RECORD OF SOCIETY OF ACTUARIES
1988 VOL. 14 NO. 2

CONTRASTING THE PRODUCT DEVELOPMENT PROCESS BETWEEN TRADITIONAL AND NON-TRADITIONAL MARKETING

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- Market driven product design
- Developing information on products where previous information is non-existent
- Reflecting the differing risks associated with differing marketing methods
- Areas for potential improvement in each process
- Investment required and returns commanded
- Incremental marketing expense versus incremental mortality/morbidity expense

MR. BRADLEY M. SMITH: Mr. Neil Lund is currently Senior Vice President at Monumental General Life Insurance Company, Baltimore. He is currently Chairperson of the Non-Traditional Marketing Section along with serving on various other committees dealing with mass marketing. Prior to joining Monumental, he was at IDS Life. Mr. Robert Polilli is Senior Vice President and Chief Actuary at Colonial Penn Life Insurance Company. Prior to joining Colonial Penn, he was at National Liberty. He has worked in the direct response area since 1980. And I am Brad Smith from the Dallas office of Milliman & Robertson, Inc., and formerly Vice President and Chief Actuary at J C Penney Life Insurance Company.

MR. H. NEIL LUND: I'll be talking about strategic pricing and product development. But before going any further, I need to disclose some of my biases. My first bias is that throughout my career, I've worked for stock companies. Therefore, my perspective is that profits exist and are necessary. Secondly, although I have worked with and developed products for agency field forces, for the last six years I have worked as a mass marketer. My remarks come primarily from the perspective of a mass marketer. Thirdly, I am employed by a company that is a good niche player.

This ties into my final and overriding bias. That is, I believe that the future for each insurance company is extremely precarious. I believe that there are three possible scenarios for each company. First of all, the company can be very big and through size alone survive. Capital and surplus can mean a lot. Secondly, the company can become a good niche player, and through playing a quality niche strategy, can survive and grow and thrive. The final scenario is that the company can do nothing and it will be gone. For most of us, becoming a niche player is our only alternative. A niche player must utilize an effective strategic pricing and product development program.

With this background, I'd like to turn to what I view as the strategic components of pricing and product development. That is, that pricing and product development are an extension of corporate strategy and more importantly, an extension of marketing strategy. The corporate strategy and therefore the marketing strategy are dynamic. They react to external and internal forces. Therefore, any pricing strategies or pricing philosophies that you follow are likewise dynamic. The starting point for all of this is getting a good grip on your company's strategic plan. First of all, your company must have a written document laying forth for all employees the company's strategic goals and the plan for obtaining these goals. This document must be written and it may be several pages long; however, you who are involved in pricing and product development should be able to effectively summarize your company's overall strategy in two or three sentences. For example, a cornerstone of our strategy is that we expect to be the leading provider of insurance products for financial institutions. This includes credit, mortgage, and supplementary insurance products.

Always keep your company's strategic statement and strategic plan close to your heart. Refer to it constantly. Bounce your products and what you're doing against that plan. If they do not make sense within the context of your company's strategy, you must question why you are pursuing it.

The next component is understanding your marketing strategy. Your company's marketing strategy is an extension of the company's overall strategic statement. Marketing strategy is, in fact, a tactic for pursuing the overall strategy of the company. Here it is important to understand the four basic components of marketing, for each must be present in your marketing strategy. The first of these is product. Your marketing strategy must define globally the areas of product that the company will offer. For my company, that includes credit, mortgage, and supplementary insurance products. We also carefully lay out some product areas we will not, at the current time, pursue. Do not take for granted that everyone in the company knows what product areas you will market: Put it down in writing. The second piece is placement. That is, what market are you pursuing and how are you going to access that market? This is an extremely difficult question and one that marketers rethink daily. It's one piece that will constantly reshape what you're doing in the product development area. You must understand what market you're targeting and how you're going to access that market from leaders and follow their lead. Thirdly, the marketing strategy must define the promotion of these products. That is, how you are going to deliver and sell them. It has to define whether you are using PPGA, brokers, mass marketing, or whatever delivery system you're going to pursue. Each approach has subtleties which must be incorporated into your products. Finally, your marketing strategy must state the pricing area in which you expect to deliver your products. That is, do you want to be a low-cost producer? Do you wish to be on the cutting edge of product development or stand back a ways? Do you wish to be priced in the middle, or maybe the second quartile against your competitors? Are you going to try to simplify your products or are you going for very complex products? All this involves where you're going to position your products for pricing.

It is worth spending some time here looking at what I just stated. I basically said that the actuarial function, as far as product development and pricing are concerned, truly is a marketing function. You as a pricing actuary must -- let me repeat, must -- have constant interaction with your marketing and sales people. You cannot price in a vacuum.

Product, price, placement, and promotion are all linked. You cannot price unless you clearly understand what the objectives of your marketing people are and how these four Ps of marketing fit together. You as a pricing actuary must be able to quickly, and again in two or three sentences, clearly state what your marketing strategy is in terms of product, price, position, and placement. Without this understanding, you can't price or develop products.

A third facet of strategic pricing is the careful identification and monitoring of your competitors. You must know what strategies your competitors are using. You must anticipate their moves. Your strategies and marketing efforts must be designed to blunt or meet the challenge of your competitors. Your products must be positioned against your competitors. Here, I believe that people who have worked as mass marketers have a distinct advantage over someone who has worked only in an agency system. We always work with the assumption that our customers are doing comparison shopping, that our competitors -- all of our competitors -- are in the consumer's mailbox at the same time we are and that the consumer will compare products. We believe that our product is never offered in a vacuum, never offered as an exclusive. With this perspective, we as a company and we as pricing actuaries must constantly stack our product up against our competitors. How are we going to differentiate ourselves from them? How do we want to emulate them -- offer lower premium rates, greater benefits, add some bells and whistles, better service? How are we going to differentiate ourselves? Again, we must know our competition in order to properly develop and price our products.

Stepping away from talking exclusively about marketing considerations for the moment, there are three other areas that must be considered when developing your products and pricing them.

First, you must assess your company's strengths and weaknesses. Your products and strategies must emphasize the company's strengths and minimize weaknesses. For example, if your claims department is sophisticated, you can develop products with complex benefits. If not, don't! Be brutally honest in this assessment. Assess every area of the company.

Secondly, you must be able to clearly and quickly state your profit objectives or as I prefer to call them, profit constraints. A single objective is not sufficient. We state our objectives in terms of return on equity, percentage of premium, and break-even years. All situations recognize the utilization of surplus. Our minimum criteria in each category must be met. One or two areas are not sufficient. All three areas must be met. Again showing a bias as a mass marketer, I believe that our products today have such short lives that they must be priced for a very short break-even period. If you meet your return on objectives and it takes 14 or 15 years to break even, you probably deceive yourself and deceive your company. Merely stating the objectives is not sufficient. You must be able to demonstrate that the products you are pricing today and are marketing today are meeting or exceeding your profit objectives.

Thirdly, you must reconcile your pricing with your administrative strategy. That is, you know if you're pricing at your current expense levels and reconcile the difference. You must communicate this clearly with everyone in your company and set the goals for the administrative area. Don't accept current expense levels as a given; challenge them. If you're going to be a good niche player, you're going to have to be extremely efficient in your administrative areas. Adjust your expense targets as appropriate.

Finally, your success as a pricing actuary is easily measurable. The two criteria against which you will be measured are as follows: (1) Your products must sell at or above expected volume. (2) Your product must meet or exceed your profit criteria. Both objectives must be met.

Overall, the pricing actuary's role is critical to the success of the company. The pricing actuary is the only one in position to recognize all the various strategic forces acting on the product development and pricing cycle. The actuary must fully understand these strategies and recognize that they are always dynamic. He must also recognize that the essence of product development and pricing is compromise. The strategies, products and prices will have to be constantly modified as you gain additional information and review your products and examine the competitive marketplace.

MR. ROBERT J. POLILLI: The idea of having your strategic document written down has been found to work in excellent companies as defined by *In Search of Excellence*. By having it written, all the employees in the company understand what the strategic vision is. By mustering the forces of all, those companies outperform companies which don't understand their vision or which have limited that vision to just the top. I thought that was a great place to start this session.

My first trip to Louisville was for business back in 1982. The purpose of that visit was to serve on the first Universal Life Task Force at the parent company. That year we were to develop the corporation's first Universal Life product, the major emphasis being an agent-sold product, but our involvement was to include a direct response product.

I remember the beginnings of Universal Life. When we did a competitive comparison, we surveyed the total industry's Universal Life portfolio by reviewing three products. Note that it was a complete survey, not a sample. That was every Universal Life policy in existence. As I sat in those Task Force meetings trying to forge a product around the systems constraints, it seemed to me that there was more than a difference in company culture involved between our direct response company and its new agency-oriented parent. Several key differences existed in the approach to product development for traditional and nontraditional products.

When I compare traditional versus non-traditional distribution I'll define them as follows. With traditional, I mean agency-sold business, either through a brokerage operation or several career-type operations. For non-traditional, I am primarily familiar with direct response sales with or without third-party endorsements, including association business. (Note that at my company, as at several direct response companies, this meaning has been reversed.)

It's interesting now having sales results subsequent to those early days of Universal Life. The results are that the agency operations were successful in selling Universal Life, whereas the non-traditional direct response operations found that they could not succeed. Let's examine some of the differences between the marketing approaches.

MARKETING DIFFERENCES

The first difference I've noted is in the use of market research. The use of market research tends to vary a great deal by distribution channel in the day-to-day operations of the company. The agents are primary clients of agency

distribution. They provide a vocal direct feedback of how the product meets the market. This feedback is invaluable. Although invaluable, this feedback can be misleading for several reasons. Although the feedback is a good barometer for how sales will do, it's those who talk the loudest who are heard the most. Like on a professional baseball team, those who have the highest batting average must know what is best. Also, the agent will emphasize current sales. The emphasis will be on competitive comparisons, illustrations and price which are symptoms of the need to develop market share at the expense of competitors in a mature marketplace.

For direct response, the market research has been done in a more quantifiable and systematic approach to the market and has been more directly applied on a day-to-day basis. We even applied a quantifiable approach to agents' feedback to learn their needs. My company recently revised a policyholder survey into an agent survey. We sent it out to our Medicare supplement agency force. The results that came back showed that 45% of the agents thought our new nursing home product was unsatisfactory as it was inferior to the competition in benefit design. We had been told this by the sales management. However, in the long, long list of other complaints, this change did not seem to have high priority. We were unable to realize the importance to the field of the product design. The 45% dissatisfaction index was by far the highest dissatisfaction expressed on the survey. An adjustment in the product design was relatively simple, and the design was changed. Within three months, sales quadrupled. In this case, quantifying the field response on this particular item made it clear that the item had great importance. Whereas other factors were only dissatisfiers, this design change was crucial.

The second difference between the two marketing channels is the cost of bringing a product to market. Both distribution channels are faced with systems, data and administrative, which have grown in complexity and this raises the cost of introducing new products. The effect of new products even without substantial data modifications should not be underestimated. The effect on the management resources of a company can be enormous.

One of the major differences I noted as I sat on that first Universal Life Task Force was that considerably more training is needed to be done to bring a product on-line for an agent operation. Simply, there were more people involved: home office, sales management, field management and agents. The product was being used in a multiplicity of situations so that extensive training manuals and illustration systems were needed for the product. In the non-traditional marketing effort, very few people managed the product or needed to know about the product design.

A third difference between the two distribution channels is that plan design is customized in the field for agent-sold products whereas the offer for nontraditional products is done primarily by the marketing departments. Even at the beginning of Universal Life, we did not grasp the significance of the fact. We'd developed a product, Universal Life, that was like a rate book, but marketing would offer only one concept at a time. For non-traditional products customization would come before issue. After working with Universal Life for several months, we were all very attuned to the product. Then the manager in charge of actually putting the direct response campaign together through the first sale called up and said, "Could you send me down the premium?" We were stunned. What premium did he want? Universal Life was a rate book, not one product.

When designing products, the process must be in line with the company strategy being adopted. Previously I mentioned the strategies in a mature marketplace where emphasis is on gaining market share. If the company strategy is to be a low cost provider, the whole development process must not introduce features that are costly to administer. Thus, the three major differences between traditional and non-traditional were in application of market research, cost of training, and customization.

To succeed at Universal Life, better market research is being brought to bear on the problem of direct response marketing. Learning how to customize while on a mass marketing basis still needs to be achieved. Universal Life gives you the ability to customize, but I'm not quite sure that direct response can do that customization.

One conclusion is that traditional companies have considerably more insurance knowledge, while non-traditional companies have more marketing knowledge to apply.

PRICING

Let's move on to some pricing considerations between the approaches. The company now has decided to introduce a new product; marketing research, agent input, et al have led to a decision that a relatively new product is needed. The assignment has been turned over to the actuary who now must come up with the price.

Now if it's a life product, some information may be available and yet a complete mortality table is not. In reviewing mortality in the past, we have had a great deal of success in finding a reasonable mortality by using classes of mortality as done in the paper by Louis Levinson, "Theory of Mortality Classes" (*TSA*, Volume XI). Using that method we have been able to take some early durational results and extend the whole mortality table. We would have a few years of experience on a guaranteed issue simplified issue basis, one or two years. We were still faced with selecting the table. By selecting the proper mortality classes, we could model the initial years and then we could extrapolate the table beyond. Subsequent experience reveals the method has been fairly successful for us at Colonial Penn.

We were then faced with a whole life product we had been using for which the reject rate was too high out of underwriting. It seemed the best solution would be to change the underwriting standards. By modeling the current experience on the mortality classes, we were able to provide a method to see how the mortality table should be increased. We added more lives at higher mortality classes as we deemed appropriate and then the projection of the mortality table was done from that point on. In this way, we could increase the mortality as the expense of having better marketing.

On the other hand, one observation on trying to adjust standard tables that I've noticed is that the mortality is highly antiselect, more than you may think, and that includes even for a fraction of the first year. I've noticed this in guaranteed issue life insurance and even in some underwritten life. I can remember, specifically, looking at our first Medicare supplement results in 1982 and having little explanation of why we had such poor results in the first few policy months. However, this burst of antiselection tends to wear off quickly.

As far as persistency goes, a lot of factors affect the persistency assumption. Several that have noticeable effects are whether you were doing a direct mail program or staying on television. Also, the first year is influenced by a Send-No-Money offer. Some methods to increase conversion from applications to paid-for policies, such as use of telephone, are watered down in their effect, to some degree, by a higher first-year lapse rate. The older the buyer the more persistent the policy will be. Also, the method of billing will have a major influence on persistency. The strength of a third-party endorsement will improve persistency.

Now after the actuary decides on his assumptions, another difference appears in the way the results are handled as an agency actuary stated. The pricing for non-traditional products tends to be done upside down in that not only is the profit objective known but generally the premium is also known. At the end, what is left over becomes the allowance for the marketing cost. This became upside down.

Since most programs are viewed as a whole, the non-traditional approach makes sure that the total results, the sum of all cells, are what are reviewed. In the traditional approach I've seen more computer programs that did not summarize all the results at the end. This was because what was being priced for was to find a premium and since the premium varied by age, there was no specific need to aggregate all the results together. The actuaries pricing in the traditional market assumed that each premium must stand on its own or that the market would produce more business in underpriced cells than perhaps the original review of any similar products in force would yield. So, much greater equity between cells was emphasized in the traditional pricing.

In several areas in direct response, such as television, the business at some of the cells could be considered marginally profitable. For example, under guaranteed issue life, the youngest ages in the 45 to 55 range would produce substandard profits. However, since television is non-specific, the result must be looked at in total since the only thing you could do would be to spend marketing dollars of which no premium income would be generated.

Another area that non-traditional actuaries emphasized more than traditional was the pricing of riders and of subsequent policyholder marketing. This is a key concept. As the direct response itself reaches its mature stages, the upfront offers are becoming less profitable on stand alone basis offers, so that emphasis is being placed on the future profitability of subsequent rider sales or upgrade sales or cross sales. Since you now have identified policyholders who have the highest propensity to buy, the pricing of the policy, assuming the front end allowance for marketing cost or a lower profit objective, will generate considerably greater profits under the policyowner marketing approach.

When putting together the bells and whistles on a product, traditional marketing is delivering basically what could be considered a rate book. You put together the benefits that you want for the client. The agent, being an expert, can make those arrangements, whereas primarily in direct response, the offer is a very fixed offer and more than four options tends to be a depressant to response rates.

Then the actuary must remember that explanations have to be kept simple so product features need to be kept simple. At one time, in a joint venture, I was

working with another company who had an agent-sold product, term life, which was no doubt considerably superior with respect to the conversion provision to our own direct response product. The insured could have full death benefit upon conversion before age 65 and 1/2 benefit at ages 66-69. For conversion he'd receive a credit on the conversion policy for some fraction of the premium. With direct response you can convert for the face amount when you attain age 65.

Obviously, the enhanced features for the agent-sold product were superior in many ways except in the crucial way of writing it into a brochure. "At age 65 you can convert for the face amount to a whole life plan" was much simpler to say and that was the provision that we went with.

CONCLUSION

Thus, the worlds of traditional and non-traditional products are not totally different but do exhibit several notable differences. More day-to-day market research for non-traditional is evident. Greater insurance knowledge supporting the ability for customization is evident for traditional markets. In pricing, emphasis has been more at the pricing cell level for traditional, as premium setting is key, whereas simplicity of design and overall marketing cost allowable are featured in non-traditional.

MR. SMITH: There are reasons why the products and, therefore, the product development process differ depending upon the distribution mechanism (traditional such as agency or brokerage versus non-traditional such as direct mail, telephone or salary savings). Let's review a few of these reasons.

Life insurance products offered by direct response methods generally are characterized by higher unit premiums than those offered through traditional (agency) distribution systems. However, a close examination of these products shows that these higher unit premiums are generally justifiable.

Direct response methods of selling life insurance usually are used within segments of the economy where an agent cannot prospect profitably for life insurance sales. The lower-income market, which is characterized by a need for policies that are smaller in size, is one of these segments. In addition, this group as a whole has a lower perceived need for life insurance, making it more difficult for the agent to present proposals and close sales. Once a sale is closed, however, it often is for a relatively small amount of life insurance, which in turn means a lower commission. Because of their higher expenses per sale in this group, agents generally have abandoned the lower-income market.

A company with direct response expertise may be better able to identify potential purchasers of life insurance within this lower-income segment than can an agent. Segmentation techniques (which represent an additional cost that must be defrayed by the policy) help to eliminate those who have little or no propensity to buy life insurance. However, the smaller-sized policies sold to this market necessarily result in higher unit costs that, in turn, contribute to higher unit premiums.

The solicitation and additional persistency risks undertaken by the company are additional justification for the higher unit premiums associated with products sold with direct response methods. The acquisition expenses (agent commissions) for products sold through an agency force are largely incurred after the policy is

issued as premiums are being paid, although some acquisition expenses, such as issue and underwriting expenses (as well as agency development expenses), are incurred before the policy is on the books.

The direct acquisition expense associated with a direct response solicitation is incurred before any of these policies are placed on the books, and the solicitation potentially could result in no paid policies. More realistically, the solicitation could produce policies with an acquisition expense per paid policy that greatly exceeds the cost assumed in the pricing of the product. Incidentally, as alluded to in a previous session on Pricing Methodologies, this aggregate solicitation expense has caused direct response type companies to price and evaluate their marketing efforts on a macro basis. Historically this concept, although not new, is clearly gaining popularity in the pricing and evaluation of products offered through traditional distribution systems. Direct response products are more sensitive to poorer-than-expected persistency in the first few policy years than are agency-produced products where acquisition expenses generally are incurred as premiums are paid. Therefore, it is extremely important to assume an appropriate skewing of lapses in the first few years when pricing a direct response type product.

It can be argued that additional risks associated with direct response products should be reflected in a higher expected return to the company. Therefore, when an insurer prices a product that is to be sold through direct response methods, it would use a higher profit objective than it would use if the product were to be offered through traditional methods, everything else being equal. This will result in a higher unit premium for the direct response product.

What can companies offering products through direct response type distribution systems do to mitigate this risk of making an unsuccessful solicitation? As alluded to in a prior session, market research is one technique. Focus groups clearly can affect copy. Surveys can keep you in touch with the attitudes of your market. Simulators are great tools that allow you to test the potential in a market before you enter the product development process. However, they are basically limited to big credit card companies.

Testing is clearly a form of market research. It costs time and money but yields information. The key is you obviously have to test before you make a major rollout to a new market. But for your testing to be successful, you have to make sure that you don't overtest because of the time and money involved.

These techniques could be used in agent business to avoid incurring costs, such as systems costs, associated with entering a line of business that cannot be marketed profitably. How many products have we seen developed for traditional distribution systems that have met with no popularity within the market? Market research techniques can be used to help mitigate this risk. One of the things that companies that use market research and sell through traditional distribution systems (agency or brokerage companies) don't do is to go directly to the purchaser of the contract. That is not their market. What they have learned is that their market is the seller, whether it be the agent or the broker. That is very important to keep in mind.

The objective in either case is to be sure the product is marketable before incurring substantial expense. The concept is to spend a little to save a lot. (However, these expenses must be defrayed by successful marketing efforts.)

The product development actuary faces a problem when designing a direct response life insurance product that is not faced when pricing a product that is to be sold through a "traditional" distribution system.

The expected level of mortality and the corresponding underwriting standards are not easily set because of the negative effect that a rejection (due to the substandard level of the risk) has on the acquisition expense per paid policy. Generally, direct response applicants are either accepted as a standard risk or are rejected based upon certain underwriting criteria. Unlike agency-produced business, substandard classifications are seldom made because of the additional expense of making such a classification, as well as the potential loss of sales that occurs when a company requests additional underwriting information or collects additional premium.

In agency-produced business, the agent can facilitate the qualifying process and minimize the number of sales lost when additional information or premium is needed. In addition, if the sale is lost because of one of these factors, the company does not incur the lion's share of the direct acquisition expense (i.e., it does not pay the commission).

The insurer must decide what is to be considered a standard risk when offering a product through the non-traditional direct mail type distribution system. Is 150% of base mortality acceptable as standard? Is 250% appropriate? The ultimate expansion of this would be to sell the product on a guaranteed issue basis. Once a preliminary decision is made about the acceptable level of standard mortality, the actuary must estimate the distribution of responses along the mortality curve and assume an overall level of expected mortality for all issued policies.

The simple formula for solicitation cost per paid policy is C/RIP, where C is the solicitation cost per piece mailed, R is the response rate, I is the issue rate and P is the paid rate. What we're trying to do is to balance the acceptable mortality acceptance standard so as to optimize the level of the issue rate.

Let us assume that a company decides to accept, as standard, risks that represent no more than 150% of base mortality. Let us further assume that the expected issue rate using this underwriting criterion is 70%. After the product is introduced, all of the assumptions made appear to hold true. However, an analysis of the underwriting results reveals that if its underwriting standards were loosened to accept risks that represent no more than 200% of base mortality, the issue rate would be increased by 5% (i.e., to 75%). This would reduce the solicitation cost per paid policy by 6.67%. Essentially it's the same formula: C divided by R times 75, which is the issue rate for the loosened risk acceptance standards, times P divided by C divided by R times 70, which is the additional issue rate based on our initial risk acceptance standards times P that yields .933. 1 minus .933 equals 6.67%.

If the increased mortality cost per unit due to the liberalization of risk acceptance is less than the reduction in marketing expense per unit, then the decision that would maximize the profitability of the solicitation would be to loosen the risk acceptance standards. This presents no real problem other than one of communication between different areas of the company.

The decision to loosen risk acceptance standards will result in an increased level of mortality that must be subsidized by a reduction in solicitation expense. The acceptable level of acquisition expense per paid policy has been reduced, and

the success of future mailings from a solicitation expense standpoint must be judged against this new standard. The problem is one of setting risk acceptance standards in order to maximize the expected profits from the marketing effort, taking into consideration the effect this risk acceptance level will have on both mortality expense and acquisition expense per paid policy.

The decision to loosen risk acceptance standards also will affect the treatment of this product under GAAP. Although presumably the overall profitability of the product is increased because the increase in expected mortality per paid policy is more than offset by the decrease in acquisition expense per paid policy, the level of the GAAP expense premium is reduced while the level of the GAAP benefit premium is increased. The sum of the GAAP benefit and GAAP expense premiums should be less, reflecting the increase in expected profitability of the product.

A similar problem occurs during the initial development of the product. Assuming that the response rate is inversely related to the level of premium (i.e., the response goes up as the premium rate goes down), the pricing actuary must consider the effect of an increase or decrease in premium on the response rate. The loss of responders due to a higher premium will tend to be skewed toward the better risks since the poorer acceptable risks presumably are getting a better deal than they could have received otherwise (since their extra mortality is being subsidized by the reduction in marketing cost per paid policy and by the better risks).

Therefore, the risk acceptance level has an effect on the resultant mortality and the acquisition expense level (due to an increased issue rate), which tend to offset each other in direction if not magnitude. The level of the premium will affect the response rate, which affects the acquisition expense per policy and, presumably, the resultant mortality (i.e., a higher response rate will result in decreased overall mortality and vice versa). Also, the level of the unit premium and the overall premium level will affect the resultant persistency of the business. All of these things must be considered carefully when designing a product to be offered through direct response methods. The interrelationship of the variables is not unique to direct response products offered through direct response mechanisms; however, it is definitely more pronounced.

Many companies have decided to set the level of risk acceptance relatively high (Table 6 or higher), although many companies are now shying away from guaranteed acceptance below issue age 50 due to the increased mortality risk associated with AIDS. They believe that by doing so they are striking a balance between the mortality expense and the acquisition expense so that expected profit can be maximized. This allows the insurer to offer the most economical premium to the group as a whole which should increase the overall response rate and improve the persistency of the product. Among other factors, this higher risk acceptance level has contributed to premiums for products offered through direct response methods that seem high when compared to standard or preferred risk products offered through the agency distribution system. However, this is not a fair comparison.

Now, I'd like to make a few comments on developments in the Salary Savings and General Markets that have an effect on the product development process.

Sliding commission scales with Guaranteed Issue limits are becoming very prevalent in this market. The actuaries are designing their products with not one

single commission but with a sliding scale of commissions which are a function of the level of the guaranteed issue acceptance. So the product actuary must be able to equate, while he's developing the policy changes in mortality due to changes in guaranteed issue, acceptance limits with changes in his commissions. You basically want a one-for-one offset.

With the Universal Life marketplace, companies that have offered this product through the salary savings mechanism have generally stayed with front end loaded products for a longer time than the general market trying to avoid the confusion that a back end product has within sales presentation. Many enrollers across the country don't have as much control, so they've offered front end products as opposed to back end products. Now, due to competitive reasons along with the favorable accounting treatment afforded back end loaded products by FAS 97, this market is moving to back end loaded products.

The general market and, to a lesser extent, the salary savings market are moving to fixed premium products. One reason for this is that the assumed premium discontinuation or suspension assumed in the pricing of the flexible premium products has been much higher than what was assumed or what was assumed was much lower than the actual payback within this period.

This does not affect products offered through the salary savings market as much because you have essentially a painless form of payment. However, the higher surrender charges available on fixed premium products due to leveraging of guaranteed interest rate and maximum nonforfeiture interest rate have also tended to cause both the general market and the salary savings market to offer fixed premium products. Under a flexible premium product the expense load or the surrender charge is limited to the maximum amount of forfeiture expense allowance. Under a fixed premium product you start with the maximum amount of forfeiture expense allowance. We've seen products that have increased essentially to four or five times the target premium because of this leveraging of the guaranteed interest rate and the maximum amount forfeiture rate.

Companies within the salary savings market are faced with addressing three very different markets: (1) small case (under 100 employees), (2) large case (over 100 employees), or (3) large case competitive. This large case competitive could be where the agent is in competition with several other agents. It generally represents ultra large cases, i.e., major corporations looking to offer salary savings to their employees.

The differences in these markets are reflected in different levels of policyholder benefits. The less the competition, the less competitive the product. With respect to commission level, the less the competition, the higher the commission and the profitability. The greater the competition, the lower the unit profitability. That does not necessarily mean the lower the overall profitability. Hopefully, if you're selling 25,000 cases you can afford a smaller per unit profitability because your overall profitability will be greater. One of the main things you need to remember when developing products for this salary savings market is that lapses are heavily tied to termination or changes in employment so that possibly the product you offer a company will be affected by how stable the work force within that company is.

MR. WILLIAM C. CUTLIP: Brad, you mentioned a concept of macro pricing. Would you expand on what that means?

MR. SMITH: That was covered in detail at a prior session. Basically it is the assignment of your pricing using variable costs only and not necessarily assigning computer costs -- major variable costs -- in order to enter a line of business on a per unit basis. So essentially you're pricing using a model office type approach as opposed to a unitized profit study approach. The main advantage is that it helps you to set the level of premium that will produce the optimum present value of profits. Intrinsic in this approach is the assignment of a demand curve that says if we offer this product at a certain price, we will be able to sell so many. If we offer it at 90% of that price, we'll be able to sell so many. By the assignment of the demand curve and the use of variable expenses in your analysis, you're able to define the premium at will, optimizing the amount of profitability. You then use the model office approach to see that you're covering your fixed expenses.

MR. LUND: Sometime ago I ran across an interesting old paper that was written before most of us here probably first heard the word "actuary." It was written by John Bragg and published in the mid-1960s in the *Transaction.* He does not utilize the term macro pricing, but does get into utility curves, price curves, trade-offs. It's strictly from an agency perspective. So to those of you who are involved in agency work, I can recommend digging up this old paper.

MR. KIRAN DESAI: For mass marketing one of the interesting ways to get into testing and into new products that may be of interest to you, Bill, is to have two sets of marketing costs. One is overall; the other is direct marketing cost with the balance being termed research and development cost, which would include costs of a small test mail (20,000-30,000 pieces). The cost of producing that kit is tremendous so take only that cost (30 cents per kit) into the normal marketing cost and the balance into Research & Development, the same as some other expenses. So you monitor that Research & Development budget overall but not on a per product basis and that works very well for entering new products, like macro pricing.

Both Brad and Bob mentioned maximizing mortality costs versus marketing costs and not going down from age 50 to age 40 or under. The other thing in mass marketing that is balancing these is the fact that the more targeted the pitch, the better the response rate. So even though you have the TV spot paid for and to say instead of 50 and over, say 45 and over may sound innocuous, at some point you've got to balance and say would the audience relate to that target audience. They may relate better to age 65 and over than to age 45 and over and you may be losing a lot of appeal. So in direct marketing you've got to balance that also in targeting and focus.

MR. CUTLIP: Brad, about your comment on the salary savings, about the commission sliding as a function of the Guaranteed Issue limits, do you have some examples of how that's being done now?

MR. SMITH: Sure. It depends on the number of employees in the group. We've seen Guaranteed Issue limits as low as 25,000 to usually around 50,000. Clearly it's a function of salary -- two or three times salary -- all the way up to 150,000. So it's a function of the size of the group, the salary, the individual and quite frankly the desire of the CEO of the company. If he feels like he needs Guaranteed Issue limits higher and it's a big group, he'll ask for higher Guaranteed Issue limits. But basically we've seen Guaranteed Issue limits going from 25,000 to 150,000 starting at one times salary going up to three times salary and commission levels that go from 85% to 45% of the first-year premium.

That's real rough. It's an easy calculation to figure out. But I think the key is once you enter that market, you need to have a good handle because as soon as you come out with one Guaranteed Issue limitation rule, you'll have an agent call in and say, "I can get this big case if we up the limit." And what you need to be able to do is say, "Are you not going to get the case if we don't up the limit?" If he says, "Yes," then you say, "Well good, then you'll be willing to lower your commission." You can't say, "We'll get back to you." I'd be prepared to address that.

MR. CUTLIP: You mentioned the 85 to 45. Are you really seeing that big a swing?

MR. SMITH: Yes.

MR. CUTLIP: I guess I would expect in working with the field force to only get away with maybe a 20 to 25 point swing.

MR. SMITH: But if you're talking about Guaranteed Issue limits that go from 25,000 or 50,000 to 150,000, that's an equally big swing. It's going to have a tremendous effect on your mortality. We have seen that big of a swing.

MR. SPENCER KOPPEL: I'd like to talk a little bit about the risk of response rates because I think it's a major difference between the two types of marketing approaches and specifically things that have happened starting towards the fall of 1987 in two areas that I think illustrate the difficulties. I was in the position, probably fairly unique, where the chief marketing officer reported to the actuary in a direct response operation and probably proved why that shouldn't occur. We were faced with a couple of things. One was the possibility of a change in Medicare and having to make the decisions as to how much TV time to buy for the January, February, and March campaigns and having to make those decisions at a time when we weren't sure how much Medicare was going to be sold because of the changes that were contemplated by Congress.

Similarly, we were considering the question about celebrity endorsements in general and how much celebrity endorsements or graded benefit life was going to be able to be sold on TV during the beginning of 1988 and having to make decisions early on to decide how much TV time we would have to take. Of course, once you make the commitment you can get out of some of it, but you can't get out of all of it. So you have a large advertising budget you have to deal with as to how much you can spend for the business that you have. Does anybody have any ways of mitigating that kind of a risk?

MR. SMITH: You're asking how do you mitigate Congressional or legislative changes?

MR. KOPPEL: Or making decisions at a time when things are in limbo or in flux regardless of whether it's Congressional, NAIC, market conditions, what have you.

MR. SMITH: I don't know. I know a few big companies that would say to increase your lobbying budget.

MR. LUND: That perhaps is a bit of an extreme example. We faced similar considerations in our mailing campaigns with our January Medicare Supplement. We tried to weigh up several alternative scenarios and delayed decisions until the

last possible minute at specific decision points along the way based on the information we had on hand at what we viewed were critical decision points. We made a decision at that point on what we had but I was trying to hold off some alternatives, whether we were going to mail something different should we really get blown out of the water. I think in that situation we have to establish critical decision points based on the best information we have at those times and the decision points have to be as late in the process as possible.

MR. KOPPEL: About the only thing we were able to do was to have the capability of switching from one product to the other with the TV time that was available to the degree that we could accomplish that. And you're right, in direct mail where you have to print everything in advance and there is a significant lead time -- you don't just print one day and mail it the next day -- you have to get printers lined up and everybody in Philadelphia is doing the same printing at about the same time. It really puts a crunch on you in terms of those kinds of decisions, too, and direct mail pieces get old fast. They have a very short shelf life.

MR. SMITH: I'd like to emphasize a point that Neil made on how the product development actuary is judged and that is by the number of sales and the profitability of the sales. I think that ties in with what Bob and I were trying to say and that is it's no big deal if you accept through Table 6 as standard. I know it makes a lot of actuaries uncomfortable that they aren't being judged on the level of mortality of a particular marketing effort but if you're expected mortality level is 125% of 65-70 Ultimate and you're within that standard and in order to accomplish that you have had to accept through Table 6 and that maximizes the profits, you have to be in the frame of mind that Neil described where you're being judged by the salability of the product and the profitability of the product, not just the mortality standard. I think that's a pretty consistent point.

MR. RICHARD D. PITTS: I'd like to go back to Spence's issue. It touches on the base of risk management and part of that includes our allocation of surplus and the development of the business risk surplus that we may have developed. And it gets back to a point that was made by one of the speakers that you've got to allocate the cost of failure or, in this case, the cost of added risk across all product lines and essentially build up a surplus fund that can be used in a year where you make a business decision that may not become, in fact, a very good financial business decision.

MR. SMITH: I agree 100%.

MR. LUND: Failure is, at least in direct response business, a factor that is always there. You attempt to minimize failure through testing, but there are always elements that are basically beyond your control and you have to accept a certain level of failure according to your capital and surplus or explicitly put it in your pricing.

MR. SMITH: I think that represents another area where direct response companies have regressed in thinking a little more than companies offering products through traditional distribution systems. I look at a lot of traditional products, the Universal Life products, and they've got break-even periods of 14, 17 years and I know that they offer products where the rate book year is six to nine months long. They're offering some products that have not been very successful and they aren't allocating the cost of these failures. Without

allocating the cost of these failures, they still have a profit objective that's very low. The risk of failure is there in direct response companies and I think the risk of failure is clearly there in agency-produced companies or brokerage-produced companies and that risk needs to be absorbed.

MR. LUND: The point that you touched on, Brad, is the concept of shelf life. When I came into the insurance industry, measured shelf life in terms of how long a rate book lasted was real long and it's very short today. And while this is generally a concept in the retail businesses, it's not something that's been translated necessarily to the insurance industry. We have to recognize that the products we develop today have very short shelf lives and if we're pricing for a long break-even where our profits are way off, we've got a big incompatibility with the real shelf life of the products.

MR. DESAI: Back to the same question Spence had, a couple of things come to mind. Not only can you switch products and other things, but taking the Chinese character, it seems that crisis and opportunity have the same character. So if you can turn crisis into opportunity in a moment like that it would be fruitful. How can we do that? We can use some creativity. You may have a management, risk management, and have a lower amount of TV time committed but you can have a two-step effort for the TV slot as one of the slots made up. You can have a Medicare information package that is made up which will be aired at that time which will be very helpful and you can have a two-step effort for people to call in for more. So we need to use some creative thinking and turn the crisis into opportunity because obviously when the state of flux is happening we are much more knowledgeable than the general public. If we want to serve the clients or potential clients we need to take that opportunity and grab it.

MR. KOPPEL: Two things. First of all, the fact that this risk exists I think is justification why in the direct response marketplace and in pricing for direct response, you must price for a higher profit potential margin or requirement than in other lines of business because it is a significant risk. We are always faced with looking at the successful campaigns and saying why don't you price for those successful campaigns because that's what we've gotten, but ignoring the fact of some of those others that have been thrown back into obscurity because we wanted to forget about them. The second thing is that it does give a significant opportunity to the company that can figure out ways to mitigate that risk to get either better profit margins or better pricing competitively to accomplish that. So I think those are some differences that probably don't exist to the same degree at least in the agency side but do exist in the direct response.

MR. POLILLI: It strikes me if shelf life on products is getting shorter that marketing will be much more difficult in direct response in maintaining your control positions as you move from control to control. Also, another thought on the mortality. We did what I had described and developed a higher mortality table. I think it was when we went to 200% extra mortality that we could take a 50% extra increase in our conversion rate on the policy. It got very interesting when I thought I ought to tell the underwriters exactly what I was expecting (in fact I think it's 200% mortality not 200% extra) and I said, "Give me 100% extra mortality," and that's what our target was. In one of the great miscommunications of all time that I must admit to, they didn't hear what I really wanted them to do. They heard we better check everybody out and we'll get a lot of attending physicians' statements (APSs) to make sure that they're within the 200% mortality. So all of a sudden our underwriting time extended itself to an

unbelievable amount of time and there was all this underwriting cost. I said, "What's going on?" They said, "You had to keep it within 200%." And I said, "I didn't mean specifically for each person. I meant kind of in the average." It wasn't one of the greatest communication jobs I ever did, but we've tried to settle that down. Also, Neil had mentioned a way they were using to measure profit returns and I was wondering if he would share that with everyone.

MR. LUND: First, I'd like to give some background to set the stage for this. A year and a half ago we were a publicly traded company, at which point we were purchased by a Dutch insurance holding organization. Fortunately, they had a good handle on insurance to understand what's going on. One of the measures that we used in the past was stock pricing. Of course, not incidentally, that was tied into stock option. The Dutch were very progressive and also wanting a good measure for all their companies, they were looking for a way to measure what the company was truly doing. We settled, with a few minor problems that still need to be worked out, on establishing the value of the company that is a modified book value of the company that currently exists plus present value of statutory profits. It's done on an annual basis and reconciled. An explicit assumption in our evaluation is that 50% of statutory earnings whether in fact they are actual or not. There are a couple of interesting things that fall under this. First of all, we as management of the company are measured on the total growth of the company. This is the value that they are placing on the company. The growth is that we have to sell the profitability, not measured solely on sales, but if we sell unprofitable business, the value of the company goes down. If we don't sell new business, the value of the company goes down. We're faced with a daily severe yardstick here that indeed is actually quite appropriate for us and probably overall a better measure than stock price ever was.

MR. SMITH: I think that value added accounting is definitely insightful and it seems that the Dutch and Great Britain use that concept to a much greater extent than we do. I think direct response companies tend to use it more in the United States than traditional companies.

MR. LUND: I know in the application of it, it was certainly easier for us than those of traditional agency companies. We're still sorting out the problems. I expect it to be a very good yardstick for us.

MR. SMITH: Bob mentioned that it was difficult to communicate with the underwriters and I had mentioned that it was important to communicate the success goals the company relates to sales and the profitability of sales. Somehow I've found it even more difficult communicating that concept to the underwriters where they feel like they're judged totally on their mortality level in comparison to the mortality level of their buddies at different associations. I've found it very difficult, and it sounds like you have too Bob, to communicate that concept of increased profitability due to increased risk acceptance levels.

MR. PITTS: Neil, to follow up on that, one of the obvious problems that you have addressed is a question that came up yesterday where you've got a large capital outlay for a seemingly non-returnable item, namely research or customer service. How do you bring that into the value added concept and sell that to the Dutch?

MR. LUND: Everything is in that. If you view that as an item that's just expense when it occurs, it's going to affect the full value of the company at that

point in time. It's going to reduce the book value of the company. Unless there's a return in terms of profitable sales, you've reduced the value of the company. So if I can turn your question around I think the approach that the Dutch have taken and that we have taken is that it becomes a selling tool in order to be able to do that sort of thing. If I can justify the fact that I've spent $150,000 or $250,000 on market research and the outcome of that has been the higher value to the company and I'm meeting my growth and profit objectives, I can do it. No questions are asked as long as I'm meeting my growth objectives.

MR. SMITH: So what you're saying is that the dollar invested in market research has to yield some positive results very soon, possibly before the next value added accounting period is over with, which I think is consistent with the value of market research. I think market researchers tend to say, "Market research is great -- period -- and you will find the value over the long term." But I think there is a little discipline required there and that the value has to be reflected.

MR. LUND: Discipline is required. I think it's pricing actuaries who need to drive home the point to our companies that everything the company does should be measurable to some value and look for the appropriate measures. Everything has cost. Everything should have a mirror result. Really try to tie into that concept. Identify the cost and measure the result.

MR. SMITH: One final comment: it appears there might be some inconsistency between what the audience has espoused and what the panel has espoused and that is higher profit objectives on direct response business due to the increased risk. Is that consistent with the fact that we accept a front end mailing that's possibly negative and subsidized by what we call the value of the customer or subsequent policyholder mailings? I think it's definitely consistent and I think that's a concept that the value of the policyholder is one that could be expanded upon and used by companies that offer products through traditional distribution systems. Clearly, if you look at agent sales, a lot of their sales are to existing customers and we haven't necessarily reflected that in our thinking.