

Liability driven investing (LDI) differs from a traditional policy portfolio approach in that an actual liability stream serves as the benchmark instead of a simple return target or a proxy based on market indices. Under an LDI approach, success is judged in terms of how closely investment returns track changes in the liability benchmark, rather than relative or absolute performance objectives. By taking on measured, compensated risk, an LDI portfolio can decrease a funding shortfall or build a reserve against unforeseen developments in the pension environment or capital markets, in effect reducing the true risk of the pension plan.

LDI turns the traditional pension framework upside down. Cash in an LDI setting can be a high-risk asset since its low duration provides little or no correlation with bond yield-driven swings in liability valuations. Long bonds, on the other hand, are typically considered low-risk because their values adhere more closely with changes in long-term liabilities.

Tightly Matched

LDI has largely come to be associated with passive or dedicated strategies, where income streams are tightly matched to the payment flow of liabilities.

minimize the variability of the asset/liability ratio under changes in interest rates.

Unfortunately, the liabilities are spread along the yield curve and purely extending duration can result in a structural mismatch which can lead to unwanted volatility in the asset/liability ratio relative to a pure flow match strategy under certain yield curve changes.

A superior approach is to analyze the performance of the assets and liabilities against a series of yield curve scenarios. The greater precision this provides not only improves the accuracy of the outcomes, but also provides a sound foundation for assessing potential active management strategies. It is our view that when building a liability driven portfolio, it can be advantageous to invest in corporate bonds whose credit is stable and the possibility of a credit event is remote. We believe in the use of credit products and would suggest that, at times, it can be advantageous to invest up to 75 per cent to 100 per cent in corporate bonds.

Longer-dated securities are more volatile from both the standpoint of duration and credit spread divergences. Miscalculations in credit risk assessment represent a much greater risk to a plan's funded status than for comparable market duration bonds.

Long Duration Corporate Strategy

In our view, this is an unnecessarily narrow depiction of LDI principles and one that results in lost opportunities.

Where appropriate, we advise an active approach to LDI, allowing portfolios to vary from an immunized position to take advantage of opportunities to add value. The traditional method of relying on a single discount rate to value liabilities does not fully capture their often complex structure and true interest-rate sensitivity. In order to measure liabilities properly, we need to discount cash flows along a predetermined yield curve structure. We advise the use of a blended yield curve made up of various credits that correspond to a policy statement's credit exposures.

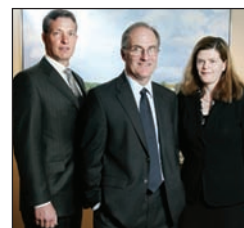
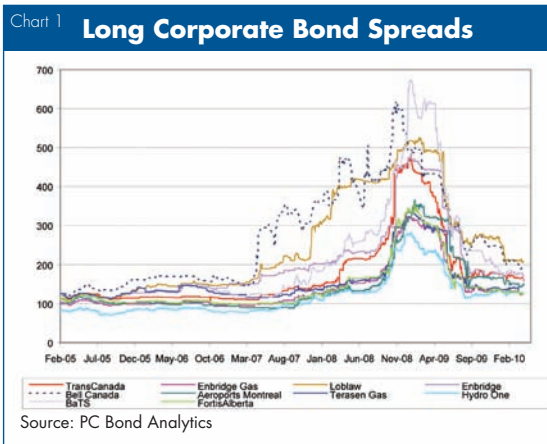
We start with the objective of constructing portfolios that will perform similar to, or outperform, the plan's liabilities as market yields change over time. This style of investing can be described as a dollar duration approach. A dollar duration approach requires that the asset's duration target be adjusted

to a number that will ensure that the change in the dollar value of assets approximates the change in the dollar value of the liabilities. This adjustment factor is the ratio of the assets to liabilities discounted at the predetermined yield curve. In theory, this should

'Fallen Angel'

When matching long dated asset and liabilities, one of the worst outcomes for the corporate bond portfolio is an impairment of principal either from a 'fallen angel' bond that is downgraded below investment grade and trades on a dollar basis rather than a credit spread basis and/or from a default. The resulting loss of duration from a bond default creates a duration mismatch in the portfolio. The fund may also be forced to manage that mismatch for a long time as credit default wind-ups can take two to three years. It is crucial in long-term corporate bond security selection to ensure that the corporation's underlying assets and cash flows supporting the bonds are long-dated. As an example, it is fairly easy to fathom that a company that operates an electricity transmission network or a natural gas distribution network will still be standing and necessary 30 or 40 years from now.

Conversely it is more difficult to contemplate what a highly cyclical company like a retailer or an industry dependent on technological advances and heavy capital expenditures such as telecommunications will look like in the long-term. ■



MARKET MONITOR

By: Bruce Corneil, David Gregoris, & Sue McNamara

Bruce Corneil is a senior vice-president, fixed income, and David Gregoris, CFA, and Sue McNamara, CFA, are vice-presidents, fixed income, at Beutel Goodman.