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Captive Insurance Company Reports

Global Solvency Regulation and Capital Management

Joseph LoPorto is a managing director and senior consultant at CapVisor Associates in New Jersey. He specializes in investment strategy design, strategic asset allocation, and advisory services for domestic and international insurers, reinsurers, and alternative risk transfer programs in U.S., Bermuda, and London markets. Contact him at joseph.loporto@capvisorassociates.com.

While Solvency II and similar initiatives continue to make headlines, it is difficult to conclude what impact the shifting regulatory environment may have on traditional captives. From an investment standpoint, there are significant similarities in terms of the way both regulators and ratings agencies evaluate the effect that an insurer's investment risk has on its risk-based capital and capital adequacy. While these regulations may never directly affect captive insurers, the overall framework provides potential best practices for captives as they relate to managing investment risk, an area that many companies struggle with.

It is, quite frankly, hard to read financial-related research in the insurance industry today without coming across Solvency II. As this topic is so heavily covered, I'll treat it with only a very high-level summary. There are, first, some important observations as this topic relates to an insurer's or captive's investing activities. Solvency II will have the most direct impact within the Eurozone. The timetable for implementation has recently been moved back again, and, as it relates to this topic, much of the relevant areas of Solvency II are still in draft form.

As an exceptionally brief summary, Solvency II is meant to provide a common regulatory framework for Eurozone insurers *including* single companies, groups, and the parent companies, affiliates, and subsidiaries of non-Eurozone companies. The objective is to create a "passport" for European companies and, at the same time, create a system of mutual recognition for countries outside of the Eurozone if those home countries regulate insurers in a similar fashion (At this time, this includes Switzerland, Japan, and Bermuda). The implication is that countries outside of Europe will be implementing similar changes to achieve mutual recognition. Indeed, the National Association of Insurance Commissioners (NAIC) has begun its own Solvency Modernization Initiative to address the issue (although not explicitly) in the United States. The global nature of these projects is a major paradigm shift from when the insurance industry was locally regulated. We now find ourselves in a new global regulatory environment. This has created the Solvency II frenzy and the resulting saturation of the topic.

From an investment standpoint, under Solvency II, of concern are two components of this regulation: the calculation of Tier II Risk Based Capital and the "Own Risk Self Assessment" (ORSA) implication for managing investment related risk generally. In short, an insurer subject to these regulations will most likely need to make a Risk Based Capital charge for all of its various sources of investments related risk. Then, that insurer may have to demonstrate the process by which it invests its assets and manages that risk in relation to its actual business. While the specific format for this calculation is potentially unique under Solvency II, the process and categories of investment-related risk are not dissimilar from existing regulatory regimes in the United States and abroad. Further, this adjustment process is not dissimilar from the approach taken by ratings agencies.

Underwriting-related risks tend to be very unique to that insurer or captive (the business mix, retention levels, reinsurance, geographic concentrations, etc.) Investment-related risk is, by comparison, far less idiosyncratic. It is not completely clear that Solvency II or any of the changes in regulation outside the Eurozone will have any direct impact on captive insurers. Because there is a commonality across geographic boundaries, these regulations may have the effect of shaping best practices for companies like captives that are not necessarily directly impacted.

The broad categories of investment-related risk under Solvency II are generally interest rate risk, liquidity risk, default or credit risk, and mark-to-market or price volatility risk associated with nonfixed income asset

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Editor **John C. Thomson**
Editor Emeritus **D. Hugh Rosenbaum**
Contributor **Joseph LoPorto**

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classes such as equities. While placing these sources of risk in categories is fairly straightforward, the more difficult question to answer is, "How much risk is appropriate for my business?" More stringent regulations, such as Solvency II, in a sense place an upper bound for this question; in other words, a theoretical limit on investment risk. In the absence of specific regulation, it's more difficult to score. On balance, most captive insurers invest 80 to 100 percent of their assets in investment grade fixed income securities due to the perceived safety of this asset class. In a relative sense, investment grade bonds tend to be "safer" than other asset classes, but how any given insurer manages a portfolio of bonds is (or should be) a function of its liabilities and balance sheet.

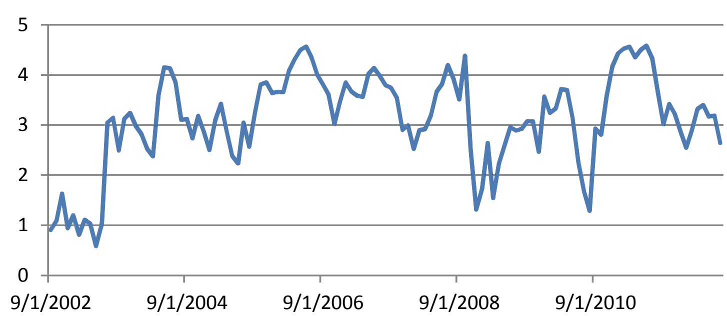
Asset liability management (ALM) is the most common risk management process employed by insurers. While property and casualty companies, including captives, rarely endeavor to literally match asset and liability cash flows, the ALM process provides a nonarbitrary means for determining how different those cash flow patterns should be and, by extension, how much capital should be exposed to the risk of adverse changes in interest rates (duration is the most basic measure of the price sensitivity of both assets and liabilities to changes in interest rates and, therefore, an asset duration target can be used as a risk budget).[1] The level of sophistication employed in this process can vary greatly, particularly in the context of a captive insurance program. Captives can also present unique challenges compared to traditional insurers and reinsurers.

For example, captive insurance company loss reserves may be reported on a discounted basis, there may be contingent sources of capital or implied support from the captive sponsor or group of sponsors, etc.

Employing an enterprise-level approach to investment risk management can create more work and complexity for boards and for the management of the captive. It's not uncommon for a captive board to devote a significant amount of time in both hiring an investment manager and setting an investment strategy (in the most basic sense, in the form of an investment benchmark). From a duration standpoint (interest rate risk), benchmarks can change significantly overtime. As an example, mortgage-backed securities (MBS) issued by government agencies, such as "Ginnie Mae," are frequently a component of typical published benchmarks. The duration of a benchmark composed of these securities can change in a material and rapid fashion over time, as shown in Figure 1.

Making investment-related decisions does require some significant effort up front. Some of the investment factors and tasks that should be included are risk budgeting, setting an investment strategy, and asset allocation, culminating with those decisions in the form of an investment policy statement and selection of an investment manager(s). But, establishing an enterprise-level investment *risk management process* requires ongoing evaluation and must be responsive to changing conditions. Regardless of how robust or sophisticated that system is, it is equally critical that the

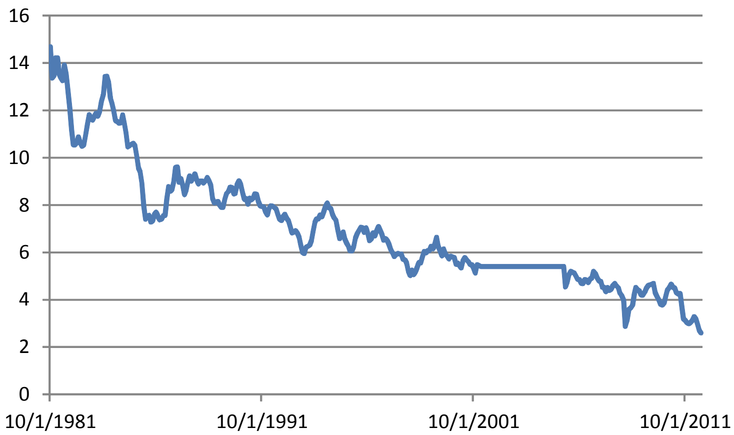
FIGURE 1
DURATION (Mod. Adj.) OF
U.S. MORTGAGE-BACKED SECURITIES



Source: Barclays Capital and CapVisor Analysis

[1]For those unfamiliar with these terms, there is an inverse relationship between interest rates and bond prices so that when interest rates fall, bond prices rise. Duration is the rate of that change.

FIGURE 2
30-YEAR TREASURY YIELD (Const. Maturity)
Oct. 1981 to June 2012



Source: Federal Reserve, St. Louis Fed, FRED and CapVisor Analysis

process be well understood by the captive's board and management.

There was a great deal of attention in the financial press given earlier this year to the losses incurred by JPMorgan due to an apparent failure in its Chief Investment Officer department. This unit was charged with hedging and managing the firm's financial market risk. No complete account of what happened has been produced, but based simply on what has been reported, there are two items that are not disputed: (1) JPMorgan was using an incredibly sophisticated process to manage the firm's financial market risk (no small task given the firm's size and global business), and (2) management had less than a clear understanding of what that process actually was. Hence, effective risk management must include both form and function.

It's worth ending with a simple observation. Interest rates have fallen steadily for over 3 decades. That allowed investment grade bonds to produce returns that exceeded their implied yield to maturity at the time they were purchased.[2] For many of us, our entire career, professional experience, and points of reference have been gained during one (nearly) contiguous bond "bull market "spanning over 30 years. Investment grade bond risk has been greatly masked by the one-directional nature of interest rates over this period and, as such, a less disciplined approach to risk management has not generated too great a cost. Even long secular trends can change or end. Despite interest rates currently being at such low levels, this is an appropriate time for captives to look closely at their investment and risk management approaches. This is recommended not only because of the regulatory impact or cost of these decisions, but also because of the true economic cost when interest rate trends change. ■

[2]As an example, on January 1, 2012, the annualized yield on the Barclays Capital Aggregate Bond Index was 2.24 percent. The total return of that index through just July 31 of this year was 3.78 percent, per Barclays.