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Things You Need to Know Before Entering the Equity-Indexed Annuity Market

by Brent A. Mardis

DOES YOUR SMALL COMPANY HAVE WHAT IT TAKES TO SURVIVE, OR WILL YOU BE THE NEXT TO GET BOOTED OFF THE EIA ISLAND?

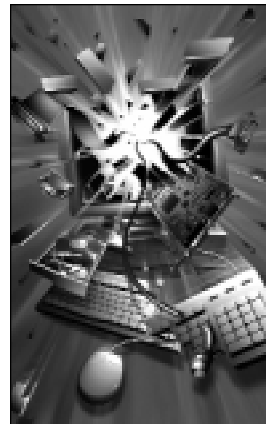
So you think you'd like to enter the equity-indexed annuity market. Equity-indexed products can put an enormous amount of additional strain on not only small companies, but also, more importantly, on small actuarial staffs. Over the next few paragraphs, I'll try to describe *some* of the areas of concern in developing EIA products. By no means is this an all inclusive list of concerns, but hopefully, it will provide you with a better idea of what needs to be done before the first EIA premium dollar hits the front door.

Design

WHAT WILL YOUR EIA product look like? Five years ago when the first round of products was entering the marketplace, I predicted it would take an extended period of low returns (0-3%) before a dominant product design would emerge. We have seen low returns this year, and we continue to see new products hit the market. I have not seen any one particular design entering or leaving the market at a greater pace than any other design. You still see a good mix of annual reset, and multi-year point-to-point products being sold.

When the first products were introduced, most products used a participation rate to determine the index credit. Shortly thereafter, asset fee rates (margins or spreads), and caps were introduced. All three potential moving parts still exist today. The most recent trend I'm aware of is a return to the participation rate products. These newer EIA products are using participation rates with caps instead of the good old days of participation rates only.

On top of deciding how you'll determine your index credit (participation rate, asset fee rate, cap, or some combination), here is a nice, long laundry list of design decisions you'll need to make: annual reset vs. point-to-point, averaging vs. no averaging, calculation of minimum guaranteed contract value, length of contract term, surrender charge schedule, re-entry features at end of contract term, commissions, single vs. flexible premium, treatment of flexible premiums, S&P 500 vs. Dow vs. NASDAQ vs. all the other indices, partial withdrawal options, free partial withdrawals based on premium vs. fund value, and last but certainly not least, a catchy marketing name for your product.



Remember there is a lot of variety in the EIA marketplace today. No one product design has proven more dominant than the others. Somehow, some way, there always seems to be room for the next product to have just a little bit different twist than the last.

Pricing

THE EASIEST WAY FOR a small company to price an EIA product is to have a consulting firm do it for you. Over the years, we have been able to develop our own pricing models, but it takes time to develop the knowledge of how to structure these models. Our company's first and part of our second generation of products were priced by consulting actuaries.

The difficulties with pricing an EIA product using traditional pricing methods deal mainly with reserves and the inclusion of options. You need to be able to calculate reserves using one of the Guideline 35 approved methods. Most traditional software packages have not allowed for easy inclusion of Guideline 35 reserve methods. The other big obstacle is trying to include the option components of the EIA products. Your pricing systems must allow you to buy options, as well as give you the ability to value the option and eventually sell the option.

Another decision to be made is how many equity scenarios you will use in pricing your product. We have used anywhere from 300-900 historical scenarios in pricing some of our products. The number of scenarios used is dependent on the number of years you are pricing over, the type of index being used for crediting purposes, and your ability to gather historical data. We also use a deterministic set of scenarios: level growth, up/down patterns of growth, and no growth are all helpful in understanding how different growth patterns affect the profitability of the product.

If you are strapped for actuarial resources, you are better off for many reasons to let the consulting world help you out.

Administration System

CAN YOUR EXISTING ADMINISTRATION system handle equity-indexed products? In dealing with EIA products, make sure your system will calculate the product's index credit correctly. As part of this calculation, your system will also have to handle the input of the closing index (whether it be S&P, Dow, or some other) each day.

Setting up the index crediting function is more complicated than building an interest rate table. Your system needs to

be able to handle the benefit design you select. Your administration system will need to be able to handle participation rates, asset fee rates, and/or caps. How much additional programming will it take to get your administration system ready for your EIA product? Before moving forward, you will need to be sure that your administration system will be able to issue and maintain the EIA product you have developed.

Issuing

HOW OFTEN WILL YOU issue your product? Due to critical mass concerns in buying index options, you will likely not start out by issuing your EIA product on a daily basis. When we started selling these products back in 1996, we issued them every Wednesday. We have grown enough that we can handle daily issuance since then. How often you issue is up to you. I'm aware of companies that issue monthly, and even some companies that issue on a semi-monthly basis. In the beginning, you should balance your marketing department's opinion on this issue with the economics of purchasing options.

Hedging

THE ART OF BUYING OPTIONS has many different concerns. First is from whom will you buy options? There are many "counterparties" available to purchase options from, but not many will be interested unless you show promise to someday gain critical mass. Critical mass is about $1 million worth of S&P 500 premium per purchase. Until you reach this level of production, you'll still get people to bid on options, but you will not see very competitive prices. This concept of critical mass goes hand in hand with the question of how often to issue the policies.

Also, depending on the structure of the product, you may have additional concerns. If you are buying options for a multi-year point-to-point product, you'll have persistency concerns. Because the options won't pay off for a number of years, there is great potential to have bought too many or even too few options. Without a long history of lapses on these products, your guess on persistency is probably as good as anybody's. All of our products are annual reset products, so we do not have the persistency concerns of the multi-year products.

Options are available for almost any kind of product structure; you just need to be able to get enough premium in the door to make buying them cost efficient. As with almost everything pertaining to being in the EIA market, you can find people willing to help you purchase your options.

Filing

ONCE YOUR PRODUCT IS designed and priced, you will have the privilege of trying to get it approved. Some states are easier than others are, and, of course, not every state is the same. Again, product filing is an area for which you might want to consider using consultants. A lot of the same consulting firms that will price your EIA product will also be more than happy to help you file the product.

Before you file, make sure your compliance staff has reviewed the specific EIA regulations of each of the states you'll be filing in. You will save a lot of time if you can identify any state-specific filing requirements prior to filing. On your first EIA filing, be prepared for a lot of frustration and a lot of additional work. The good thing about starting today is that state regulators are a lot more educated about EIA products than they were five years ago. Over the years, our company has developed, in our opinion, very good working relationships with the insurance departments that have the most specific EIA filing requirements. It takes time and a lot of product filings, but eventually you can develop a very good idea of what each state will require when filing EIA products. Your first filing will not be fun, but it can be done. Have patience and keep good notes.

Reserves

WILL YOUR CURRENT RESERVE system handle any of the methods required under Actuarial Guideline 35? To date, we have handled the calculation of our EIA reserves via a spreadsheet method. Spreadsheets have worked nicely for a while, but there is a limit to the number of policies they can effectively handle.

We have looked to outside vendors to help us with calculating EIA reserves. Again, there is a cost to purchasing a reserve system, but if you can find a vendor that can handle your EIA product designs, I believe it will be money well spent.

Make sure that when you select one of the methods approved by Guideline 35, it is a method in which you'll be able to easily obtain the necessary option pricing information. There are some Guideline 35 methods that work better than others for certain designs. You need to study each method to find the one that will fit well with your product and will fit with your reserve system.

> ***"Setting up the index crediting function is more complicated than building an interest rate table. Your system needs to be able to handle the benefit design you select. Your administration system will need to be able to handle participation rates, asset fee rates, and/or caps."***

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Cash Flow Testing

THE BIGGEST OBSTACLE AGAIN is the ability of your modeling system to handle EIA's. You need to have a system that can buy, sell, and value the specific options that back your product. You also need a system that allows for the proper calculation of the policy's index credit. Make sure your system allows you, in some fashion, to generate or at least input equity scenarios. We run our fixed interest annuities and equity indexed annuities in separate models. We do this so we can isolate the index options that back our EIA products.

Once you have your model created and running accurately, you need to determine what is an appropriate number of scenarios to run to achieve the necessary comfort level with the cash flow testing results. We currently use three different scenario sets in running cash flow testing on our block of EIA products. The first is the New York 7. The second set includes at least 100 stochastic scenarios. The last set involves what we call an NY 7 version of equity scenarios. We use the 7 interest rate scenarios in conjunction with 7 equity scenarios. In the seven equity scenarios, we use equity growth patterns that mimic the interest rate patterns of the NY 7. The result of the 7 interest rate scenarios and 7 equity scenarios is 49 scenarios which test set changes in both interest rates and equity growth rates. The aggregate results of the three scenario sets have been enough to give our auditors and me a comfort level with our EIA products that allows me to sign the Actuarial Memorandum.

Final Thoughts

WHEN THE DAY IS over and you think you're ready to enter the EIA market, think again. If you can't get a strong commitment to sell EIA's from your marketing staff, and more importantly your field force, the cost both financially (to the company) and emotionally (to the actuary) will not be worth it. This is definitely a market where achieving critical mass is nothing less than critical. There have been a lot of companies that have entered this market and eventually left because they could not generate enough EIA premium to justify all of the additional costs associated with developing, administrating, selling and maintaining a block of equity-indexed products.

Good luck!

***Brent A. Mardis, ASA, MAAA, is vice president and chief actuary of American Equity Individual Life Insurance in West Des Moines, IA. He can be reached at* bmardis@american-equity.com.**

2000 Annual Meeting in Chicago

Taking a break from discussing section activities during the Annual Meeting in Chicago are members of the Smaller Insurance Company Section Council —

***L to R** – Ed Slaby (2000-2001 Section Chairperson), Susan Reitz (2001 Spring Mtgs. Program Committee Rep.), Rod Keefer (1999-2000 Section Chairperson) and Paul Retzlaff (2000-2001 Secretary/Treasurer). Dale Hall (2000-2001 Vice-Chairperson) joined in later.*