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THE Actuary

Junk Assets

by Donna R. Claire

Junk assets go by many names: they are called enhanced return, high yield, high risk or below investment grade assets. Whatever they are called, however, the purpose of investing in them is the same — to get additional yield over what is possible with more traditional investments.

The volume of junk assets available recently has mushroomed. The traditional type of junk is the debt of companies rated below the top four investment rating categories by Standard & Poor's or Moody's. One of the more popular types of junk lately is leveraged buyouts. What typically happens is that a company being taken over or defending against takeover will increase the amount of debt (leverage) on its balance sheet to pay for the buyout. The asset amount of leveraged buyouts in 1987 was \$41 billion, compared to less than \$4 billion 10 years ago.

Insurance companies own over one third of the junk assets in the U.S. Several companies began to invest in junk assets when they started to match assets and liabilities by duration and then determined that shorter assets, which were bought for interest-sensitive products, did not yield enough to support a competitive rate. Therefore these companies took a credit risk instead of a maturity risk. Some companies have treated junk bonds like any other bond, and they were surprised when the market value of junk bonds plunged as a reaction to the stock market crash of Black Monday (October 19, 1987). The higher quality junk assets — larger more diversified companies — have since recovered their value. Risky bonds track the stock market much more closely than investment grade bonds.

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Board Votes to Strengthen Research

by Irwin T. Vanderhoof

At its January 1988 meeting, the Board of Governors voted to strengthen significantly the role of research within the Society. Education and research are the two bases of any profession as it moves forward. For many years our emphasis has been on education and examination. But as the future of the actuary evolves, research to sustain a changing profession becomes more critical. Recognizing this, the Board passed resolutions (1) approving two additional professional staff positions for the Research Department and (2) including \$150,000 in a Research Development Fund to serve as seed money for research projects.

To implement the Board mandate, the Research Policy Committee (RPC) has now designated its role as one of issues management. An important aspect of the issues management process is determining specific research needs to resolve the identified issues. The RPC will recommend to the Board the priorities of

each issue and what approaches appear to be best in solving the problems.

Rather than simply throwing money at problems, the Board and the RPC recognize the need to diagnose issues clearly, prepare responses carefully and allocate limited resources, namely, manpower and financial support, accordingly. While the Society's volunteer system has served the profession well and will continue to do so, volunteers often need staff assistance. The E&E system is undergoing such a transition now with increased staff support, and the Board sees a parallel need for increased staff support for research.

Timeliness is another aspect which must be considered in research, particularly regarding the inter-company experience studies. With that in mind, one of the Board-approved staff positions is dedicated to working on mortality and morbidity reports and valuation tables.

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Board Strengthens Research cont'd.

This staff person will be responsible for improving the content, format, and timeliness of the studies; developing computer based means to transfer data to end users and to automate typesetting; analyzing the needs for new studies and valuation tables; preparing instructions for data contributions for new and existing studies; working with data contributors to minimize their involvement in the process; and assisting committees in data analysis and final report preparation.

An actuary with experience in mortality and morbidity studies would be a good candidate for this position. But the appropriate individual also needs a strong background in statistical analysis and computers, particularly with the move to seriatim data presently underway. Finally, a flexibility to shift from one project to another is essential.

To augment research activities beyond the experience studies, the Board approved a second staff position for a research professional. This person would be responsible for implementing the Society's research program as defined by the RPC through the issues management process. The role of this staffer is envisioned as that of a planner, facilitator, administrator, and performer of research. Some research will be performed outside of the Society staff, and in those cases the research professional will serve as a guiding force in the eventual outcomes. On the other hand, some research projects will be prepared internally because of the expertise of the research professional and the need for staff control.

An actuary with a broad-based career in practice and academia would be a good candidate for this position. More importantly, however, the appropriate individual should possess a sensitivity to problems facing the actuarial profession and an ability to find ways to resolve them.

Mail Alert

The First Ballots for the Society's 1988 elections were mailed to all Fellows on March 29, 1988, and should have been received before the arrival of this issue of *The Actuary*. To be valid, ballots must be returned to the Society office by May 2, 1988.

Manpower is only one aspect in undertaking an active research program. A financial commitment also is critical. To this end, the Board approved the allocation of \$150,000 to serve as seed money for research projects. The Board required that the RPC have its issues management function implemented before the funds can be expended. To move the issues management process along, the RPC requests that the membership provide its thoughts on issues significant to practicing actuaries and the profession at large. Your suggestions for the research needed to resolve such issues would be most helpful.

I should note that this request is a departure from the past. The SOA leadership has previously requested member input on what *research* would be most useful. Today, however, our approach is one of first determining what *issues* are important and then designing research projects or other activities to resolve them. Furthermore, with additional manpower and financial assistance now available, we can attack these issues by providing more support to the volunteer system, sponsoring independent research efforts as needed, leveraging our financial contributions with outside support, and conducting in-house research. That is why your thoughts and concerns need to be expressed. We want to begin the issues management process with significant member participation. We intend to institutionalize this approach and aggressively tackle the problems.

Let me also clear up a misconception that research is only an expense item in the Society's budget. This is not so. For example, the cost of the experience studies is reimbursed to the Society by insurance companies and actuarial consulting firms. Second, the sale of software packages for disability income valuation tables has returned about three times the original investment. Finally, some research projects underway may eventually become part of the examination syllabus and be sold as study notes or books. While we will probably never recoup 100% of research costs, a well-conceived research program can nevertheless generate revenues and resolve issues of concern to members.

Research need not be equated with blue sky, long-term projects; rather we need to be keenly aware of how to assist our members by

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Board Strengthens Research cont'd.

providing the tools and data they need to perform their jobs effectively. Yet, as the actuarial profession changes, we must be prepared to adjust also. Knowing what issues face our members, both in the short and long run, provides us with a basis to stop reacting to problems and to start finding ways to prevent matters from getting out of hand.

Please write or phone Mark G. Doherty, SOA Director of Research, with your ideas and concerns. If you are interested in finding out more about the professional positions available, also contact Mr. Doherty for more information.

Irwin T. Vanderhoof is President of Irwin T. Vanderhoof Actuarial Investment Consulting, Inc. He is the SOA Vice President overseeing Research and Studies, the Chairperson of the Research Policy Committee, and an Associate Editor of *The Actuary*.

Academic Actuaries Sought

Academic actuaries are being sought to fill two tenure-track or visiting faculty positions in actuarial science, beginning August 1988. The positions require a commitment to excellence in teaching and creative research. Rank and salary will depend on qualifications. Applications from either life or casualty actuaries are welcome. A Ph.D. is required for a tenure-track appointment. The selection process will begin immediately and continue until the positions are filled. Interested candidates should send a current curriculum vitae and three letters of reference to Jim Broffitt, Actuarial Search, Department of Statistics and Actuarial Science, University of Iowa, Iowa City, IA 52242. The university is an Equal Opportunity & Affirmative Action Employer.

Junk Assets cont'd.

Several state insurance departments have recently been concerned with how much some insurance companies are investing in junk. Since the percentage of junk assets as a percentage of total assets is unprecedented, it is difficult to predict the risk which insurance companies may be taking. However, if a recession causes many junk assets to default, some insurance companies may become insolvent. Because of this risk, certain states now have laws or regulations regarding junk. New York, for example, passed Regulation 130 in 1987 to prohibit any domestic life insurer from investing more than 20% of its assets in junk without the Superintendent's prior approval. The Regulation further requires that the board of directors of insurance companies which invest in high yield, high risk obligations have a written plan with respect to quality and diversification standards for junk bond investments.

Companies should follow a "Prudent Man" rule with respect to investments. For example, when pricing or cash-flow modeling a portfolio with junk assets, the possible behavior of junk should be taken into account. Simple ways to do this (as suggested in New York Regulation 126 on Actuarial Opinions and Memoranda) are to subtract a certain holdback, such as 2.5%, from the principal of the junk bonds, or to assume the junk bonds will yield on the average, a rate equivalent to the rate of Moody's seasoned Corporate Bond Average. If an insurance company is more heavily into junk, more rigorous testing should probably be done to assure that the company would be able to withstand the effects of a recession which can cause junk bond defaults.

Using some junk assets presents an opportunity for companies to increase their overall investment yield. However, actuaries need to understand the risks inherent in these assets to price and value the effects of junk assets on products and on the future health of their insurance companies.

Donna R. Claire is an Actuary at the Equitable Life Assurance Society. She is the Secretary of the Individual Life Insurance and Annuity Product Development Section, the chairperson of the Part 10 Committee and has been a speaker at past Valuation Actuary Symposia.

Individual Disability Income Experience

The 1984 Reports, to be distributed later in 1988, will include experience for individual disability income policies for their first benefit year beginning during 1982 and 1983. The data presented are similar to those included in the 1981 study, with additional information covering claim continuance rates.

Analysis of trends of claim costs, based upon the weighting (by age grouping and elimination period) of ratios of the claim cost for each period of time compared to the claim cost for the period of 1976 to 1983, indicates that experience of 1982 to 1983 showed improvement over the combined experience of 1976 to 1983, as in Table 1.

Table 1

Ratio of Weighted Claim Costs to Weighted Claim Costs of 1976 to 1983

Years	Male Occupation Group I	Male Occupation Group II	Female Occupation Group I
1976-77	1.088	1.093	1.155
1978-79	0.955	1.044	1.049
1980-81	1.000	1.069	0.903
1982-83	0.988	0.843	0.972

In the 1982 to 1983 study, data were submitted on the basis of two occupation groupings: Group I, generally including professional and white collar workers, and Group II, generally including blue collar workers. The recently adopted 1985 CIDA table includes data for four occupation groupings. Over the next few years, contributing companies will be modifying the data that they submit so that experience can be analyzed in relation to that table.

An early copy of this study may now be obtained from Mark Doherty at the Society office for \$15. All readers of this study are invited to submit discussions or comments to Sam Gutterman, the Chairperson of the Committee on Individual Health Insurance Experience at his *Yearbook* address. If of general interest, they will be published in the *Reports*, along with an appropriate response from the Committee.