Learning More About Reinsurance

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This paper introduces what your editor and I visualize to be an extended *Journal of Insurance Issues* series. This ongoing dialogue concept, spawned after my presentation at the 1999 WRIA annual meeting, is intended to provide the essentials of property and casualty reinsurance in modular format. This initial offering, then, is aimed at scoping the subject, with future installments targeted at more specific topics.

Reinsurance deserves more understanding for several reasons. One reason is the omnipresence of reinsurance transactions within the insurance marketplace. The significance of reinsurance transactions is *res ipsa loquitur* (the thing speaks for itself). Using the property/casualty industry as a basis, reinsurance premiums account for about ten percent of insurance company premiums. Since the risk exposures represented by the ten percent figure are most likely higher limits/exposure-driven accounts, the impact (significance, size, character) of this subject is self-explanatory. The relevance of this topic is buttressed by the industry’s need to redistribute risk exposures. These factors justify the need to learn more about reinsurance. My challenge is to deliver that expectancy.

WHY REINSURE?

For more theoretically minded users, let’s pose a lead-in question: Why should an insurer reinsure? Since insurance companies seek to underwrite portfolios of risk exposures that are (1) balanced in terms of spread of risk and (2) devoid of an overexposure to single risk or catastrophic accumulation losses, could reinsurance become redundant and costly? If prices are charged that encompass risk probabilities, if both loss and expense components develop as expected, and if the aforementioned overexposures do not occur, then reinsurance could be superfluous.

Given this idyllic situation of a perfectly balanced and priced portfolio, one can question the need for reinsurance. A hypothetical case can be made

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that insurance companies should undertake only those risk exposures that can be written net to their own account. Accepting more than a retained position can logically be attacked as unnecessarily endangering the insurer’s net worth. Within each reinsurance transaction we can find the insolvency risk exposure of a reinsurer that renders the company vulnerable to pay a reinsured claim when it comes due. Can it be argued that insuring again, through reinsurance, provides more risk than rewards?

Seeking guidance, and using banking as a corollary study, the significance of monitoring risk concentration in the banking industry is demonstrated by common internal limits on credit extensions to a single borrower. To comply with regulatory limits, individual banks usually absorb only the loan amount that can be digested by their own firm. It’s true that affiliated banks often share in the loan of a larger lender; however, the group will cap its combined loan commitments. Financially trained readers are probably aware that a bank can approach the Federal Reserve discount window to exchange a loan, previously accepted, for government credit. These market practices in banking are a possible comparison to a world of net insurance exposures, because one lending firm tends to underwrite a loan amount on the basis of its own resources. The “lead” bank in a multi-bank loan placement earns more income but incurs more marketing/underwriting administrative expenses. Mortgage bankers and other lending agencies work the same way. Thus support for an un-reinsured world exists in related fields.

REALITY DRIVES REINSURANCE PLACEMENTS

Having catered to the theoretical approach, the reality of today’s competitive insurance marketplace causes reinsurance transactions to occur. In practice, insurance companies, contrasted to their financial banking counterparts, overwhelmingly prefer to underwrite an insurance offering for their own account and for that of their reinsurer(s). One obvious advantage to the insured consumer is that only a single entity is underwriting the risk. The buyers do not have to continue seeking placement if one insurer underwrites the entire exposure. There is only one policy contract. That convenience to the customer is a strong marketing advantage. If excess layers of protection are required beyond an insurer’s gross risk capacity, then once again a single excess-of-loss policy, underwritten by a different insurer, is the traditional market practice.

The single risk absorption practice also works well for the insurer seeking to control a customer’s account. As is usual in business transactions, market practice tends to follow the advantage of both parties.
let’s extrapolate this micro analysis to a macro approach to witness the role of reinsurance.

From a macroeconomic viewpoint, reinsurance responds to unbalanced risk portfolios. For example, when the damage from Hurricane Hugo was analyzed by the Continental Insurance Group (N.Y.) in 1989, it was discovered that two of their five top agency producers were located in San Juan (P.R.) and Charleston (S.C.), which were the hardest-hit targets of that devastating storm. Clearly, Continental’s spread of risk was unbalanced. At present, current market conditions, influenced by excess capacity and spiked by cost-cutting, higher-than-expected limit requests, and an improving awareness among risk managers, have caused most insurers to deviate from their original underwriting plans. Where do these over-committed insurers go to seek protection from such overages? They go to the capital-intensive reinsurance marketplace, where cost-cutting and other measures are simultaneously occurring. The point is that these current market conditions are producing unbalanced portfolios, both in risk exposure content and in pricing. This awareness reinforces the need for reinsurance.

Reinsurance, then—which is the insuring of insurance risks—contributes on a micro level via a single customer. Offshore oil risks were heavily reinsured for years before the Piper Alpha loss reminded us why specific reinsurance was needed. The industry also contributes on a macro level by furnishing capacity protection for thousands of insurance companies on a worldwide basis. In the United States, approximately 50 reinsurers, of which the top dozen underwrite about two-thirds of the published reinsurance premiums, serve over two thousand non-life insurers domestically and untold carriers worldwide. Translated to a property/casualty industry revenue base, the top fifty U.S. professional reinsurers assume net (1998) roughly $23 billion of premiums. They serve as a foundation for the domestic property/casualty net (1998) premium figure of just over $280 billion. That leveraged effect is what makes the business so terrifying to some and so fascinating to others.

**THE LEVERAGED EFFECT OF REINSURANCE**

Perhaps a clarifying visual showing an uneven seesaw could be helpful. To illustrate the uneven element of reinsurance-to-insurance, one could envision:
After factoring in the *non-published* reinsurance results, one finds that ten percent of revenues (or fourteen percent of net worth) is the reinsurance component that props up the rest of the property/casualty industry. This leveraged effect is fascinating. A corollary in banking is the amount of loans supported by net deposits. In either case, the smaller component allows the larger industry to be more effective.

Defining basic terms seems appropriate at this juncture. Sellers of reinsurance assume the transferred risks. Buyers of reinsurance cede their excessive risks to the assumers. Accounting for these transactions is governed by the National Association of Insurance Commissioners (NAIC). Data can be drawn from the filed NAIC statements. A subsequent paper in this series can specify those sources. The detailed identity of each cedent and each assumer can be found in the NAIC Schedule F (part 3 and part 1, respectively) annual statements.

Once the significance of the property/casualty reinsurance industry is established, a natural question arises: can the size of this industry be determined? One landmark reference is a previous study conducted by the editor of this journal, Dr. Joseph J. Launie, who no doubt will readily agree that reaching for this statistic is a tactical nightmare.

**DEFINING THE REINSURANCE MARKET**

One approach is to trace the ceded reinsurance transactions that are listed in each insurance company’s NAIC annual statement in Schedule F. However, two types of transactions are included: (1) affiliated insurance group transactions (intra-), and (2) non-affiliated (outside group) transactions.

The first question to resolve is whether intra-group (affiliated) reinsurance should be considered part of the total industry count. To grasp true industry activity, only “arm’s length” transactions should be included. There is a second puzzlement in following the data secured from so-called professional reinsurers. The search for domestic premiums is clouded by first determining the amount of domestic reinsurance underwritten by a U.S.-based firm because published figures include risk exposures outside of the United States. Clever analysts often follow up this point by asking: “What about the U.S. assumers of international business as retrocessions from reinsurers abroad?” Once again, unless domestic-only data are to be collected, even the U.S. domiciles have a problem separating their nationalist from world-wide underwritings. Once those decisions are made, the buyer’s side can be secured from NAIC, part 3 of Schedule F data.
Another cloud arises if you access the published RAA (Reinsurance Association of America) data to determine the seller’s version. Several assuming reinsurers do not share their statistics with RAA. Notable on this listing of omitted markets are Lloyd’s of London and the Federal Crop Insurance Corporation (FCIC).

Each of these sources has underwritten over a billion dollars of assumed reinsurance premiums annually in recent years, yet their results are not included in “annual industry results.”

Given that the industry collector of reinsurance assumed revenues does not include Lloyds or the FCIC, many other assumers are similarly overlooked in the seller’s compilation. There is an entire category of “missing members” that collectively constitutes several billion dollars of premiums. That group is best described as (a) the reinsurance assumed division or department or subsidiary of a larger insurance company or (b) unauthorized foreign providers. Such entities may choose not to answer the RAA’s request for industry data or they may not even be contacted for a response. There is one invidious motive for not replying—if the reinsurance division has created an out-of-focus underwriting loss and does not want to appear next to the professional giants of our business because the comparison and contrast would be embarrassing. So again we scratch off several assumers from the RAA’s compilation.

Still another category of missing members could be the reinsurance pools, where the managers are not contributing to industry experience. This grouping is tricky to follow, since the individual pool members may be individually collecting data and including their pool experience with other writings. More logically, however, pool members would be expected to serve as retrocessionaires of an assuming front company. Thus their data become a voluntary submission at best.

The result of all these deviations causes this writer to believe that the RAA-listed reinsurance premiums (~$22B in 1997) should be increased by at least another one-third to reach the estimated U.S. assumed market.

When I appeared before the U.S. House of Representatives Subcommittee on the so-called Insurance Crisis in 1986, my role as a distinguished guest expert was to reveal the nature, scope, and effect of the reinsurance market. I presented an explanation of the difficulty in identifying the U.S. reinsurance marketplace. Congressman McMillan of North Carolina asked an intelligent question: “Why is an industry of such size and such effect not required to formulate credible statistics?” His cogent inquiry has yet to be answered.

A study to further identify the U.S. reinsurance marketplace might examine the effect of recent mergers. Several traditional markets have been absorbed by larger concerns. Included in the roster of former members of
the U.S. marketplace would be Mercantile & General’s domestic business, National Reinsurance, Underwriter’s Re, and Kemper Re. Their identities have been removed. Moving forward with the role of giants, the three largest domestic reinsurers are owned upstream by even larger firms. General Re is now part of Berkshire Hathaway, American Re is owned by Munich Re in Germany, and Employers Re reports to General Electric. One might ask whether this amalgamation of the U.S. reinsurance business translates to “good” or “evil” for our society. In years past, reinsurers of lesser size were underwriting certain risk exposures that outstripped their resources. Improved reinsurer security is a social good. On the other hand, the crimping of the current market portends lessened competition in the years ahead. As open markets become oligopolies, evil is suspected. Which is best?

After digesting these marketplace observations, let’s return to the fundamentals of this business. In order to have reinsurance, we must first find insurance. A prime requirement is an insurance company, not a self-insured program or a risk retention act purchasing group. This mandatory insurance company can be domiciled and licensed in one or more U.S. states or be a de facto insurer. Examples of the latter include:

- several municipalities in Virginia commissioned in that state
- several school districts in the Denver area, authorized by the Colorado authorities;
- a full-fledged risk retention act insurer, domiciled and licensed in any state.

Each insurer (a.k.a. cedent, cedant, reinsured) selects a combination of risk exposures as ceded reinsurance candidates. Meanwhile, the various reinsurers have activated strategic plans to locate and provide protection through assumed reinsurance. Extending these basics, each reinsurer has undoubtedly lined up reinsurance on selected reinsured writings. Subsequent reinsurance-on-reinsurance transactions are termed retrocessions.

Reinsurers tend to bring their offerings to reinsureds either directly or via intermediaries. The ten largest brokers are listed annually in Business Insurance. Additionally, there are about three dozen smaller brokers operating domestically.

**CLOSING THE INITIAL CHAPTER**

To recap, this first JII installment has built the parameters of reinsurance, defined the subject matter, highlighted the overarching issues, and hopefully invited interest in future chapters. The insurance-of-insurance
business, still dominated worldwide by reinsurers in other countries, has earned a significant domestic presence. U.S. reinsurers have more combined net worth than annual premiums. The industry financial condition is strong, and links to worldwide retrocessions improve that strength. The next III issue will include the identity and analysis of the products that reinsurers provide.

NOTES

1 The author thanks various WRIA members who, while attending their recent annual meeting in Las Vegas, expressed the need for more reinsurance knowledge in their classroom presentations.
3 Data from the author’s involvement in a multi-year seminar relationship with Continental’s Systems Division.
4 Reinsurance statistics are available from R.A.A. (op. cit.) and also from Standard & Poor’s.
5 R.A.A., op. cit.
6 See Congressional Record, September 9, 1986 testimony.
9 See, for instance, Business Insurance, November 10, 1998.