Life ILS: 2014 year in review and looking ahead to 2015

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Last year, 2014, was a transformative one for the U.S. life reserve financing marketplace, which still remains the largest segment of the Life ILS[1] market. Over the 11 years since companies began using reserve financing transactions both for capital management purposes and to offer consumers more competitive products, the approval process for such deals was always completed on a one-off basis, based on rules agreed upon between the insurer's domestic regulator and the captive reinsurer's regulator. In 2014, the National Association of Insurance Commissioners (NAIC) made significant strides toward bringing more uniformity to the regulatory process and more transparency to insurer financial reporting relating to reserve financing transactions. While more work still needs to be completed in 2015, 2014 saw the adoption by the NAIC of Actuarial Guideline XLVIII (AG48), which will provide uniformity around reserve financing transactions executed on policies issued in 2015 and later (and to all pre-2015 policies that are not "grandfathered"). And new disclosure requirements will increase the transparency of both existing and new reserve financing transactions.

This year, 2015, will bring additional developments to formalize the provisions of AG48 into an NAIC Model Regulation and will bring clarity around the capital requirements for reserve financing transactions covering non-grandfathered policies.

We have seen the reserve financing marketplace evolve in response to changing market conditions since the market first began in 2003, and 2015 will be a watershed year as we await to see how insurers react to the new AG48 requirements. Such reactions may entail insurers increasing premiums in reaction to the smaller amount of reserves likely to be financed (or, alternatively, accepting a lower profit margin), new creative solutions from financing providers, insurer re-domestication to a state supportive of reserve financing, increased mergers and acquisitions (M&A) activity and/or third-party reinsurance, and other reactions not yet contemplated by the marketplace.

SUMMARY OF 2014

In 2014, we estimate that over USD 25 billion in reserve financing and embedded value (EV) financing transactions were completed. Most of these transactions involved the financing of excess reserves (defined further below) for U.S. life insurers selling level premium term insurance subject to Regulation XXX or universal life products with secondary guarantees (UL-SG) subject to Actuarial Guideline XXXVIII (AXXX, or AG38). The forms of financing used in 2014 were not materially different from those used in 2013.

[1] When the reserve financing market first developed, many reserve financing transactions involved the issuance of securities that were often called "Life ILS," or just "ILS," which is an acronym for "insurance-linked securities" or "insurance-linked securitization." While many of the current transactions do not involve the issuance of securities, in this paper we continue to refer broadly to such transactions as "Life ILS" or "ILS" transactions.

In addition to the reserve financing transactions and the EV financing transactions, in 2014 the market saw at least USD 360 million in transactions to hedge catastrophic morbidity or mortality risk, and continued growth in the market to hedge longevity and other pension risks.

DEVELOPMENT OF EXCESS RESERVE FINANCING TRANSACTIONS

The XXX/AXXX excess reserve financing market developed because statutory reserving requirements did not evolve to keep pace with significant improvements in mortality seen by the industry in the 1990s and 2000s, resulting from significant improvements in insurers' underwriting and risk classification capabilities. As a result, many insurers sought financing for the part of the statutory reserves on certain products that were viewed as excessive. Financing providers, based on their due diligence, got comfortable that the reserves were excessive and were able to agree with insurers on terms for financing a material portion of such reserves. Most transactions involved one or more financing agreement documents and a reinsurance agreement between the insurer as cedant and a captive insurance company subsidiary or affiliate serving as reinsurer, with at least one agreement providing negotiated definitions of "economic reserves" and "excess reserves." The definition of "economic reserves" varied from deal to deal, but often was defined with assumptions set at deal inception as a best-estimate gross premium reserve or as a gross premium reserve with modest provisions for adverse deviations. The definition of "excess reserves" was typically statutory reserves minus economic reserves. These transactions also included negotiated provisions to ensure the financing provider, the cedant's regulator, the captive's regulator, and rating agencies that the captive would be sufficiently capitalized over a range of stress scenarios.

The XXX/AXXX excess reserve financing market evolved slowly initially, starting in 2003, but since then XXX/AXXX reserve financing transactions have grown in popularity to become a common part of many insurers' capital management programs, in many cases allowing companies to use debt-like financing for a portion of their reserves. The financing of excess reserves has allowed insurers to offer consumers lower priced insurance products. Even the New York Department of Financial Services (NY DFS), which has been outspoken in its opposition to reserve financing transactions, now acknowledges that the statutory reserves on level premium term products and on some UL-SG products are excessive.

Over these 11 years, the market has evolved significantly. Early on, the market was largely funded by capital market securitization transactions structured and guaranteed by Aaa/AAA-rated financial guarantors. During 2006 and 2007, solutions funded by banks on a recourse basis achieved a material market share. In 2009 and 2010, much of the financing was structured by banks providing long-dated letter of credit (LOC) solutions on a recourse basis. In 2011, much of the financing involved nonrecourse LOCs or other nonrecourse transactions with economics similar to nonrecourse LOCs. More recently much of the financing has involved structures whereby a captive purchases credit-linked notes (CLN) for which one or more professional reinsurers (or other financing providers or investors) provides credit enhancement. Each of these transactions was reviewed by the ceding insurer's domestic regulator and by its captive's regulator, where the terms of each transaction were negotiated between the insurer and the financing provider on a one-off basis and then modified, if needed, to obtain regulatory approval. While common concepts existed, there was no uniformity in the definition of economic reserves or in terms of the kinds of assets that could back excess reserves.

AG48 AND RECTOR FRAMEWORK

AG48, which was the end product of several years of work by the NAIC, was intended as a temporary solution to bring more uniformity to reserve financing transactions. AG48 implements concepts developed by the NAIC's consultant, Rector & Associates, Inc. (Rector), based on input from the regulators and the insurance industry. The NAIC adopted the "Rector Framework" on June 30, 2014, and then worked quickly to develop AG48. AG48 will be replaced on a state-by-state basis after the NAIC first develops and adopts amendments to the NAIC Credit for Reinsurance Model Law and a new NAIC XXX/AXXX Reinsurance Model Regulation, and then as each state adopts these models. Such legislative process probably will span the next several years.

For reserve financing transactions, AG48 uses concepts developed for principle-based reserves (PBR) to define an "Actuarial Method" reserve. AG48 specifies particular assets ("Primary Security"), which must be used to support Actuarial Method reserves and allows "Other Security" approved by the regulators to back the excess of statutory reserves over the Actuarial Method reserves.

The Actuarial Method reserves are intended to bring uniformity in reserve financing transactions to what previously was the economic reserve concept, with calculations reflecting the PBR requirements as specified in the NAIC Valuation Manual, chapter 20 (VM-20). To reflect anticipated changes to VM-20 prior to PBR becoming effective, a modified version of VM-20 has been specified as the Actuarial Method in AG48.

AG48 applies to policies included in reserve financing transactions after January 1, 2015, except it does not apply to policies that were part of a specified reinsurance arrangement as of December 31, 2014 (and it does not apply to the refinancing of such existing transactions).

On a treaty-by-treaty basis, the ceding insurer's actuary must review and opine on compliance with the AG48 requirements for reserve financing transactions subject to AG48, and must issue a qualified opinion for the insurer if one or more of its reserve financing transactions is not compliant with the requirements of AG48. The ramifications of a qualified opinion are still being considered by the NAIC and the marketplace ramifications of a qualified opinion are unknown.

In addition, the Rector Framework requires that one party to the reserve financing transaction hold appropriate risk-based capital (RBC). The NAIC is currently working on defining the specifics of how RBC will operate for such transactions.

And the Rector Framework requires increased disclosure by insurers in their statutory annual financial statements with regard to reserve financing transactions, both for new grandfathered transactions and non-grandfathered transactions. Such disclosure is required for the first time for insurers' year-end 2014 statutory annual financial statements, in a Supplemental XXX/AXXX Reinsurance Exhibit to be filed with the regulators by April 1, 2015. The NAIC is currently updating the disclosure requirement for year-end 2015.

OTHER RESERVE FINANCING DEVELOPMENTS

While the main development in the reserve financing marketplace related to the regulatory developments discussed above, we saw the following trends and other developments in 2014.

- There was a lot of activity on standalone XXX or AXXX financing and on transactions involving a combination of XXX and AXXX financing.
- The number of financing providers successfully executing transactions appears to be relatively unchanged.
- We believe that the total number of reserve financing transactions in 2014 was larger than the number of transactions in 2013, though a small percentage of transactions were disclosed publicly as in preceding years. Cedant data to be disclosed in the new Supplemental XXX/AXXX Reinsurance Exhibit will give a much clearer picture of 2014 and prior activity.
- Reinsurers played an increasing role in the reserve financing market, typically with CLN structures that compete with bank LOCs.
- Reserve financing continues to be a significant issue in M&A transactions that include term insurance and UL-SG blocks of business.
- Gross financing costs continued the steady declining trend we observed during the last few years prior to 2013.
- In response to a possible "grandfathering" date of July 1, we saw a lot more activity in the first half of 2014 as compared with the first half of other years. After that implementation date was postponed in late June by the NAIC until January 1, 2015, we saw the resurgence of increased activity in the fourth quarter of 2014, in advance of the effective date for the NAIC framework.
- Some of the larger CLN structure transactions involved a lead financing provider plus one or more additional financing providers.
- The significant level of discussion at the NAIC on reserve financing transactions led to increased regulatory scrutiny of transactions.

OTHER LIFE ILS TRANSACTIONS IN 2014

While most of the North American Life ILS transactions in 2014 involved XXX/AXXX excess reserve financing, several other innovative transactions provided financing or insurance risk hedging in various forms in the United States and in Europe.

It was a somewhat busier year than 2013 for EV securitization, where there were at least two EV securitization transactions completed, and there was a comparable amount of activity in a related form of financing that has been described in Europe as a value of in-force (VIF) monetization.[2] The EV securitizations included one EUR 55 million transaction for a European insurance group, and a USD 300 million limited recourse transaction for a U.S. insurance group. In January 2015, the completion of a CAD 210 million EV securitization was also disclosed. One of the VIF monetizations once again involved a Spanish bank, as did two 2013 VIF monetizations, and provided a ceding commission to a life insurance subsidiary of a Spanish bank for the reinsurance of its life mortality and disability risks. The other VIF monetization provided a U.S. insurer with reinsurance to monetize the value of its long-term care business.

Aetna, through its ongoing Vitality Re financing program, raised USD 200 million in January 2014 via two tranches of securities issued by Vitality Re V Ltd, and in January 2015 raised USD 200 million via two tranches of securities issued by Vitality Re VI Ltd. While Vitality Re V provides five years of excess-of-loss protection on a portion of Aetna's group commercial health insurance business (i.e., catastrophic morbidity risk hedging), Vitality Re VI provided three years of protection. Consistent with the overall decline in spreads seen in the natural catastrophe bond market, spreads on the Vitality transactions continued their downward movement.

In the catastrophic mortality market, for the first time in several years we did not see a repeat issuer come to market with a publicized transaction, but Hannover Re was an issuer for the first time. Hannover Re obtained USD 160 million of catastrophic mortality protection through the execution of an index-linked swap on mortality in the U.K., Australia, and the United States, placed primarily with institutional investors.

The market for hedging macro longevity risk continues to develop. Among publicized transactions there was substantially more risk hedged in 2014 (GBP 48 billion) than in 2013 (GBP 17 billion) and in 2012 (GBP 37 billion).

Many of the longevity deals that took place in 2014 followed the trend of insurers or reinsurers ultimately accepting the risk. The U.K. market continues to be the leader in longevity risk transfer transactions, where there is a robust longevity swap market (i.e., only the longevity risk is transferred) and buy-in/buy-out market (i.e., where the asset risk is transferred too). Longevity swap transactions became a larger portion of the market in 2014 (compared with 2013), in terms of number of transactions and percentage of all longevity risk transactions. Further, we continue to see cross-border transactions.

In the U.K. market, perhaps the most noteworthy longevity transaction was between Britain's biggest corporate pension scheme (British Telecom, or BT) and a U.S.-based insurance company (Prudential), where Prudential provided longevity reinsurance on GBP 16 billion

[2] Clark, D. & Mitchell, S. (November 2012). VIF Monetisation for Life Insurers–Key Drivers and Considerations. Milliman White Paper. Retrieved February 23, 2015, from http://ch.milliman.com/uploadedFiles/insight/Articles/perspective/published-articles/pdfs/vif-monitisation-for-life-insurers(1).pdf.

of BT's pension liabilities. The transaction is significant not only for its size (as it is the largest British pounds longevity swap to date), but also for its structure, in which BT created a captive that insured 25% of its pension liabilities, which then in turn acquired longevity reinsurance protection from Prudential. This captive/reinsurance longevity swap structure enabled BT in the U.K. to deal directly with Prudential in the United States, eliminating the need for an intermediary and improving cost-efficiency for the pension plan.

There was also a noteworthy longevity transaction emanating from continental Europe. Dutch life insurer Delta Lloyd entered into a longevity swap transaction with RGA. Not only was it the second-largest reported longevity swap transaction in 2014 (EUR 12 billion), the transaction was indexed-linked, where RGA assumed the systematic longevity risk and Delta Lloyd retained the basis risk.

While not as robust as the U.K. market, the U.S. longevity market continued to develop in 2014. While there were more mid-sized buyout transactions in 2014, there were a couple of billion-dollar buy-out transactions. In the largest of these transactions, Motorola transferred USD 4.2 billion of pension liabilities on approximately 30,000 retirees to Prudential. While there were some successful buy-out transactions in the United States, the historic low interest rate environment resulting in significantly large funding gaps (i.e., pension liabilities being higher than plan assets) limited the viability of other deals. Low interest rates weren't the only assumption increasing pension liabilities. The Society of Actuaries introduced new pension mortality tables, which are likely to increase plan liabilities another 6% to 9%. While the longevity swap market was virtually nonexistent in the United States in 2014, plan sponsors were starting to consider its virtue after being forced to recognize that life expectancies have increased further than originally anticipated. In the fall of 2014, Milliman produced an in-depth pension de-risking case study[4] that examined the impact of the new mortality tables on plan sponsors and the cost-effectiveness of various longevity hedge instruments.

The 2014 Canadian group annuity longevity market was the largest on record, with about CAD 2.5 billion of transactions. A noteworthy 2014 event that may have affected the Canadian longevity market was the publication by the Office of the Superintendent of Financial Institutions (OSFI) of a Policy Advisory on Longevity Insurance and Swaps. In this policy advisory, OSFI provides "information and guidance to administrators of federally regulated defined benefit pension plans who are considering entering into a longevity insurance or longevity swap contract as a means of hedging longevity risk."

REGULATORY, LEGAL, AND RATING AGENCY DEVELOPMENTS: HIGHLIGHTS

There were many significant regulatory, legal, and rating agency developments that took place in 2014 that affect the Life ILS market. Below are executive summaries of what we view as the highlights of these developments.

NAIC PBRI TF's adoption of an NAIC framework for reserve financing

On June 30, 2014, the NAIC PBR Implementation (EX) Task Force (PBRI TF) adopted a reserve financing "framework" and passed charges to various NAIC technical groups to implement the framework. The framework was based on the work of Rector & Associates (which is why we refer to it as the Rector Framework). The key objectives of the Rector Framework were:

- Establish (initially via an Actuarial Guideline, and ultimately via an amendment to the NAIC Credit for Reinsurance Model Law, and a new Model Regulation) uniform collateral requirements (the "Required Level of Primary Security") for XXX/AXXX reserve financing transactions that cover non-grandfathered policies.

- Require standardized cedant disclosure of all XXX/AXXX reserve financing transactions, and enhanced disclosure for transactions that cover non-grandfathered policies.

- Enhance NAIC Financial Analysis Handbook guidance to address regulatory review of XXX/AXXX reserve financing transactions.

- Implement RBC requirements for cedants that execute reserve financing transactions that cover non-grandfathered policies.

NAIC's adoption of AG48

- The NAIC adopted AG48 on December 16 with an effective date of January 1, 2015. AG48 was developed by the NAIC Life Actuarial (A) Task Force (LATF) and then refined by the PBRI TF.

- Grandfathered policies: AG48 defines "Covered Policies" to "not include policies that were both (1) issued prior to 1/1/2015 and (2) ceded so that they were part of a reinsurance arrangement, as of 12/31/2014, that would not qualify for exemption as described in Section 3 of this Actuarial Guideline." We refer to such policies as "grandfathered."

- AG48 is focused on XXX/AXXX reserve financing transactions and so it specifically defines certain reinsurance transactions (e.g., yearly renewable term reinsurance, or coinsurance with a certified reinsurer) that are exempt from the AG48 requirements.

- Reserve credit requirements: In order for the cedant to receive full reserve credit for Covered Policies ceded to a reinsurer that is not exempted, Primary Security, as defined in AG48, must be held as collateral (on a funds-withheld basis or in trust on a book value basis) to secure a portion of the statutory reserve greater than or equal to the "Required Level of Primary Security," which is the Actuarial Method reserve, and the excess of statutory reserves over the Actuarial Method reserve must be backed by "Other Security" (defined as Primary Security, or any other type of asset that does not qualify as Primary Security but is approved by the cedant's domestic regulator as part of the regulatory approval of a reserve financing transaction).

[4] Published in Institutional Investor Journals. A copy can be made available upon request.

- "Primary Security" is defined as:

    1. Cash meeting the requirements of Section 3.A. of Model 785.

    2. Securities listed by the NAIC Securities Valuation Office (SVO) that meet the requirements of Section 3.B. of Model 785, but excluding CLNs or similar securities.

    3. Any of the following held under a funds-withheld or modified coinsurance (ModCo) arrangement:

        – Commercial loans in good standing of CM3 quality and higher.

        – Policy loans.

        – Derivatives acquired in the normal course and used to support and hedge liabilities pertaining to the actual risks in the policies ceded pursuant to the reinsurance arrangement.

- "Actuarial Method" is defined as:

    – After PBR is implemented, the version of VM-20 included in the Valuation Manual applicable to such year, without modification.

    – Before PBR is implemented, a modified VM-20 calculation, with 2.5 pages of modifications as described in AG48, for which highlights are as follows:

        1. For term life, the Actuarial Method is the larger of the deterministic reserve and the specified percentage of the net premium reserve (NPR), and exclusion tests will not be applicable.

        2. For UL-SG, the Actuarial Method is the largest of the deterministic reserve, the stochastic reserve, and the specified percentage of NPR, and exclusion tests will not be applicable.

        3. The "specified percentage" for NPR calculations is 100% starting in 2016 but in 2015 varies by issue age, gender, and smoker status.

NAIC's adoption of 2014 year-end disclosure requirements for XXX/AXXX reserve financing transactions

- In the fall of 2014, the NAIC adopted a four-part Supplemental XXX/AXXX Reinsurance Exhibit for which the filing deadline is April 1, 2015. The exhibit requires year-end 2014 disclosure of certain nonconfidential information about existing (grandfathered) transactions. The NAIC will adopt a modified exhibit for year-end 2015 to also disclose transactions covering non-grandfathered policies.

- The Statutory Accounting Principles Working Group (SAPWG) on November 16 confirmed it will begin work on its charge from PBRI TF to "Develop a Note to the Audited Financial Statements regarding compliance with the NAIC XXX/AXXX Reinsurance Model Regulation." PBRI TF provided clarification that the charge also applies to compliance with AG48. Such note would first appear in 2015 year-end annual statements.

NAIC's adoption of Financial Analysis Handbook guidance to address regulatory review of XXX/AXXX reserve financing transactions

- In the fall of 2014, the NAIC adopted edits to the NAIC Financial Analysis Handbook related to XXX/AXXX reserve financing transactions, providing guidance for state regulators with authority over the cedant or the holding company in a proposed or existing XXX/AXXX reserve financing transaction. The guidance is intended to help regulators appropriately differentiate their reviews of grandfathered policy transactions from their reviews of non-grandfathered policy transactions. The NAIC adopted these edits as a new additional NAIC accreditation standard.

- Most of the XXX/AXXX reserve financing transaction-related edits closely followed recommendations from a memo of February 11, 2014, addressed to the PBRI TF by the NAIC Financial Analysis (E) Working Group (FAWG). That memo implied that the FAWG would soon start (or had already started) a process of providing confidential feedback to regulators on XXX/AXXX captive transactions pending regulatory approval, which was a role charged to the FAWG by the E Committee in 2013. Throughout 2014, with regard to pending XXX/AXXX reserve financing transactions submitted for regulatory approval, most of our insurance company clients received more regulatory questions than in prior years, but because the FAWG process is confidential most companies were not sure whether the questions were coming from the FAWG or whether their regulators on their own were following guidance from the FAWG's memo of February 11, 2014.

NAIC's deliberations on appropriate year-end RBC requirements for cedants that execute reserve financing transactions covering non-grandfathered policies

- The NAIC has divided its work on this topic into three charges that have been delegated to the Life Risk Based Capital (E) Working Group (Life RBC Working Group) of the Capital Adequacy (E) Task Force (CATF). These charges were clarified in 2014 as follows:

    – RBC cushion: Develop an appropriate RBC cushion for an insurer ceding XXX/AXXX policies when the assuming reinsurer does not file an RBC report using the NAIC RBC formula and instructions.

    – RBC factors for Other Security: Develop appropriate asset charges for the forms of Other Security used by insurers under the XXX/AXXX Reinsurance Model Regulation. These charges should then be considered for incorporation into the RBC cushion developed in accordance with the previous charge.

    – Qualified actuarial opinion impact: Determine whether the current RBC C-3 treatment of qualified actuarial opinions is adequate for the purposes of the risks of XXX/AXXX reinsurance transactions receiving qualified actuarial opinions.

- The Life RBC Working Group has exposed for comment some straw-man conceptual approaches for each of these charges, but views the straw-man approaches as a work in progress. In late 2014, the working group clarified its intent to vote on proposals for all three charges at the same time, because the charges are interrelated, and for its parent CATF to adopt by April 30, 2015, all such proposals, which will be effective for year-end 2015.

NAIC development of accreditation program requirements for XXX/AXXX reinsurance subsidiaries

- At the NAIC 2014 Spring National Meeting, the NAIC Financial Regulation and Accreditation Standards (F) Committee (F Committee) exposed proposed revisions to the Accreditation Program Manual preambles that would define a term "multi-state reinsurer" to include most captive subsidiaries of commercial insurers, and would also subject multistate reinsurers to NAIC accreditation standards. In response, most of the 34 comment letters objected to the breadth of the proposal and/or to the unconventional process used to make the proposed changes, although a small percentage of the comments supported the proposed changes.

- At the NAIC 2014 Fall National Meeting, the F Committee directed NAIC staff to draft revisions to NAIC accreditation program preambles to include a prospective requirement applicable on an effective date, to be determined, that a captive assuming XXX/AXXX risk is to be treated as a multistate reinsurer subject to accreditation program requirements. Such revisions would provide that a captive satisfying the NAIC XXX/AXXX Reinsurance Framework would be deemed to meet the applicable accreditation requirements. NAIC staff stated that it will be necessary to substantially revise the current preambles to the accreditation program in order to provide both clarity and accuracy to the proposed revisions.

NAIC's development of model laws and regulations relating to XXX/AXXX reinsurance ceded

Late in the fall of 2014, the NAIC Reinsurance (E) Task Force (RTF) created a XXX/AXXX Model Regulation Drafting Group to create a new model regulation to establish requirements regarding the reinsurance of XXX/AXXX policies. The RTF instructed its drafting group to begin its drafting work, to closely follow AG48, and to seek PBRI TF input before departing from AG48.

NAIC's evaluation of potential requirements for VA and LTC captives

In a November 13 memo to the F Committee, NAIC staff proposed that its draft revisions to NAIC Accreditation Program Manual preambles would also include a prospective requirement applicable after effective dates, to be determined, that a captive assuming variable annuity (VA) business or long-term care (LTC) business also be treated as a multistate reinsurer subject to accreditation program requirements. As with XXX/AXXX captives, the revisions would acknowledge that similar treatment would be given to VA captives and LTC captives should the NAIC in the future develop methodologies that address these types of products, but in the interim these types of reinsurance transactions would be subject to the normal accreditation requirements. During the F Committee's November 16 meeting, the American Council of Life Insurers (ACLI) suggested that the effective date of such accreditation requirements be deferred until the effective dates of any such new NAIC frameworks for reinsurance of such products, as otherwise such accreditation requirements would just encourage companies to create captives offshore. The F Committee appeared to ignore the ACLI comments and directed staff to include VA and LTC in the preamble revisions as described above, but the F Committee did indicate that it would consider such revisions as a "straw-man" proposal that would be exposed for comment.

During the November 17 PBRI TF meeting, one regulator asked whether PBRI TF will commence a review of VA captives given the discussion at the F Committee. The chair responded that PBRI TF is not ready to consider the possibility, and needs to focus on completing the outstanding components of the XXX/AXXX Reinsurance Framework, as well as its other charges.

State legislative and regulatory issues directly affecting Life ILS transactions

In general

While the NAIC was working rigorously in 2014 to design and implement an NAIC framework for XXX/AXXX reinsurance, most state regulators that approved reserve financing transactions before 2014 continued to provide regulatory approval in 2014 for such transactions. While we are seeing some enhanced level of regulatory scrutiny, transactions continue to be approved.

New York

On March 27, 2014, the NY DFS published a letter addressed to other state insurance commissioners stating it has determined that reserves on level term products "are high relative to actuarial experience and should be modernized." On December 9, 2014, the NY DFS published revisions to NY Regulation 147 (which is New York's version of XXX), and NY Regulation 179 (allowable mortality tables). These are applicable for new term life written on or after January 1, 2015, and do not address excessive reserves on in-force business. The NY DFS expects that the aggregate effect of the change will be that reserves on such new future business will be 30% to 35% lower than under current Regulation XXX, though some in the industry question whether such reductions will be achieved, given other requirements from the NY DFS's annual "Special Considerations Letter," which provides NY-DFS-specified requirements for insurers' annual asset adequacy testing.

The NY DFS also indicated in 2014 its intent to reduce statutory reserves in New York for certain AXXX policy types issued after 2014.

Ohio insurance code was amended to permit Ohio-domiciled captives

Captive amendments to Ohio's insurance law, which were adopted on June 17, became effective on September 17. These amendments provide for the creation of various types of captives including special purpose financial captives.

Vermont's modified requirements for SPFICs created after January 1, 2014

On January 27, 2014, the Vermont Department of Financial Regulation issued Bulletin No. C-2014-01, which requires new special purpose financial insurance companies (SPFICs), unless otherwise exempted by the commissioner, to obtain an NAIC company and group code number, prepare annual and quarterly statements on appropriate NAIC blanks in accordance with instructions, and file annual and quarterly statements with Vermont and the NAIC. Quarterly statements, use of NAIC blanks, and filing with the NAIC have not historically been requirements of Vermont or other U.S. captive jurisdictions. Vermont's stated reasons for these changes were in response to concerns about SPFICs raised by state and federal regulators.

Federal regulatory initiatives on life insurer use of captives

- Three U.S. federal regulatory entities issued reports on life insurer use of XXX/AXXX captives, but none of the reports provided any material revelations not already in documents published by the NAIC or rating agencies:
  - Voting members of the Financial Stability Oversight Council (FSOC) approved the FSOC 2014 Annual Report on May 7, 2014.
  - The Federal Insurance Office (FIO) of the U.S. Department of the Treasury on September 24, 2014, published its annual report on the insurance industry (FIO 2014 Annual Report).
  - The Office of Financial Research (OFR) of the FSOC on December 2, 2014, published its annual report to Congress on financial stability (OFR 2014 Annual Report).
- The Federal Reserve Bank (FRB) of Boston on October 7, 2014, published a paper entitled "Variable Annuities – Recent Trends and the Use of Captives." Highlights of the paper are as follows:
  - "While VA reinsurance captives owned by life insurers have been in existence for over a decade, it is in the past four years that their use has accelerated for VA business."
  - "Since there are no uniform regulations for captives, the same liabilities can be valued differently based simply on the jurisdiction of the captive."
  - "VA captives can also employ other mechanisms that reduce regulatory capital requirements, such as parent company capital maintenance/support agreements and regulatory permitted practices. Furthermore, captives can reduce collateral requirements by domiciling the traditional ceding insurer and captive in the same state."
  - "The benefits of captive reinsurance lie in the fact that different regulatory reserve/capital requirements and asset recognition are applied to same risks as the exposures move from ceding insurers to captives."
  - "The significance of the capital arbitrage opportunities and the current degree to which they are exploited are supporting arguments for consolidated capital standards. The use of affiliated reinsurance captives does not transfer risk outside of the consolidated organization, yet their use allows VA writers to hold less RBC and enables the transfer of risk to a regulatory regime with lower capital requirements. Thus, the use of reinsurance captives obscures existing statutory capital adequacy assessments and can leave VA statutory writers and their insurance holding companies with less ability to absorb market and other tail risks which emanate from this significant and volatile business. In the absence of consolidated capital standards, market participants' understanding of a firm's financial condition would benefit from better public disclosures with respect to the use of affiliated captives for risk transfer."

Rating agency developments affecting Life ILS

- **A.M. Best criteria for assigning ratings to captives, ILS, or ILS funds:**
  - On September 19, 2014, A.M. Best published criteria entitled "Rating Reinsurance/Insurance Transformer Vehicles," which highlight A.M. Best's rating considerations that are unique to its evaluation of captives or ILS for which A.M. Best assigns ratings.
  - On December 12, 2014, A.M. Best published criteria entitled "Insurance-Linked Fund Ratings," which explain how A.M. Best opines on an ILS fund's average credit quality and vulnerability to losses.
- **Fitch's criteria for ILS:**
  - On August 8, 2014, Fitch issued updated criteria entitled "Insurance-Linked Securities Methodology." The methodology covers how Fitch assigns ratings to captives or ILS. It was an update to a report of the same title published in 2012, where the changes from the prior report improved clarity but were not material changes in Fitch's criteria.
- **Moody's criteria for global reinsurers, and view on life insurer use of captives:**
  - On May 20, 2014, Moody's issued a special comment, entitled "U.S. Life Insurance: 'On-shoring' Does Not Reduce Credit Risks of Captives," which explains Moody's views on life insurer use of captives domiciled in the United States.
  - On October 13, 2014, Moody's issued a rating methodology document entitled "Global Reinsurers," which replaced "Global Rating Methodology for Reinsurers," published by Moody's in December 2011. The update sharpened the descriptions of a number of analytical considerations including linkages between sovereign risk and insurance sector risk, and the level of ratings uplift based on parental support.

- **S&P's evolving view on life insurer use of captives:**

  – On March 10, 2014, S&P published a proposed new "Methodology For The Treatment Of Captives In Rating U.S.-Domiciled Life Insurers," on which S&P requested comments by April 25, 2014. We believe S&P's intent is to develop a practical way to properly consider use of captives in evaluating a life insurance group's consolidated capital adequacy, reflecting how well a group's captives are capitalized and how equity investments in the captives are valued. In an August 18 update S&P indicated that after review of industry comments on its proposal, it had begun to explore refinements to its proposed approach that would utilize GAAP reserves (instead of economic reserves) to estimate the redundant portion of statutory reserves, and it was hoping to publish revised criteria in the coming months.

LOOKING AHEAD TO 2015

Below we present our views as to potential further developments in 2015.

The XXX/AXXX reserve financing marketplace

Insurers are in the process of evaluating the implications of AG48 and as-yet-to-be finalized RBC requirements for new reserve financing transactions. And financing providers are also considering such implications. There is a range of questions that will need to be considered. With AG48 dependent on PBR's VM-20, this really accelerates the implementation process of PBR for companies that previously had not expected to be doing PBR calculations until 2017 or later. Are companies ready to perform VM-20 calculations? In effect, AG48 will result in live "field testing" of VM-20. An important issue that insurers and financing providers will need to consider is the impact of the volatility in Actuarial Method reserves resulting from the VM-20 requirement to unlock reserve assumptions each year (most grandfathered reserve financing transactions used "locked-in" economic reserve assumptions). Who will bear the volatility in the Actuarial Method reserves (and the resulting volatility in the reserves to be financed)? What creative new structures will be developed possibly to finance the difference between the Actuarial Method reserve and the economic reserve? How will the implementation of AG48 affect insurers' pricing of its term and UL-SG products? For one 20-year level term sample product evaluated by Milliman, premiums would need to rise approximately 15% under AG48 for an insurer to maintain its current profitability level. We believe that insurers and financing providers will be working hard in the first half of 2015 investigating these and other questions as they await more clarity on RBC requirements, so we expect most reserve financing transactions in 2015 will occur in the second half of 2015.

Aside from the AG48 potential implications, the following additional factors may affect the nature of the financing structures that will be implemented in 2015.

Regulatory implementation of Financial Analysis Handbook guidance to address regulatory review of XXX/AXXX reserve financing transactions

There are two new provisions related to XXX/AXXX under section 16.f. of the Financial Analysis Handbook that give cedant regulators considerable discretion with regard to Form D approval of a particular form of financing. These are for the regulator to consider:

1. The extent of refinancing risk present within transactions, given they may involve financing of long-duration reserve liabilities with short- or medium-duration assets.

2. Conditions imposed by the financing provider that require the assets available to satisfy policyholder claims be used before payment is made by the financing provider. Information may be requested from the insurer as to whether assets supporting reserves contain conditions or "priority of payment" provisions that could make the asset unavailable to satisfy general account liabilities. If so, consider if such provisions are consistent with existing law.

Cedant commissioners in different states that have already approved XXX/AXXX reserve financing transactions have had different views on the above concepts, and have reflected such views in their approvals. It is possible that one or more states changes its historical view on these concepts as a result of the formalized Financial Analysis Handbook requirements and/or as a result of FAWG confidential feedback to regulators on XXX/AXXX captive transactions pending regulatory approval.

Life RBC Working Group XXX/AXXX-related charges

RBC cushion: On January 16, 2015, the Life RBC Working Group exposed a conceptual approach for an RBC cushion, differentiating between situations where the cedant is already calculating and holding a C-0 charge because the captive is an admitted subsidiary, where the cedant is not already calculating and holding a C-0 charge for the captive, or where the captive assumes business from more than one cedant. The design of the approach would be to create a level playing field among cedants, regardless of which of the three situations applies.

RBC factors for Other Security: On December 29, 2014, the Life RBC Working Group exposed a straw-man proposal that had not been fully developed. On a February 12, 2015, Life RBC Working Group conference call, it was clarified that the SVO had been asked to recommend C-1 factors for Other Security that does not qualify as Primary Security, and there was some regulatory discussion suggesting that for types of Other Security already rated by the SVO, the SVO will consider whether to suggest higher C-1 factors than the C-1 factors for bonds of the same rating. Depending on the final version adopted by the Life RBC Working Group and the NAIC:

- CLNs could continue to be viewed by most insurers as the preferable form of financing.

- LOCs could be viewed as equivalent to CLNs with similar priority of payment conditions.

- Funded forms of financing, where the captive issues surplus notes purchased by third-party investors or by a special purpose vehicle (SPV) that issues senior debt purchased by third-party investors, could be viewed by some insurers as more attractive than CLN and LOC financing.

Qualified actuarial opinion impact: On December 29, 2014, the Life RBC Working Group exposed a proposal that would avoid impacting all lines of business for a qualification of the actuarial opinion for a cedant based solely on AG48. The Life RBC Working Group also exposed two alternative approaches under consideration to adjust the cedant's RBC calculations if there is a shortfall of Primary Security, where one would reduce the cedant's total adjusted capital (TAC) and the other would increase the cedant's authorized control level RBC. Under either approach, we believe that most cedants will have sufficient incentives to ensure their transactions for non-grandfathered policies comply with AG48. The Life RBC Working Group plans on exposing a modified proposal by the end of February with a goal of having the CATF adopt the proposal by April 30, 2015.

Other CATF activities that could affect XXX/AXXX financing

Unauthorized reinsurance: The timing is uncertain for the Life RBC Working Group of the CATF to develop and expose a proposal to require life companies to collateralize RBC ceded to unauthorized reinsurers in the same manner as reserves. If adopted, this could encourage cedants of XXX/AXXX risks to add the captive's Company Action Level RBC to the amount secured by Other Security or by Primary Security, and could thus affect the structuring of financing transactions executed after the effective date for such changes.

Operational risk RBC: For Life (and Health) RBC, the CATF's Operational Risk (E) Subgroup is in the process of assessing the degree to which operational risk is already reflected in C-4 RBC and other areas of the formula and also considering suggestions by interested parties that any additional charge for operational risk (beyond that already in NAIC RBC) should be nominal. To the extent that the additional charge for operational risk is material, and depending on how it is defined, it might, when effective, impact the structuring or capitalization of certain types of captives.

Principle-based reserves updates

PBR: Officially 20 states have passed the NAIC's PBR package as of February 9, 2015. These 20 states account for about 36% of 2008 industry premiums. PBR won't become effective until 42 states or jurisdictions, representing 75% of 2008 premiums, have adopted the revised Standard Valuation Law incorporating PBR. Another 12 states, representing about 25% of premium, have introduced bills for this PBR legislation and are in various stages of passage. If all these bills pass the total would be 32 jurisdictions with just over 60% of premium. Given that another 10 states with 15% of premium would be still be needed, we believe the earliest PBR can become effective is 2017 (and remember that, following the operative date, companies have three years before they are required to begin reporting on a PBR basis). While it still may be many years before a company needs to file its statutory statements on a PBR basis, under AG48 the Actuarial Method for XXX/AXXX business is based on a modified version of the PBR VM-20 requirements, so companies looking to execute reserve financing transactions on non-grandfathered policies in 2015 need to be prepared much sooner to begin performing PBR-like calculations.

State regulatory XXX/AXXX captive-related developments

New York: The new NY DFS reserving requirements for level term business are effective as of January 1, 2015. In the January 28, 2015, edition of the New York State Register, the NY DFS published proposed amendments to NY Reg 147 and Reg 179 for UL-SG policies for a 45-day public comment period. Similar to the recent change for level term, the UL-SG changes, if adopted, will introduce mortality improvement into the reserve calculation. Interestingly, NY DFS has also included a lapse provision (similar to what was in the AG38 revisions in 2012, which NY DFS adopted and then rejected). Both of these new reserving rules will create additional administrative burden on companies licensed in New York that sell level term and UL-SG business.

Rating agency XXX/AXXX captive-related developments

S&P: At this juncture, we are still waiting for a public update from S&P on its intentions for modifying its XXX/AXXX criteria.

A.M. Best, Fitch, and Moody's: In light of ongoing life captive-related regulatory developments, and given how financing structures have evolved in the last couple of years, we would not be surprised if one or more of these rating agencies in 2015 introduces changes to their captive-related criteria.

Non-XXX/AXXX developments

EV financing and VIF monetization market: We expect to see modest or no growth in the number of EV securitizations in Europe and North America. We also expect to see modest or no growth in the number of VIF monetization transactions executed by insurance subsidiaries of banks or insurance holding companies in Europe or North America in solutions to strengthen holding company balance sheets.

Catastrophic morbidity and mortality risk hedging market: We expect that Aetna will continue to be an annual issuer of catastrophic morbidity bonds, and that we will have one or two publicized catastrophic mortality transactions in 2015.

VA captives and other VA capital management transactions market: Because the issue has been raised by the FRB of Boston, the NAIC may establish an NAIC task force or working group to research and deliberate on whether it makes sense to develop VA reinsurance framework enhancements, rather than implement the F Committee's December 2014 proposal (which would just encourage companies to domicile their VA captives offshore).

Longevity risk hedging market: We expect continued development around the world.

In the U.K., in the long term, we anticipate a dramatic reduction in life insurer demand to purchase longevity protection as a result of a March 19, 2014, U.K. finance minister announcement that changes will be implemented to substantially reduce the percentage of new retirees that are compelled to buy individual annuities. However, in the near term for insurers in the U.K. and continental Europe, we anticipate modest longevity market transaction growth that might accelerate as a result of Solvency II developments. Among pension plans in the U.K. and continental Europe, we see no reason for a material slowdown in longevity transaction activity, especially given that insurers may seek to take on more bulk transactions to offset the reduction of their individual annuity businesses. Further, the market has grown in efficiency, which may allow smaller pension funds to participate.

In the United States, the funding levels in defined benefit plans affects plan sponsor interest, where greater interest is expected from plans that are more highly funded. Milliman's Pension Funding Index (PFI), which is determined based on the funded status of the top 100 defined benefit plans in the United States, showed a funding ratio of 83.5% as of year-end 2014 and 79.6% as of January 2015. The drop in the ratio in January was due to a decline of 42 basis points in benchmark corporate bond rates used to value liabilities. The current PFI statistics are before the reflection of the anticipated new pension mortality table assumptions, which will likely significantly increase pension liabilities, and in turn decrease the funding ratio further. The revised mortality assumption that illustrates the longevity risk of defined benefit plans may lead to chief financial officers at corporations with pension plans to better understand the impact of longevity risk, and in turn it may expedite the number of longevity risk transfer transactions. While we expect the buy-out market to continue, the drastic funding gap keeps it from reaching its full potential. However, we do expect continued market innovation in 2015, including growth in longevity only (e.g., longevity swap) transactions that will allow a U.S. plan sponsor to hedge a portion of its risk in a cost-effective manner—especially if the transaction can help put it on a path towards defeasing most of its pension risks.

In Canada, we anticipate further longevity market transactions after pension plan sponsors and longevity protection providers fully digest the mid-2014 OSFI Policy Advisory on Longevity Insurance and Swaps.

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