a risk-adjusted basis by incorporating actuarial reserving, regulatory capital costs and liquidity considerations into the analysis. While these two capital pools should be addressed in different manners, each can potentially benefit from the expanded opportunity set.

Access

An experienced origination team is critical to successful private market investing. In addition to the skills required to analyze private transactions, the team must possess the required relationships across industry segments to source, analyze and structure attractive investments. Some smaller insurers may have overlooked the private markets due to perceived high barriers to entry into these asset classes. Fortunately, select third-party asset managers like TD Asset Management Inc. (TDAM) provide access to these investment opportunities through their purposely staffed multi-asset-class platforms.

Expanding the Opportunity Set – Liability-backing Assets

Given regulatory encouragement in Canada to match assets to the underlying liabilities, liquidity and cash flow generation are generally the two primary characteristics sought when selecting from the fixed income opportunity set. However, in today's volatile market environment, it's important to define that opportunity set more broadly than public bonds. Canadian regulators certainly do think about it this way as they also consider preferred shares, mortgages and investment-grade private debt as fixed income or interest rate sensitive assets.

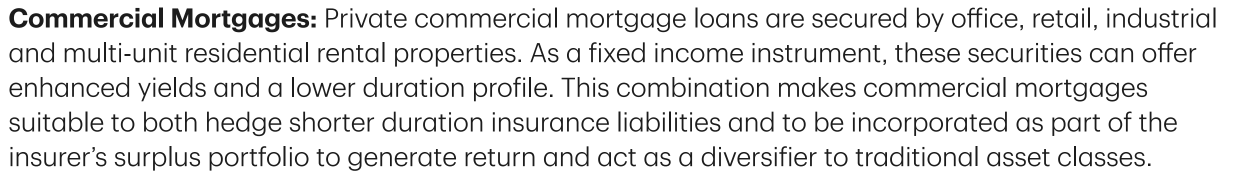


Source: TD Asset Management Inc. and Office of the Superintendent of Financial Institutions. As of June 30, 2021.

Property and casualty (P&C) insurance liabilities are often shorter-term. As a result, commercial mortgages are often an attractive liability-matching private credit instrument. As shown in Chart 1, an incremental 160 basis points (bps) of yield, net of incremental capital costs and asset default margins, can be garnered by replacing FTSE Short Bond exposures with commercial mortgages within the liability-backing allocation.

Life and Health (L&H) insurance liabilities are often longer in duration. To this end, investment-grade private debt is typically an attractive liability-matching private credit instrument. As shown in Chart 1, an incremental 80 bps and 100 bps of yield, net of incremental capital costs and asset default margins, can be generated by replacing FTSE Mid Bond and FTSE Long Bond exposures with private debt within the respective liability-backing allocations.

What Is Private Credit?



Commercial Mortgages: Private commercial mortgage loans are secured by office, retail, industrial and multi-unit residential rental properties. As a fixed income instrument, these securities can offer enhanced yields and a lower duration profile. This combination makes commercial mortgages suitable to both hedge shorter duration insurance liabilities and to be incorporated as part of the insurer's surplus portfolio to generate return and act as a diversifier to traditional asset classes.

Investment Grade Private Debt: Investment grade private debt offers an opportunity for incremental yield without sacrificing credit quality. These securities are supported by highly predictable contractual cash flows and enjoy enhanced credit protection through direct issuer negotiations. Private debt is most suitable for backing insurance cash flows with medium to long duration, where the additional yield over comparable public corporate bonds can be harvested to generate investment gains.

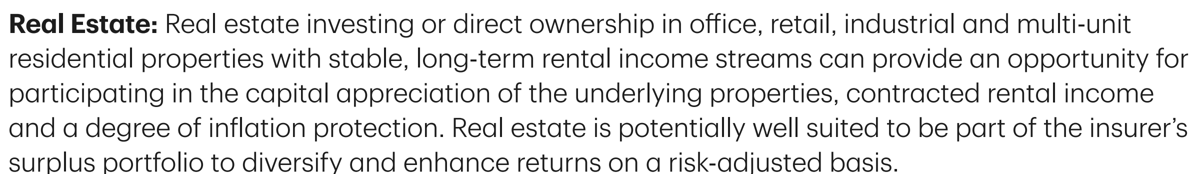
Expanding the Opportunity Set – Surplus Assets

An insurance company's surplus assets typically serve a dual purpose. In part, growth is expected to support predictable premium costs for policyholders, while at the same time these assets can be drawn upon to provide a buffer for fluctuating and adverse claims experiences.

When insurers seeking to enhance returns within their surplus accounts rely solely on increasing their equity allocations, this generally requires increasing their risk appetite as well. However, adding alternative investments can in many cases reduce the portfolio's total risk due to these assets' lower correlation to equities without sacrificing expected return.

Typically, public securities are included for liquidity management, while alternative assets are added for diversification and yield enhancement. With the purpose of the segment clearly defined, the surplus portfolio optimization exercise can then be performed by incorporating the appropriate regulatory capital costs and actuarial reserving margins.

Real Estate and Infrastructure



Real Estate: Real estate investing or direct ownership in office, retail, industrial and multi-unit residential properties with stable, long-term rental income streams can provide an opportunity for participating in the capital appreciation of the underlying properties, contracted rental income and a degree of inflation protection. Real estate is potentially well suited to be part of the insurer's surplus portfolio to diversify and enhance returns on a risk-adjusted basis.

Infrastructure: Infrastructure investing in privately purchased physical assets that provide essential services can be attractive given their monopolistic attributes, strategic location or regulatory protection (e.g. airports, toll roads, regulated utilities, independent power producers, etc.). Earning returns from the revenue generated by the operation of these underlying assets can be attractive for investors that can afford to take a long-term perspective, such as within a surplus allocation. These assets typically provide a diversified source of return enhancement and inflation protection.

Every Insurance Company Is Unique

We understand that insurance company objectives are often more complex than simply maximizing returns. In fact, most insurers have multiple objectives whose relative priority can change over time. Insurance investing is not a set-and-forget exercise but rather a dynamic process that requires ongoing monitoring and revision as the environment insurers face changes. We believe insurers can confidently navigate all environments when they have a broad and deep opportunity set to draw upon.

To bring the benefits of a full opportunity set to life, two case studies are shown to illustrate these concepts in today's market environment.

Case Study 1: Farm Mutual P&C Insurer

Consider as a hypothetical example a small Farm Mutual P&C insurance company. Historically, the company has only invested in public markets assets. This company offers farm, auto and home insurance policies to its members. Its combined $30 million claim and unearned premium liabilities have a duration of 3 years and are backed by duration-matching public fixed income assets. The company's surplus assets of $20 million are comprised of a mixture of public bonds, preferred shares and market-cap weighed equities. The company is regulated by the Office of the Superintendent of Financial Institutions (OSFI) and subject to reporting under the Minimum Capital Test (MCT) guidelines, with a target MCT ratio of 400% and required return on capital of 6%.

The company is challenged by the current market environment and seeks opportunities for incremental yield. At the same time, given the volatility of its claims experience, it is weary of volatile equity markets being its only source of surplus growth and seeks risk reduction through diversification of these growth assets.

Liability-Backing Portfolio

With a current 70% allocation of liability-backing assets to government bonds, the current asset mix is quite conservative.

Allocation	Current	Full Opportunity Set
Federal Bonds	10%	10%
Provincial & Municipal Bonds	60%	20%
Corporate Bonds	30%	30%
Commercial Mortgages	0%	40%
Characteristics		
Duration	3.0	3.0
Gross Return	1.01%	2.17%
Asset Default Margins	0.09%	0.21%
Cost of Capital	0.05%	0.36%
Net Return	0.88%	1.61%

By using the full opportunity set and introducing a 40% allocation to commercial mortgages, the company can expect to earn an incremental 73 bps net return on a risk-adjusted basis. At the same time, the short duration of the commercial mortgage cash flows preserves the cash flow match of the assets to the underlying liabilities.

Surplus Portfolio

To reduce surplus volatility, the insurer can use the full opportunity set as well. The company can look to reduce its current allocation to traditional market-weighted equities by seeking equity-style diversification and less correlated alternative asset classes. More specifically, the company found a low carbon, low volatility equity allocation attractive. The investment has not only reduced wrong-way risk within the company's underlying insurance business, but it also is well aligned with the company's corporate philosophy and values in a sustainable investing context. In addition, alternative assets are attractive as they draw a lower capital charge when compared to public equities.

Allocation	Current	Full Opportunity Set
Fixed Income	35%	35%
Preferred Shares	15%	15%
Canadian Equities	30%	15%
US Equities	20%	0%
Low Carbon, Low Volatility Equities	0%	10%
Real Estate	0%	15%
Infrastructure	0%	10%
Characteristics		
Expected Return	4.4%	4.4%
Cost of Capital	1.7%	1.4%
Asset Default Margins (Fixed Income)	0.0%	0.0%
Net Expected Return	2.7%	3.0%
Volatility	8.3%	5.6%
Capital-Adjusted Sharpe Ratio	0.32	0.53

By expanding the spectrum of opportunities, the surplus portfolio's net expected return is increased by 30 basis points, while the volatility is reduced by 2.4%, leading to a significant increase in the portfolio's capital-adjusted Sharpe ratio.

Total Company Characteristics

Capital Requirements	Current	Full Opportunity Set
MCT Factor (Average)	9.5%	11.0%
Total Portfolio Metrics		
Net Income Impact[1]	0%	$0.5M
Surplus VaR (1-year, 95%)	$1.6M	$1.0M
Portfolio Risk Premium	1.7%	2.3%
Risk Premium per Unit of Capital	18%	21%

Putting it all together, at the total company level, the incremental returns on the liability-backing portfolio translates to a net income gain of approximately $0.5 million. At the same time, the surplus volatility declines, and there is an increase in the overall risk premium earned per unit of regulatory capital allocated. As a result, the objectives of increasing yield and reducing volatility are met.

[1] Net income impact calculated as: market value of liability-backing portfolio × duration × increase in net yield × (1 – tax rate).

Case Study 2: Monoline Long-Term Disability (LTD) Insurance Company

Next, we consider as a hypothetical example a medium-size monoline long-term disability (LTD) insurance company. The company currently invests in public market assets only and is looking to explore private asset classes to generate incremental return. The company's $400 million of actuarial liabilities have a medium-length duration of approximately 8 years. The company's surplus assets of $300 million rely solely on equities for long-term growth. The company is regulated by OSFI and reports under the Life Insurance Capital Adequacy Test (LICAT) guidelines, with a target LICAT ratio of 170% and required return on capital of 10%. The company is looking to both improve the yield of the assets backing its actuarial liabilities in a capital-efficient manner and reduce the volatility of the plan's surplus assets by diversifying its growth asset allocation.

Liability-Backing Portfolio

The LTD product prohibits payment portability or any sort of cash value commutation. As a result of having lower liquidity needs, the insurer could exchange some of its conservative liquid public market fixed income for private credit and receive better compensation through harvesting the liquidity premium. At the same time, the portfolio would continue to duration-match the underlying liabilities.

Allocation	Current	Full Opportunity Set
Federal Bonds	30%	10%
Provincial & Municipal Bonds	40%	15%
Corporate Bonds	30%	25%
Private Debt	0.0%	50%
Characteristics		
Duration	8.0	8.0
Gross Return	1.84%	2.85%
Asset Default Margins	0.06%	0.18%
Cost of Capital	0.25%	0.61%
Net Return	1.54%	2.08%

While non-publicly rated private debt commands a capital charge of 6% under LICAT, the default margins are typically lower than its public counterparts due to the stronger covenants governing private issuances, providing additional spread on a net basis.

Despite an increase in the overall asset default margins and cost of capital from higher allocation to credit assets, the net incremental yield more than compensates the insurer for the additional risk, resulting in an incremental net expected return of 54 bps.

Surplus Portfolio

The current surplus allocation consisting solely of public market instruments is highly liquid but heavily concentrated in equities for long-term growth. The insurer believes it has excessive liquidity within its surplus segment and could achieve lower volatility through a more diversified growth allocation. The recommended allocation shifts toward provincial and corporate bonds, offering incremental yield net of cost of capital and expected default margins, while still providing sufficient liquidity in the surplus portfolio.

To branch out from highly-correlated equity exposure and reduce surplus volatility, the insurer introduced style diversification through an allocation to low volatility strategies and the addition of real estate.

Allocation	Current	Full Opportunity Set
Fixed Income	35%	35%
Federal Bonds	25%	0%
Provincial Bonds	10%	15%
Corporate Bonds	0%	20%
Preferred Shares	15%	15%
Canadian Equities	30%	15%
US Equities	20%	0%
Canadian Low Vol Equities	0%	15%
Canadian Real Estate	0%	20%
Characteristics		
Expected Return	4.6%	4.6%
Cost of Capital	3.1%	2.4%
Asset Default Margins (Fixed Income)	0.0%	0.1%
Net Expected Return	1.5%	2.1%
Volatility	7.9%	6.4%
Capital-Adjusted Sharpe Ratio	0.19	0.34

By expanding the opportunity set, the surplus portfolio's net expected return is increased by 60 bps while the volatility is reduced by 1.5%, leading to a significant increase in the portfolio's capital-adjusted Sharpe ratio.

Growth

Total Company Characteristics

Capital Requirements	Current	Full Opportunity Set
LICAT Factor (Average)[2]	9.6%	10.1%
Total Portfolio Metrics		
Net Income Impact	0%	$12.6M
Surplus VaR (1-year, 95%)	$25.3M	$18.3M
Portfolio Risk Premium[3]	1.7%	2.4%
Risk Premium per Unit of Capital	17%	25%

Putting it all together, at the total company level, the incremental returns on the liability-backing portfolio translates to a net income gain of approximately $12.6 million. Meanwhile, the surplus volatility declines, and there is an increase in the overall risk premiums earned per unit of regulatory capital allocated. So, the objectives of both improving the yield of the assets backing its actuarial liabilities in a capital-efficient manner and reducing the volatility of the plan's surplus assets by diversifying its growth asset allocation are achieved.

[2] LICAT factor does not include the impact of interest rate risk capital.

[3] Portfolio risk premium calculated as the spread of portfolio expected return over the Government of Canada bond yield.

How TD Asset Management Can Help

Over the last 30 years, TDAM has built significant expertise in managing assets on behalf of insurance companies, offering product access and portfolio management services for insurance companies with the broadest solution suite in Canada. To help Canadian insurance companies navigate a volatile market environment and complex regulatory landscape, TDAM has numerous professionals with actuarial and investment expertise across multiple teams who can help provide insurance clients with unique insight and solve their most important challenges.

Strategy

Connect with TD Asset Management

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