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## **Session 22PD**

### **XXX Update**

**Track:** Financial Reporting/Product Development

**Key Words:** Financial Reporting, Product Development

**Moderator:** DONALD P. MAVES

**Panelists:** ROBERT W. FOSTER, JR.

LARRY M. GORSKI

MICHAEL PALACE

**Recorder:** DONALD P. MAVES

*Summary: Regulation XXX, adopted by the National Association of Insurance Commissioners in 1995, has effectively been in force in only one state through 1998. Recently, an ad hoc industry group presented a revised version of XXX with the goal of gaining widespread adoption. This revised XXX will play a major role in the pricing and valuation of life insurance products, particularly term insurance.*

*Panelists will cover a brief history of the 1995 version of XXX, provide an overview of the activity in the past year leading to a revised version, summarize the significant changes in the revised regulation and the scope of products covered, cover the outlook for state adoption and possible state variations, assess the impacts upon product design and valuation, and present a regulatory perspective including the expectations that regulators will have of the appointed actuary.*

**Mr. Donald P. Maves:** I am from PolySystems. I have recruited three expert panelists, each of whom has been deeply involved in the nuts and bolts of XXX almost from the beginning. They are Michael Palace of Transamerica, Rob Foster of CNA, and Larry Gorski of the Illinois Insurance Department. I will tell you more about each of them in my introductions prior to their respective presentations.

Our agenda today is as follows: I will present a short history of the first XXX, then Michael will discuss recent developments and the impacts of certain changes from

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Note: The charts referred to in the text can be found at the end of the manuscript.

the original XXX. Rob will then follow with a discussion of how the new version of XXX affects the pricing actuary. Larry will close the prepared remarks with his regulatory perspective. There will be overlap of issues between all of us, but that will allow you to hear different perspectives from everybody.

The history begins in the fall of 1988. The NAIC Life and Health Actuarial Task Force (LHATF) distributed the first draft of XXX for comments. It was intended to be an actuarial guideline, not a regulation. At the time, I was employed by a company that was a big player in the term insurance market. I felt that the draft was open to interpretation. If I took a conservative approach, I calculated additional reserves that would be equal to about seven times our company surplus, so obviously that approach was not good. Thus I took a liberal approach and that was much better. It only wiped out surplus three times instead of seven, so my management was thrilled to hear that. The primary cause of the very high reserves was the retroactivity feature.

We decided that I should make some remarks at LHATF's next meeting, which was December 1988. It became quite clear that a lot of people in the industry had not heard about XXX. At the next LHATF meeting, four companies objected to it. At the meeting after that, we had 16 companies. At that point, LHATF asked the industry to form a task force. It was composed of 14 companies, whose purpose was to discuss the appropriate reserves for term insurance. The task force was well diversified between stock and mutual, large and small, and term and non-term writer. It was also geographically diverse. In 1991 the task force issued its final report.

LHATF then asked the task force to draft a regulation based on the report. This project lasted until 1994 because a number of issues arose after the final report, such as: the appropriate method of segmentation, universal life (UL) and secondary guarantees, unusual cash values, applicability and exemptions from the regulation, appropriate select factors for base reserves and for deficiency reserves, safe harbors, and other items. New York beat the NAIC to the punch and passed Regulation 147 in 1994. A draft acceptable to the industry and regulators passed LHATF in December 1994 and finally passed the NAIC in 1995.

At that point, I think everybody breathed a collective sigh of relief and went on to other things. In addition, a consumer advocate lobbied against XXX in most or all the state insurance departments and legislatures. The only states that took any action followed the so-called Illinois rule, in which the regulation would not be effective until it passed in enough states such that the aggregate population in those states was at least 51% of the U.S. population. This is where XXX stood until about

a year ago, when a few states passed or threatened to pass XXX with imminent effective dates.

This is where my part of the story stops and where our panelists' stories begin, so I will turn the discussion over to our first panelist, Michael Palace. Michael is vice president and actuary with Transamerica in Los Angeles. He is responsible for the pricing of all individual life products, and he also has extensive background in financial reporting. Michael's involvement with XXX started about its inception, and he was a key participant in the industry ad hoc group formed a year ago. He will give you additional insights and a historical perspective on XXX.

**Mr. Michael Palace:** Primarily because of the action taken by the state of Wisconsin, XXX came back on everybody's radar screen with a vengeance approximately a year ago. An ad hoc industry group, including the major term writers and non-term writers, was formed. The group, working with LHATF in a very large-scale effort, eventually developed a new version of XXX that was adopted at the March NAIC meeting. It has a January 1, 2000 effective date. Every company worked together particularly because they felt this would create a level playing field. The support of all of the companies is contingent on a swift adoption by all states. If there is uneven adoption, there could be major market disruptions in the competitive part of the term market.

As we will see, the mortality tables that are used in the basic reserves are not all that different from the tables promulgated originally; actually, they are relatively close to the 1980 CSO tables. Along the way, there was a move to come up with a more liberal valuation table, something perhaps akin to a 2000 CSO table. Unfortunately, that was derailed because of tax-related issues, primarily by the concern with creating a new prevailing statutory mortality table. It could impact things like 7702 compliance, nonforfeiture issues, and tax reserve issues.

Here are the key changes in the revised guideline. First, we now have 20-year select factors as opposed to 15-year select factors in the original XXX. Second, perhaps the most key element of the new XXX is that the judgment of the appointed actuary will be relied upon to select the X factors in the calculation of deficiency reserves. The calculation of deficiency reserves and basic reserves are being decoupled. These X factors, of which much more will be said later, are applicable only in the first segment, which is a concept inherited from the original XXX. There was a lot of discussion as to whether guaranteed or current premiums should be used to define the segments, but the result is that we are back to the original definition in which the guaranteed premiums define the segmentation. The X factor that is applied to the mortality tables can be as low as 20%, but it cannot decrease by policy duration; e.g., if you use 30% in duration one, you cannot, in subsequent

durations, use a percentage lower than 30%. Finally, another byproduct of the revision is the elimination of the five-year safe harbor for term insurance that was embedded in the original XXX.

I always feel a picture is worth a thousand words, so let us look at Chart 1. On the very top is the original 1980 CSO 10-year select-and-ultimate mortality. The second line is the basic mortality defined in 1995 XXX; the third line down is the deficiency mortality as defined in 1995 XXX; and, the fourth line is the basic mortality under 1999 XXX. They are all very close together, and they eventually merge into 1980 CSO. The major change for 1999 XXX is that the selection period increases by five years. The basic mortality is relatively unchanged. Finally, at the bottom is an example of an X factor of 20%. This gives you an idea of the differential in mortality by applying a 20% X factor.

Chart 2 shows a 10-year level term product with an ultimate tail that we will ignore for the moment. The premium is \$1.10, which is typical of the super preferred nonsmoker categories of today. The bottom line is a target reserve that is calculated using typical GAAP mortality and lapse assumptions, but using a statutory interest rate of 4.5%. That is probably on the conservative side, even for a GAAP reserve of today. There is also no offset for a deferred acquisition cost (DAC). The next line is  $\frac{1}{2} Cx$ , which many companies may hold as reserves under the unitary method on these kind of products today. As you can see, it slowly increases to well above the target reserve. The next line up is the same product, but with a five-year premium guarantee. Again, it is higher than  $\frac{1}{2} Cx$ , but it is a gentle humpback, and then it merges into  $\frac{1}{2} Cx$  because presumably the guarantees have eliminated the need for further level-premium reserving. Next we have the basic reserve under 1999 XXX, and above that is the basic reserve under 1995 XXX. There is not a lot of difference between the basic reserve under 1999 XXX and the basic reserve under 1995 XXX, but you can see a big difference between both those reserves and a typical target reserve.

Finally, the top line is the minimum reserve under 1995 XXX, including the deficiency reserve. Just to give you an idea of what this means, Chart 3 shows ratios of the statutory reserves you saw before to the gross premiums. The target reserve gets up to twice the gross premium over a period of about six years. On the other hand, the new XXX reserve gets up to approximately four times the gross premium, which does make a difference in pricing. It is not a totally inconsequential change.

Chart 4 illustrates a 20-year level gross premium of \$1.69. We have the same cast of characters and the same reserve lines, except we now see very big differences emerging. For starters, look at the  $\frac{1}{2} Cx$  line and the target reserve line; they are not far apart. On the other hand, the basic reserves under 1999 XXX and the basic

reserves under 1995 XXX start to amount to a lot of money. If you really want a shock, look at the deficiency reserve ratio on Chart 5. Whether it is a  $\frac{1}{2}$  Cx or a target reserve, you get something approaching seven or eight times the gross premium after 14 years, which is not a bad situation. On the other hand, if you look at the reserve on 1999 XXX, at duration 15, it is approximately 25 times the gross premium. That is a lot of statutory reserve to set up, and if you want to make a statutory profit, this may cause you some problems.

Finally, on Chart 6 is a 30-year term, a product that is very popular. We can see  $\frac{1}{2}$  Cx at the bottom; the target reserve is still fairly close to  $\frac{1}{2}$  Cx. The XXX reserves are basically the same whether they are calculated under 1995 XXX or 1999 XXX. If you are a masochist, look at the minimum reserve under 1995 XXX. Here are the ratios on Chart 7. The target reserve is approximately 11 or 12 times the gross premium after 23 years, but the 1999 XXX reserve produces a ratio of over 60 times the gross premium in 21 years. That is a very big price to pay for a 30-year product. This reserve level is so high because the select factors grade into the 1980 CSO tables after 20 years.

This is not only a term-insurance issue. Universal life with no lapse guarantees, which was covered by 1995 XXX, is also covered 1999 XXX. Chart 8 has a standard no-lapse guarantee policy issued at age 65. I have shown the account value and right underneath it, the Commissioners Reserve Valuation Method (UL CRVM) reserve. In practice, if the surrender charges decrease more quickly than minimum nonforfeiture charges, these two lines will be closer. For purposes of illustration, we left them as calculated. Here are the reserves that would be generated under 1999 XXX. The lower line is for a 25-year no-lapse guarantee; it rises significantly above the account value. Eventually the account value grows enough to take over and the reserve itself starts dipping down. However, many companies provide guarantees beyond 25 years, and these reserves go up a lot higher and come down a lot later. If we look at the ratios on Chart 9, we see that the line in the middle is the account value, and the CRVM reserve, as a percentage, rises up slowly toward the account value. These are the new reserves that would be required under the no lapse guarantee, 25-year and 35-year no lapse guarantees respectively. Again relative to the account value, they are steep in earlier years. Relative to the CRVM reserve, they are very steep.

I mentioned the new X factors and that the regulation allows certain latitude in the choice of factors. They can vary by policy year, policy form, underwriting class, issue age, etc. It is entirely up to each company to choose the structure of its X factors; however, there are some requirements attached. First, no mortality improvement can be assumed beyond the valuation date. Second, there is a requirement of an annual opinion by the appointed actuary as to the

appropriateness of the X factors. In order to give some guidance as to how X factors should be chosen and analyzed in subsequent years, an actuarial standard of practice (ASOP) is being developed by an Academy task force, of which I am a member. Much of the debate about it is centered on subsequent testing and analysis that is going to support the validation of the X factor. We must provide guidance in the initial selection of the X factor. One way of looking at it is a series of concentric circles. To start, companies will look at their own mortality experience based on their underwriting standards and classifications. Many companies may not feel totally comfortable relying solely on their own mortality experience, so they will move out and look at industry experience. In addition, many companies will discuss the experience with their reinsurers. The appointed actuary must weigh precisely how this will all fit together.

Once the X factors are chosen, regulators will require rigorous statistical testing of the validity of the X factors based upon emerging experience. In case companies are concerned that they may not have enough experience, there are several papers that have been written that show how even a relatively small number of claims can be used for hypothesis testing.

As a further note on the X factors, look at Table 1. At the top, there are four products listed. The gross premiums are typical of the superpreferred classes that are available for male non-smokers age 45. The net premiums are based on the 1999 XXX table with an X factor of one. It is obvious that if you sell superpreferred business with these premiums and all you can support is an X factor of one, you will be in deep trouble because of very substantial deficiency reserves. On the other hand, if you can support X factors in the 30% range, then you will be able to offer these gross premiums without serious statutory problems. The 30-year plan may be a problem because the select factor table grades to 1980 CSO after 20 years. The choice of X factors will be critical in what gross premiums you can charge and whether you get deficiency reserves or not.

TABLE 1  
XXX—DEFICIENCY RESERVE, NET PREMIUM CONSIDERATIONS  
MALE NONSMOKER AGE 45  
(PER \$1000 FACE)

	10 Year	15 Year	20 Year	30 Year
Gross Premiums—Super Preferred Net Premiums (based on 99 XXX Table)	1.10	1.40	1.69	2.65
<b>Multiples (X-factors)</b>				
1.00	2.84	3.79	5.61	10.58
0.30	0.85	1.14	1.71	3.44
0.20	0.57	0.76	1.14	2.32

What does this all mean? I think we can hazard a few guesses. First, based on the charts that I showed you, I have a feeling most companies who are worried about the cost of statutory surplus will consider reduced guarantee periods in products both on the term and on the UL secondary guarantee side. Second, to the extent you wish to offer long-term guarantees because the marketplace wants them, those long guarantees will be more expensive. Finally, it is clear that we need a new set of CSO mortality tables. That process has started, but it could move much faster if a number of companies get involved.

**Mr. Maves:** That was an excellent introduction to the subject. Now I will introduce Rob Foster. Rob is assistant vice president and actuary with CNA in Nashville. He is responsible for the pricing of all individual products. As such, he has been involved with a company that has become a significant force in the term market in a very short period of time. He has also expanded the concept of multiple risk classes. In addition, I learned that he is also responsible for pricing in such diverse areas as Canada and Chile. Rob was also a key participant in the recent industry ad hoc group that worked on the 1999 XXX. He will give you insight into how 1999 XXX will affect the pricing actuary.

**Mr. Robert W. Foster, Jr.:** I am going to take a different approach today. We do not have a lot of experience yet in pricing XXX products, so I will discuss what we have done so far with XXX from a pricing and product development point of view.

We have had a series of product development meetings to go over what XXX is, primarily to discuss X factors because I think they are the key both to pricing and to valuation. We will soon make a presentation to management about XXX and what it will mean to the company's products and to the financial statements. I will also cover the next steps, the keys to product development in the XXX environment, and finally some thoughts about universal life.

There were many key points and purposes of our product development sessions on XXX: to get the team up to speed on XXX, to review new requirements, to review our products for problems or concerns over the new XXX rules, to develop new ideas, and to discuss changes we must make under XXX. I will share some of the issues that we discussed.

Via-Choice is one of our term plans. It starts life as a 10-year term plan, but after seven years, the customer has a choice of extending the coverage period to 15, 20, 25, or 30 years. When any customer makes an election, the premium rate changes. That causes a new segment under XXX, and we lose the advantages of the first segment. After the first segment, we lose the new select factors for basic reserves and the X factors for deficiency reserves.

Other term plans offer a smoker discount. A smoker can get a nonsmoker rate for a period of years, and then the rate increases to the smoker rate if the insured cannot provide evidence of nonsmoking. Again, the increased rate causes a new segment. We think we have a solution. If we guarantee the smoker rate at the higher level, and then offer the discount on a current basis, we avoid a new segment because segments are based on guaranteed premiums. It is not quite as powerful a marketing message because of the lack of guarantees, but it seems to work reasonably well.

We also have a program in which the insured gets a discount on the first-year premium if he pays premiums on an annual mode. Is that a guarantee? After the first premium is paid on an annual mode, there is no way to ask the customer to pay more in the first year. XXX has a provision that deals with unilateral guarantees that the company extends after issue. If the guarantee extends for more than one year, then the reserve is the greatest of three calculations: (1) calculate the reserve ignoring the new guarantee; (2) calculate the reserve as if the new guarantee had existed at issue; (3) calculate the reserve as if the policy was issued when the new guarantee takes effect.

Next year, we are likely to be in an environment where the products have to comply with 1995 XXX and 1999 XXX because some states will not have adopted 1999 XXX by January 1, 2000. For example, West Virginia, with all the problems it had with XXX the first time, shows no interest in adopting 1999 XXX.

The X factor is a key element in the pricing models. A product that is not deficient at issue because of the initial X factors may become deficient later because the X factors are reset on each valuation date. It will be prudent to project scenarios of future possible sets of X factors and the effect upon deficiency reserves. You should not merely consider the X factor at issue only.

We were asked to provide management with detailed GAAP projections on a pre-XXX and post-XXX basis. That should be easy because XXX is a statutory concept. It turned out to be not quite so easy because we define GAAP equity for the return on equity calculation as the difference between statutory and GAAP reserves. Now we have to deal with this issue also.

What are the key elements to coping successfully with XXX? Work with the valuation actuaries to interpret XXX because XXX is open to interpretation and there is not much guidance yet. For example, we are trying to determine the meaning of the word "reentry." Believe it or not, that has turned into a complicated issue. Also, work with your reinsurers. They may not want to deal with longer term guarantees.



Finally, I have some thoughts on universal life. Three factors work against universal life at this point. The first is the drop in interest rates since UL was introduced. The first UL product on which I worked came out at 14.2%. Rates have dropped a long way since then. The second factor is the illustration regulation. The long illustrations are quite complicated and not well-liked by the field force. Finally, the long-term secondary guarantees have been driving UL sales recently. If they become very expensive under XXX, they may go away as well. Whole life might resurface as an alternative to universal life. It has one long segment to which the X factors can apply. We may see premiums dropping by a third or a half on a whole life plan, and we may see some variations such as indeterminate premium whole life and excess interest whole life, concepts from 20 years ago.

**Mr. Maves:** Our final speaker is Larry Gorski. Larry is life actuary with the Illinois Department of Insurance, and he has been with the department since 1976. Among other things, he reviews actuarial opinions and memoranda, monitors investment activity, and reviews corporate transactions. He has also been active in a number of NAIC activities including LHATF, the invested asset working group, the valuation of securities task force, the life risk-based capital working group, and others. Larry has been involved with XXX since its inception, so we will now hear the regulatory perspective on XXX.

**Mr. Larry Gorski:** I think that regulation XXX will be adopted in Illinois effective January 1, 2000. When Governor Ryan took office at the beginning of this year, he put a freeze on regulations and the freeze was lifted just recently. We are in the process of redrafting our existing version of regulation XXX to comply with the new version. We have been thinking about three main aspects of the new XXX: marketing material, innovative design features, and the X factor. Most of my presentation will cover the X factor, but I will also talk about the other two points.

Our focus on marketing material stems from our experience in reviewing equity-indexed annuities and equity-indexed life products over the last several years. We will not approve a policy form until we have reviewed the marketing and advertising material to make sure that the material comports with the product. Our authority for doing that is built into our statute. It gives the commissioner direct authority to withhold approval of any policy form if it contains provisions that encourage misrepresentation, unjust, unfair, inequitable, ambiguous, misleading, inconsistent, or deceptive statements. We look at content of the material, placement of the items, and omissions. Advertising and marketing material may contain everything that is required, but sometimes the problem is in the positioning of the material.

This process is subjective. Companies work continually on their marketing material to reflect new products and new design features. I hope that you talk to your regulators soon to avoid any year-end deadline problems. In your internal product development process, you talk to the valuation actuary, you talk to your reinsurers, and you should be talking to regulators.

We think there may be some opportunities for loopholes in the regulation itself. We are reviewing the applicability section and the exceptions therein. We also consider the existence of secondary guarantees and also the length of secondary guarantees. The whole notion of secondary guarantees in the regulation leaves many unanswered questions. I hope that companies meet with regulators as soon as possible to address these issues.

The other item that I want to talk about today is the X factor. This X factor idea seemed to be a cure-all for a problem that has been around for several years. What mortality is appropriate for deficiency reserves? I view it in a couple of different frameworks. First, I think it is an opportunity to take the valuation actuary concept to a higher plane. Currently, the valuation actuary is responsible for the asset adequacy analysis and opinion, and I think XXX expands that concept. Second, it forces the valuation actuary to use a sufficient degree of rigor in the process. There are certain objective criteria that have to be met when using the X factors, and they are clear. There are also two subjective criteria that are part of the actuarial opinion when providing a certification. One is a present value test, and the other is a mortality rates test. They both rely heavily upon the actuary's expectations as to future mortality. I want to see the valuation actuary use rigorous statistical analyses of experience. The X factor should be based upon expected mortality without any improvement beyond the valuation date, and based upon emerging experience. I think that language requires a sufficient amount of analysis to support the X factor.

Late last year, I wrote a paper that discusses evaluating the appropriateness of the X factor. I view the question of evaluating the appropriateness of the X factor as a hypothesis-testing process. If the adjusted mortality rates produced by the X factors are the expected mortality rates that can generate a distribution of claims, would actual claims in the experience period support or reject the hypothesis, i.e. the validity of the X factor? To illustrate the process, my paper has an example with 27,000 lives in the sample. I have sample mortality rates, and then I develop a distribution of claims using a Monte Carlo approach and then a normal approximation.

My example of a 50% X factor is purely illustrative. My paper shows the quartiles of the distribution that is generated by the normal approximation in the first case, and the Monte Carlo approach, using a varied number of trials in the other cases, to

generate the distribution. Once one generates this distribution of claims, one then uses one half of the claims (either claim counts, dollar amounts, or whatever unit of exposure is appropriate) and compares it to a point on the distribution. What one needs to do is determine a rejection region. If actual claims fall in the rejection region, one must assume that the X factor is not correct and then choose a different X factor. The choice of that rejection region is an issue needing regulatory input.

Once one has a rejection region, one models using a Monte Carlo approach, a more simple normal approximation, or even a Poisson approximation. Depending on the relationship between the actual results and the distribution, one either accepts or rejects the hypothesis that the X factors are correct. The question is whether this kind of method penalizes companies with limited amounts of exposure. So I used the original population multiplied by 1%. The tails of the distribution extend farther out, and thus I think small companies are not unfairly penalized in the process. Their claims are expected to have a greater variance, and the statistical tool used to evaluate the appropriateness of the X factor also reflects that.

There is a myriad of other questions that arose. I have no preconceived notions as to what the answers to these questions are. I have about 30 questions that I gave the Actuarial Standards Board to consider in its development of the Actuarial Standard of Practice. Some of the questions deal with calculation issues, but I will not cover them today.

The other questions relate to the use of reinsurance in the process and the ability to aggregate experience over product lines. The regulation allows one to consider all of the experience for all of the business subject to it.

My first reaction to the question about aggregating experience is that it probably should not be aggregated. It probably should be viewed in smaller segments, such as business that has X factors less than one, and business that has X factors equal to one and greater. The experience that is aggregated can have implications for X factors in the future. For example, in the use of the X factors in the future, one might have to consider whether certain experience is short lived, soon to terminate, and happens to be the experience that has high mortality margins. Suppose a current X factor can be supported at a given level that is dependent on the use of experience blocks of business that may not be around much longer. That needs to be considered when aggregating experience.

Similarly, the use of reinsurance has those same kinds of considerations. Should the analysis be done gross or net of reinsurance? I think it should be done on a gross basis, but the use of reinsurance must be considered consistently. If one will justify X factors by combining different kinds of experience, one must consider the

maturity of that experience, the use of the mortality margins in that experience, and so on.

**Mr. Maves:** That ends our prepared remarks. Are there any questions?

**Mr. William J. Schreiner:** Industry solidarity depends on getting a January 1, 2000 effective date in as many states as possible so that we have, in effect, a national standard. The ACLI is working very hard to accomplish that goal. Our state directors have this as one of their key objectives of the year, and they are working in particular on those states with the 51% rule. Our goal is to see that each one of those states adopts the 1999 version. For those who are members of the ACLI, we have a compilation of all 51 jurisdictions that updates exactly what the status is in each of those states. That can be found on our Web site.

**Ms. Faye Albert:** How will the X factors be reflected in tax reserves?

**Mr. Palace:** Deficiency reserves are not incorporated into tax reserves. The tax actuaries concluded that defining a different mortality standard for calculating deficiency reserves would not create problems. There will be no attempt by the IRS to posit a new prevailing mortality table.

The X factor is decoupled completely from the base reserve. The calculation of the base reserve has to use the 20-year select table that grades into 1980 CSO. The X factor is used only in the calculation of deficiency reserves; thus they are not connected.

**Ms. Nancy Elizabeth Winings:** I understand there are certain states that are considering adopting 100% as the minimum X factor. I also understand certain states are trying to use the XXX methodology to apply to nonforfeiture values. Could you comment on these issues?

**Mr. Gorski:** This is the first time that I have heard that some states want to use a minimum of 100%. That clearly was not part of the thinking of anyone on LHATF or the interested persons involved in that process. I would be disappointed if that happens because that threatens the coalition of support for XXX. I do not support that view. I view the X factor from a couple of perspectives. One, it brings more realism into the valuation of term insurance products, and two, it moves toward greater reliance on the appointed actuary. I find the latter point just as important as the first point. Because of that, I feel comfortable with a 20% minimum on the X factor; yet I want to make sure that rigorous testing takes place.

In terms of using regulation XXX for nonforfeiture values, I have not heard about that at all.

**Mr. Schreiner:** I agree with Larry. I follow the states, and there has been no report to me that any state might require a 100% minimum. This would also be the first time that I have heard of any connection with nonforfeiture.

**Mr. James N. Van Elsen:** I can shed some light on both issues. The issue of the 100% minimum X factor has been recommended by a staff person in the state of Washington. I do not know if it will go any farther. The second issue may be related to the recently proposed guideline regarding secondary guarantees on universal life. I have no idea how far that will go.

**Mr. Arnold A. Dicke:** What sort of provisions for adverse deviation were in the target reserves?

**Mr. Palace:** They are typical additional margins. Also, the use of a lower interest rate provides some margin.

**Mr. Dicke:** Larry, could you provide more details about reinsurance margins when determining X factors?

**Mr. Gorski:** Suppose that, for purposes of determining an X factor, a company combines all of its experience, experience not subject to reinsurance and experience that is subject to reinsurance. Also suppose that the business that is reinsured has good margins for mortality. If that experience is used to support an X factor, it would support a lower X factor than if it were not used. That business may have been reinsured on some kind of financial reinsurance basis such that profits flow to the reinsurer.

Those profits and those mortality margins would not be available. One cannot simply combine all experience, good and bad, to support an X factor without considering how all that other experience might affect the overall financial results of the company.

**From the Floor:** The section on secondary guarantees for UL products gives two examples of typical secondary guarantees. However, other types of guarantees within a product that are not specifically dependent upon specified premiums could in fact be considered secondary guarantees. Could you comment on that?

**Mr. Gorski:** I think one needs to look at those items in the regulation as examples of secondary guarantees, but not as an all-encompassing list. I agree with your point.

**Ms. Marcia S. Pena:** How does the regulation apply to backdated policies? Suppose a policy is backdated to December 31, 1999, for example. Also, how long will it take to get policy forms approved by January 1, 2000? Will there be a backlog, since most companies will probably be filing policy forms at the same time?

**Mr. Maves:** I believe that if you change your company practice on backdating specifically to avoid XXX, you will have trouble justifying it. You probably should be consistent with the company practice that you have now.

**Mr. Gorski:** The key for timely policy form approval is to get your policy forms and advertising material in as early as possible because there will be a rush before the end of the year. We may shift resources to the approval process for a period of time. Again, I would emphasize that we will continue to review the policy form and advertising and marketing material. The policy form might be fine, but the hang up may be with advertising and marketing material. Keep that in mind as well.

CHART 1  
XXX MORTALITY RATES COMPARISON

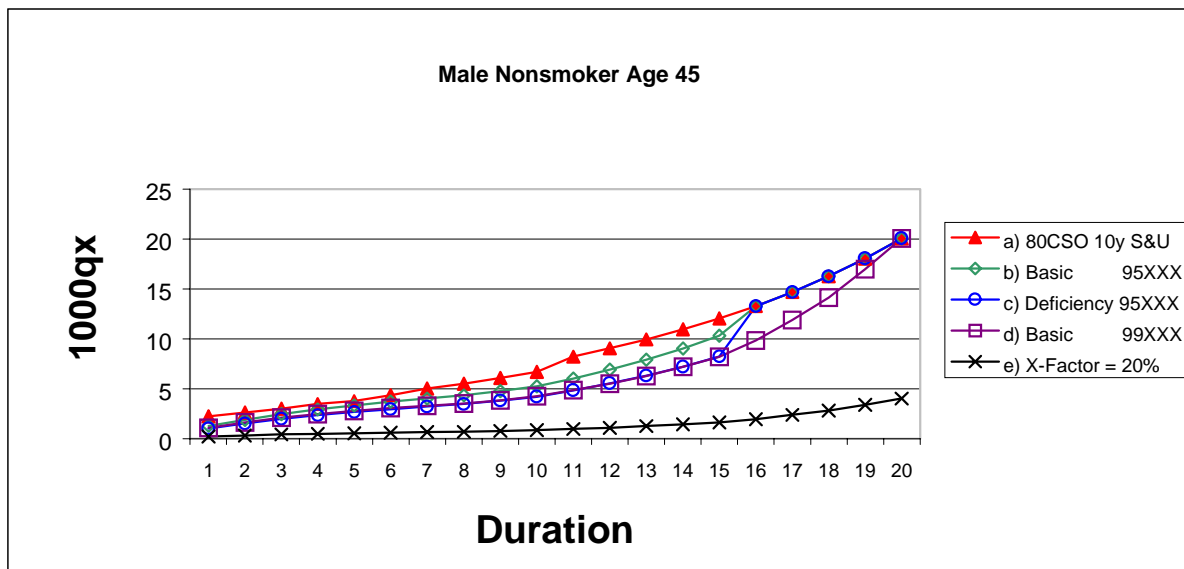


CHART 2  
XXX MEAN STAT RESERVE COMPARISON

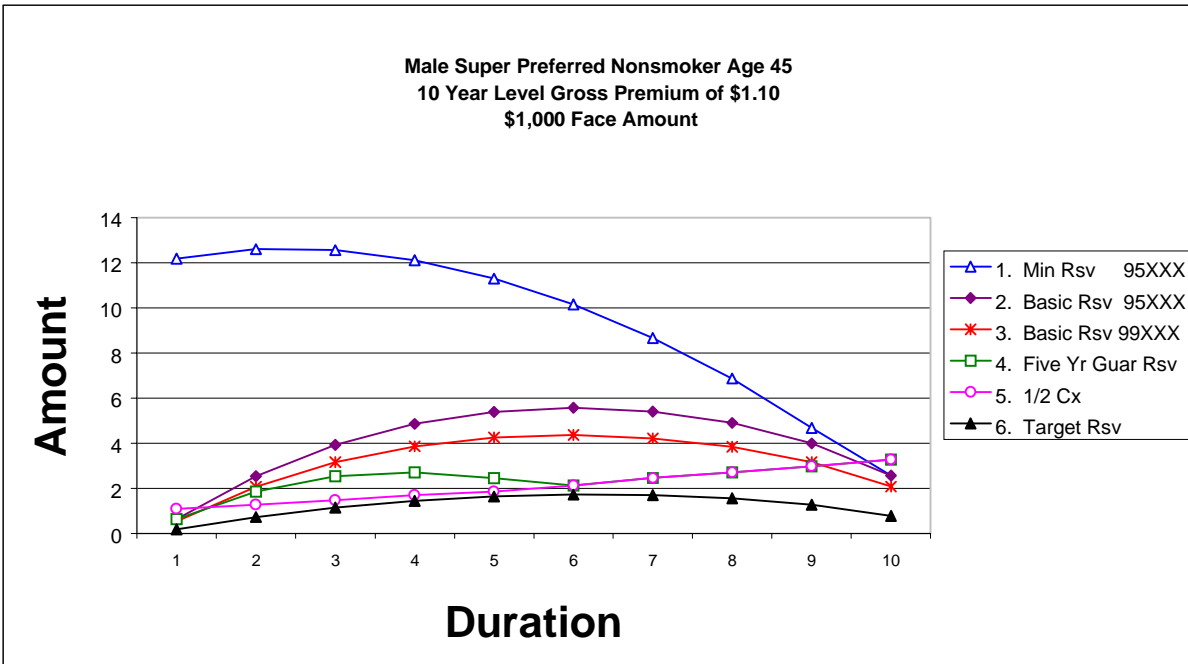


CHART 3  
RATIO OF MEAN STAT RSV TO G. PREMIUM

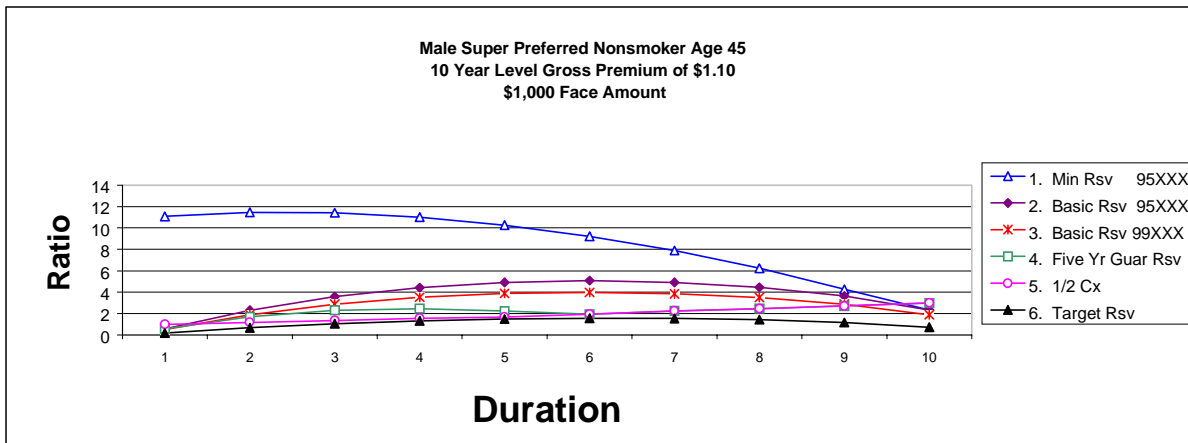


CHART 4  
XXX MEAN STAT RESERVE COMPARISON

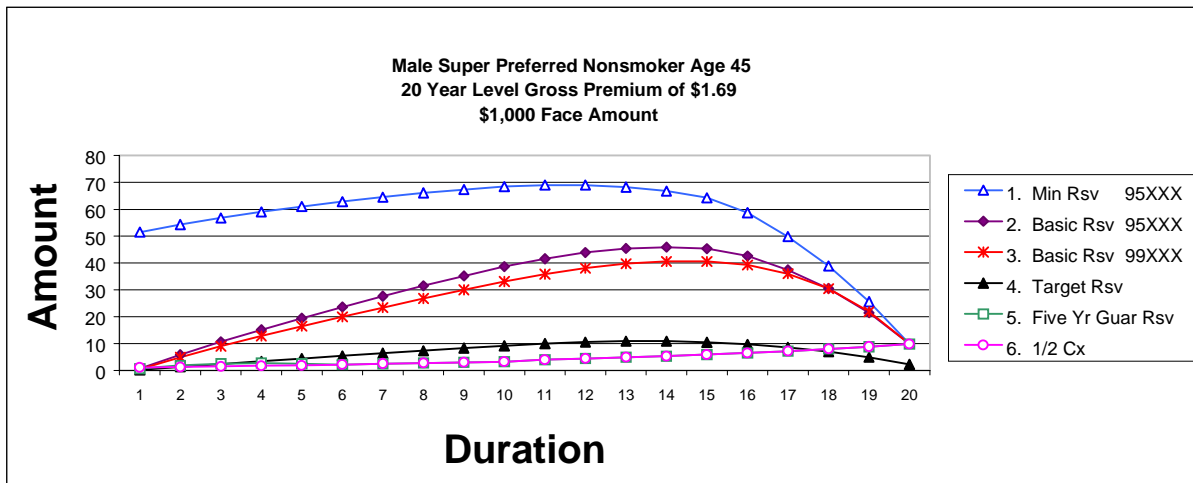


CHART 5  
XXX—RATIO OF MEAN STAT RSV TO G.PREMIUM

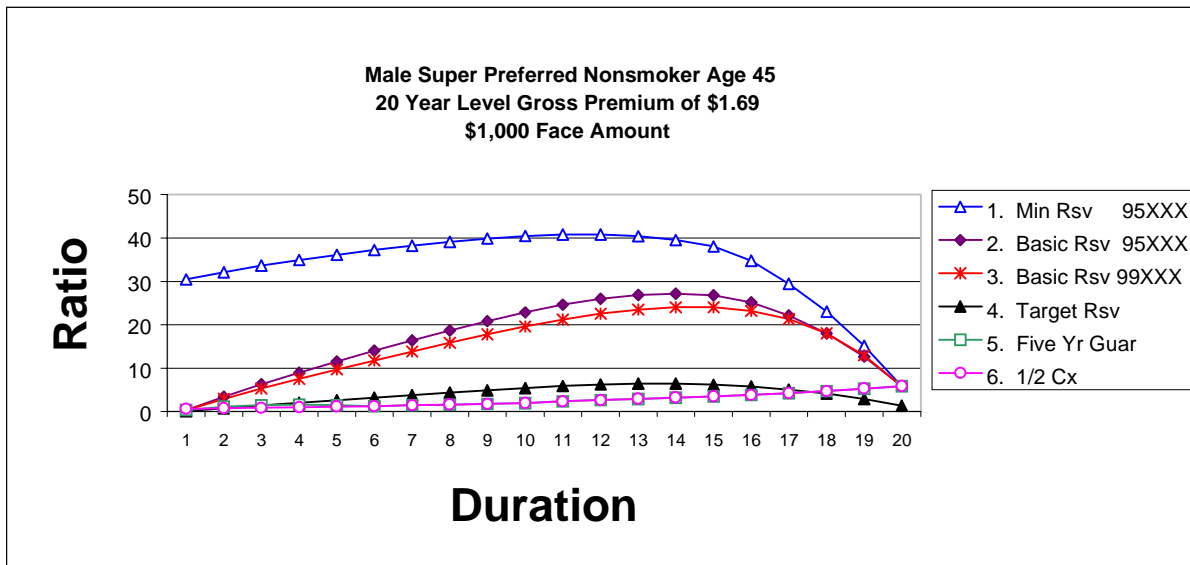




CHART 6  
XXX—MEAN RESERVE COMPARISON

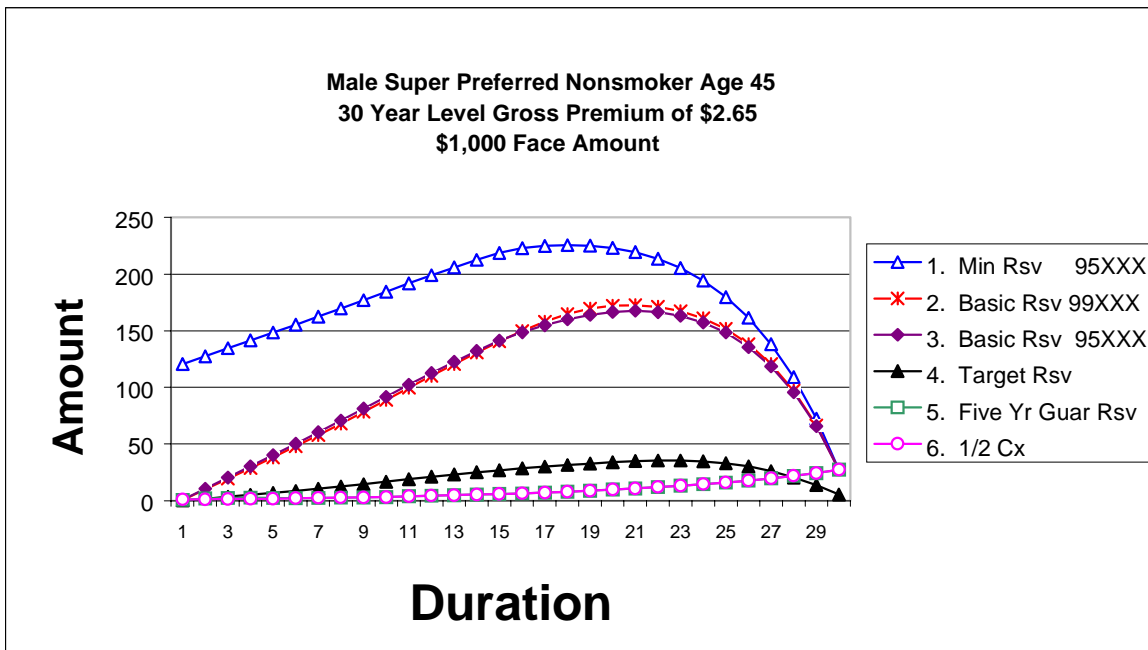


CHART 7  
XXX—RATIO OF MEAN STAT RSV TO G.PREMIUM



CHART 8  
XXX—UL NO LAPSE RESERVES

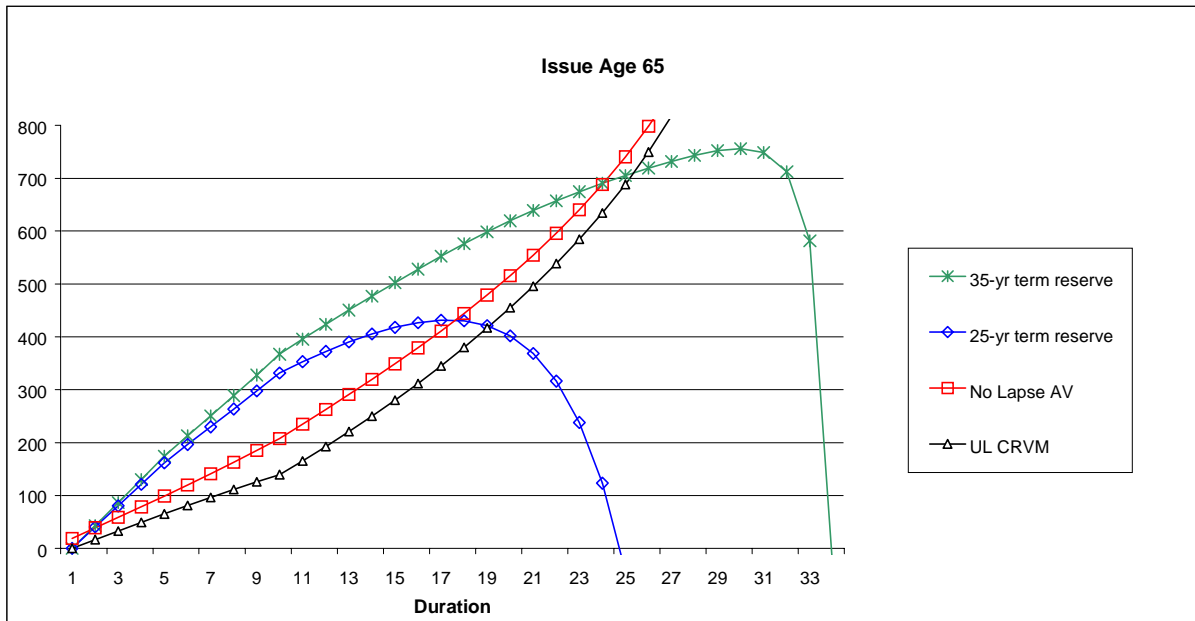


CHART 9  
XXX—UL NO LAPSE RESERVES AS PERCENT OF ACCOUNT VALUE

