



Hartford Actuaries Club

May 21, 2008

Sue Sames

Tillinghast business of Towers Perrin

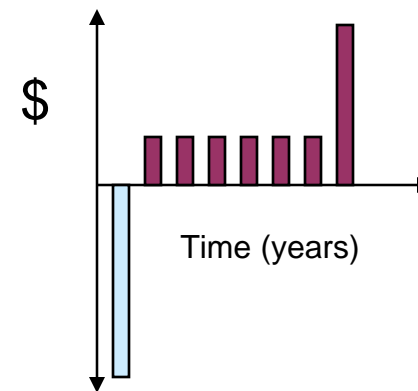
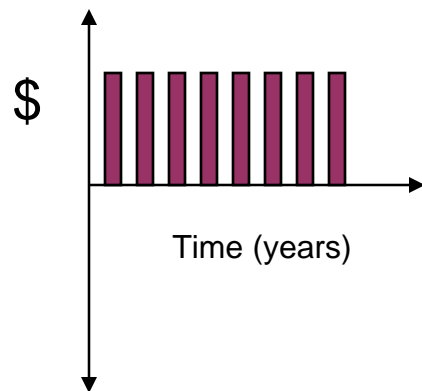
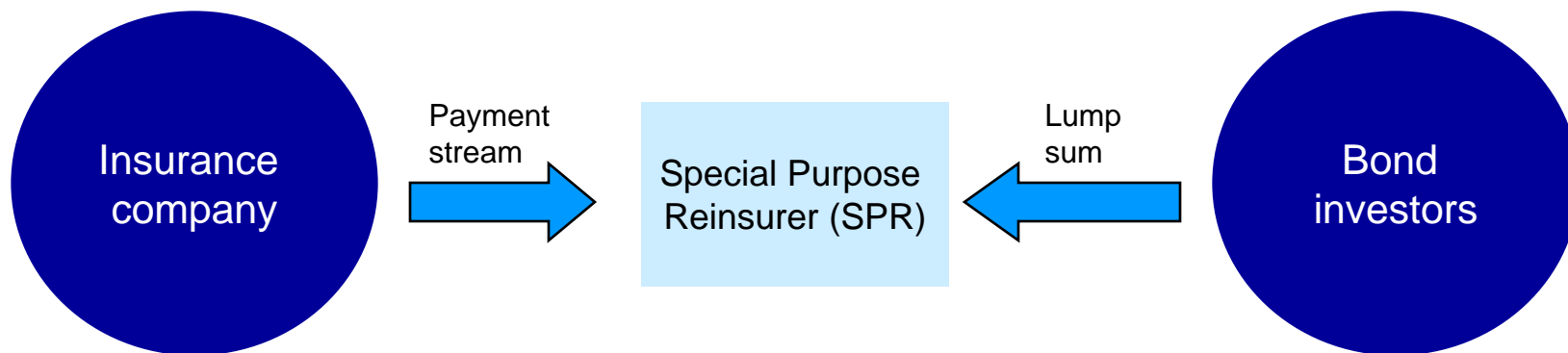
Discussion topics

- Fundamentals of securitizations
- Perspectives on health transactions
- Recent trends in securitization market place
- Securitization outlook for disability products

Fundamentals of Securitizations



Securitization - An exchange of cash flows



Corporate versus securitized-risk bond returns

Corporate Bond

Risk Free
Return

+

Spread for Credit Risk
(Risk of Default)

=

Total
Return

Securitized-Risk Bond

Risk Free
Return

+

Spread for Event Risk
(Loss on Insured Risk)

=

Total
Return

Corporate bond spreads are a function of default risk

**Annual default rates and bond spreads for 10-year bonds by credit rating
(basis points)**

Corporate bond credit rating ¹	AAA	AA	A	BBB	BB
Historical annual default rate ²	3	4	10	30	130
10-year historical spread ³	92	99	119	167	325
February 28, 2007 spread ³	65	75	85	114	218
December 31, 2007 spread ³	111	152	164	198	366

1. Moody's scale
2. Average, October 1998 to current (Sources: Risk Metrics, Bloomberg)
3. Towers Perrin

Recent life & health securitization transaction types

- Redundant reserves
 - XXX
 - AXXX
- Embedded value
 - Closed life blocks (from demutualizations)
 - Trapped capital (disability deals)
- Catastrophic risk protection
 - Mortality bonds
- Other
 - Commission financing
 - Life insurance secondary market

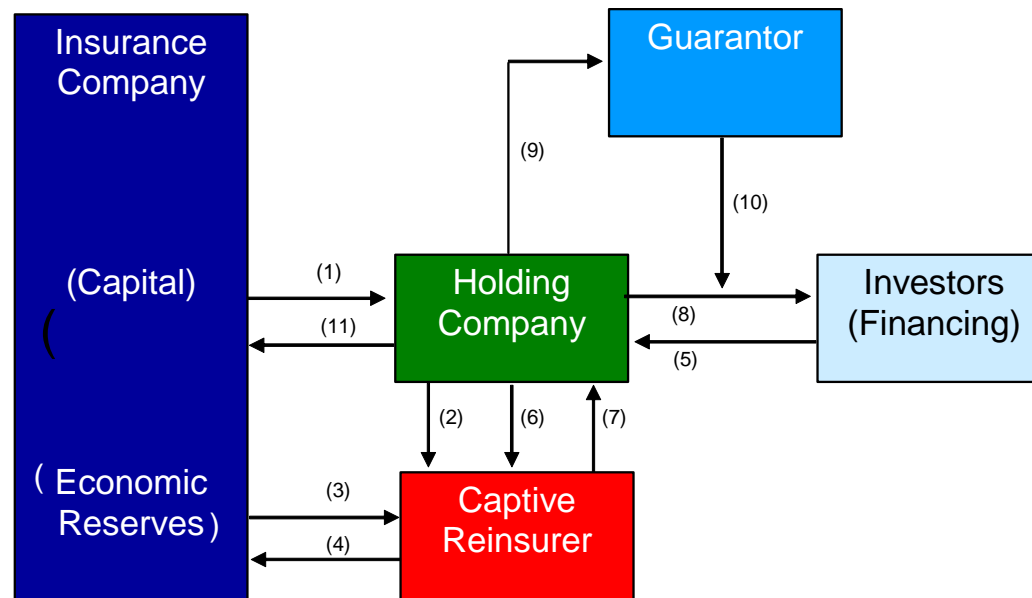
Wrapping transactions

- Bond insurer (monoline) guarantees principle and interest, thereby upgrading credit rating of bond
 - Bond insurer premium is paid in basis points by the issuer of the bonds (holding company)
 - Wrapped ratings generally equal the credit rating of the bond insurer
- Wrapping widens pool of potential investors, who may not be comfortable with specific insurance risk
- Rating agencies provide wrapped ratings (usually AAA), plus “shadow ratings” for unwrapped risk
 - Investors use to evaluate “double trigger” risk of potential deal failure

Types of securitization vehicles

- Non-recourse
 - What people commonly think of as securitizations
 - Risks are completely transferred to third-party, no recourse to parent
 - Not viewed as financial leverage or operating leverage by rating agencies
 - Generally involves more time and expense to execute than recourse deals

Typical embedded value non-recourse securitization structure



- (1), (2) Insurer sends economic capital to Holding Company, who uses to seed captive reinsurer
- (3), (4) Insurer cedes risk to Captive Reinsurer, who provides reserve credit back to Insurer
- (5), (6) Holding Company sells notes to Investors; proceeds fund excess statutory reserve
- (7), (8) Dividends paid as reserves and capital released; dividend income used to repay notes
- (9), (10) Guarantor may insure repayment of principal and interest
- (11) Any remaining cash flows back to Insurer

Types of securitization vehicles

- Recourse
 - Deal types to date have been redundant reserve or embedded value (EV)
 - Financing counterparty (e.g., a bank) provides funding for excess reserve or EV
 - Financier has recourse to parent of originating insurer
 - Typically, non-insurance holding company provides an ultimate guarantee (or recourse) directly or indirectly to financier
 - Risk to parent company must be “de minimus” or rating agencies will view deal as financial leverage
 - Certain deal structures will be viewed as operating leverage by rating agencies
 - Other complexities also need to be managed
 - Generally less up-front time and expense to execute than non-recourse

Considerations for a catastrophic risk securitization

- Principal amount of notes equals catastrophic protection (market capacity not limited)
- Principal and interest are at risk to investors if “trigger” is reached
- Very common with P&C (hurricane) catastrophe risks, also catastrophe mortality bonds
- Markets strongly prefer “public” triggers
 - Viewed as more structured, less subject to unexpected outcomes
 - Reduces due diligence needs
 - May avoid cost of a wrapper
- All catastrophe deals to date have been non-recourse

Securitization versus reinsurance features

Features	Reinsurance	Securitization
Capacity	Actual and/or practical limits	Limited only to what buyer can afford
Minimum size	Generally not an issue	Generally requires significant scale
Pricing	Market driven	Risk driven
Credit risk	Ceding company exposed to credit risk of reinsurer	Funded – Ceding company exposed to credit risk of lender
Upfront time and expense	Generally fast with low upfront cost	Varies by structure (recourse, non-recourse) – pros and cons to each

Perspectives on Health Transactions



Securitization is proving to be an accepted form of capital management for health insurers

- Primary areas where life insurance securitization solutions have been used
 - Redundant reserve securitizations
 - Embedded value/closed block securitizations
- Recent and proposed transactions are introducing securitization to health insurance products
 - Group long-term disability (completed)
 - Individual disability (completed)
 - Long-term care (proposed)
- Potential transactions under health securitizations include
 - Funding redundant reserves
 - Freeing up excess of required capital over economic capital
 - Obtaining aggregate stop loss protection not available through traditional reinsurance markets

Summary of recent Unum disability transactions

- Unum's deals were embedded value securitizations that released trapped surplus
- Unique aspects of the Unum deals
 - First time long-term disability ("LTD") and disability income ("DI") blocks were securitized
 - Only health securitizations to date
 - Critical to success of both deals was acceptance by capital markets that Unum's view of economic capital provided sufficient strength for securitized block
- Keen rating agency interest in residual block capital adequacy

Summary of recent Unum transactions (cont.)

- First deal was designed to whet the appetite for the second, a much larger and more complex deal
 - First deal was \$130 million of notes on a block of disabled lives with \$1.5 billion of reserves
 - Second deal was \$800 million of notes on a closed block of policies with \$1 billion of premium and \$11 billion of reserves on both active and disabled lives

Health transactions — Considerations

- These transactions require in-depth experience analysis across a number of variables seldom captured in industry data
- We identified a number of trends of experience across certain parameters that had not been previously identified in industry data (but with research could be supported from the industry data), including
 - Mortality trend differences by claim duration
 - Claim termination rates weighted by reserves much lower than claim termination rates weighted by amount
- Depending on the nature of the business included, the impact of underwriting and contracts on new business can be a major source of volatility

Health transactions — Considerations (cont.)

- Other complexities include
 - Reacting to the adverse financial history of the DI business
 - No prior “blueprint” for catastrophic scenarios (key scenario tested was based on 1930s depression)
 - Difficulties in quantifying the tail of exposure because of the lack of data
- We also tested a long-term, adverse morbidity trend combined with severe asset scenario

Recent Trends in Securitization Marketplace



Recent trends in securitization marketplace

- Bond spreads have widened substantially
 - This flows through to cost of non-recourse transactions based on deal risk
 - On recourse transactions the credit rating of the bond insurer is more important
- Financial strength of bond insurers has become an issue
 - Credit ratings of a number of bond insurers have been dropped
 - Financial strengths of other bond insurers are under review by rating agencies with negative outlook
 - Berkshire Hathaway announced it is forming new subsidiary to capture opportunity created by a potential market void for municipal bond guarantees
 - Risk of long-term guarantees viewed as greater than short-term

Recent trends in securitization marketplace

- No apparent slowdown in rate of securitizations
 - Increase in of non-recourse deals
 - Decrease in recourse deals, especially wrapped deals
 - Temporary?
- Popularity of securitizations is growing
 - Being applied to an ever expanding range of situations

Securitization Outlook for Disability



What is the future for disability securitizations?

- All three categories of securitization could work for disability
 - Excess of statutory reserves over economic
 - Views and situations differ from company to company
 - Excess of “trapped” capital over economic capital
 - Catastrophic risk
- Potential opportunities
 - Recourse transactions make insurers view of risk more palatable
 - Temporary coverage may be practical for Cat coverage
 - Inherent hedge of mortality risk against longevity risk in multiple product blocks
 - Separate interest rate risk from morbidity
- Potential obstacles
 - Long tail risk
 - Perceived morbidity risk volatility increases with duration
 - Public trigger not available for catastrophic exposures

Securitizations and current market for M&A

- Overall market uncertainty is hindering M&A activity
 - Potential buyers/sellers/partners may view stock prices as undervalued
 - Uncertainty makes companies want to conserve capital
- Disability M&A activity has been low historically
 - Few buyers want to acquire other company's problems
 - Few sellers want to report the loss they would incur to move the block
 - Potential hidden problems in older blocks
- Securitization opens up a potential alternative vehicle for "selling" closed blocks
 - Proven avenue for leveraging ROE on closed blocks
 - Recourse deals could help offset market reluctance
 - May eliminate or alleviate need to report GAAP loss

Questions or Comments

Please direct any questions or comments to:

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