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# EVALUATING FINANCIAL ASPECTS OF DIFFERENT DISTRIBUTION SYSTEMS

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- o How is profitability of distribution systems measured?
- o Are there differences in underwriting and mortality or lapse levels by distribution systems?
- o What are the levels at which to measure profitability?
- o Should the profitability of individual producers be reviewed?
- What are the best ways to manage the financial aspects of different distribution systems?
- o What is the effect of replacement or rollovers on distribution systems?
- o How are the costs of distribution system development handled?

MR. JAY M. JAFFE: The subject we are going to be discussing is one of the more difficult panels I have moderated. There are no black and white answers to the questions the panelists will address. This is a very subjective area.

In 1964 I was involved with a professor from the Harvard Business School, which resulted in a Master's thesis for me and a PhD thesis for him. I found that the book that my professor wrote, Management Control in Life Insurance Branch Offices, essentially covers the topic we are now talking about. He did an analysis of three different companies and came to some conclusions as to one or more methods of helping these companies control their operations in their branch offices.

The subject is still around, and we're very fortunate to have three people with three different points of view. Bill Koenig is from Northwestern Mutual. Bill's perspective, of course, is going to be that of a rather large specialized mutual insurance company selling a particular line of business, individual life, through a career agency force. James Van Elsen, from Inter-State, brings another perspective to the panel. His company deals mainly with brokers in the life insurance business. David Moorhouse, who was recently with American Family in Columbus, Georgia, was involved with an agency force selling a specialized product. They are independent agents, not captive company agents. Their products are slightly different from the traditional life products.

MR. WILLIAM C. KOENIG: My company is a large mutual which has specialized in the sale of individual life insurance. It operates solely on the career agent/general agency (GA) system. It has over 100 general agencies and is licensed in all 50 states and the District of Columbia. Since it does not accept any business other than that written by its own career agents, it has not had to weigh the profitability of one type of sales outlet against another. By definition, if the company has been a profitable enterprise, the general agency system has been profitable.

#### PROFITABILITY OF AGENCIES

It is obviously true that some general agencies are more profitable than others. On one level, some general agents do enough of the right kind of activities to earn themselves incomes sufficient to maintain their desired lifestyles, and some do not. On a second level, some general agencies produce business with the kinds of characteristics we know lead to company profits, and some do not. On the first level the GAs largely sort themselves out. Those who make adequate incomes tend to stay, and those who do not make adequate incomes tend to terminate. Usually, on the second level the company must do the sorting, since it is quite possible for an agency to write a large quantity of business which is unprofitable to the company while generating admirable commissions to the agency itself.

Let's talk first about the GAs whose activities are not generating "adequate" incomes for themselves. (The word "adequate" presumes some general level of agreement as to what constitutes a reasonable GA lifestyle.) Most of the failures we see are recent GA appointments. Why is this so? Every time an agency opens up, the entire situation is extensively reviewed by a team of Home Office people, including both Agency and Field Financial specialists. In the simple case it is only the replacement that is at issue, but it may also be the territory or market opportunity. Our agencies have an average size of \$2,300,000 of annual premium, and we expect that somewhere in the neighborhood of \$1,400,000 is required to support an agency given our compensation package -- depending, of course, on individual circumstances. The financial aspects of every new general agent appointment are structured, very carefully, in discussions between the H.O. specialists and the GA designate. Standards of performance, especially with respect to recruiting, are spelled out for about a five year start-up period. Every item of income and expense is projected. Our GA compensation package is structured such that almost all GA profit is in renewal overrides. We effectively loan funds to most of our new GAs based on renewal overrides as collateral to help them get going.

If an agency is "too profitable" over the near term -- that is, more profitable than can be justified for a new appointment, usually due to the sheer size of the agency involved -- certain elements of noncontractual GA income are scaled back or withheld entirely to put more emphasis on the GA's own performance and less on the funds arguably produced due to the efforts of his predecessors. If an agency is "not profitable enough" over the near term to support the new appointment but can become so in a reasonable period of time with extra support, that extra company subsidy is provided.

The goal in all cases is to create what amounts to a unique compensation package which will produce an adequate income only if standards of acceptable performance are met. If these standards are exceeded, the general agent will prosper, and income projections will be exceeded; however, if the performance standards are not met, the GA's income is likely to be unacceptable as well. These latter situations represent failure not only for the GA involved, but also for the company. Especially in those cases requiring subsidy, a GA

failure means that the subsidy was wasted in that the desired goal was not met. Another new appointment is necessary, with almost certainly another new round of subsidies. At the same time, this system is superior to one which institutionalizes failure by providing adequate incomes at too low a level of achievement.

By the way, our new general agent appointments are drawn exclusively from within our field system. We believe that a successful general agent (or other management type) for another company would not very likely be interested in starting over. It is more common that the not-so-successful managers tend to see greener grass elsewhere. It is our experience that when a general agent fails with us and goes elsewhere, he almost invariably fails again. As a result, we have never seen the wisdom of believing that another company's failure would somehow be a good candidate for us. With the costs of failure as high as they are to the individual, the agency, and the company, it has always seemed more profitable to us to "grow our own."

Why don't we see many longer term GAs failing, or generating less than "adequate" income? We track the financial progress of each of our GAs carefully, and any deterioration would be caught at an early stage and remedial plans instituted. That remedial plan will often consist of an increased emphasis on recruiting. If corrective action is not taken by the GA, we might begin steps to transfer the agency before the situation worsened even further. We do occasionally have cases of general agents who have succeeded in building their agencies to such a point that they generate adequate incomes with seemingly little current GA effort. This is a problem if the agency is deteriorating in other ways, either in new manpower due to a lack of GA recruiting or in morale due to a lack of GA attention. Each situation is unique and must be managed based on the particular facts of the case. In each case our goal is to halve the deterioration, even by appointment of a new GA if necessary. If a successful agency deteriorates too far, it falls back into the category which requires extra support at GA changeover, always a less profitable venture from our point of view.

Keeping the agencies up and running as successful business ventures is probably the first order of business. A failing agency that writes "good business" is

still a failing agency, and any extra profits generated by the business will be lost in the expense of rebuilding the agency. A failing agency that writes "bad business," the far more likely event, is just adding one more expense to an already expensive situation.

## PROFITABILITY OF THE BUSINESS

The more interesting and challenging questions arise in trying to determine which of our agencies are writing the kind of business that is more profitable to the company. This is a more difficult exercise, since you cannot count on a general agent to let you know that although his agency is writing a lot of business, it is of an inferior quality. In fact, from a field perspective there is almost always a "good reason" for poor quality. For example, we know that new agents have poorer first year lapse rates than experienced agents. So, if an agency has a poor first year lapse rate, is it because the business is of a lower quality (bad), or because the general agent did a relatively better job of recruiting and has a lot of new agents in his shop (good)? The point here is that at the field level the issues of quality business and profitability are never as clear cut as they are in the actuarial formulas. But if you plan to use actuarial formulas to measure profitability and then reflect that measurement somehow in compensation, or if you introduce some arbitrary adjustment to compensation (somehow based on quality factors) as a proxy for profitability measurement, you will certainly have to deal with the field issues as well. Be prepared.

I'd like to talk about some profitability/quality measures that I have some experience within my company's total field compensation package. First, lapse rates. We have for almost 20 years now had an element of compensation at the agent level which enhances the agent's renewal commissions if his first year lapse rate is better than the company average. Why first year and not renewal or overall lapse rates? One practical reason was that the first year rate was more readily available. Also, we felt it was the first year rate that most clearly tied to the quality of the sale and the business. On the other hand, one big lapse can have a relatively large effect, which can lead to some controversy. The amount of the renewal enhancement is not directly tied to the increased profits to be expected from the better than average persistency.

Rather, it serves more as an attention-getter, a proxy for a true profitability measurement. In effect, we have said we will spend \$x as an incentive for good persistency. The \$x cost is borne proportionately by all our business. It increases with company growth, but the \$x figure does not change as first year lapse rates improve or deteriorate. We believe this factor has made agents more aware and interested in their persistency.

Now back to the agency level. We know that if the company is profitable, the agency system has been profitable, but clearly some are more profitable than others. How can we get general agents interested in the persistency of the business in their agency? First of all, since their profits arise almost exclusively from renewal margins in our system, you'd think they would already be exceedingly interested. However, we have gotten much more mileage and attention from some rather modest actions. Our GAs can qualify for some money to help pay for an agency supervisor by meeting certain standards of agency development and having an acceptable agency first year lapse rate. Agencies having lower lapse rates qualify for more funds than agencies with higher rates (and some are excluded altogether). In effect, we have said that if an agency has a first year lapse rate that is more than a certain level above company average, we don't see why we should be asked to provide more funds to pay a supervisor so we can presumably garner more business with above average lapse rates.

Not only do our GAs accept this; they urged us to institute a first year lapse adjustment in our District Agency compensation, which we have done. Our DA compensation is much more front-ended, and the GAs had felt that the DAs were not paying enough attention to lapses, thus adversely impacting the GAs' chances to qualify for the supervisory allowance. Of course, when we looked into it, we found that in general our District Agency first year lapse rate was quite good relative to direct general agency business. By the way, our agency lapse rates are weighted by the individual agent's years of service and contract type so that a general agent doing a good recruiting job is not discriminated against. As for patterns of quality, it seems to be more a function of the general agent himself than anything else. A general agent who believes in the value of good persistency, whether for monetary or philosophic reason, is likely to get it. While there is something of a regional bias, it

is perfectly possible for an agency in New York or Chicago to have a good lapse rate, and similarly possible for an agency in the rural midwest to have a poor one.

We do not recognize levels of mortality in our compensation package. Neither do we even do agency mortality studies, our feeling being that only our largest agencies have enough business to make any results even mildly credible, and a fair portion of the business in those agencies was written by agents no longer affiliated with the company. In short, I have felt that there was not a great deal we could do with agency-by-agency mortality data if we had them. Unlike first year lapse rates, the effects of poor mortality are deferred to such an extent that it is difficult to reflect them in any sort of program today.

The need is for some prompt measure of performance that is indicative of future mortality. One suggestion that has been made (but not implemented) attempts to make the prompt measurement by looking at the smoking question. Prior to recognizing smoking as an impairment, roughly a quarter of our applications were from smokers, and that rate dropped by one-third immediately upon our action. Where did the other smokers go? The smoking question is one place where agents (and GAs) constantly face the temptation to "accommodate" their prospective smoking clients. Smokers are not any more deserving of preferential rating treatment than are, say, AIDS victims. In order to emphasize the importance of the smoking question, and reward those agents (or GAs) who do a professional job of field underwriting and thus contribute to company profitability, a company might make regular nicotine checks and pay extra compensation to those agents who have zero or minimal "hits."

We would very much like to reflect morbidity experience somehow by general agency. We write a good deal of disability income and have found that morbidity results vary widely by agency. I will make the same comment here that I made with regard to lapse experience: an agency's morbidity experience seems to be at least as dependent on the individual agent and general agent as on any other factor -- including geographic location. Two agencies in one city can have widely varying experience. The question then becomes, as with mortality, What can I do with this information now that I have it? It does not appear legally possible to vary traditional compensation based on morbidity, although

it is our feeling that the experience develops much more rapidly, so it would be practical otherwise.

One might want to study expenses on an agency-by-agency basis. In fact, as part of our normal GA auditing work and New York Regulation No. 49 compliance work we have excellent agency expense records. While the bulk of our agency compensation is purely production driven, there are some elements that are not. A few agencies in high rent areas are eligible for a special rental allowance. Is business from these agencies less profitable? Perhaps, although counterarguments are easy to come by. You needn't really get into this controversy unless you intend to do something about it, and we have not. My company feels it serves a good business purpose to have a big-city presence, so any extra rental costs we incur are a business expense to be borne by the business as a whole. Similarly, business written through our district agencies generates an extra company allowance relative to direct GA business. Since we are not about to differentiate product value based on which of our agents made the sale, the added allowance on DA business is treated as an expense to be borne by all the business.

In both of these cases, and others like them, these extra expenses can't be forgotten just because we intend to charge for them across the board. It becomes very important to manage such expenses to make sure they do not get out of hand. For example, we annually review the rent level at which agencies qualify for the rental allowance. We have strict guidelines for where and under what circumstances setting up a district agency makes sense and is permitted, especially when in the same metropolitan area as the general agent. Without such rules there would be a strong incentive to set up DAs and filter business through them. By managing this expense, the percentage of our business coming from DAs has changed very little over time.

# PROFITABILITY BY LINE

Like most companies, we have been working hard to gain a better understanding of the profitability of our business by line. It wasn't too long ago that the individual life line simply overwhelmed everything, so there was little use in studying profits by line. Now annuities and disability income are quite

substantial lines by themselves, and the exercise makes sense. I won't say much about this, since it's not pertinent to the topic at hand, other than to say that there are some similarities in the issues that come up in studying profitability by product or by agency. For example, we can allocate rental expenses in big cities to the company as a whole, because it's worthwhile to the enterprise to be in big cities. If variable products or universal life has high ongoing systems costs, one might argue that these extra costs should be allocated to all business, because it's worthwhile for the company to sell variable products or universal life. One should ponder carefully and be comfortable with the possible ramifications of such decisions on product pricing.

## PROFITABILITY POTENTIAL

Our general agents have a major responsibility to recruit and train new agents. That sort of activity is clearly expensive and a sizable drain on the current profitability of the enterprise. We still feel that this expense is really more in the nature of an investment required to assure the long term viability of individual agencies and the company as a whole. While our general agents earn some extra allowances on the business of their new recruits, they still end up making a personal investment as well, both in time and money. Not all general agents are equally enthusiastic about making such an investment, especially as they advance in their careers to the point where they feel they will not be around to enjoy the return.

Ten years ago at a Society meeting in Toronto, Bob Shapiro led a session on agency profitability which you might want to review if you are interested in the subject. He identified as one element of agency profitability the increase from year to year in the present value of expected future business to be written. While clearly speculative, this is exactly the element of profitability that we are asking our general agents to address by recruiting and training. Almost twenty years ago we felt a need to focus some extra general agent compensation in this area as an incentive to recruit. Put another way, we wanted to place some sort of objective measurement on the return side of the recruiting equation to draw some attention away from the expense side. Each year we do an inventory of each general agency's future production potential by

assigning a point value to each producer based on age, years of service, and current production. The GAs qualify for a bonus based on the increase in their point total, and some of these bonuses have been quite impressive. Also, we require an acceptable point increase or point total to qualify for some other general agent compensation programs.

Again, this program does not pretend to measure actual future profits of future business. Rather, the calculation we make is a proxy for that measurement which is an attempt to sort out which general agents are creating more future profits in their agencies and which are creating less -- or actually running their agencies down. The program has not been a total success, primarily, I believe, because it is difficult for field people in general to understand compensation which is not strictly production driven. It may be more difficult in a very large, successful agency to improve future profitability potential than in a smaller agency. The GA of the latter may qualify for a bonus, while the GA of the former does not, which might seem totally unreasonable to him because his total income is a multiple of the income of the GA in the smaller shop.

## PROFITABILITY BY AGENT

Given my previous remarks about mortality by agency, I'm sure it will come as no surprise that neither do we study mortality by agent. We do keep track of first year lapse rates by agent, as I've said, and use these for purposes of calculating a renewal commission enhancement. However, enhancement is not tied directly to the increased profitability expected from business with low lapse rates.

It is sometimes argued that substantial producers are somehow more profitable to a company than more average producers. This is certainly true with respect to FICA contributions, for instance, but an integrated pension plan will offset this advantage to some extent. We have seen that larger producers tend to have larger expense ratios than other agents. Many companies have some element of compensation which increases with increased production, perhaps designed to offset this higher expense level. Any such production bonus element will very likely more than offset any "economies of scale" inherent in the business of

superproducers. The issues here are more philosophical and practical than actuarial. A large company like mine has many agents, and they are by no means a homogeneous group. They not only exhibit differences in production; they also are young, old, male, female, urban, rural, specialists, generalists, partners, sole practitioners, part-time managers, full-time producers, still in college, semi-retired, and on and on. The members of any one subset will have reasons for questioning whether the profitability of their business is being properly reflected in their compensation.

One of the truly intriguing arguments in favor of agent-owned reinsurance companies is the assertion that profitability by agent will be more accurately ascertained. To the extent they are starting out with a more homogeneous group, the number of variables they need consider in their analysis is reduced. To my knowledge, none of this work has yet been made public. Like many of you, I'm sure, I look forward to learning more about these techniques as information becomes available.

There is one particular area where the profitability of agents is constantly called into question, and that's with respect to new recruits. Some companies have concluded that the recruiting and training of new agents is too expensive an activity; that they can obtain more volume, and probably of a better quality, by spending their recruiting and training dollars elsewhere. I would say that it is important that recruiting and training be done in as efficient a manner as possible. To this end, we have a Training Allowance Plan which is based entirely on production. There is no monthly salary, although our general agents are free to provide one if they wish. We will provide the financing, with the GAs on the risk. As a result, they are very careful about who they lend money to. The plan provides a first year commission enhancement in each of an agent's first three contract years. It is greatest in the first contract year and declines thereafter in such a way that together with a special renewal schedule on this business, an agent who writes a modestly increasing amount of business each year should enjoy an increasing annual income. This program has been successful -- or at least a contributor to success -- in our agent recruiting for over 20 years. It has persevered through periods of low inflation and high inflation, and perhaps most impressively, through a period of declining premiums per \$1,000 unprecedented in the life insurance industry.

The most desirable feature of the plan is that it pays only when sales are made. Since even brand new agents have expenses, they cannot afford to stay under contract unless they are producing. It is an excellent method for weeding out failures early and only paying for success.

## PROFITABILITY OF ROLLOVERS

As a mutual company with a portfolio investment income allocation system, we have never seen much purpose in having policies "rolled over." I understand the "more coverage for the same premium" argument, but also feel that in many cases it could be successfully countered and the desired added coverage provided in a less expensive manner. Excessive replacements are a contributor to high lapse rates. To that extent, they can hardly be viewed as profitable to the company. The buyer is charged for a new round of acquisition expense, which is hardly profitable for him. If the agent is granted a new first year commission, or even a new full bank of renewals, there is almost certainly some profit there.

We have taken the view that rollovers are so rarely to the buyer's benefit that under no circumstances will we pay another full first year commission. These are cut substantially, by 80%, although a full bank of renewals is paid. We used to have a system whereby the first year commission rate increased as the age of the replaced policy increased, but we switched when we came out with a policy with lump sum capability. Our agents have been quite supportive. If you discount the "pay me or the business will go elsewhere" argument -- not particularly potent in a career agent environment -- it is logical to align the agent's and client's financial interests. This is consistent with having reduced commissions on replaced premiums.

# **SUMMARY**

It has been my company's thinking that mortality and persistency experience do differ by distribution system, and a good part of our good experience over the years is directly attributable to the quality of our career agency force. However, since we are committed to this system to the exclusion of all others, we are unable to test this impression. I'm not at all empowered to speak for

our agents, but I'd like to think that they would attribute some of our success to home office management and efforts. However, since they are also committed to our enterprise, they have not been able to test that hypothesis, either. In short, our attitudes have been something like those of partners in a long term marriage, who don't always agree, but who understand that it is in the long term best interests of both to work things out to their mutual satisfaction.

Because we are committed in this way to our distribution system, some types of profitability analysis don't seem to be particularly fruitful. Although not tasteful to actuaries, we simply accept the impression that our agency system is our best choice. We want it all to prosper, and we want it all to be profitable.

Our pricing is based on system average costs. Any time averages are calculated, some must be above average. Unless one is willing to act on such information, it is not fruitful to do complicated studies to determine which agents or agencies are above average in cost or below average in profitability. It is fruitful to design compensation programs which tend to lead all participants to more profitable behavior, thus improving the profitability of the enterprise as a whole. This system does not allow home office management to abrogate its management responsibilities. There are always exceptional cases requiring management skills and judgment.

The goal, however, is to have a compensation system which has clear incentives for profitable behavior. Agents are competitive by nature and want to be "the best." Yet there are some events that are beyond their control which could have a negative impact on the profitability of their business. A company committed to its agency system must protect that system from such events. In other words, the system cannot be charged for deteriorations in average profitability from any source. The weaker links in the system can't afford such charges, and although the stronger can, at least for a while, it is the whole system that is important. Since it doesn't have the capacity to participate on the down side, neither should it participate on the up side. As a mutual company it has been our policyholders, not the agents, who participate based on their experience. The agents prosper in proportion to their sales, mostly, but

also by the quality of their business and the resulting share of bonus pools (if predetermined total size) that they can earn.

Whether this strategy will be successful in the future has yet to be seen, of course, as has always been the case. There will always be modifications and adaptions, but it has a generally good track record.

MR. JAMES N. VAN ELSEN: Those of you who have been involved in considering demutualization for your company have probably heard of my company, Inter-State Assurance. After over 75 years as a small mutual company, Inter-State demutualized and became a wholly owned stock subsidiary of Central Life Assurance in May of last year. The Iowa Insurance Commissioner and Inter-State's policyholders approved the plan for demutualization and subsequent acquisition by Central. The primary concern during this process was the treatment of Inter-State's mutual policyholders. The challenge was to adequately compensate them for their interest in Inter-State. A related issue that was discussed at length in the hearings was determination of the going-concern value of Inter-State and its field force. Two widely-known actuarial consultants testified during those hearings that the going-concern value of Inter-State's field force was zero.

Before you come to the wrong conclusions, I need to point out several factors about Inter-State's field force. In 1979, Inter-State's inforce volume was \$280 million. At the time of the demutualization in May 1985, the company had inforce volume of over \$4.5 billion. Inforce business increased 16 times in 5 1/2 years. The growth of Inter-State business has been dramatic and places Inter-State among the fastest growing life insurance companies for this period of time. Without going into specifics, the quality of the business written during this period was as good or better than for most companies. Inter-State's products are distributed by many outstanding professional agents and agencies. The average premium per sale is high, and the face amount per sale is also above average. The consultants' suggestion that there was no going-concern value in our field force was certainly not a reflection of the quality of Inter-State's agents.

The key factor in their opinion of no value was that Inter-State markets its products through life insurance brokers. These brokers are independent businessmen looking out for their own interests. A high percentage of those agents who distribute Inter-State products also sell for other companies. When they elect to place a policy with our company, it is because they believe Inter-State best serves the needs of agent and client. Our past performance means very little to the brokers. They are concerned with the products and services the company provides today. Inter-State is a manufacturer of products. Agents and brokers distribute the products. It is imperative for brokerage companies like Inter-State to offer competitive products and services, or else sales will decline. For these reasons, the actuarial consultants placed a zero value on Inter-State's field force.

Brokerage companies can compete for a broker's business in three ways: products, services, and compensation. Products may include life, annuity, and health forms written on an individual or group basis. The key from the agent's perspective is that whatever is offered must be competitive. The field force is especially concerned with the interest and cost of insurance rates for universal life insurance and premium rates for term insurance. Several agencies use sophisticated computer analyses to evaluate various companies' products. On the basis of one agency's analysis it sold our term product at ages 37, 43, and 52. It's enough to make you take a deep breath when graduating premium rates.

Inter-State has been effective in marketing select and ultimate term on a guaranteed premium and an indeterminate premium basis. Our universal life products are very flexible, accommodating high commissions, and yet are able to be very competitive. My company has been contacted by some agents marketing specialty products. The product management committee evaluates these products and decides if costs measure up to anticipated return.

Inter-State's underwriting of applications is very important to our field force. Applications must be carefully and quickly evaluated. Although our underwriting is aggressive, our mortality experience has been favorable. Inter-State also offers guaranteed-issue and simplified-issue salary savings programs. Other brokerage companies are offering guaranteed-exchange programs

and other underwriting incentives to encourage brokers to place business with their companies.

The second factor important to Inter-State's field force is service. Service includes all areas of agent and policyholder contact. It includes sales support provided to agents at the point of sale. A high percentage of our field force sell by effectively using ledger sheets and illustration programs. Policy-issue time is extremely important. Commissions must be paid on time. In short, career agents are more tolerant of slow service with their primary company, but not with a brokerage company. Finally, the policyholders must receive excellent service. Providing excellent service to the agent and policyholder is as important as the competitiveness of the product. If you are unable to service the business properly, agents will rewrite with another company. The majority of the agents in our marketplace are not compensated heavily for service. Poor service to a policyholder reintroduces the policyholder to the agent and provides the agent an opportunity to rewrite the business with another company.

Of course, a very important element in the acquisition of business is agent compensation. The general rule is the higher the commissions, the better. The majority of compensation arrangements in our market are heaped first-year commissions. There have been discussions by many companies about leveling commissions. Currently, however, level commissions are not succeeding. A variation of the level commissions has been commissions on accumulation values of universal life policies. There are also various bonus and other incentive compensation arrangements.

The interesting thing about the three competitive factors -- products, services and compensation -- is that companies tend to compete on the basis of the factor which they do the poorest. In other words, you can have the best compensation arrangements built within an extremely competitive product, but if you don't provide good service, you are not going to get the agents' business. The same holds true for the other factors. For brokerage companies to succeed, they have to offer good products, service and compensation.

Given the brokerage market environment, I want to discuss the effect it has on pricing assumptions. The primary assumptions are persistency, mortality, expenses, investment earnings, profit margins, and contingency margins. It is no surprise that the producer is the key to good persistency. In a very realistic sense, the agent owns his/her business. This certainly is not true in the legal sense, but rather the agent has the capability of producing persistent business. In evaluating persistency there are significant differences between issue ages and the sizes of the policy. The type of sale will also have a significant effect on persistency. For example, insurance written for personal purposes does not persist as well as insurance written for business purposes. Another frustration for the actuary is that the past experience of the company will not always be indicative of experience in the future. The fiasco in the select and ultimate term market is evidence of this statement. While it can be argued that companies should have known that the experience on these policies would have been unacceptable, I doubt that an accurate evaluation of this marketplace would have indicated such bad experience. It is also interesting that our company experience with this product is that persistency rates have been improving significantly. This may be because of changes that have taken place in the reinsurance marketplace.

A key factor in evaluating persistency is the agent's incentive to have the business persist. Typical commissions provide for very little renewal commissions. The agent earns most of his compensation in the policy's first year. Companies earn their profits in renewal years. It is definitely a situation where the company's interests are not completely in line with the producer's. For compensation reasons, the agent may approach his/her policyholders five years later, three years later, or even every year to rewrite policies with other companies. This is how many agents are currently surviving. This explains the unusual pattern in persistency that Inter-State has experienced on its universal life business. We have written universal life since April of 1980. Early persistency was extremely good -- far better than expected for any life insurance product. In the later policy years, however, the lapse rates have increased. One reason may be that the initial lump sum deposits are running out. Competition is also more fierce than it was in 1980. Another possibility is that agents are replacing our early front-end loaded universal

life policies with back-end loaded policies -- or finding other reasons to replace business and earn additional compensation.

Agents also influence mortality experience. The completeness of non-medical applications affects how well the underwriters can select risks. Many professional agents use good field underwriting judgment and produce quality risk selection. It's important to remember that the agent only gets paid when cases are paid, not on the quality of his applications. His compensation is primarily at the point of sale and is only minutely affected by the ensuing mortality results. In many cases, good field underwriting may result in a case's not being placed.

In evaluating the necessary underwriting rules, the company must be very careful to properly evaluate the cost-benefit relationship of any medical underwriting procedures ordered. A key consideration is the underwriting requirements of competing companies. Any significant deviations from the practices of competitors must be made up in reduced expenses or reduced expected mortality. Our company is conservative in preparing such evaluations. This is particularly true in the areas of guaranteed policy-exchange programs. We do not believe the significant increase in mortality costs is offset by the reduced underwriting expenses.

Expenses may be the most difficult assumption for the actuary to develop, and it may be particularly true for the small and medium sized companies. It is very difficult, when developing a product, to assess how well it is going to sell in the marketplace. There are many stories of complex products requiring intricate administration developed in anticipation of substantial sales that never materialize. There are also many stories of quickly developed products requiring routine administration that double the size of a company. This makes it very difficult to accurately determine the acquisition unit costs in pricing work.

An extension of this difficulty is the cost spiral that many small and mediumsized companies are experiencing. Current expense levels, if used in pricing, result in uncompetitive products. Products with these assumptions reflected in

the prices are not competitive and don't sell. The end result is higher expenses than anticipated.

The inverse of this spiral is that the level of production will reduce unit costs. When high production goals are assumed, the actuary can design competitive products. At this point, when the production objectives are realized, the company achieves the profit objectives as expected. The opposite happens if the production goals are not realized.

The estimates need to be reasonable. Is is really likely that the company will double its production in two years? In some instances, it is. You will also want to assess the level of risk if your assumptions are not realized. The level of production is significant for a product like select and ultimate term, because acquisition costs are high and renewal premiums are low. Salary savings products with low first-year acquisition costs do not require the same sales results.

The amount of support given to the field force is a consideration. The brokers who represent Inter-State are demanding more and more commission in return for less service. This needs to be reflected in pricing. The effect of future events in the policies needs to be considered. Examples include the underwriting costs on reentry for some term products and the costs of annual statements for universal life products.

The level of investment earnings is extremely critical in the interestsensitive market. This market has become extremely sensitive to small differences in interest rates. To respond to this need, many companies are, I
believe, mismatching their investments against the liabilities they are supporting. When developing the assumptions for investment earnings, consider the
pressures which will be put on the margins in products. I will not delve into
the entire issue of asset-liability matching, but consider this very carefully
before putting all your universal life investments into 30-year bonds.

Other factors which affect investment earnings are the maximum-loan leverage sales. The incentive for this type of sale may decrease with the introduction

of the new tax law. Finally, you will want to consider the effect of any commissions that are advanced and financing arrangements.

The final pricing components are profit and contingency margins. These margins are being pushed down. This is particularly true in the interest-sensitive market. Some companies may actually be marketing with a negative spread on investment earnings. Sooner or later, I hope, sanity will return to the marketplace, and companies will realize the planned spreads in investment earnings. At this point, term products may be producing a better profit margin than universal life.

The marketplace for brokerage companies is very competitive. Let's review some of the realities of the marketplace. First, universal life products must credit the highest interest rates and charge the lowest cost of insurance rates. Term products must have the lowest premium rates. The company must also have the best service and pay the highest commissions. Failure on any one of these items will result in the marketing people's saying the product won't sell. Plus, to make things even more interesting, the writing agent has very little incentive to keep the business on the books and could care less about the company's mortality experience. There just isn't any way for you to accurately predict how much business will be sold.

Although not impossible, I would suggest that competing in the brokerage market is a very difficult task. Several companies are introducing new plans and services that enhance their competitive situation. Unique compensation programs are starting to show up. Some companies have introduced products with levelized commissions. Unfortunately, most of these programs have failed. A variation is providing commissions on the accumulation values in universal life. This seems to have enjoyed more success. Other companies are introducing products with no commissions, designed for fee-charging financial planners.

Many agents are providing less service, which means that home offices have to provide more service. Many professional agents want high commissions in return for producing quality business. They are not interested in company training, recruiting or marketing programs. All they want are products, services, and commissions. Some of the superbrokerage agencies may soon be underwriting

cases, issuing policies, and paying commissions to brokers. These agencies are actually extensions of the home office and will want to be compensated for the services they are providing for the company. Inter-State is currently negotiating such arrangements. One advantage to these arrangements is that the agent must make a significant investment to participate in this program. This investment may increase the bond to the company. There are some concerns about the quality control in these situations. Hopefully, this can be handled by post-underwriting and auditing.

The final area which has received a lot of attention lately is agent-owned reinsurance companies. Although widely discussed in the trade literature and highly touted by a few companies, they have not taken off as rapidly as some have predicted. In most of these arrangements, the agent makes a significant investment, putting money at risk with the expectation of a good return on the investment based on favorable experience of the agent's book of business. In some instances, the agent is actually heavily involved in the management of the agent-owned company. The investment takes many forms. Sometimes it is in the form of large sums of money up front. In other situations, it involves reduced first-year commissions. From the producer's point of view, there may be some tax advantages in terms of deferred compensation and capital gains instead of ordinary income. From the company's point of view, it may result in improved production, persistency, and mortality. All of a sudden the agent is as concerned about these factors as the writing company. The company's objectives and the producer's objectives are in concert. There have been some difficulties in some of these programs. Marketability of the stock is one concern being addressed. I believe, however, that most companies in the brokerage market will be forced into the agent-owned company arena in one of two ways.

The first is an aggressive posture. The companies that do business with the agent-owned companies first will attract new agents and, hopefully, improve the quality of business. A second posture is defensive. At some point, the companies not utilizing agent-owned companies will begin to lose business or will acquire business that the agents don't want to place with their own company. An extreme scenario on this would suggest that companies would begin to receive only the business the agent doesn't want in his own company. The key to the success of agent-owned companies is how direct the relationship is

between the success of the company and the success of the agent. It will be necessary for successful programs to have fairly direct relationships between the profitability of an agent's business and the ultimate compensation received.

The agent-company relationship can be considered a partnership. As with all partnerships, the only successes are those where both parties benefit. The companies that will be successful in the future are those that will be able to structure their programs so that what is in the agent's best interest is also in the company's best interest. Product design, quality service, and thoughtful compensation will be the keys which companies need to focus on in attracting quality brokerage business. A final key will be the company's adaptability to the changing environment. Like other segments of our business, the brokerage marketplace is changing rapidly.

MR. JAFFE: If the tax law eliminates capital gains taxes, what will that do to some of the agent-owned reinsurers and the incentive for an agent to own a company?

MR. VAN ELSEN: I don't believe it will eliminate the desirability of such programs. It may reduce the number of agents that would benefit. It will require more production for an agent to realize the benefit. The overall concept of agent-owned companies, I believe, is valid.

MR. FREDERICK S. TOWNSEND JR.: I think you said you were addressing the question of the marketability of stock in agent-owned reinsurance companies. Can you elaborate on that?

MR. VAN ELSEN: Much of the value an agent receives from an agent-owned company is reflected in the shares of stock he owns and the value of those shares of stock. If an agent, at the completion of his career, is unable to realize that value, it destroys the whole concept of the agent-owned company. I'm aware of several ways being used to handle this market value. Some companies have resorted to formulas, where the other stockholders in the company buy out the shares based on a formula. They might, for instance, pay the current statutory book value of the agent's business and statutory profits

for the next five to ten years. From the situations I've seen, it varies considerably from company to company on how they address this.

MR. JAFFE: I'm familiar with some examples. A typical clause in the agreements says that the ceding company and its actuary shall determine the value of the stock of the reinsurance company, and the direct writer has first right of refusal on the stock. The ceding company has a first refusal, because it wouldn't want its business in the hands of somebody else -- a competitor, for example. The provisions in the smaller agent-owned companies, I think, are quite restrictive as to selling of stock.

MR. VAN ELSEN: Of course the real concern is that once an agent has left a company, his business will also leave. A lot of arrangements I've seen want the agent to have some interest in the future quality of that business. The ones I've seen have been dealing with a statutory book value and future earnings as they emerge.

MR. JOHN DAVID MOORHOUSE: Because of the breadth of the subject under discussion, I will look at one product only (a 10-year non-participating individual term insurance product) to be marketed in a developed North American or European country.

Our life insurance company is seeking to build a new portfolio from scratch and will examine four distribution systems (discussed in the next section). The first is a captive sales force remunerated on a salary plus bonus basis, where salespersons are totally tied to a specific insurance company and do not sell the products of any other insurance company. The second is an agency network remunerated on a commission basis, where agencies are tied to a specific insurance company for a defined product by an agency agreement. Agencies are free to sell other products not covered by the agency agreement. The third distribution system is an agency network remunerated on a commission basis, where agencies are not tied to the insurance company by an agency agreement for any product. Last is a direct response program which does not involve a salesperson or agency network at any stage in the program. This is not intended to be an exhaustive list of distribution systems, either in terms of

systems operating in today's insurance industry or systems which might operate effectively in the changing conditions of the future.

In order to evaluate the four distribution systems, management will initially address three financial indicators (discussed later):

- (1) Costs of setting up each distribution system.
- (2) Ratio of productivity to setup and ongoing costs.
- (3) Ratio of profit to productivity.

Because it is difficult to obtain detailed data from insurers who have worked with these systems to date, I have drawn up theoretical data which I will discuss and use to draw comparisons between the four systems.

#### THE FOUR DISTRIBUTION SYSTEMS

# Captive Sales Force (Salary Plus Bonus)

This system has been used by the home debit or industrial branch industry for many years and was very successful in retaining policies on the insurer's books. This was in part due to the personal relationship built up between salesperson and policyholder, the connection often being maintained from one generation to the next.

During a time of slower change in the life insurance industry, with lower rates of inflation, an insurer could look forward to steady growth, and policyholders were able to plan for family security (on retirement or prior death) with a degree of reliance on future economic conditions. The salesperson, working in these conditions, could earn a reasonable living by building a book of renewal policies which gave him a steadily increasing bonus on top of a basic salary from the insurer.

Following the Depression in the 1930s and the Second World War, all that changed. Inflation became a major factor in planning for family security, the

salesperson's costs of doing business rose accordingly, administration of the portfolio was more cumbersome (until the advent of advanced computers), and prospects for the salesperson seemed limited. As these fundamental changes took place, however, consumer demand for a range of flexible, inflation-linked life insurance products increased. At the same time, disposable incomes were on the increase, and the need for greater protection against unexpected death, injury, or illness produced a whole new generation of products aimed at penetrating fast-expanding socio-economic markets.

Some of the problems in redirecting a captive sales force towards these emerging markets were, and still are, the recruitment and training of salespersons into "new," more complicated covers; how to sell such covers most effectively; how to keep lapses under control when so many insurers (and systems) are offering competitive versions of the same cover; and how to administer such business efficiently and cost effectively, thereby generating profitable business and offering an attractive return on insurance company stockholders' or shareholders' capital employed.

It is sufficient to note that earlier forecasts that the captive distribution system was in a state of fatal decline appear to be unfounded. Insurers have regrouped and diversified, average premium has increased, profits are being generated, and salespersons can still make rewarding careers. The insurer's sales/administrative support costs are being controlled (more sophistication on the sales side and more computerized efficiency on the administrative side), and with these changes have come the opportunity to expand product range and socio-economic market while retaining policyholder affinity.

# Agency Network (All Commission, Single Product Tied)

This system can be viewed as having developed from two major directions:

(1) The need for a life insurer to avoid high salesperson support costs while at the same time not becoming dependent upon a limited number of independent sales/renewals outlets.

(2) The need for agencies to be able to expand their sales by working with more than one insurer and thereby generating more commission income.

Here again, the system grew out of more stable conditions, subsequently swept away by the Depression and post-Second World War economic changes. The independent network was, and is, more free to realize the potential of "new" or emerging markets, development of these markets being achieved by a form of partnership between network and insurer. The variety of tied agency agreements is endless and reflects the many ways in which this partnership has worked successfully to date.

We should note that freedom of movement is not limited to the network. The insurer is also free to enter and develop different markets with different networks, each subject to its own agency agreement. Provided that all business costs can be monitored accurately, the insurer is in a strong position to evaluate the profitability of each of the agency networks beinging in the business.

Can the insurer, however, retain the business if the agency agreement is broken? What happens to future renewals of business written during the term of the agreement? Although it may be specifically stated that such business remains with the insurer, the agency network can switch its clients to another insurer.

## Agency Network (All Commission, Not Product Tied)

The expansion of this system also came about by pressures from more than one direction. As networks grew and diversified, the need to be seen as totally independent of any one life insurer became stronger. As insurers grew and diversified, the need to depend upon or be limited by the sales capability or market penetration of any one agency network was seen as an unnecessary limitation. As the buying public became more sophisticated about its insurance/ financial needs, it began to be more suspicious of both the captive salesperson and the product-tied agency network. As markets expanded, competition between agency networks increased.

The larger networks have diversified into a range of activities and have taken on some of the administrative expenses, thus enabling the insurer to charge more competitive premiums. However, as more flexible inflation-linked products have come into the market, the control which larger agency networks might be able to apply to sales volumes and market penetration needs to be watched.

The professionalism of larger networks has to be weighed against the affinity links generated with the consumer by smaller networks and the captive salesperson. Clearly, image/name advertising is only part of the answer to building a long-term relationship between policyholder, distribution system and insurer. Personalized service is very important. How personalized or efficient are some of the policyholder services provided by the larger versus the smaller (tied or untied) networks? How real is the threat of switching whole blocks of policyholders from one insurer to another by independent agency networks? Or, is business only switched by individual salespersons?

# Direct Response Programs (No Salespersons/No Agency Networks)

In the insurance industry, this is a comparatively new system, perhaps destined to open up whole new markets and become a more significant factor in the industry in the future. Viewed historically, the system (which I define here as including media, the mail, TV and radio) has developed to meet certain needs and fill in some gaps:

- A range of supplemental coverages not offered by many traditional insurers or distribution systems.
- (2) A range of target markets not penetrated by many traditional insurers or distribution systems.
- (3) An increasing disillusion, by the buying public, with salespersons of any type.
- (4) A demand by the buying public for clearer, more easily understood insurances presented in such a way that the buyer is free to make his or her own decision without the "interference" of a third party.

The life insurance industry tended to avoid this system in earlier days, leaving a few specialists to develop and refine it. Certainly, the agency networks viewed it with suspicion, seeing it as a threat to commission income from their traditional markets. More recently, however, it has been recognized that the system carries a number of good features, among which can be included (1) clearer control of setup and portfolio maintenance costs; (2) the creation of a more direct affinity between policyholder and insurer, which can be built upon by the sale of other types of insurance, using a range of distribution systems; and (3) the ability to assist the captive salesperson or agency network to build commission income by following up generated leads.

The direct response system also has limitations. For example, it may not be able to generate larger volumes of business unless some very precise target marketing techniques are applied, and the process of refined targeting may be a costly one. The labeling of a life insurer as a "Direct Response Specialist" in this system may limit the insurer's ability to grow in other markets where other distribution systems are needed.

# THE THREE FINANCIAL INDICATORS

# Costs of Research and the Setting Up of Each Distribution System

This indicator consists of the following two elements:

- Research to establish which system is best suited to the insurer's objectives in regard to growth, market position and return on capital employed.
- (2) Having completed research, the insurer will incur organizational setup costs associated with recruitment and sales training, field operations support (including a full range of literature and sales incentives) and all the administrative functions required to service ongoing sales activity.

Many of these costs can be reasonably quantified at the outset, but some are more difficult to quantify, depending upon the quality of salesperson recruited and administrative efficiency (between system and insurer, and between insurer

and policyholder). For example, the cost of initial research can be precisely quantified by the insurer hiring an outside consultant, or setting up an in-house project team, to carry out the research during a defined period of time. As such research proceeds, many areas of setup and ongoing costs will be identified and can be quantified with some degree of accuracy: e.g., policy issue, setup of internal records, premium collection, and claims administration. Even in these areas, however, there will be an element of approximation in the allocation of departmental overheads, which, for the "new" system to be established, must depend upon assumed production volumes.

When looking at recruitment, sales training, field support, and sales administrative support, quantification of projected costs is much more difficult. For example, what is the appropriate range of quality for recruits (educational level, past experience in the insurance industry, age and sex mix)? What type of sales training program will yield the best results? A lot depends on the characteristics of the markets to which the product is targeted for sale. How can recruits be evaluated during training and after they start selling? How can junior salespersons be supported financially during the early stages when they are building their bonus/commission income? To some extent, agency network systems take the burden of these questions off the insurer's shoulders, but on the other hand, the insurer will incur setup and support costs while relying upon the agency network to generate quality new business.

Because the quantification of sales support costs can be difficult, some insurers have started by identifying the market, the product, and the level of competitive premium, and then calculating the maximum commission payable within that premium structure. Following this process, the insurer has recruited salespersons or signed up agency networks, followed by a short training program, with limited financial support, and applied the strategy of "sink or swim" in order to separate the good from the not-so-good. In other words, sales support has been limited.

This strategy has worked in some instances in the past, but with the increasing sophistication of the buying public, increased competition between insurers (and against other financial institutions such as banks and investment institutions), rising support costs, and pressures on rate of return on capital by

stockholders, the insurer must refine his recruitment/support programs and control the wastage inherent in the "sink or swim" strategy.

At this stage, we note that the agency network systems require different sales support structures from the captive sales force system. For example, under the non-tied agency network system, no initial training or ongoing support services may be required from the insurer. In a direct response program, where no salespersons are involved at any stage in the program, support costs can be limited to internal personnel dealing with inquiries from respondents to the program.

Cost of research is defined as the cost of a specific project undertaken by an in-house team which will work to present full recommendations to management by a specified date. Cost of setting up the distribution system is defined to include setup of the recruitment/sales training organization, setup of the field support organization, setup of the productivity administrative support organization, and design/printing of sales literature.

## Ratios of Productivity to Setup and Ongoing Costs

This financial indicator can be viewed as two ratios: productivity/setup costs and productivity/ongoing costs. Productivity during a specific time period can be defined as gross written premiums less lapses, or as number of policies written less lapses. More complicated definitions of productivity can be applied, but in order to compare the performance of different systems (or of different salespersons or networks within one system), there are many variables at work, some of which are difficult to quantify.

For example, Network E = 100 salespersons, aged 25 to 40. Their average experience is 3 years in insurance. Network F = 50 salespersons, aged 35 to 50. Their average experience is 10 years in insurance. During the initial 12 months of the system, Network E produces 1,000 policies, and Network F produces 500 policies. Network E lapses 300 policies, and Network F lapses 100 policies. Also during the initial 12 months, Network E loses 20 salespersons and recruits 10 salespersons. Network F loses 5 salespersons and recruits 2 salespersons.

At first glance, Network E produces 2 policies for every 1 policy that Network F produces. However, the number of policies/salespersons is not the same. Effectively, Network E employs (100 - 20 + 10) salespersons, while Network F employs only (50 - 10 + 2) salespersons. Net production per salesperson equals 700/90 or 7.8 for Network E and 400/42 or 9.5 for Network F. There are many reasons behind this difference, including the fact that Network E employs less-experienced salespersons, Network F retains more salespersons, Network E may train/support less effectively, Network F may sell more to longtime customers, and so on.

It is difficult to allow for all such variables when comparing productivity generated by each system. I will define productivity as gross written premiums less lapses. Turning to setup costs, we use the same definition as in the first financial indicator. Finally, ongoing costs will be defined to include:

- bonuses/salespersons' salaries/commissions
- sales refresher courses
- sales incentives (prizes, conventions, etc.)
- policy conservation
- salesperson or agency termination costs
- salesperson or agency accounts administrative costs
- other ongoing administrative costs

Note that under the fourth system there are no costs for sales refresher courses, sales incentives and other salesperson or agency costs.

## Ratio of Profit to Productivity

We use the definition of productivity set out in the previous financial indicator. Profit can be defined in a number of ways, depending on the viewpoint taken. For example, from the viewpoint of shareholders or stockholders, profit can be defined as after tax, net of all policyholder allocations, allowing for creditor/debtor accruals and income from all sources. From management's viewpoint, profit can be defined as before taxes, after all policyholder allocations, and including income from cash flow and invested

policyholder reserves. We will take the second viewpoint, because management will be responsible for the introduction of the specific distribution system and will monitor the portfolio of business generated by that system.

## DATA TO BE USED IN COMPARISONS OF THE FOUR DISTRIBUTION SYSTEMS

As mentioned earlier, it is difficult to refer to actual results of insurers in the marketplace, for a number of reasons. I have, therefore, constructed the datasets in Table 1 based upon a broad industry experience, in order to illustrate the application of the three financial indicators.

A number of comments are required to explain the data in Table 1.

- (1) Research. Assumed to cover a well controlled project, the same amount is incurred by all 4 systems.
- (2) System Setup Costs. (A) involve the setting up of an extensive field support network. (B) requires less sales support materials than (C). (D) does not incur salesperson support setup costs but is assumed to require a more streamlined administrative system.
- (3) Salespersons at Start.
- (4) New Salespersons/Month. (A) starts slowly but builds up its number of salespersons fairly quickly. (B) starts with a larger number of salespersons, building less quickly. (C) being a totally non-tied network, starts with a large number of salespersons but is assumed not to expand its network.
- (5) Lapsed Salespersons/Month. (A), (B), and (C) all suffer from lapsation of salespersons. (A) retains salespersons more successfully, because its training/motivational programs are assumed to be more effective, and commitment to the insurer is stronger.
- (6) Salesperson Activity Ratio. This represents the proportion of salespersons selling policies at any time, and it is highest for (A). As

TABLE 1

	I tem	(A)	(B)	(c)	(D)
(1)	Research System Setup Costs	50,000 300,000	50,000 200,000	50,000 250,000	50,000 150,000
( 3) ( 4) ( 5) ( 6) ( 7)	Salespersons at Start New Salespersons/Month Lapsed Salespersons/Month Salesperson Activity Ratio	100 50 20 40%	300 30 20 20%	500 10 10 10%	NIL NIL NIL NIL
( 8) ( 9) (10) (11)	Monthly Production/ Active Salesperson Annual Salary/Salesperson Annual Incentives/Salesperson Field Support Staff Productivity/Administrative	10 Policies 10,000 100 1/50 Salespersons 1/40	15 NIL 50 1/100	5 NIL NIL 1/250 1/100	NIL NIL NIL NIL
(12) (13) (14)	Support Staff Gross A.P. per Policy Sold Initial Bonus/Commission Renewal Bonus/Commission	Salespersons 300 25% Yr. 1 A.P. 10% Yrs. (2-5)	400 35% 20%	600 50% 15%	180 NIL NIL
(15)	Incurred Claims Loss Ratio, Including Claims Reserves, by Policy Year	10% Yr. 1 A.P. 15% Yr. 2 20% Yrs. (3-5)	15% 20% 25%	15% 20% 30%	20% 25% 35%
(16)	End Year Policy Reserves	10% Yr. 1 A.P. 20% Yr. 2 30% Yr. 3 40% Yr. 4 50% Yr. 5	10% Yr. 1 20% Yr. 2 30% Yr. 3 40% Yr. 4 50% Yr. 5	10% Yr. 1 20% Yr. 2 30% Yr. 3 40% Yr. 4 50% Yr. 5	10% Yr. 1 20% Yr. 2 30% Yr. 3 40% Yr. 4 50% Yr. 5
(17)	Policy Lapse Rates	20% Yr. 1 15% Yrs. (2-5)	30% 15%	20% 15%	20% 10%
(18)	Direct Response Direct Marketing Costs (D.M.C.) Where Yr. 1 A.P. = 500,000 Yr. 1	NIL 2,000,000 Yr. 2	NIL 4,000,000 Yr. 3	NIL 6,000,000 Yr. 4	100% Yr. 1 A.P. 8,000,000 Yr. 5
(19)	Other Outgo, by Policy Year	30% Yr. 1 A.P. 20% Yrs. (2-5)	30% 20%	25% 15%	20% 15%
(20)	Investment Income Rate	10%	10%	10%	10%

the "tie" between insurer and system is reduced, so that activity ratio also is reduced.

- (7) Monthly Production/Active Salesperson. (B) produces more than (A) because (B)'s quality of salesperson is higher. (C) is the lowest, because larger premium sales are more difficult, and because the "tie" to the insurer is weaker.
- (8) Annual Salary/Salesperson. This only applies to (A). Allowance should be made for increases in salary from year to year. However, I have ignored inflation, and high performing salespersons are rewarded with incentives as well as increasing bonuses.
- (9) Annual Incentives/Salesperson. This includes prizes, conventions, etc.
   (B) attracts lower incentives than (A), because commissions are substantially higher than for (A). The insurer offers no incentives under system (C).
- (10) Field Support Staff. (C) only uses 1/250, because the non-tied agency network is assumed to be large, with little need for support from the insurer once the system is launched. (A), however, needs substantial backup, especially in the early years. Annual salary/costs per field support person averages \$20,000.
- (11) Productivity/Administrative Support Staff. Based at the insurer's office,
  (A) requires the greatest support, because quality of recruits is mixed.
  (C), on the other hand, has personnel (within the network) who are experienced in handling productivity queries and problems. Annual salary/costs per productivity/administrative support person averages \$10,000
- (12) Gross Annual Premium (A.P.) per Policy Sold. In (A), salespersons operate in their local territories, many not in the larger cities, and therefore produce a lower A.P. The socio-economic profile of policyholders rises from (B) to (C). (D) is assumed to generate responses from lower socio-economic groups and has the lowest A.P. For ease of comparison, all premiums are assumed to be payable annually.

- (13) Initial Bonus/Commission. (A) is lowest, because salespersons are also remunerated by annual salary. (C) is higher than (B), because its salespersons are concentrating on the more sophisticated financial services markets and, therefore, sell fewer policies during any period of time. Furthermore, (C)'s own organizational overheads are greater.
- (14) Renewal Bonus/Commission is payable from Year 2 onwards. (A) has the lowest rate (10%), imposed by the insurer in order to ensure that successful salespersons do not build up residual renewal commissions and then stop selling new policies. (B) has a higher rate than (C), because the total commissions structure in the product allows it; i.e., 35/20% is equivalent to 50/15%.
- (15) Incurred Claims Loss Ratio. Under (A), (B) and (C), underwriting (in the field or at insurer's offices) is applied, while under (D), cover restrictions apply during the first policy year. (B) and (C) produce higher ratios than (A) in years 1/2, because it is assumed that networks will "beat the system" more easily than tied salespersons. (D)'s ratios reflect claims experience in respect of lower socio-economic insured lives.
- (16) End Year Policy Reserves. On an approximate basis, these are the same for all systems. The scale is applied separately to each year's new policies written.
- (17) Policy Lapse Rates. Rates vary by system, with (D) assumed to experience the lowest rates, because a direct decision to buy is less vulnerable to switching by a salesperson or agency network. (B) experiences a higher year 1 lapse rate, because the insurer has less sales control than in (A). (C), on the other hand, employs the highest-quality salespersons. Aftersales service, impacting on lapse rates in year 2 and later, is assumed to produce no variations between (A), (B) and (C). Note that lapses are assumed to attract NIL cash values under all four systems.
- (18) Direct Response D.M.C. Under (D), an approximate average cost is assumed. This cost includes creation/artwork/printing of all sales

materials and media/mail costs incurred in offering the product to the market.

- (19) Other Outgo. This covers initial and ongoing administration and allocated overheads, but does not include general corporate overheads. Expressed as a percentage of A.P., it should be reduced as collected premium volume increases. For simplicity of illustration, this reduction has been ignored.
- (20) Investment Income Rate. This is the same average rate for all four systems.

## DISCUSSION OF RESULTS

Using the data in the previous section and the projections in Schedules 1 through 4, we now take a closer look at each of the 3 financial indicators.

# Cost of Setting Up Each Distribution System

In Table 2, while (A) is the most costly, we should project the potential business and its profitability before discarding (A) as being too costly to set up. Similarly, while (D) is the least costly, projected business written and its profitability may not be considered sufficiently large to warrant even the comparatively low initial outlay. In comparing (B) and (C), management may feel that (B) allows the insurer to retain greater operational control than (C), which, by our definition, is a totally independent agency network. Here again, business projections need to be analyzed.

	TABLE 2						
	(A)	(B)	(C)	(D)			
Research	50,000	50,000	50,000	50,000			
System Setup	300,000	200,000	250,000	150,000			
	350,000	250,000	300,000	200,000			

TADIES

Year	Collected Premium	Bonuses Paid	Saler Saleries	spersons Incentives	Sale Field	Productivity Admin.	Other Outgo	Incurred Claims	Cash Flow
1	3,816	954	2,650	27	100	70	1,145	382	(1,512)
2	12,053	2,555	6,250	63	240	160	3,191	1,358	(1,764)
3	23,980	4,525	9,850	99	400	250	6,215	3,018	(377)
4	39,041	6,809	13,450	135	540	340	9,745	5,304	2,718
5	56,021	9,302	17,050	171	680	430	13,696	8,010	6,682
1/5	134,911	24,145	49,250	495	1,960	1,250	33,992	18,072	5,747

Year	Allocated to (from) Reserves	End Year Reserves	Investment Income	<u>Profit</u>	Start Year Invested Assets
1	305	305	(76)	(1,893)	NIL
2	935	1,240	(247)	(2,946)	(1,588)
3	1,780	3,020	(379)	(2,536)	(3,599)
4	2,769	5,789	(300)	(351)	(4,355)
5	3,834	9,623	140	2,988	(1,937)
1/5	9,623		(862)	(4,738)	

					Sal				Ι.
Year	Collected Premium	Commissions Paid	Sales Salaries	Incentives	Field	Productivity Admin.	Other Outgo	Incurred Claims	Cash Flow
i	5,112	1,789	-	18	80	40	1,534	767	884
2	10,418	3,110	-	24	100	60	2,768	1,742	2,614
3	16,398	4,565	-	30	120	70	4,136	3,003	4,474
4	22,949	6,134	-	36	140	90	5,619	4,408	6,522
5	29 ,986	7,801	-	42	160	100	7,200	5,934	8,749
1/5	84,863	23,399		150	600	360	21,257	15,854	23,243

Year	Allocated to (from) Reserves	End Year Reserves	Investment Income	Profit	Start Year Invested Assets
Ł	358	358	44	570	NIL
2	729	1,087	224	2,109	928
3	2,103	2,190	600	3,971	3,766
4	1,468	3,658	1,210	6,264	11,498
5	1,819	5,477	1,587	8,517	21,834
1/5	5,477		3,665	21,431	

PROFIT PROJECTION DISTRIBUTION SYSTEM (C)

in	(00	90'	

# PROFIT PROJECTION DISTRIBUTION SYSTEM (C)

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Year	Collected Premium	Commissions Paid	Sales Salaries	persons Incentives	Sale Field	Productivity Admin.	Other Outgo	Incurred Claims	Cash Flow
1	1,800	900	-	~	20	50	450	270	110
2	3,240	1,160	-	~	20	50	666	558	786
3	4,464	1,300	-	~	20	50	850	925	1,319
4	5,504	1,456	-	~	20	50	1,006	1,237	1,735
5	6,389	1,588	-	-	20	50	1,138	1,503	2,090
1/5	21,397	6,404	-	-	100	250	4,110	4,493	6,040

Year	Allocated to (from) Reserves	End Year Reserves	Investment Income	<u>Profit</u>	Start Year Invested Assets
1	144	144	6	(28)	NIL
2	245	389	51	592	116
3	312	701	161	1,168	953
4	354	1,055	330	1,711	2,433
5	376	1,431	554	2,268	4,498
1/5	1,431		1,102	5,711	

Schedule 4

In (000's)	PROFIT PROJECTION DISTRIBU
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# PROFIT PROJECTION DISTRIBUTION SYSTEM (D)

Year	Collected Premium	D.M.C.	Sales Salaries	spersons Incentives	Sale Field	Productivity Admin.	Other Outgo	Incurred Claims	Cash Flow
ı	500	500	-	-	-	-	100	100	(200)
2	2,400	2,000	-	-	-		460	500	(560)
3	5,960	4,000	-	-	-	-	1,094	1,326	(460)
4	10,964	6,000	-	-	-	-	1,945	2,617	402
5	17,268	8,000	-	-	-	-	2,990	4,364	1,914
1/5	37 ,092	20,500	_	-	-	-	6,589	8,907	1,096

<u>Year</u>	Allocated to (from) Reserves	End Year Reserves	Investment Income	Profit	Start Year Invested Assets
1	40	40	(10)	(250)	NIL
2	192	232	. (49)	(801)	(210)
3	473	705	(105)	(1,038)	(819)
4	856	1,561	(118)	(572)	(1,384)
5	1,318	2,879	(14)	582	(1,100)
1/5	2,879		(296)	(2,079)	

Which system will allow the greatest flexibility in meeting future market developments? Which system promises the most reliable buildup of a profitable portfolio? Which system is most insulated against cost inflation? Which system will give the best return on initial outlays? To begin to answer these questions, we have to examine the second and third financial indicators.

# Ratios of Productivity to Setup and Ongoing Costs

We will look at two indicators under this heading: (a) productivity/setup costs (P/S), and (b) productivity/ongoing costs (P/O).

T	٨	RI	т:	2

	(A)	(B) (000	(C)	(D)
Productivity Year 1	3,816	5,112	1,800	500
Productivity Year 2	12,053	10,418	3,240	2,400
Productivity Year 3	23,980	16,398	4,464	5,960
Productivity Year 4	39,041	22,949	5,504	10,964
Productivity Year 5	56,201	29,986	6,389	17,268
Years 1/5	134,911	84,863	21,397	37,092
Setup Costs	300	200	250	150

Table 4 is a selection of indicators which can be used to compare the four systems.

TABLE 4 (from Table 3)

(A) (B) (C)	(D)
P/S Year 1 13 26 7	3
P/S Year 2 40 52 13	16
P/S Year 3 80 82 18	40
P/S Year 4 130 115 22	73
P/S Year 5 187 150 26	115

Table 4 takes a year-by-year approach and indicates that (A) should be the most productive system after year 3. (C) appears to be the least attractive, while (D) is in the middle after a slow start.

TABLE 5 (from Table 4)

	(A)	(B)	(C)	(D)
P/S Cumulative Year 1	13	26	7	3
P/S Cumulative Year 2	53	78	20	19
P/S Cumulative Year 3	133	160	38	59
P/S Cumulative Year 4	263	275	60	132
P/S Cumulative Year 5	450	425	86	247

Table 5 takes a cumulative approach and indicates that (B) is more productive than (A) until year 5. (D), while not the worst, is significantly lower than (A) or (B) in all years, being handicapped by its slow start. Too much emphasis should not be placed on years 4 and 5.

In Tables 6 and 7, (A) and (D) are very close until year 5, while (B) and (C) are significantly higher. This indicates that (A) and (D) are less efficient in supporting the ongoing costs associated with their projected productivity.

Productivity/Ongoing Costs (P/O)

TABLE 6 (000s)

Year	(	(A)		(B)		(C)	(D	)
	(P)	(O)	(P)	(0)	(P)	(O)	(P)	(O)
1	3,816	4,946	5,112	3,461	1,800	1,420	500	600
2	12,053	12,459	10,418	6,062	3,240	1,896	2,400	2,460
3	23,980	21,339	16,398	8,921	4,464	2,220	5,960	5,094
4	39,041	31,019	22,949	12,019	5,504	2,532	10,964	7,945
5	56,021	41,329	29,986	15,303	6,389	2,796	17,268	10,990
1/5	134,911	111,092	84,863	45,766	21,397	10,864	37,092	27,089

TABLE 7

(f	rom	Tab	le	6)

	(A)	(B)	(C)	(D)
P/O Year 1	0.8	1.5	1.3	0.8
P/O Year 2	1.0	1.7	1.7	1.0
P/O Year 3	1.1	1.8	2.0	1.2
P/O Year 4	1.3	1.9	2.2	1.4
P/O Year 5	1.4	2.0	2.3	1.6
Years 1/5	1.2	1.9	2.0	1.4

If we exclude other outgo from ongoing costs, the P/O ratio is altered as shown in Table 8.

	TABLE 8			
	(A)	(B)	(C)	(D)
P/O Year 1	1.0	2.7	1.9	1.0
P/O Year 2	1.3	3.2	2.6	1.2
P/O Year 3	1.6	3.4	3.3	1.5
P/O Year 4	1.8	3.6	3.6	8.1
P/O Year 5	2.0	3.7	3.9	2.2
Years 1/5	1.8	3.5	3.2	1.8

Table 8 is comparing productivity with sales/sales-related costs. (B) is significantly better than the other systems from the outset, although (C) catches up by year 3. Again, (A) and (D) are very close until year 5.

# Ratio of Profit to Productivity (Pr/P)

Profit projections can be summarized as shown in Table 9.

				(000s)				
Year	еаг (А)		(B)		(C)		(D)	
		Cum.		Cum.		Cum.	, ,	Cum.
1	(1,893)	(1,893)	570	570	(28)	(28)	(250)	(250)
2	(2,946)	(4,839)	2,109	2,679	,592	564	(801)	(1,051)
3	(2,536)	(7,375)	3,971	6,650	1,168	1,732	(1,038)	(2,089)
4	(351)	(7,726)	6,264	12,914	1,711	3,443	(572)	(2,661)
5	2,988	(4,738)	8,517	21,431	2,268	5,711	582	(2,079)

TABLE 9

Cum. = Cumulative

From Table 9, we derive two sets of ratios as shown in Table 10.

TABLE 10				
	(A)	(B)	(C)	(D)
Pr/P Year 1 Pr/P Year 2 Pr/P Year 3 Pr/P Year 4 Pr/P Year 5	(0.5) (0.2) (0.1) NIL 0.1	0.1 0.2 0.2 0.3 0.3	NIL 0.2 0.3 0.3 0.4	(0.5) (0.3) (0.2) (0.1) NIL

Note that Table 10 does not look at each year's new business separately but takes an overall portfolio view.

TABLE 11

	(A)	(B)	(C)	(D)
Pr/P Cumulative Year 1	(0.5)	0.1	NIL	(0.5)
Pr/P Cumulative Year 2	(0.3)	0.2	1.0	(0.4)
Pr/P Cumulative Year 3	(0.2)	0.2	0.2	(0.2)
Pr/P Cumulative Year 4	(0.1)	0.2	0.2	(0.1)
Pr/P Cumulative Year 5	ŇIĹ	0.3	0.3	(0.1)

Clearly, (B) and (C) outperform (A) and (D) in Table 10. (A), however, has a slightly better trend than (D). Definitions of profit and productivity can be altered (e.g., by ignoring investment income in profit), but the trends should compare similarly to those in Table 10.

# SUMMARY OF COMPARISONS

From the preceding section, we conclude that:

- (A) costs the most to set up, while (D) costs the least.
- (B) costs less to set up and achieves the second highest 5-year cumulative productivity, overtaken only slightly by (A).
- (C) has low productivity with high setup costs.
- (B) and (C) both have significantly lower ongoing costs relative to productivity.
- (A) and (D) generate 5-year cumulative losses, while (B) and (C) generate healthy profits.

Therefore, our insurer is well advised to look more closely at (B) and (C), especially if it has no existing portfolio of business to support the introduction of a new distribution system. On balance, distribution system (B) appears to offer the best chance of building a successful portfolio. As market conditions change in the future, the insurer will probably develop more than one distribution system.

## CONCLUSION

This presentation does not attempt to mirror market conditions accurately but is presented as a stimulant to discussion of an important issue in today's insurance industry: How can a smaller life insurance company survive and prosper in a changing environment where large insurance/financial groups are tending to dominate the marketplace more and more?

I suggest that any smaller life insurer seeking to survive and expand during the next 10 years should review the efficiency of its current distribution system(s) and will probably have to consider using "new" distribution system(s) in the future. This discussion outlines one approach to that review and suggests ways in which management decisions can be monitored against actual results in the future.

MR. JAFFE: I can relate some of my experiences with specialty companies. It's a very trying experience for them to look at and evaluate the profitability of agencies. I know management finds every excuse in the world to say why this particular set of numbers doesn't reflect the true conditions at this agency, and if the agency continues to look like this, maybe next year we'll do something about it. Have any of you had that experience? There's an old saying that I use all the time, and it is very applicable here: "It is difficult to win an argument when your opponent is not handicapped by a knowledge of the facts." And in fact this is quite often what many of the people do. They just bury their heads in the sand: the ostrich syndrome. We don't want to look at the numbers, because they might tell us something.

I think it is incumbent upon us to present the facts in a clear and concise manner to the non-actuaries who are involved with the general management of insurance companies or even actuaries who have graduated to other company positions. We must show them clearly what these agencies look like or what different distribution systems look like. This is a formidable task.

Evaluating performance on an individual agency level for mortality experience is very difficult. On the other hand, the argument can be made that maybe we

should be evaluating the underwriters, not the agencies, for mortality experience, since underwriters are being paid to evaluate the risks.

MR. BRUCE E. PALMER: At Great Fidelity Life we're currently looking into the possibility of going direct response in some areas, and I wondered if anyone has any experience in entering the direct response market on a limited basis. Our basic approach right now is with independent brokers.

MR. MOORHOUSE: The first thing I would say is you have to see direct response as supplemental. It is, in my opinion and experience, not for all markets. That leads to the second question: Is direct response going to complement your existing operations and the image of where you want to be, say, five years from now in whatever market you are in? It's easy enough to say it is scientific insurance marketing. You can set up separate units of administration and marketing and control costs from day one fairly well. You've got to be careful in the kind of products you initially go with, so they complement each other. Probably the biggest thing is to make sure your agencies are not alienated by this.

MR. JAFFE: There are ways of doing this, and I'm in the process of working with clients introducing programs using agency forces. It is very delicate. I want to emphasize that direct response is not necessarily a cheaper distribution system. It's not a substitute for good management, but it can work, and work very well. I think David's comment is very crucial -- that if you're going to do it and you do have an existing agency force, be careful.