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Enterprise Risk Management—A Brazilian Market Perspective

by David Sommer

Priorities in overseas insurance markets are not the same as in the United States. Enterprise Risk Management (ERM) is no exception.

While various forms of dynamic financial analysis and risk modelling have been discussed and practiced for some time in more technically advanced insurance markets, the advent of Solvency II has brought these concepts and the framework of Enterprise Risk Management to the attention of developing markets. In many instances, this awareness is created via the regulatory authority, which wishes to implement a risk-based approach to capital adequacy. This was the case in the Brazilian market, where new regulations anticipate capital requirements for underwriting, credit, market, operational and legal risks. While these will be phased in over time, this completely new approach toward insurance company management is forcing the market to reeducate itself.

While there has been much written about ERM, it has typically been written from a developed-market (U.S. or European) point of view. Many sources of insurance risk in other markets are different and even those that are similar have different levels of relevance. The goal of this article is to look at ERM from the point of view of the Brazilian Insurance Market and comment on some of the specific challenges there.

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Underwriting (and Reserve) Risk

Brazil is a market with a much less aggressive court system than other more developed markets and almost no natural catastrophe risk. While there is significant price competition and related underwriting cycles here, the tails are much shorter and as a result, the corrections typically occur much more quickly. Further, companies with diversified books of business do a fairly good job of not being aggressive across-the-board. In addition, the market is focussed on personal lines products with lower limits. Even where there are higher limits exposed (property premiums make up less than 15 percent of market premium), company retentions are relatively low due to regulatory restrictions, limiting the insurer's underwriting risk due to large losses.

Underwriting risk in Brazil typically comes from what we would call parameter risk, that is the incorrect pricing of business (or poor acceptance criteria) due to the lack of familiarity by the underwriting department. While there is a movement toward more technically-based pricing in the market, this is limited to a only a few products and much of this analysis tends to be subverted by commercial concerns with only a few brave souls willing to maintain discipline in face of market pressures. With regards to life insurance, there is still significant debate over which mortality tables are appropriate for the Brazilian insured population (which is significantly different than the overall population) and the impact of improvements in mortality in general.

As far as reserving risk is concerned, the market for the most part calculates reserves mechanically without considering changes in portfolio or environment. As a result, there is a significant probability that a company's reserves are not properly stated. With the relative shortness of tail, this magnitude of this risk is likely to be less than in more developed markets.

Market Risk

Market risk is characterized by volatility in interest rates and their effects on asset values and returns. Due to the governments concerns of inflation, Brazil has one of the highest real interest rates in the world despite consistently improving indicators. However, interest rates are falling and will continue to do so, with forecasts of nominal interest rates close to 10 percent at the end of the year. This sustained fall in investment returns (interest rates were 18 percent in January 2006, compared to 11.5 percent in July 2007), is particularly concerning as there are few options for long-term investments that could allow for companies to immunize their portfolios against the impact this will have on their investment returns. And for multinationals with Brazilian operations, the weakening of the U.S. Dollar against the Brazilian Real (18 percent since the beginning of 2006) has only increased these concerns. Integrating a well-built asset module into an insurer's dynamic financial model can provide the basis necessary to evaluate which investment strategies would be the most appropriate for this new environment.

In addition to these more obvious issues, there are the underwriting risk implications for products with interest-sensitive components. During periods of high returns, many insurers provide guarantees for their products that are unsustainable in today's environment. In these instances, market and underwriting risks are difficult to separate, especially when effects on lapse rates are also considered.

Credit Risk

Until the beginning of the year, the Brazilian reinsurance market has been a monopoly. Although legislation has been passed opening the market, regulation defining the new environment will likely not be released before the end of the year. As such, traditional credit risk concerns of reinsurance recoverables have not yet come to Brazil, although they will be here shortly. While there is the default risk on investments, insurers typically do not invest in stocks and most commercial paper held, if any, is in larger banks.

Legal Risk

This is Brazil's contribution to the international discussion of what risks insurers face. The initial definition put forth by the regulator to the working group in 2005 was that legal risk consisted of "the level of uncertainly to the returns of an institution due to the lack of a completely legal basis for its operations. An example of this is the risk that its contracts are not legally protected against bad faith by its associates, insufficient documentation, or insolvency." The regulator, perhaps seeing that the market was having difficulties understanding the distinctions between legal and operational risk (and some aspects of underwriting risk) has recently defined this to be "the risk in view of the peculiarities of the Brazilian legal system." It is clear that the market will continue to await further definition of this and operational risk prior to undertaking any modelling.

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Operational Risk

As in other contexts, operational risk remains defined in complementary terms or "all other risks." The market, due to regulatory initiative, has begun to focus more on internal controls and it is hoped that this will be the first step towards identifying (and subsequently quantifying) sources of operational risk.

While insurers do not tend to have large sums of money riding on the successful execution of the number of transactions that banks have, they do recognize that there is significant risk due to bad faith, E&O and other operational shortcomings. And as the legal system in Brazil is particularly paternalistic, the "people" risk due to employee lawsuit (not covered by legal risk) is a significant reality here.

ERM for Insurers in Brazil in the Near-Term

As previously mentioned, insurers are facing new risk-based capital requirements that carry strong incentives (approximately 15 percent of required capital) for them to develop dynamic financial models for these risks, starting with underwriting risk. As the market is relatively unsophisticated from a modelling perspective, companies are scrambling to hire consultants and/or develop internal expertise in designing, building, parameterizing and calibrating these types of models, as well as finding a platform sufficiently transparent and flexible to adapt to future regulations as well as integrate into the company's newly-developed risk management processes. While it is important for these modelling efforts to be focussed on Brazilian issues, it is equally important to understand how the Brazilian market is changing and understand which methods and approaches will be appropriate for a given company during this period of transition. ✦

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