

AVOIDING BUYER'S REMORSE: WHEN'S THE RIGHT TIME TO BUY ANNUITIES?

The topic of de-risking defined benefit pension plans is getting more and more attention from plan sponsors and pension committees these days.

For many pension plans, transitioning responsibility for the care of their members to an insurance company through an annuity purchase is the eventual objective. New products like annuity buy-ins (also known as Pensurance™) mean that top-up cash contributions and accounting settlements are no longer deterrents to purchasing annuities.

But when is the right time to purchase annuities? No one wants to experience “buyer’s remorse” by buying something today that goes on sale next month or next year.

This article explains some of the factors that impact annuity prices and suggests a strategy that plan sponsors and pension committees can use to minimize the chance of buyer’s remorse, namely generating cash for an annuity purchase by selling bonds. The strong relationship between bond prices

and annuity prices protects the plan sponsor and pension committee from ever being too wrong in their timing.

WHAT FACTORS IMPACT ANNUITY PRICES?

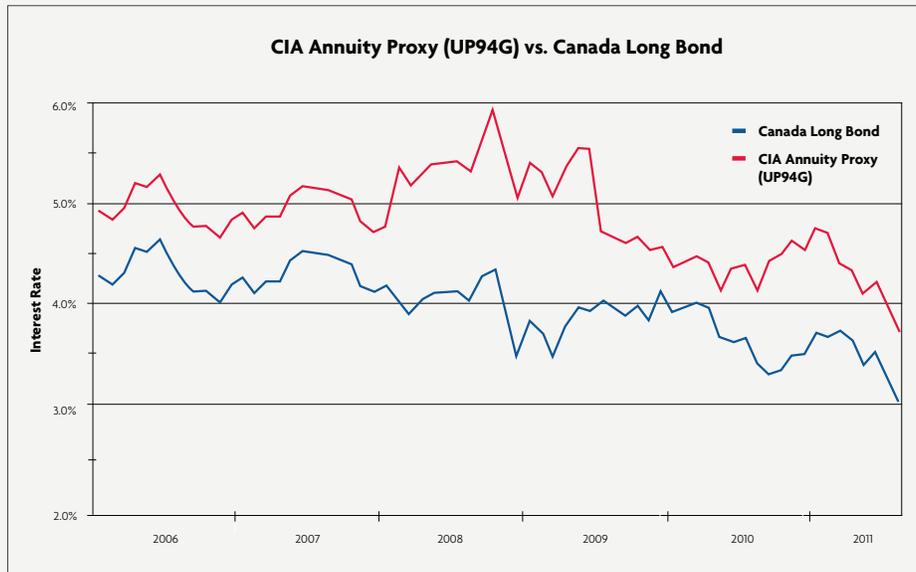
People often assume that when Government of Canada bond yields are at historically low levels, annuity prices must be at historically high levels.

The level of Government of Canada bond yields definitely impacts annuity prices, but there are many other factors that affect annuity prices. For example, insurers don’t just rely on Government of Canada bonds to back their annuities – they use other investments such as provincial bonds, corporate bonds, and mortgages. All of these investments include credit spreads, which can change over time and can thus offset or compound changes in Government of Canada bond yields.



Another factor that impacts annuity prices is supply and demand. If the volume of annuity transactions coming to market in a particular year is much lower than the insurers' planned sales volumes, then annuity prices will generally decrease as insurers bid aggressively on transactions. On the other hand, when the demand for annuities exceeds the supply, then annuity prices will generally rise.

These factors mean that changes in annuity prices do not always mirror changes in Government of Canada bond yields, as can be seen in the following graph.



In 2006 and 2007, the relationship between Government of Canada bond yields and annuity prices was very consistent, and the two moved in parallel during this time. In 2008 and the first part of 2009, this historical relationship decoupled as yields on some of the riskier fixed income assets such as provincial bonds, corporate bonds and mortgages increased dramatically due to the financial crisis. Insurers were able to capture these higher yields and offer lower annuity prices.

The historical relationship reasserted itself in the latter half of 2009 and the first half of 2010 as markets recovered from the financial crisis. In mid 2010 the two rates became decoupled again due to a supply and demand imbalance as the volume of annuity transactions coming to market in 2010 was just over half of the volume coming to market in 2009. This resulted in insurers pricing annuities aggressively to win business and annuity prices that were not far off from their 2006 and 2007 levels.

Even though Government of Canada bond yields are now at historically low levels, opportunities for favourable annuity prices are still available. Insurers are regularly sourcing assets with attractive credit spreads, and supply and demand imbalances in the market continue to affect prices. In addition, the CIA Annuity Proxy rate is an average rate and plans with different characteristics may experience better prices. For plan sponsors considering an annuity purchase in the future, an illustrative annuity quote may be the best way to avoid missing a market opportunity.

READING THE GRAPH

The graph shows the Government of Canada long bond yield and the Annuity Proxy rate published by the Canadian Institute of Actuaries (CIA). When reading the graph, it's important to remember that there is an inverse relationship between the CIA Annuity Proxy rate and annuity prices. That is, a higher CIA Annuity Proxy rate translates into lower annuity prices. Since March 2011 the CIA Annuity Proxy rate has been expressed using the UP94 mortality table and the AA improvement scale. We have adjusted the CIA Annuity Proxy rates before December 2009 by adding 20 basis points, and between December 2009 and February 2011 by adding 5 basis points, to roughly equate the rates to this new mortality table and ensure an apples-to-apples comparison.

CIA ANNUITY PROXY RATE

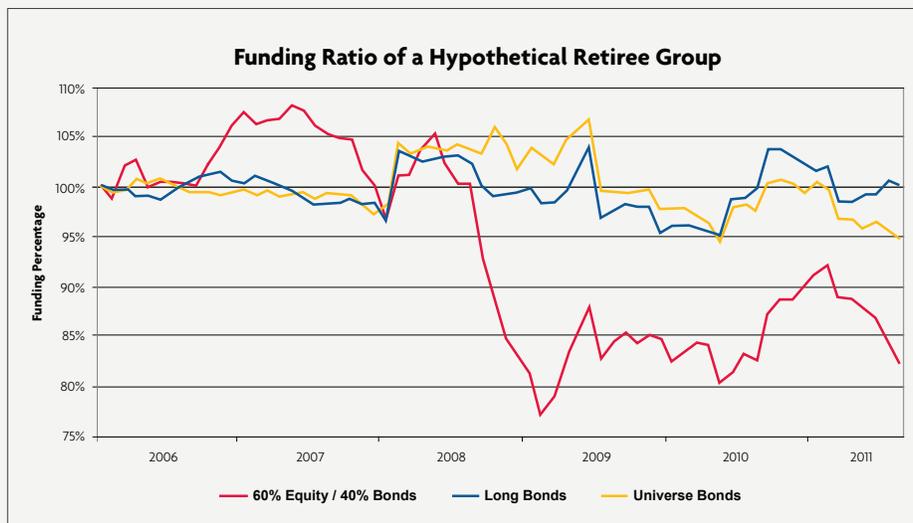
As the name suggests, the CIA Annuity Proxy rate is designed to approximate the annuity purchase interest rates available in the market at a given point in time. On a quarterly basis, insurers provide illustrative annuity quotes to the CIA. The CIA considers these illustrative quotes, along with actual group annuity purchases in the last quarter, to set an appropriate average interest rate. In this way, the CIA Annuity Proxy reflects insurers' available assets as well as the supply and demand of annuities, in addition to Government of Canada bond yields.

IT'S ALL RELATIVE

As we just saw, there are a number of factors in addition to Government of Canada bond yields that influence annuity prices. One way of deciding whether annuities are expensive or inexpensive is to use the CIA Annuity Proxy rate, which captures all of these factors. This provides a good indication of how current annuity prices compare to past annuity prices.

However, this approach does not consider the performance of the pension plan's assets. For example, annuity prices might be at all-time highs, but if the pension plan has just made a 15% return on its bond portfolio, it could be an ideal time to de-risk by buying annuities.

One way to better understand the relationship between plan assets and annuity prices is to look at how they've behaved over time. For each month in the last five years, we've calculated the funding ratio for a hypothetical retiree group.



As we can see from the chart, the strategy of backing a retiree group with a Balanced Portfolio resulted in a funding ratio that often dramatically deviated from 100%. This isn't surprising as equity returns are uncorrelated to annuity prices. Generating cash for an annuity purchase by selling a portion of a plan's Balanced Portfolio can easily lead to buyer's remorse given the unpredictable swings in equity markets.

This creates uncertainty for plan sponsors and pension committees, and can lead to a lot of debate around when to purchase annuities. Fortunately, there's a better strategy.

As we can see from the chart, the strategy of backing a retiree group with a Long Bond Portfolio or a Universe Bond Portfolio resulted in a funding ratio that stayed very close to 100%. This isn't surprising as bond and annuity prices both react in similar ways to changes in interest rates. Another way of saying this is that any decrease in annuity prices will largely be offset by a decrease in the value of a pension plan's bond portfolio (and vice versa).

The strategy of generating cash for an annuity purchase by selling bonds can be very attractive to plan sponsors or pension committees that are concerned about purchasing annuities at the wrong time. Under this strategy, the strong relationship between bond prices and annuity prices means that the timing can never be too wrong, minimizing the chance of buyer's remorse.

CALCULATING THE FUNDING RATIO

The funding ratio for the hypothetical retiree group has been determined by calculating the following values:

- The cost of purchasing annuities for a hypothetical retiree group with a duration of 9. [A]
- The market value of the portfolio of assets backing the hypothetical retiree group. [B]
- The funding ratio for the hypothetical retiree group. [B divided by A]

Because different pension plans will allocate different assets to back their retiree liabilities, we will look at three different asset portfolios:

- A Balanced Portfolio made up of 20% TSX, 20% S&P500, 20% EAFE and 40% DEX long bonds.
- A Long Bond Portfolio made up of 100% DEX long bonds.
- A Universe Bond Portfolio made up of 100% DEX universe bonds.

ANNUITIES AS AN ASSET CLASS

A natural extension of the strategy of generating cash for an annuity purchase by selling bonds is to think of annuities as a type of bond, which perfectly offsets all of the investment risk and longevity risk associated with a designated retiree group. This is perhaps most obvious for Pensurance™ (as it remains an asset of the pension plan), but with a bit of imagination also applies to traditional annuities.

Thus the strategy becomes one of simply shifting plan assets from one type of bond (long or universe) into another (annuity). Over time, the plan sponsor or pension committee would shift assets out of equities and into long and universe bonds and/or additional annuities, in order to achieve the plan's target asset mix.

DID YOU KNOW?

Group annuity purchases in Canada total about one billion dollars each year! That number is expected to grow significantly as more DB plan sponsors look for affordable risk management solutions.

ABOUT THE AUTHOR

Brent Simmons leads Sun Life Financial's DB Solutions team. Brent joined Sun Life Financial in 2008 from a strategy consulting firm where he was a partner and specialized in non-traditional risk and insurance solutions. Prior to that he was a Principal at one of Canada's leading pension consulting firms.

For more information about how annuities might help your pension plan, contact your pension or investment consultant. For more information about Sun Life Financial's de-risking solutions for defined benefit pension plans, please contact:

Brent Simmons

Senior Managing Director, Defined Benefit Solutions
416-408-8935 | brent.simmons@sunlife.com

Heather Wolfe

Assistant Vice-President, Defined Benefit Solutions
416-408-7834 | heather.wolfe@sunlife.com

