

Article Title: ARCHIVE | Criteria | Insurance | Life: New Method Of Analyzing Use Of Short-Term Credit Solutions For U.S. Firms Data: (EDITOR'S NOTE: — This criteria article is no longer current. It has been superseded by the article titled "Methodology: Treatment Of U.S. Life Insurance Reserves And Reserve Financing Transactions," published on March 12, 2015.) In 2006, Standard & Poor's Ratings Services is implementing financial leverage treatment for the analysis of the financial period ended Dec. 31, 2005, on certain short-term funding solutions to collateralize long-term reserve requirements for U.S. life insurers. These types of transactions rely on short-term letters of credit (LOCs) or short-term funding for long-term liabilities, creating rollover and pricing risks that Standard & Poor's believes could result in a reduction of financial flexibility under certain scenarios. Since the adoption of Regulation Triple-X in 2000 and the subsequent Actuarial Guideline AXXX, many U.S. life insurance companies use reinsurance treaties with either on-shore or off-shore reinsurance for the benefit of receiving regulatory reserve credit for their U.S.-regulated issuers. The majority of these treaties are backed with LOCs that serve as collateral to obtain reserve credit for the ceding company. Although these criteria are being driven by the ever-increasing demand for LOCs created by Triple-X and AXXX reserve requirements, it has general applicability in all areas that require match funding. Standard & Poor's has long recognized the problem of over-reliance on LOCs for reserve collateral and qualitatively assessed these risks when considering assigning ratings. However, going forward and starting with the year-end 2005 financial analysis, there will be discrete analytical adjustments for the mismatched position. Insofar as the risk factor was already embedded—if less rigorously—in the analysis, Standard & Poor's expects that most companies will comply with the criteria, with the majority of them expecting to complete a more permanent longer-term funding solution or accelerate plans in 2006 to do so. As a result, few if any rating actions are likely to stem from the revised criteria. The LOCs are used to fund required reserves in the AXXX and Triple-X transactions and are unlikely to ever be drawn down. As a result, Standard & Poor's is applying the financial leverage criteria to address the actual funding requirement and not the probability of the draw. The determination of operating leverage is a separate analytical process whereby Standard & Poor's reviews the de minimis nature of the underlying cash flows and determines operating leverage treatment for various debt-funded securities. Nevertheless, Standard & Poor's will be reviewing the economic reserve adequacy on the particular blocks of Triple-X and AXXX to determine the relative reserve adequacy and support the statutory reserve funding peak assumptions. Standard & Poor's considers the following risks when funding a long-term requirement with shorter-term sources: Rollover risk. The issuers could face a situation in which the LOC or other short-term funding solutions are not available in the market. If that happens, the issuers will have to recapture the policies and put up the statutory reserves by deploying its capital or by issuing debt. If there is a lack of liquidity, there will be a statutory capital shortfall. Pricing risk. The LOCs could become more expensive because there generally is no specific price cap, and the cost is reset when it is renewed again. The LOC term is usually short (one, three, or five years), which creates a mismatch between the liability maturity term (as long as 20 years for term insurance and more than 50 years for universal life insurance) and the term of the collateral. This mismatch could erode future profit margins in the product if the collateral cost increases through time and it cannot be passed on to the policyholders. Recently, LOC in the seven-10-year time range have become available, but even these are of a substantially shorter duration than the liability, and availability is not great. In the event of reset pricing, Standard & Poor's will consider the impact and determine if the reset is uneconomic. If so, the duration will be capped at the reset date and be subject to the financial leverage criteria.

Company-specific issues. Even if pricing or availability were not generally issues in the LOC marketplace, for a specific insurance company or the insurance industry as a whole, access might be constrained because of specific company-related or industry-related problems. Regulation Triple-X's Financial Leverage Application To Short-Term Funding Solutions The following criteria will be applied to Regulation Triple-X The notional amount of LOCs or short-term funding outstanding with less than eight years of maturities and locked-in cost will be treated as financial leverage as follows: LOCs or short-term funding of less than three years would be treated as 100% debt. LOCs or short-term funding of more than three years but less than eight would be treated as financial leverage in the following proportions: Table 1 Triple-X Financial Leverage For Short-Term Funding Of More Than Three Years But Less Than Eight TERM (YEARS) (%) OF OUTSTANDING NOTIONAL TREATED AS DEBT 4 80 5

60 6 40 7 20 LOCs or short-term funding solutions with term maturities of eight years or more with fixed locked-in cost would not be considered financial leverage or operating leverage. If an LOC is drawn, Standard & Poor's will assess the drawn amount as financial leverage. To the extent that a company can illustrate a statutory reserve peak that is different than the industry average (i.e., seven to eight years), Standard & Poor's will qualitatively assess the difference and apply an appropriate factor. Standard & Poor's considers the statutory reserve funding peak for the standard Triple-X book of business to be eight years. Standard & Poor's believes that the funding structure should at least cover the reserve peak duration reflecting appropriate asset/liability management. Further, because the underwriting track record of Triple-X is fairly predictable, Standard & Poor's believes a three-year period to refinance the required collateral is appropriate. Actuarial Guideline AXXX's Financial Leverage Application To Short-Term Funding Solutions The following criteria will be applied to Regulation AXXX

The notional amount of LOCs or short-term funding outstanding with less than 15 years of maturities and lock-in cost will be treated as financial leverage as follows: LOCs or short-term funding of less than five years would be treated as 100% debt. LOCs or short-term funding of more than five years but less than 15 would be treated as financial leverage in the following proportions: Table 2 AXXX Financial Leverage For Short-Term Funding Of More Than Five Years But Less Than 15 TERM (YEARS) (%) OF OUTSTANDING NOTIONAL TREATED AS DEBT

TERM (YEARS)	6	9	7	8	8	7	0	8	7	0	9	6	10	50	11	40	12	30	13	20	14	10	
LOCs or short-term financial solutions with term maturities of 15 years or more with fixed lock-in cost																							

would not be considered financial leverage or operating leverage. If an LOC is drawn, Standard & Poor's will assess the drawn amount as financial leverage. To the extent that a company can illustrate a reserve peak that is different than the industry average (i.e., 12 years and level to year 20), Standard & Poor's can qualitatively assess the difference and apply a different factor. The rationale for this treatment reflects the view that Standard & Poor's considers the statutory reserve funding peak for the standard AXXX book of business to be 12 years with a flat slope for a number of years and then running down gradually beyond 18 years. Standard & Poor's believes that the funding structure should at least cover the reserve peak duration reflecting appropriate asset/liability management. Further, the 15-year level is appropriate for an issuer to refinance the collateral requirements for reserve credit. Given that the underwriting track record of AXXX is limited, Standard & Poor's believes a five-year period to refinance the reserve collateral is appropriate and will treat the duration with less than five years as financial leverage. In cases where the insurer is marginally investment grade, Standard & Poor's is expected to review covenants, specifically material adverse conditions clauses, to determine that no further assessment of financial duress is warranted. Frequently Asked Questions What has caused U.S. life insurers to become so reliant on letters of credit? The biggest reason is so-called Regulation Triple-X, effective since Jan. 1, 2000. Regulation Triple-X applies to certain life insurance products—primarily level premium term insurance—and requires U.S. life insurers to hold reserves under statutory accounting that far exceed the actual economic value of future policy benefits. (For a more complete description of Regulation XXX, see "Credit FAQ: The Looming Crisis of XXX Reserves," published March 30, 2004, on RatingsDirect.) Competitive conditions in the industry and a focus on capital optimization have led many companies to reinsure their Triple-X business offshore to bypass the Triple-X reserve requirements. Bermuda and other common offshore domiciles have much more relaxed regulation, meaning companies can hold more of a best-estimate reserve. To meet the onerous statutory reserve requirements, the offshore reinsurer must post collateral for the required amount, either by depositing assets into a trust or by posting a letter of credit from an accredited bank. Because of their low cost, contingent nature, and relatively short-term exposure, LOCs have been by far the most popular solution, resulting in an estimated \$21 billion of LOCs held in support of U.S. life insurance reserve requirements by the end of 2005 (see chart). What have been the recent developments in the LOC market? Just a few years ago, LOCs were almost entirely issued for 364-day terms, meaning they need to be renewed each year. This places the insurer at risk that deterioration in its credit or dislocation in the availability of LOCs in its market could lead it uncovered in a year or less. More recently, as banks have sought to serve this need and found creative ways to manage their own capital requirements, four- and five-year facilities have become more common and affordable. Facilities as long as 10 years are available in the market, usually through programs syndicated across a number of banks, but at a meaningful price increase, and even longer facilities are in development. In spite of

the recent softening, Standard & Poor's continues to view the bank market as having limited capacity for extending credit to the life insurance sector and probably could not meet the projected ultimate need of as much as \$100 billion. What problems are caused by the LOC reserve solution? The LOCs are used for required reserves that exceed the economic need, so they are unlikely to ever be drawn down. However, companies are at risk on the rollover of these instruments. The underlying policy obligations are guaranteed for as long as 30 years and have an average life of about 16 years. An extension of Triple-X, Actuarial Guideline 38 applies to universal life insurance and has funding needs that could go as far as 60 years. Given the enormous mismatch, if credit conditions are weak at LOC renewal time or if an individual company's credit is strained, then rollover could create problems. This could be anything from a substantial price increase that the insurer cannot pass on to customers to an inability to renew LOCs at all. Under the latter circumstance, the insurer would need to put up capital to support the reserves, which could severely strain its capital base. Why is Standard & Poor's revising its ratings criteria for LOCs now? Standard & Poor's has long recognized the problem of over-reliance on LOCs for reserve collateral. In the early years, the numbers were not very material, but they have increased significantly. At this point, some companies have Triple-X requirements that exceed their equity base, and others are growing in that direction. Further, the market is increasingly developing longer-term solutions that more appropriately match the length of the reserve requirement with the funding vehicle. Given the availability of better solutions, Standard & Poor's feels that this is the appropriate time to differentiate between companies that are managing prudently with long-term funding and those that are using higher-risk and lower-cost short-term funding. What types of alternatives to fund Triple-X reserves are there in the market? Longer-term LOC products are becoming increasingly available, and prices are slowly coming down. LOC commitments of 10 years—many of which are annually extendable for an additional 10 years—are becoming more affordable and are well suited to covering the bulk of the Triple-X funding need. Longer-term funding that is more suited to AG 38 products is still expensive but is also becoming available. Companies are also looking toward funded solutions that involve issuing long-term debt to fund the obligation. In these structures, the company will deposit the proceeds from the debt offering into a trust designed to achieve the same reserve collateral treatment as the LOC solution. Such funded solutions can easily be obtained with 20- and 30-year terms. Standard & Poor's has determined that, within limits, it will not consider these funded solutions as financial leverage if the company can demonstrate de minimis likelihood of a draw on the reinsurance trust and appropriate asset/liability management of the assets in trust. The best solution to Triple-X funding is a full securitization. Under these structures, a company reinsures its Triple-X business to a special-purpose reinsurer that funds the requirement by issuing notes to the market. The notes are designed to be nonrecourse to the sponsoring insurance company. Under these structures, the funding fully matches the term of the underlying insurance products, and the investors in the notes have taken the risk that the funding could ultimately be drawn. The insurer has then passed much of the funding and insurance risk on to the investors. Does Standard & Poor's mean to imply that short-term LOCs are universally bad? All collateral funding mechanisms have their place. There continue to be other types of shorter-term coverages for which short-term LOCs are very appropriate. In addition, many companies use shorter-term LOCs in a warehousing function. That is, they accumulate reserves in a facility supported by LOCs until the funding need builds to the critical mass needed to pursue longer-term funding. Typically, the critical mass level of funding is at least \$200 million for full-recourse debt funding or \$400 million for a full securitization, though these could come down as investors and others become more comfortable with the risk and the modeling. In summary, heavy reliance on funding that mismatches the obligation over its lifetime is a high-risk strategy. What types of companies are most exposed to this issue? Life reinsurers are the most at risk, having taken on billions of dollars of these liabilities from ceding insurance companies. In addition, a few nontraditional life reinsurers—either bank affiliates or financial reinsurance specialists—have effectively rented out their balance sheets by taking on a significant share of the funding need. At the same time, the reinsurers are also generally at the forefront of pursuing securitizations and other longer-term funding mechanisms, though not all have moved at the same pace. Also, many but not all of the major U.S. life reinsurers are part of large globally diversified groups (e.g., Swiss Re, Munich Re, AEGON) and are in a strong position to manage global funding needs of various durations. As life reinsurers seek to manage their exposure to Triple-X

funding, they have passed on cost increases to direct life insurers. As a result, an increasing number of direct companies are seeking to establish their own off-shore (or in some cases on-shore) reinsurance captives to manage this risk themselves. Standard & Poor's estimates that fewer than 20 direct life insurers have the critical mass to implement a securitization, so many continue to rely on LOCs or other short-term funding to support their long-term funding needs. How will the new LOC criteria impact ratings? Standard & Poor's will begin calculating financial leverage ratios under the new criteria with the Dec. 31, 2005, financial period, and some companies' leverage ratios are likely to exceed the published tolerance for the current ratings. No immediate rating actions will be taken, but Standard & Poor's will accelerate its dialog with the companies where the impact of the new calculation is greatest. Depending on the result of those discussions, Standard & Poor's could take rating actions within six to 12 months if companies do not have a concrete plan to bring leverage ratios into line. However, Standard & Poor's expects that most companies will agree with the criteria by accelerating their move toward longer-term funding, so few if any rating actions are likely.