

### **IMMUNIZED PORTFOLIOS: AN ALTERNATIVE TO GICs**

With the insolvency of several insurance companies many retirement plan sponsors have become increasingly concerned about the guaranteed investment contracts (i.e. GICs) among the options provided employees in the company's defined contribution plan. The fundamental problem with GICs is that the plan's retirement investment becomes an integrated part of the assets of the insurer. The plan is then just another liability on the insurance company's balance sheet.

Once the money is invested in a GIC, plan participants have no control over the investments, or the investment guidelines, made with their funds. Further, they do not own the assets underlying their guaranteed return, but instead are general creditors of the insurance company. That is, they are subject to the full credit risk of the insurance company.

In the past, certain plan participants were attracted to GICs because they were perceived to provide a guaranteed rate of return to a specific horizon date. By comparison, it is difficult to target a rate of return with a bond that matures on the specified horizon date because of the uncertainty in the short-term rates at which coupon income can be reinvested during the horizon period. The yield to maturity on the bond assumes that the coupon income will be reinvested at the bond's yield to maturity. That is a very unlikely assumption at best.

Treasury zero coupon bonds maturing at the horizon date are the only way an investor can guarantee a rate of return because there is no coupon income to invest. The investor buys the zero at a discount and it reaches par value at maturity. In this case, the yield to maturity is the same as the rate of return. However, most zero issues are Treasuries and therefore have considerably lower rates of return than those promised by GICs. Corporate zeros provide comparable rates of return to GICs but they are simply not available in a wide range of maturities.

An alternative approach is to buy a portfolio of bonds with a range of maturity dates that collectively has the same time-weighted present value of cash flows, or duration, as the GIC. The objective of this strategy is to balance the effects of interest rate changes on market values and reinvestment income in order to provide an assured terminal value of assets by the specified horizon date. Since the market value of the assets in the portfolio is assured by the horizon date, a specific rate of return is also assured. Such a strategy is commonly called "immunization" because the return on the portfolio is immunized against changes in interest rates.

The immunized portfolio is monitored through time to assure that the portfolio's duration remains matched to the duration of the horizon date. In addition, the portfolio's convexity, or rate of change of the duration, is also continually monitored and adjusted. In this way, the assured rate of return is protected against shifts and changes in the shape of the yield curve.

Immunized bond portfolios offer an attractive alternative to GICs primarily because the investor maintains direct ownership of and can provide specific guidelines for the investments. While, the GIC investor

represents just one of many creditors on the balance sheet of an insurance company, the immunized investor has legal ownership of a portfolio of securities. In addition, the immunized investor can control his exposure to credit risk by limiting the portfolio to certain types of investments. For example, the investor might specify what percentage of the portfolio be in corporate issues versus Treasury issues. In addition, the corporate issues themselves can be limited to specific industry sectors and credit ratings. Furthermore, the immunized investor is diversified across a number of liquid issues and can liquidate a single issue or the entire portfolio at any time with low transaction costs prevailing market prices.

By contrast, the GIC investor has no control of the credit worthiness of his investment. The GIC funds may be commingled with a variety of other assets and invested in risky real estate ventures, junk bonds, and illiquid private placements. The GIC investor has no diversification and is dependent on the credit worthiness of the insurance industry. In addition, GICs are illiquid as there is no well-developed secondary market for them. The GIC investor will take a significant decline in return in order to unwind the investment before the stated maturity date.

Further, insurance companies issue GICs because they believe they can invest the funds at a higher return than the guaranteed rates, which the insurance companies retain as profit. It was, in fact, a desire to expand the spread between what they earned and what they guaranteed that caused some of the aggressive investment strategies utilized with GIC assets.

With an immunized portfolio any excess funds earned through active management revert to the investor. Vanderbilt Avenue Asset Management has a long history of managing immunized portfolios.

The table below summarizes the advantages of the strategy of Bond Immunization over a GIC in a defined contribution plan.

**VANDERBILT AVENUE ASSET MANAGEMENT  
IMMUNIZATION VS. GICs**

	<b>VAAM IMMUNIZATION</b>	<b>GICs</b>
• <b>OWNERSHIP</b>	Plan sponsor has legal ownership of all securities in portfolio	Ownership belongs to insurance company
• <b>QUALITY</b>	No junk bonds No real estate No private placements Average Quality: AA+ (or client specified)	May have large junk real estate and private placement components
• <b>PERFORMANCE</b>	Highly assured rate of return; all returns above target revert to the plan	All returns above target revert to GIC provider
• <b>DIVERSIFICATION</b>	Portfolio is well-diversified across all sectors of the Fixed Income Market	No diversification; complete concentration in insurance industry
• <b>PORTFOLIO COMPOSITION</b>	Individually ear-marked for a specific client	Commingled

Vanderbilt Research Team

