

Creating an Annuity Benchmark for the Retirement Industry

By Simon Dabrowski

In January 2014, CANNEX launched the CANNEX PAY™ (Payout Annuity Yield) Index to address the absence of an income annuity benchmark within the retirement industry. Any index – whether for stocks, bonds, or real estate – is meant to be a representative indicator of the overall market, as opposed to capturing the price of a specific security or commodity for a given transaction. Likewise, the CANNEX PAY™ Index is meant to provide an indication of the lifetime yield that a retiree can expect from an income annuity and consequently, provide users with a quick synopsis of where annuity payouts currently stand.

The PAY™ Index benefits the consumer in that it can increase competition among carriers as they compare their payouts to the PAY™ Index. For example, a firm paying less than the PAY™ may choose to increase their payouts in order to attract more clients. PAY™ can also provide users with a benchmark spending rate, i.e. the maximum an individual can spend on an annual basis ignoring any adjustments for inflation. It can also be compared to a long term bond index when investigating the decision to annuitize. Ultimately, the PAY™ Index provides users with a quick and

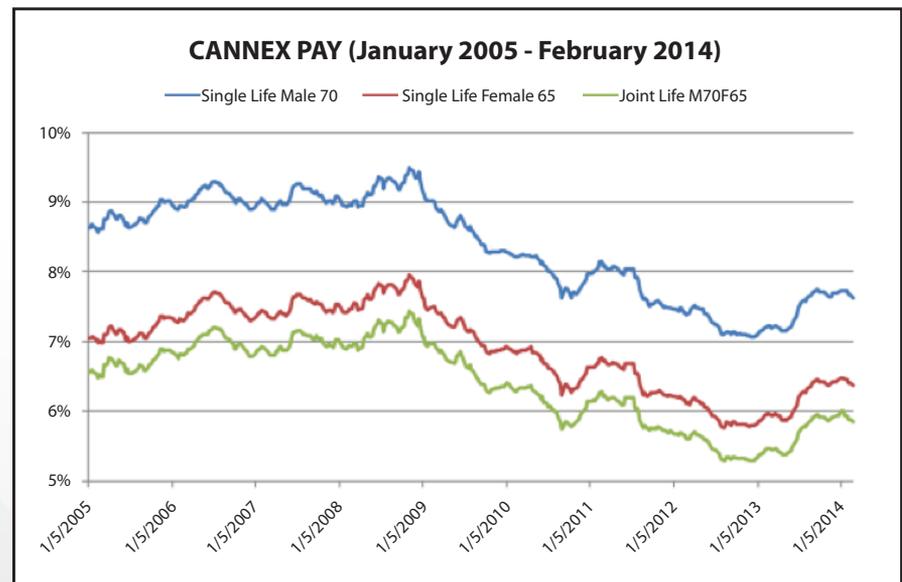
effective way to begin a discussion about the costs and benefits of income annuities as well as their benefits within retirement portfolios.

The PAY™ Index is an average annual payout for a Single Premium Income Annuity (SPIA) from the preceding month for three age groups: 70-year-old male, 65-year-old female and joint male-female couple aged 70 and 65 years, respectively.

The index value is calculated using the quotes of the top ten carriers listed on CANNEX. The top 10 carriers are chosen based on income annuity sales.

Before averaging the weekly quotes for all three contracts (70-year-old male, 65-year-old-female, and joint male-female couple aged 70 and 65 years), the maximum and minimum values are discarded to control for outliers. The average payout is then annualized and divided by the premium to derive the payout yield. For a detailed description on the index calculation methodology, please visit <http://www.cannex.com/usa/english/index.htm>.

Figure 1 shows the PAY™ Index values for the U.S. market from January 2005 to February 2014.



“CANNEX PAY™ Index is meant to provide an indication of the lifetime yield that a retiree can expect from an income annuity and consequently, provide a quick synopsis of where annuity payouts currently stand.”

It's important to note that the PAY™ Index might be higher or lower than the yield offered by any given insurance company at any given time. Given that the PAY™ Index is an average payout yield, some companies will offer a yield greater than the numbers presented in the PAY™ Index while others will offer lower yields. One of the reasons it's sighted for higher annuity yields is the lower credit ratings of the insurance company, which has been validated by extensive back testing¹. Historically, since January 2005, the highest weekly payout yield offered by an insurance company was approximately 20 basis points higher than that of the PAY™ Index for that corresponding week. Finally, a retiring couple who aren't exactly 65 and 70 years old respectively, or who desire a longer period certain and/or desire a lower survivorship benefit upon death, will receive a different yield.

Observations

From 2005 to 2008, the U.S. economy was finishing up dealing with the technology bubble, possessed an 'incredibly' strong housing market and held an unemployment rate of approximately 5%. The 10-year Treasury rate was approximately 4.5%. Concomitantly the PAY™ Index value is much higher than it is today. A 70-year-old male with a \$100,000 premium would see a payout yield of approximately 8.6%, while a 65-year-old female would see a payout yield of 7.05%. In 2008, however, the U.S. saw the housing market collapse. There were significant disruptions in the financial sector of the U.S. economy. Bear Stearns was acquired by JP Morgan, and Lehman Brothers declared bankruptcy. AIG, Fannie Mae, Freddie Mac, and both General Motors and Chrysler were bailed out by the Federal government. The Troubled Asset Relief Program (TARP) was introduced, and in 2009, President Obama and Congress passed the American Recovery and

Reinvestment Act – which provided tax cuts and Federal funds to create and save jobs and promote economic growth. The 10-year Treasury rate went from roughly 4% in mid-2008, to roughly 2% in the span of six months. Moreover, since this time, the Fed has continued to inject stimulus into the economy in an attempt to prompt growth and decrease unemployment, and, not surprisingly, it's led to lower interest rates. Then observe how during this same period, the PAY™ Index also fell. In 2012, a 70-year-old male with a \$100,000 premium would see a payout yield of approximately 7%, while a 65-year-old female would see a payout yield of 5.7%. Only recently, in late 2013 to early 2014, as the Federal Reserve has scaled back its stimulus, have the PAY™ Index raised. In 2014, a 70-year-old male with a \$100,000 premium would see a payout yield of approximately 7.6%, while a 65-year-old female would see a payout yield of 6.3%.

Going forward, given that interest rates can't be much lower, the near term outlook will see a rise in interest rates which in turn will be reflected with a rise in PAY™ Index values. However, from a long-term perspective, the business cycle will be dictating the market.

Applications

How and where can the PAY™ Index be used? While the list below is by no means exhaustive, it does demonstrate how the PAY™ Index can be applied to a variety of scenarios.

Market Trends and Competition

The most obvious use has already been touched on, i.e. market trends. Users can simply look at the values presented to get an idea of what payouts are currently yielding and how the market has evolved over the month. For example, if the PAY™ Index is raising then this implies that payouts for all annuities are also rising. The index also allows

carriers to compare their payouts to the average payout in the market – which could very well lead the firm to change its pricing in order to offer a payout in line with its competitors.

Benchmark Spending

The PAY™ Index can also be interpreted as a benchmark spending rate. The values represent the maximum an individual can spend on an annual basis ignoring any adjustments for inflation. For example, if an advisor is approached by a 70-year-old male client stating that they're interested in spending 8% annually, the advisor can simply look at the PAY™ Index and demonstrate that the most the client can spend annually is approximately 7.5% as of March 2014 (not adjusted for inflation). Since a SPIA is the most efficient vehicle available to guarantee a regular income, we can infer that the client can't sustain a level of spending higher than the PAY™ index.

SPIA vs. Corporate Bond

Generally speaking, retirees are more risk averse and as per their risk aversion, their portfolios are more heavily concentrated in fixed income products. A SPIA is like a bond in how it pays the owner every so often; however, there's no maturity date. Essentially, the owner receives income for as long as they're alive. A corporate bond also provides income to its owner, however there's a maturity date; at which point the owner must choose whether to purchase another bond. Given the fixed time horizon of this security, investors are subject to a wide range of risks such as: credit risk, price risk, and inflation risk.

While one can argue that some of these risks are present within the SPIA, the SPIA completely controls for longevity risk whereas the corporate bond doesn't.

All that being said, prior to purchasing any annuity a client must be cognizant of the fact that some

The index not only provides a pulse of the market but also provides users with a quick and effective way to begin a discussion about SPIAs as well as their benefits within retirement portfolios.

annuities may not offer liquidity nor any legacy to their heirs, whereas the corporate bond offers both of these features. Naturally, the trade-off is an endogenous decision on the part of the client. Are they interested in guaranteed lifetime income with potentially significant restrictions on liquidity and legacy, or is the client willing to take the risk of outliving his or her capital yet have access to liquidity and potentially offer heirs a legacy value?

For example, a 70-year-old male can use \$100,000 to purchase a lifetime income annuity with a five-year period certain guarantee that will yield approximately 7.5% annually at today's market prices. He can also purchase an investment grade corporate bond with a 20-year maturity that will provide an annual coupon of 5.5%. In this particular case, depending on the individual, if he's willing to sacrifice some liquidity and legacy for guaranteed income for life, the annuity may be a better choice and vice versa if liquidity and legacy are valued much more highly. This said, the corporate bond requires investors to take on the risk of a changing interest rate environment where they may not be able to obtain the same level of income they originally purchased. Hence, the PAY™ Index provides a basis for this type of comparison.

Mortality Credits and Bond Yields

Given the lifetime nature of a SPIA, it offers something called mortality credits. Basically, the product pools longevity risk across several people who have purchased a SPIA and those who pass on quickly supplement the income of those that live longer than expected. Given this fact, it's axiomatic that a younger individual will see a lower yield relative to an older person. Thus, advisors can use the PAY™ Index to offer clients guidance on the decision to purchase an annuity. For example, the PAY™ Index provides a value

for a 70-year-old male who can use \$100,000 to purchase a lifetime income annuity with a five-year period certain guarantee that will yield approximately 7.5% annually at today's market prices. A much younger male client would receive much less from an annuity because of the lack of mortality credits, and thus, may be better off purchasing bonds in an attempt to grow their portfolio, thereby delaying the purchase of an annuity because despite the risks that the purchaser will face the bond yields are better, the mortality credits are very low and ultimately, the potential reward is worth the risk. Conversely, the exact opposite may be true for an older client. As in the case of the SPIA vs. Corporate Bond example above, a client must consider the trade-off between a sustainable stream of income (SPIA) and the amount of legacy to heirs (Bond). The client must also bring the desire for liquidity into consideration – where the SPIA may offer little to none whatsoever and the bond offer some.

Final Thoughts

The absence of any annuity benchmarks within the retirement industry led CANNEX to develop the PAY™ Index. The index not only provides a pulse of the market but also provides users with a quick and effective way to begin a discussion about SPIAs as well as their benefits within retirement portfolios. You can obtain a monthly report by going to www.cannex.com/usa/english/index.htm and you can subscribe to our Twitter feed (@CannexTweets) to be notified automatically.

¹ Milevsky, Moshe. "Life Annuities: An Optimal Product for Retirement Income" CFA Institute, May 2013.

Simon Dabrowski is a Research Associate at QWeMA (a division of CANNEX), which developed the PAY™ Index. CANNEX compiles data and calculations about a variety of financial products and makes that information available to subscribers. For more information, see www.cannex.com.