## Discussion on insurance risk securitisation



The specialist on Insurance Risk Securitization has provided different complement about this sector. Generally, through various books and articles they express their opinions. These opinions include the advantages, uses, aspect and limitations of insurance risk securitization. "The Chicago Broad of Trade launched options on natural catastrophes (cat spreads) in 1995 and catastrophe-linked bonds (cat bonds) have been issued since 1997.

These innovative financial instruments are the response to the traditional insurance and reinsurance market's inability to deal with highly correlated risks. Say for example, simulations conducted by modeling firms suggest that damages caused by a major hurricane in Florida could be at least \$75 billion and those due to an earthquake in California could exceed \$100 billion. With prospective event-losses easily exceeding \$50 billion, the capitalization of the insurance and reinsurance industry is at issue. Estimates of total capital and surplus of U. S.

insurers and international reinsurers are approximately \$300 billion and \$100 billion respectively. Though such type of catastrophic losses are large enough to place the insurance industry under severe stress, they are lower than one standard deviation of the daily value traded (about \$130 billion on average) in the U. S. capital markets" (MAHUL, 1 August 2001). The article on Securitization of Life Insurance Assets and Liabilities by J.

David Cummins includes that "since 1970, trillions of dollars worth of mortgages have been securitized, and new issue volume reached \$1.5 trillion by 2002" (Cummins, 3 January 2004, p. 2). Both the parties who carrying the insurance risk and who buy this risk are increasing their interest

in securitization process of insurance risk as well as other types of risks which can be securitized such as weather, credit risks, etc.

The process of securitization of risks into a tradable commodity generated the most significant trend of our times, i. e. , these products are dominating the capital markets. After contracting an insurance policy it is converted into a commodity, that is the policy is securitized and it become a financial instrument that can be bought and sold in the capital market." There is a general agreement among various commentators that in time to come, we will see greater application of the securitization process to convert and market risks. According to Peter Drucker, who wrote an article in The Economist, and he saw, in his own foresightful wisdom, the possibility of pooling and transfer of exchange rate risks by securitizing them.

Mr. Al Hageman, the Citibank's global securitization head, very recently wrote of his experience with securitization over last 20 years and he say increasing trend towards much purer forms of risk transfer in securitization. Thus, securitization as it is emerging would have more elements of risk transfer than financing" (Frankel, and LaPlume). That is, the main intention of the insurers is not allocating fund through securitization rather the insurers try to diminishing the insurance risk, so that they can meet up the great insured peril. The securitization process makes them capable to face any amounted insurance demand. In traditionally the primary insurers get protection from large insurance risk by process of reinsurance.

The reinsures who are specialists and well established in the insurance market even though achieve a special spread of risk and in a result, they are

capable to bear catastrophe risks (such as floods, hurricanes, tropical storms, earthquakes, wildfires, volcanic eruptions, etc. ) those are undiversifiable to the primary insurers, but the transaction costs associated with reinsurance, that is premiums, are high. On the other hand in consequence of catastrophic insurance policy many reinsurers may become insolvent or seriously impaired if the insured peril is occurred. Therefore the reinsurers may unable to continue insuring the same volume of insurance business. "High premiums as well as the fact that catastrophe losses exhibit little correlation with capital market indices, has attracted considerable activity in Wall Street in searching for new instruments that securitize catastrophe risk.

The high transactions costs of reinsurance offers potential for hedging instruments to be offered to primary insurers that are both competitive with current reinsurance as well as investors get high rate of return in compare to other instruments in the capital markets. Now-a-days, many players are talking of catastrophe risk being a new " asset class" and new instruments such as catastrophe options and catastrophe bonds are starting to appear" (Doherty, December 1997, p. 1). Day by day, the markets for insurance risk and capital are converging; " Convergence can be defined as the process of moving towards union or uniformity. But the true meaning is that two separate markets have started performing the same function. Initially driven by the risk transfer needs of the insurance industry, and the diversification benefits perceived by the capital markets, the convergence of insurance and capital markets is now accelerating" (BNET).

"The securitization of insurance risk is a manifestation of the markets' convergence. Insurance companies, that have traditionally held the advantage in bearing property and casualty risks, are transferring the hardto-place risks - on an aggregated or indexed basis - to the capital markets. From the investor's point of view, there are compelling arguments to include securitized insurance risk in a diversified investment portfolio – although whether this asset class will grow sufficiently in size and product range for investment fund managers to devote the necessary resources for portfolio inclusion remains to be seen. Furthermore, commodity, interest rate and equity risks, long the domain of the capital markets, are being offered as part of risk transfer packages by insurers" (Cole, and Chiarenza, July 1999). According to Cummins, and Weiss (2004), " securitization provides a mechanism whereby contingent and predictable cash flows streams arising out of a transaction can be unbundled and traded as separate financial instruments that appeal to different classes of investors. "Since these financial instruments provide a reasonable return to the investors, these are popular to the investors.

"Another general benefit is provided by the securitization is creation of new classes of securities that appel to investors with different appetites for risk. In the limit, securitization can create non-redundant securities that enable investors to improve portfolio efficiency by increasing the level of risk. Securities mortality, catastrophic property, and longevity risk are non-redundant because the covered events are not otherwise traded in capital markets. Securities based on these risks also are likely to have relatively low covariance with market systematic risk (which is expressed by Beta and

average systematic risk for the market is 1), making them even more valuable for diversification purposes.

Because this diversification reduces the total systematic risk or average Beta of the portfolio" (Cummins, 3 January 2004, p. 12). "Thus, investors can improve portfolio efficiency by adding these securities to their portfolios" (Epetimehin, 5 February. 2008). In spite of the relatively small volume of insurance transactions to date, securitization has significant potential to improve market efficiency and capital utilization in the insurance industry. Because of the securitization policy, now-a-days the insurance companies are more capable to make their position effective and strong in the financial system.

This strong position has enabled insures to compete more effectively with other financial institutions, i. e. , in increasing return on equity and improving other matters of operating performance. Insurers can offer more profitable and secured policy in the financial markets which are attracted to the financial investors.

"With the help of securitization insurers get the opportunity to unlock the embedded profits in blocks of insurance presently carried on balance sheet and to provide an alternative source of financing in an industry where traditional financing mechanisms are often restricted due to regulation."

(Goliath, 01 January 2005). It also provides a mechanism to the insurers to create different kind of insurance policies by utilizing equity capital more efficiently rather than using investment management, policy servicing, and risk bearing functions. Hence the insurance companies can separate the

insurance policy origination function from the investment management, policy servicing, and risk bearing functions.

Thus, the companies can minimize their risk in a significant portion. Since the securitization of insurance risk provide a new and significant source of finance as well as improve liquidity and transparency, the insurers get new sources of risk capital to make protection against adverse underwriting more efficiently in compare to traditional techniques such as reinsurance and letters of credit. Candidates for SecuritizationAs like as other companies the balance sheet of an insurance company contains the total assets and liabilities of that company. There are some long term assets and liabilities as well as short term assets and liabilities. Normally these assets and liabilities are showed in the balance sheet at present value, i. e.

, current market price of those assets and liabilities. For instance, if a plant is purchased at \$100,000 now and the life of the plant is 10 years, then after 2 years the value of it will be \$80,000 and at the balance sheet the plant will be valued at \$80,000 not at \$100,000." In principle, any account or any series of cash flows which represent estimates of the present values of cash flows inherent in each asset and liability account is a candidate for securitization (Cowley and Cummins, 2005). Conclusion The securitization process provides almost every benefit to the primary insurers, which can be achieved by reinsurance. In addition, it removes the disadvantages of the reinsurance.

Through securitization the insurers can generate huge amount of fund as well as they can reduce the insurance risk in significant portion. On the other

hand, securitization of insurance risk provides the opportunity for insurance companies to enter into the capital markets. The financial investor also benefited by investing in those financial instruments, which are created through securitization process. Because these financial instruments has the lower systematic risk in compare to other financial instruments in the markets. All these performance of securitization brings the goodwill for the respective insurance company. Hence, the insurers feel encourage in securitization rather than going into the reinsurance process.

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