Life Insurance Company Reserves, Minimum Capital Standards and the Causes of Insolvency

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Significant time and effort has been expended around the globe in the design and implementation of new reserve and minimum capital standards for life insurance companies. Preparation for the introduction of Solvency II and IFRS throughout the world and Principle Based Reserves in the United States are a few of the initiatives currently underway. The objective of each of these initiatives appears to be improvement in the transparency and consistency of life insurance company financial statements that, in turn, will decrease the likelihood of future insolvencies.

The underlying premise of these efforts seems to be a belief that if actuaries work harder, run more scenarios and produce additional stochastically generated results, the numbers appearing in company financial statements will be more accurate. This, unfortunately, is a false premise. It fails to reflect the limits of actuarial science, and the availability of reliable data, particularly with respect to policyholder behavior. In reality, the best argument for performing these analyses is that they will give senior management additional insight into the possible adverse financial ramifications of the risks they undertake.

The question then becomes, will senior management of insurance companies pay any attention to the results of these analyses? So far, the primary focus has been on the volatility of the capital markets, particularly with respect to the level and slope of interest rates. However, life insurance company results are significantly affected by things other than interest rate risk. Mortality/longevity, persistency, expense and regulatory risks routinely have a major impact on life company results.

This focus on reserves and minimum capital standards is somewhat misguided. The level of reserves held and minimum capital required determines the amount of capital available for shareholder dividends. With the exception of a few small health insurers, only a handful of insolvencies have resulted from the understatement of reserves and subsequent overpayment of shareholder dividends.

The real risk of these narrowly focused analyses is that increased, unnecessarily conservative reserves and minimum capital requirements will result. During the 2007/2008 financial crisis, overly conservative reserve and capital requirements served only to make a bad situation much worse for insurers, while offering an unwarranted advantage to competitors from the financial services area. Rather than assuring the solvency of companies, they imperiled them by introducing the risk of "artificial insolvencies."

What is an "artificial insolvency"? In this context it is an insolvency of an otherwise economically sound company caused by a "run on the bank" (massive withdrawal of policyholder funds necessitating

liquidation of company assets at artificially low prices) which was stimulated by the rumor or appearance of financial weakness. Excessive reserve and minimum capital requirements cause the appearance of financial weakness, particularly in a very volatile financial market such as that which existed at the end of 2007/beginning of 2008. During this period the American Council of Life Insurance Companies (the ACLI) proposed a series of suggestions to the National Association of Insurance Commissioners (the NAIC) meant to lessen the excessively conservative standards. The NAIC rejected these suggestions, increasing the risk of an "artificial insolvency." In NAIC's defense, it is very difficult to lessen standards during a crisis, when they have already been described as necessary during more favorable periods of time. Although the NAIC rejected the ACLI's suggestions, individual commissioners did entertain requests from individual companies domiciled in their states. Doing so made the financial statements of individual companies less comparable, while lessening the real possibility of an "artificial insolvency" of one or more significant life insurers.

Another problem with excessively conservative reserve and minimum capital requirements is that they imperil the industry's access to capital markets. Access to the capital markets is the ultimate safety net for life insurance companies. Requiring excessively conservative reserve and capital levels necessarily raises the cost to the consumer and makes it difficult to produce reasonable return on capital. Without the prospect of a risk adjusted return, capital markets dry up, reducing or eliminating the insurers' ultimate safety net.

So, if introducing new reserve and minimum capital requirements will not decrease the likelihood of company insolvency, what will? This question is answered by a review of the primary cause of company insolvencies. Historically, significant insolvencies of life insurance companies have been caused by either asset issues within the company or bad product design and/or pricing. In fact, these problems are oftentimes related.

Bad product design/pricing arises, in part, from a lack of understanding of policyholder behavior. Life insurance actuaries typically have substantial current and historical data with respect to mortality/morbidity and expense. They may also have historical data on policyholder persistency. Typically, the concern is that policy lapsation will occur at a higher rate than anticipated in the pricing process. High policyholder lapse makes it difficult to amortize the initial acquisition expense associated with issuing a new policy (i.e., issue and underwriting expense plus commission).

Many of the most popular policies sold today are "lapse supported." For instance, level term policies are typically "lapse supported" as are Long Term Care policies. Variable Annuities with Guaranteed Living Benefits and No Lapse Guarantee Universal Life policies may also be lapse supported.

What are "lapse supported" policies? Policies are "lapse supported" when additional profits emerge when a policy lapses in its later policy years. Likewise, a company earns less if the ultimate lapse rate decreases. This typically occurs when a policy has no or little cash value and a level premium is being charged for a risk that increases with age. Level term is the perfect example. During the early policy durations more premium is being collected than death benefits being paid. During the later policy durations the opposite is true; more death benefits are being paid than premiums being collected. Once

this occurs the company is better off if the policyholder lapses. This is true even though the company is establishing a reserve for the excess premiums being collected in the early policy durations because that reserve is released once the policyholder lapses. Since there is little or no cash value the policyholder is not compensated for his "equity" in the policy at the time of lapse.

Even though companies have substantial policyholder lapse experience from which to draw, they typically do not have as much direct experience for lapse supported policies. Consequently, at times, they have over-estimated the level of lapsation that will occur in the later policy years. Since the profitability of the product tends to be highly leveraged to the number of policyholders remaining during the later policy years, over estimating lapsation can have a dramatic negative effect on policy profitability.

This was particularly true with Long Term Care policies. Initially developed in the late 1980's and early 1990's, these policies were typically sold by the same agents who sold Medicare Supplement policies. Since these policies tended to have relatively high lapse rates in the later policy years (i.e., 8% to 12 %), it was assumed that Long Term Care policies sold by these same agents would also experience high ultimate lapse rates. However, policyholders recognized the "equity" they had built up in their policies and did not lapse at anticipated levels. In fact, ultimate lapse rates on many of these policies fell to 5% or lower, creating substantial losses on these policies. (A decrease of 1 percent [additive] in the ultimate lapse rate can decrease the "at issue" profit margin 6% to 8%). Consequently, a decrease in the ultimate lapse rate of 5% to 7% or more is potentially devastating to the profitability of this line of business. That is one reason we have seen numerous requests for substantial premium rate increases within this line of business. Likewise, there are a few companies that specialize in Long Term Care that have become financially impaired.

The lesson to be learned from all of this is that agents and their policyholders tend to recognize a good deal when they see it and tend to act in ways that maximize their benefit. That, in turn, can have an adverse impact on the profitability of the product from the issuing company's standpoint.

Many of the high profile large dollar impact insolvencies/impairments in the United States have been caused by asset problems. A number of these asset based insolvencies can be traced back to flawed, overly aggressive product design/pricing. Specifically, companies that have either guaranteed or illustrated a high credited interest rate have a tendency to "reach for yield," either by decreasing the quality of assets they invest in or by subjecting themselves to disintermediation risk by extending themselves on the yield curve (i.e., investing in longer duration assets). Executive Life invested in junk bonds to support the credited interest rate on their universal life policies. When the market for junk bonds became illiquid, policyholders began to withdraw their funds, a "run on the bank" ensued and the company became impaired. Mutual Benefit Life invested heavily in real estate to support the rates they credited on their accumulation-type products. Liquidity in the real estate market seized up, policyholders began withdrawing their funds at an increased rate and the company became impaired. More recently, the problems of AIG, primarily caused by their Financial Products division, a non insurance entity that issued credit default swaps on sub-prime mortgages, were accentuated by their life insurance companies' securities lending program. The purpose of these programs was to temporarily

exchange lower yielding, higher quality assets for higher yielding, lower quality assets in order to meet interest rate spreads priced into their products. Once these "borrowed" assets became illiquid, the companies were unable to sell them and retrieve the higher quality assets. Consequently they were stuck with the lower quality assets when they could least afford them. This is but another example of chasing yield to support aggressive product pricing/design.

We were all aggravated and impacted by the breach of trust witnessed during the recent financial crisis. Our normal, human instinct is to over-react. In this instance, we implemented even higher reserve and minimum capital requirements. However, this is unproductive. Rather, we need to reexamine and thoroughly understand the root causes of insolvencies, which require deeper analysis, and more appropriate response.