

## LIFE INSURANCE

# SECURITIZATION EXPANDING

Capital markets participation in the life insurance industry is on the rise as a result of innovative securitization structures. How can life insurance companies take advantage of securitization to improve their own financial performance?

*By Duncan M. Briggs, Jonathan Hecht and Charles Pickup*

Both the U.S. and the U.K. now have well-developed securitized debt markets. The range of securitized asset classes has expanded beyond mortgages and credit card receivables to include a wide range of alternative assets (see *Emphasis 2003/3* and *2004/1*).

Not surprisingly, life insurance companies in both countries have explored these opportunities to raise capital and transfer risk, and a few large deals have closed.

### WHY SECURITIZE LIFE INSURANCE?

The limited availability and increasing cost of certain types of traditional reinsurance, together with concerns about exposure to reinsurer credit risk, have led some life insurers to consider securitization as an alternative solution. The uses of securitization include:

- financing the cash strain associated with writing new business (e.g., variable annuities and life settlements)
- monetization of the embedded value of a defined block of business
- funding regulatory capital requirements
- reducing exposure to a block of business with a low or volatile ROE
- transfer of catastrophe risk.

Life insurance securitization raises debt against the cash flows arising from a defined block of life insurance business. The cash flows are used to service and repay the debt. Investors bear the risk that the cash flows will be insufficient to fund the debt payments. This type of debt is referred to as “non-recourse” because investors do not have any recourse to the

general assets of the issuing company if the cash flows fail to fund the debt payments.

Cash flows are generated from a block of life business in the form of distributable earnings. Given the conservatism inherent in regulatory reserving and capital requirements in most countries, distributable earnings will generally be positive once any initial capital strain has been met. The stream of distributable earnings is the collateral for the debt. A securitization structure includes some degree of over-collateralization; i.e., projected distributable earnings will include a margin over the amount required to fund the debt payments.

Over-collateralization provides a buffer to protect investors against adverse deviations in future experience. The amount of over-collateralization depends on a number of factors, including the volatility of projected distributable earnings with respect to key assumptions, the level of risk that investors are prepared to accept and the risk premium charged by investors for accepting additional risk.

In a securitization, the subject business is “ring-fenced” in order to isolate the distributable earnings associated with the business. The form of ring-fencing can be “accounting only” or “legal separation.” In the former, the subject business continues to reside in the issuing insurance company, and accounting mechanisms are established to track cash flows for the block. In a legal separation, the subject business is reinsured to a special purpose vehicle (SPV), which issues the debt. Investors generally prefer legal separation because it reduces their exposure to other risks associated with the insurance company.

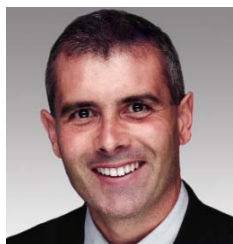
### KEY CONSIDERATIONS

The market for life insurance securitizations is relatively immature and rapidly evolving. The fixed costs involved in structuring a securitization are currently quite high, which limits the market to large transactions. As various types of securitization become more standardized, fixed costs will likely decline and the economics will become more attractive for smaller deals.

Accounting practices are an important consideration in a securitization transaction. How will transactions affect statutory and GAAP income statements and balance sheets? What will happen to regulatory capital levels? The novelty of many securitization transactions may necessitate advance discussions with regulators and auditors in order to agree upon accounting implications.

In a life insurance securitization, investors are exposed to the risk that the securitized business underperforms and the cash flows generated are not sufficient to cover debt interest and principal payments. The underlying risk factors may include mortality, lapses, equity market returns, interest rates, asset defaults, expense levels and taxation. The most significant risk factors will vary depending on the nature of the securitized business and how the transaction is structured. For example, some transactions remove expense risk from the securitization.

Robust actuarial models are necessary to quantify the risks. Typically, these models need to project the business over the term of the securitization under a wide range of



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future experience scenarios. In transactions thus far, investors received a considerable amount of information regarding the underlying cash flows, including sensitivity analyses, and further comfort derives from an independent actuarial opinion on the cash flows.

Most life insurance securitizations to date have also included a credit “wrap.” Under a wrapped structure, a third-party, specialist bond insurer guarantees the interest and principal payments on the underlying securities. Because the bond insurer typically has a AAA rating, the guarantee provides the securities with the same rating. The insurance risk associated with the securitized business is assumed by the bond insurer, protecting investors from direct exposure. The issuing company pays a premium to the bond insurer for providing the credit wrap. As the life insurance securitization market continues to evolve and investors become more familiar with the underlying risks, more unwrapped transactions are likely.

Rating agencies have played a key role in many of the recent securitizations, and some issuers have sought a “shadow” rating from one or more of the agencies. The shadow rating is based on the level of risk to investors, ignoring any credit wrap. Once the shadow rating has been determined, the credit wrap provider may vary its premium. For example, the wrap provider may charge a higher premium for a shadow rating of A than for a shadow rating of AA. Treatment of the securitization for debt ratio purposes is also an important consideration; a rating agency may treat the debt as operating leverage rather than financial leverage.

While both U.K. securitizations to date have been in the form of publicly traded debt, the U.S. securitizations have all been private placements. The U.S. move to publicly traded debt should improve liquidity and marketability. However, given the complex nature of the life insurance business, public investors in securitization face a steep learning curve in understanding the underlying risks.

**U.S. MARKET**

A variety of different life insurance securitizations have occurred in the U.S. in recent years, including:

- closed block securitizations
- Regulation XXX securitizations
- securitizations of variable annuity fees
- mortality catastrophe bonds.

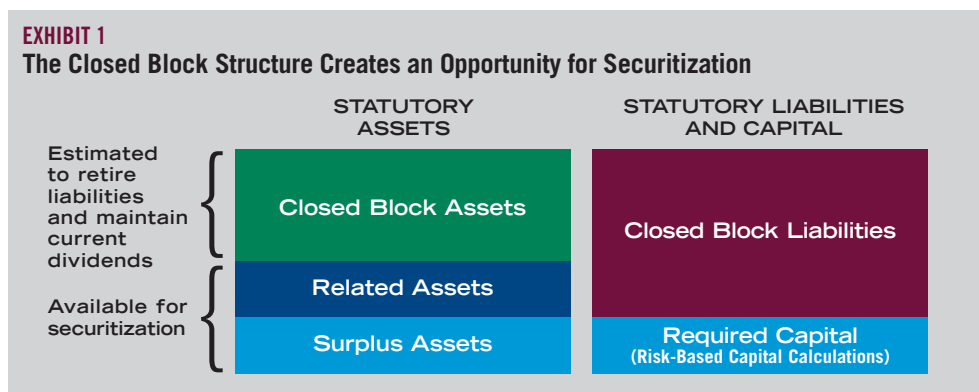
The first two categories have generated the highest level of interest and are discussed below.

■ **Closed Block Securitizations.** These refer to transactions involving the closed blocks of participating life insurance policies that are formed in the U.S. at the time a

former mutual life insurance company demutualizes and converts to a stock life insurance company. In most of the U.S. demutualizations, a closed block was formed to protect the reasonable policyholder dividend expectations of participating life policyholders. The closed block is funded with high-quality assets that, together with future revenues from the closed block, are expected to be sufficient to pay future benefits for the closed block policies, including policyholder dividends.

Typically, the closed block is initially funded with assets covering 80% to 90% of the closed block liabilities (policy reserves). The insurer is obligated to manage the dividend scales for the closed block policies so that the closed block assets are just sufficient to support the liabilities until the final policy matures.

In addition to the assets assigned to the closed block, other assets are allocated to support the closed block policies in order to satisfy regulatory requirements. These other assets are referred to as surplus and related assets (see *Exhibit 1*), and are not expected to be needed to pay benefits on the closed block policies.





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Both Prudential and the MONY Group completed closed block securitizations by issuing bonds secured by the earnings on and release of the surplus and related assets. Prudential raised \$1.75 billion in 2001 and MONY raised \$300 million in 2002. In both transactions, the bonds were issued by a newly formed intermediate holding company, and a credit wrap was provided by a third party.

The primary motivation for a closed block securitization is to monetize the value of the profits expected to emerge from the underlying business, thereby providing capital that can be invested in higher-growth businesses with potentially higher returns.

Despite the success of these two deals, other closed block securitizations are unlikely in the very near term because some rating agencies may treat the debt in future deals of this type as financial leverage rather than operating leverage.

■ **Regulation XXX Securitizations.** Effective in 2000, Regulation XXX increased the statutory reserve requirements for most long-duration term life insurance policies. In addition, the closely related Guideline AXXX mandated additional reserves for many types of universal life (UL) insurance policies that contain “no lapse” guarantees. The additional reserves can be very significant and are considered by many to be largely redundant. *Exhibit 2* illustrates the buildup of statutory reserves for a 20-year level-term product and compares the statutory reserve to an economic reserve calculated using best estimate assumptions.

Insurers have been using a combination of reinsurance and product design solutions to alleviate the reserve strain from Regulation XXX and Guideline AXXX. Several issues are causing them to look beyond the traditional reinsurance marketplace:

- limited availability of AXXX reinsurance
- increasing costs of letters of credit (LOC) used to secure reserve credit
- LOC capacity limits
- concerns over reinsurer credit exposure.

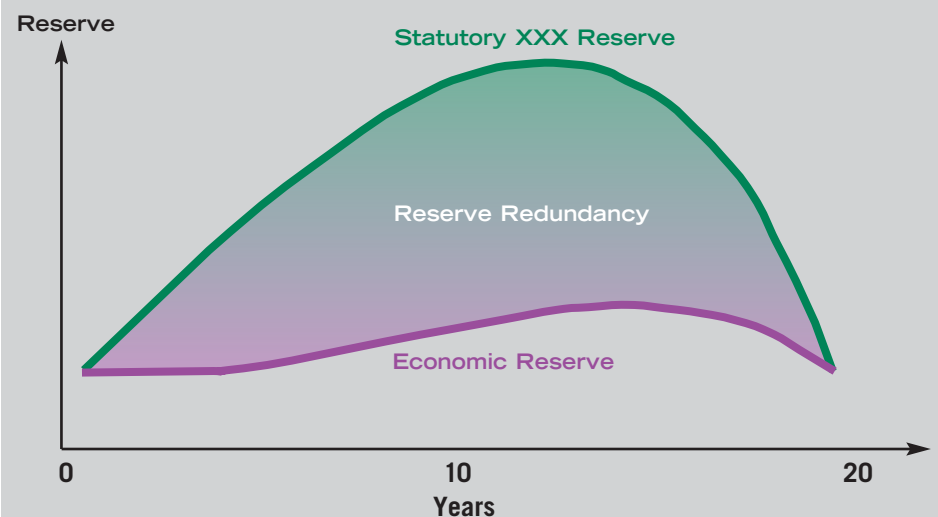
Capital markets solutions are being explored as an alternative to reinsurance. One company completed a successful securitization of its Regulation XXX term insurance business in 2003, and other companies are exploring similar structures for their term and universal life business. There is intense current interest in this area, with the potential for many deals in the near term.

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These structures involve the issuance of non-recourse debt capital to fund the redundant portion of statutory reserves. The viability of these securitizations is predicated on the redundancy of a large proportion of the excess XXX and AXXX reserves (i.e., the excess reserves are not required to pay policy benefits, even under moderately adverse scenarios). Interest and principal payments on the underlying debt are at risk if the securitized business significantly underperforms.

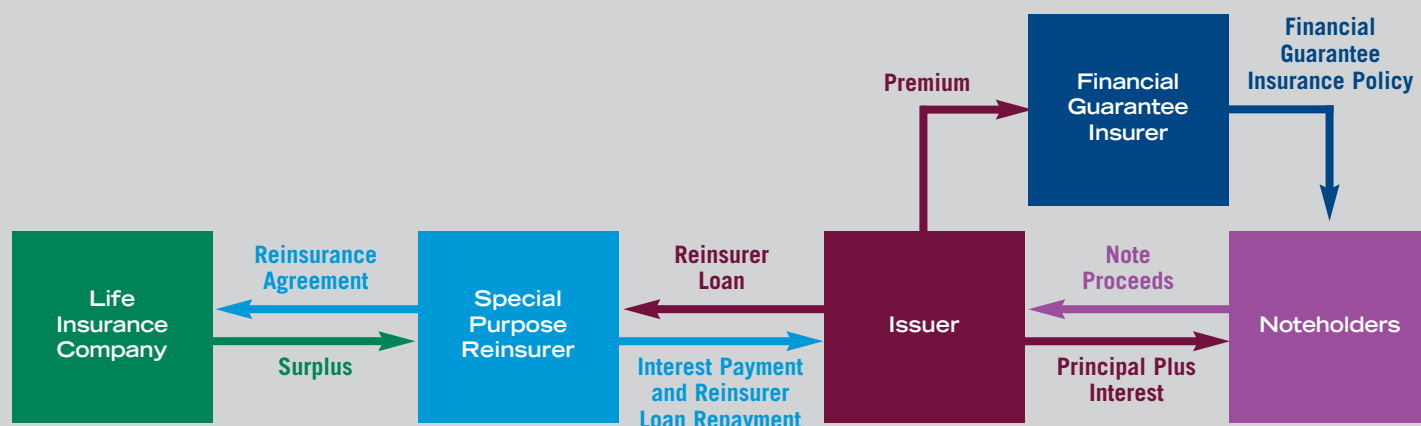
XXX or AXXX securitizations could be structured by first reinsuring the underlying business into a special purpose reinsurance company. This company would initially be capitalized with assets equal to the economic reserve for the business plus a margin to allow for adverse deviations in experience. To fund the additional reserves up to the regulatory prescribed

**EXHIBIT 2**  
Regulation XXX Results in Significant Long-Term Reserve Strain for Term Insurance



### EXHIBIT 3 Simplified Structure of the Barclays Securitization

Transfer of liability, including premiums, commissions/expense allowance, death benefits, surrender/maturity benefits



level, additional capital would be raised via a debt offering to the capital markets. These assets would be invested and held in trust and used to repay the debt as the insurance policies mature.

#### U.K. MARKET

Despite the obvious attractions, U.K. insurers have issued securitized debt only twice:

- an issue of £260m of bonds by National Provident Institute (NPI) in 1998
- an issue of £400m of floating rate notes by Barclays Life in 2003.

Although both these issues are publicly traded, they are very much aimed at institutional investors.

Both transactions are structurally complex, albeit for different reasons. NPI was seeking long-term funding and consequently expected to retain a significant proportion of the profits emerging each year if future profits emerged in line with the base case projections. However, if profits fell materially (or were expected to fall), the balance of profits emerging in a year had to be reserved by NPI and, in certain cases, transferred to a collateral account. In addition, were NPI to breach certain solvency ratios, reserving the excess profits in any year was also triggered.

The Barclays Life transaction (see *Exhibit 3*) was very different from the NPI transaction, but probably more complex, due to the following features:

- The funds were used to refinance part of an existing contingent loan structure.
- A specially established reinsurance company was inserted between the issuing company and Barclays Life.
- The credit rating of the notes was enhanced to AAA by Ambac, which credit-wrapped the transaction.

The Barclays Life transaction contained several features that made it attractive to investors (and, presumably, to Ambac):

- The parent company, Barclays Bank (a AA-rated U.K. retail bank), retained a number of risks and provided £352m of funding to Barclays Life.
  - Expense risks were mitigated to a substantial degree because Barclays Life outsourced its policy administration via a TPA agreement.
  - Barclays Life is substantially closed to new business.
  - Barclays Life has no exposure to with-profits (participating) business.

#### THE FUTURE OF CAPITAL MANAGEMENT

Past transactions have shown securitization to be an effective capital management tool for life insurers. However, issuing securitized debt is a complex and time-consuming process due to legal, actuarial, accounting and regulatory issues that must be addressed. These “fixed costs” place a high threshold on the size of transaction needed to make economic sense. Over time, as securitizations become more commonplace, fixed costs will likely shrink and smaller transactions will become more economical. A natural evolution might be toward more publicly traded securitizations. Although the up-front fixed costs are likely higher in a public deal, the lower funding costs from greater liquidity may more than compensate.

The capital markets certainly appear to be developing an appetite for life insurance securitization. This promises to be a major impetus for an increase in both the frequency and variety of new deals.

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