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AVR/IMR/RBC/FAS 107 IMPLEMENTATION

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- AVR/IMR versus MSVR
- RBC
 - How portfolio is being changed
 - Impact on 1992
 - Impact on 1993
- FAS 107
 - How was it implemented?
 - How useful is the discussion?

MR. EDWARD F. MCKERNAN: The first topic of this session, risk-based capital (RBC), was incorporated into the statutory annual statement beginning in 1993. The second topic, *Financial Accounting Standard (FAS) 107*, requires that the fair value of assets, and some liabilities, be reported in the financials. (*FAS 115* will be discussed as well.) The third item, interest maintenance reserve (IMR) and asset-valuation reserve (AVR), is a replacement of the mandatory securities valuation reserve (MSVR) in the annual statement. This was effected in 1992.

Fred Townsend will discuss RBC. You may be familiar with a number of articles that Fred has written for *The National Underwriter*. He was president of Connecticut Life Insurance and Annuity Corporation which is a reinsurance company. He has been a frequent speaker at Society functions and many industry association meetings. He has participated in institutional research and has been involved in the sales of insurance stocks, asset management for insurance companies, venture fund analysis, and the like.

Bob Beuerlein is a senior vice president with the Franklin Life Insurance Company. His charge of responsibility involves all the actuarial functions of the company. He is also on the board of directors at Franklin. He has been very active with both the Society of Actuaries and the American Academy of Actuaries. He is on the Financial Reporting Section Council.

I am a consultant with KPMG Peat Marwick and I've been involved, as well, in many Society activities. I will speak on the subject of IMR/AVR.

MR. FREDERICK S. TOWNSEND, JR.: If life insurance companies find that the RBC requirements are too high, life insurance companies will find a way for the RBC requirements to plummet to earth. I'll go through what's been happening in 1992-93, as many life insurance companies prepare for the introduction of RBC at year-end 1993.

In our firm, Townsend and Schupp, we follow 130 major companies, which comprise 85% of industry assets. The rough distribution of assets at last year-end was 62% in bonds, 20% in mortgages, 3% in real estate, 3% in affiliated stocks, 3% in

unaffiliated stocks, 5% in policy loans, and 4% in other assets. The mix of investments in bonds, of course, has increased in the current environment, as people have moved out of common stocks, mortgages, and real estate and into investment-grade bonds. If companies have high RBC requirements due to the mix of their bonds, they've been upgrading their bond portfolios in 1992-93 to reduce those requirements.

Mortgages and real estate, although they make up 23% of industry assets, have been coming down in recent years. Many major companies have 40-55% of their assets in mortgages and real estate. Many companies have been reclassifying mortgages, and through securitization have been converting mortgages to bonds to bring down the RBC requirements.

Stocks are a very small mix of industry assets: only 6%. However, for some companies, stocks are a much larger number. You'll see that stocks are half-affiliated stocks, half-unaffiliated stocks, or common stocks bought for pure investment purposes in the marketplace. Overall, it does not impact the industry to a great degree, but the most punitive RBC factors were introduced for stocks relative to other asset categories. Some companies that are very peculiarly affected by stocks protested vociferously against the RBC requirements, and some of them are restructuring their corporate organizations to overcome what they perceive to be a handicap.

Looking at the RBC factors for bonds, it is quite easy to see why companies have been upgrading their bond portfolios in 1992-93. If you want to cut down on your RBC requirement, just move everything up a class. Take a Class-5 bond, sell it, buy a Class-4 bond in its place, and you reduce your RBC requirement by 55%. Sell a Class-4 bond, convert it to a Class-3 bond, and you reduce your RBC requirement by 56%. Sell a Class-3 bond, buy a Class-2 bond, and you reduce your RBC requirement by 75%. Sell a Class-2 bond, buy a Class-1 bond, and reduce your requirement by 70%. There's been extremely heavy trading activity in bonds. If you saw my article in *The National Underwriter* earlier this year, the top 20 life insurance companies acquired half of their bond holdings at year-end 1992 during 1992. There's been a lot of new money going into bonds, and there has been a lot of turnover in bonds, not only from the realizing of gains to offset capital losses, but also from upgrading the bond portfolio for RBC purposes.

Commercial mortgages make up about 92% of the mortgage loan holdings of life insurance companies. A mortgage in good standing has a 3% RBC factor. If it becomes restructured, the factor stays at 3%. When a mortgage becomes delinquent, the factor is doubled to 6%. When it moves to the process of foreclosure, the factor moves up to 20%. After it is foreclosed, the factor moves back to 15%. It may seem strange that the foreclosed RBC factor is less than the foreclosure, but there is often a write-down of the property at the time it is foreclosed upon. In contrast to a piece of property that is bought initially as real estate, the investment real estate factor is only 10%. Something that becomes real estate through foreclosure has a 15% factor. Suppose you are a CEO or someone with decision-making responsibility in a life insurance company, and mortgages are 30-50% of the assets. What would you do with mortgages that become problem mortgages, with RBC coming up at year-end 1993? You are faced with a decision as to whether to foreclose upon a property or to restructure the loan.

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Many company actions are going to depend on where they already stand with respect to RBC. If they're comfortably into having a healthy ratio, and the economics of the situation say to foreclose the property, it is likely to happen as it normally would. If a company is running a low RBC ratio, below the 125% trend test or even worse, below 100%, somebody is going to think twice. "Well, should we just restructure and carry a 3% factor rather than a 15% factor?"

Many major life insurance companies have already restructured significant parts of their mortgage portfolios. I won't say that it is for RBC purposes, but you may be surprised to see what the current situation is in some large companies. The Travelers Insurance Company has the largest known mortgage loan problem in the industry; 21% of its mortgage portfolio is already restructured, and its subsidiary Travelers Life & Annuity is 31% restructured.

The two Equitable Companies which have been in the news the last two years. The parent has 16% of its mortgages restructured, and its subsidiary, Equitable Variable, has 19% of its mortgages restructured. A company that hasn't been in the news, New England Mutual, has nearly 20% of its mortgage loans restructured at this point in time. General American Life is at 12%, and Teachers Insurance Annuity Association (TIAA) is at 10%. Other major companies are below the 10% mix of mortgages being restructured.

Besides this choice as to whether you restructure a mortgage or foreclose upon it, some companies have chosen to securitize parts of their mortgage portfolios. In other words, convert mortgages to bonds. If you can convert an alleged good mortgage with a 3% RBC factor to an NAIC Class-1 bond with a 3/10ths of 1% factor, you reduce your RBC requirement by 90%. In the last few years, the John Hancock securitized department mortgage loans through Federal National Mortgage Association (FNMA) and received pass-through certificates in exchange. Converting mortgage holdings to bond assets not only helps RBC, but it may also help your appearance with the rating agencies. At the 3% level, it would have had to hold \$30 million in an RBC requirement. It went to a Class-1 bond, to be down to \$3 million or a \$27 million reduction. Massachusetts Mutual, having the largest transaction, placed \$2 billion of residential mortgage loans in a trust and received fixed-income certificates rated Aaa by Moody's and rated Class 1 by the NAIC. It shrank a \$60 million RBC requirement to \$6 million, a \$54 million reduction.

Principal Mutual has a significant part of its mortgage loan portfolio in so-called credit mortgages, mortgages granted on the home office of major business corporations. It was decided that this was essentially a bond credit risk, not a mortgage-loan risk, so it restated \$1.6 billion of mortgages to bonds. In a transaction just announced in the last week, The Equitable, in a continuing series of moves to lower its RBC ratios, securitized some private placements. Private placements are typically BB-rated securities, Class-3 NAIC bonds with a 4% requirement. For anything that you can securitize and improve to a Class-1 requirement, the factor goes from 4% to 0.75%. So with the \$686 million of private placements that it securitized, it may have reduced, in the most extreme circumstances, a \$27 million RBC requirement to only \$2 million.

Besides bonds and mortgages, common stocks have been a controversial area. It does not affect many companies, but for those companies that it does affect, it can affect them significantly. If you have a life insurance subsidiary, you just see through and it is sort of like merging the two for RBC purposes. Whatever the RBC requirement is for the life insurance subsidiary, it is added to the RBC requirement for the parent company. However, for nonlife subsidiaries, these factors really drive some insurance company managements up the wall. The RBC factor for property/casualty subsidiaries is 50% of the equity in the subsidiary, for other subsidiaries it is 30%, and for unaffiliated common stocks it is also 30%.

What's the danger in this group? Why are these factors so high? Those of you who read *The National Underwriter* know that in 1989, I started this high-risk asset ratio, dividing noninvestment-grade bonds plus delinquent mortgages, plus foreclosed real estate, by surplus. Those categories – noninvestment-grade bonds, mortgages in default, real estate acquired by foreclosure – had significantly lower RBC ratios than common stocks for investments in subsidiaries. I called those other asset classes high-risk assets, because they were carried at book value in the blue books, but their market values were significantly less than book value. Whereas, I did not include common stocks in that ratio, because common stocks are, indeed, carried at market value.

So what are the respective dangers in these classes? Let us take a look at the assets that are carried at book value and not at market value. Noninvestment-grade bonds probably have market values that exceed the book values, but at year-end 1990, large numbers of defaults were beginning to occur in noninvestment-grade bonds issued for takeover paper, etc. Bonds were generally selling at a 30% discount to book value, yet they were carried at par value rather than at market value, which was perhaps 70% of par.

Mortgage loans in good standing are carried at book value. Remember, I said that 92% of mortgage loans in the industry are commercial loans. Most of those commercial loans are not loans that are amortizing the principal, but they are mortgage loans issued for 3-7-year durations to match GIC contracts. They have balloon maturities. What happens is that the real estate developer is able to pay the interest on the property, but when the mortgage loan comes to maturity at the end of the 3- to 7-year term, he can't pay it off. The assumption at the time that he got the loan was that banks would always be willing to refinance the loans, a supposition that has fallen by the wayside. The second supposition was that real estate values always go up, something else that fell by the wayside. Major life insurance companies are generally finding they're reporting default ratios of 80-90% of maturing balloon commercial mortgage loans.

Regarding investment real estate, if you look in *The Wall Street Journal* on a weekly basis, it shows vacancy rates in different areas around the country. Many areas have vacancy rates running 20-24%. If you issued a mortgage on a \$10 million property, you issued an 80% mortgage, or \$8 million. Now you have a 20% vacancy rate. The value of that building is probably \$6 million, because, even though you have variable income from your leases, you have fixed expenses in your overhead. It might be an 80% mortgage outstanding, but the market value is only 60% of the original

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value of the property. Investment real estate carried at book value does not reflect market values.

The common stockholders are mad that the common stocks are carried at market value, and these other classes clearly are not at certain points in time. The committee that established the RBC factors has come up with the counterargument that common stocks, whether they're in the stock market or whether they are subsidiaries of life insurance companies, have volatility, and that must be what they're paying the penalty for. This leads to some maneuvering in the anticipation of RBC.

If we look at some comparative RBC factors, and we'll see that two of the most punitive factors are for common stock in a property/casualty subsidiary, and for unaffiliated common stocks, 50% and 30% respectively. Some companies invest in unaffiliated common stocks to build their surplus because they believe in growth in the stock market over a period of time as being a superior vehicle. Those people claim it is inconsistent to assign this category the highest risk factor for RBC, because it is better for the consumer, (i.e. better long term returns) especially when selling variable life and variable annuities. The risk factor for unaffiliated stock is 30%; for a CCC bond, which is near one step away from default, it is 20%; there is a 50% higher factor for common stock than there is for a CCC bond. Take the noninvestment-grade, Class-3 bond, a 4% factor; let us call it a high-yield or junk bond. The factor for common stock is 7.5 times the factor for the BB bond. The factor for common stock (30%) is ten times the factor for a so-called good mortgage, a balloon commercial mortgage that hasn't come up to maturity yet, that hasn't been tested.

So why the high factors for common stocks for affiliated companies? The risk in nonlife insurance subsidiaries really depends on the underlying business; this is where substantial risk can occur. Let us take a look at some specific examples. Subsidiaries with cyclical risk perhaps deserve to have a high factor. Whether it should be 30% or 50%, I don't know. Bob Winters, chairman of Prudential, at its 1993 annual press conference said, "Last year, 1992, we had 364 good days. The 365th day was the hurricane in Florida." In 1992, it began the year with \$900 million of surplus in Prudential Property/Casualty Company. In one day it was wiped out. Should there be a 50% factor for a property/casualty subsidiary subject to hurricane exposure? Perhaps there should be.

I worked for a securities firm for 25 years; I was a general partner in a member firm on the New York Stock Exchange. We had fixed overhead. That makes for a cyclical business when you have fixed overhead. When the stock market booms, trading volume expands, revenues go way up, and earnings shoot up. When you go to a bad market and volume shrinks, these firms often report heavy losses, and securities salesmen may be even more aggressive than life insurance agents in their sales presentations. Securities firms get sued. Last week, Prudential Securities just settled litigation for the way it handled assets and made sales presentations for \$550 million, a single lawsuit. Maybe some common stockholdings, those of subsidiary companies in certain businesses, do deserve a high RBC factor if the regulators intend to protect the solvency of these companies.

Back in the late 1960s, early 1970s, Diners Club never showed a profitable year while it was owned by Continental Corp. Diners Club ate up its surplus and it sold it

off at a tremendous loss. People here probably don't remember when Travelers only had 40 million shares outstanding. Travelers got enthralled with the computer business and issued ten million shares, 25% of its outstanding capital, to buy Franklin Computer. It went down the tubes in about ten years. It sold it to a bank for \$20 million. It essentially gave up 25% of Travelers for \$20 million. When Aetna Life & Casualty diversified, it went into Comsat and the oil business. It wanted to balance the life business, the property/casualty business, and the group business with diversified businesses, and took its losses and got out. I think examples like this are probably part of the reason as to why we have high RBC ratios for holdings of stock in subsidiary companies. The only way to combat that is to make changes in corporate structure.

This is what has been happening in the last two years. Let us assume that Company A owns Company B. There are several things that it can do, several things that have actually been happening in the industry. One is to move Company B out from under Company A. Instead of having a holding company own Company A, which owns Company B, just make them both direct subsidiaries of the parent holding company. In some cases, people have merged Company A and Company B. We have seen a couple of situations in which the ownership has been flipped. Company B was not in the public eye for marketing purposes and rating agency purposes. Instead of having Company A own Company B, it changed it around so that Company B now owns Company A.

In some cases, subsidiary Company B had a single, special purpose, typically holding only one specific asset class, such as Government National Mortgage Association (GNMA) collateral, real estate holdings, bond tranches, or an investment company. And so the parent company just dissolved it and now it carries an RBC factor for the specific asset class, rather than a punitive 30% factor.

I'd like to discuss something that just came up, the Executive Life ploy, or as I call it, the Garamendi Shift. Executive Life has just mailed out the election booklets to its policyholders, in which they can either opt into the new Aurora National Life or they can opt out and take their money in cash during a period of time. What did Executive Life or Aurora National do?

In this booklet, by the way, it aggressively touts itself three times, in what to me appears to be in violation of the NAIC mandate on discussing the RBC ratio relative to the industry. Three times it points out that if Executive Life were ranked relative to the fifty largest life insurance companies, Executive Life would rank in the top ten with its RBC ratio. Three times it states that it would have the highest RBC ratio of the top 20 annuity writers in the U.S.

Mr. Garamendi has taken all the common stock holdings with a 30% RBC ratio, put them in an asset trust, and has taken them off the balance sheet of Executive Life. He has taken all the Class-6 and Class-5 bonds with 30-20% ratios, moved them into an asset trust, and has taken them off the Executive Life balance sheet. He has taken the investment real estate, put it in a separate real estate asset trust, and has taken it off the Executive Life balance sheet. He has left Executive Life, now Aurora National, with about 99% of its assets in Class-1 bonds. As a result, he's producing

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an RBC ratio of roughly 300%. That is probably not an avenue that is available to other people to emulate.

I will point out a few examples of what's going on with the liability side of the balance sheet. Companies are selling or reinsuring low-margin business segments. If group life or group health is offered as an accommodation, some companies have just discontinued it. If a company has a few large, special group life or group health cases that have been essentially nonprofit cases, they're there for business reasons, they've decided to discontinue them because of the penalty associated with them under RBC. We have seen a number of companies with continued losses in the disability income line, withdrawing from the disability income line, which also happens to have a heavy RBC ratio. And then there are only 65 companies in the U.S. writing GIC contracts. I would say that 15-20 of those 65 companies are essentially withdrawing from the business; they're no longer writing new GIC contracts.

Besides directly getting out of businesses, you can stay in businesses but simply restructure your liabilities. Take interest rate risk. RBC breaks up liabilities into four different categories. Contracts surrenderable at book value (surrenderable at a 5% or less surrender charge) have a 3% RBC factor; contracts with a surrender charge of 5% or more have a 1.5% RBC factor; market-value-adjustment contracts have a 0.75% RBC factor; and nonsurrenderable contracts have a 0.75% RBC factor.

Aetna Life Insurance Company, through some GIC and pension holders who had surrenderable contracts in which they carried a 3% RBC factor, offered to raise the interest rate it was paying on the contract if the contract holder would extend the contract and make it nonsurrenderable until it matured. It cut its RBC factor 75%, from 3% to 0.75%.

Xerox Financial Services Life wrote to people with surrenderable single-premium deferred annuity (SPDA) products and offered an increased crediting rate if they would exchange those annuities for a five-year nonsurrenderable contract. People are restructuring liabilities in addition to making changes in their asset portfolio.

As I said at the beginning of my remarks, there is the law of gravity as it applies to life insurance companies. If the RBC requirements are too high for life insurance companies, life insurance companies will find a way to make the RBC requirements plummet to the ground.

And in conclusion, I leave you with a single question, which you can ponder. When the regulators established the scale of RBC factors, did they realize the gravity of the situation?

MR. ROBERT M. BEUERLEIN: I'd like to talk a little bit about *FAS 107*, *FAS 105*, and *FAS 115*. These things all relate to what Fred was talking about. On the statutory side, we are using RBC to evaluate the variability and the risks that are associated with things that are going on in an insurance company. On the GAAP side, we are using some new things that FASB has come out with to let investors have a better idea of what's going on, as far as potential risks and variability out there. *FAS 107* and this whole group of latest pronouncements goes along those lines.

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In 1986, the FASB undertook a comprehensive, major project to reconsider the accounting for financial instruments. At that time, its goal was to provide a consistent conceptual basis for resolving accounting issues for financial instruments. It was particularly concerned about these new financial instruments back in 1986. A collateralized mortgage obligation (CMO) was still pretty new, and it was concerned about letting investors have a better idea of what was going on.

About that same time, or maybe a year or two later, the General Accounting Office (GAO), the AICPA, the SEC, and several congressional committees got excited and said, "we need to have more information in the financial statements with regard to market values or fair values." They were strong in what they said so something had to be done.

In 1990, the AICPA came out with SOP 90-11. In this statement of position it said that you had to disclose the amortized value and the market value and the unrealized and realized gains and losses associated with your debt securities. That was kind of step one. Then in 1990, as part of this major project that FASB was doing, it came out with *FAS 105*, which required disclosure of contractual information that was associated with instruments with off-balance-sheet risks. *FAS 105* was just telling about the contractual information but was not really putting any numbers down on paper.

FAS 107 came out in December 1991. *FAS 107* requires that all entities, not just financial institutions, disclose the fair value of certain on- and off-balance sheet assets and include that in their audited financial statements. *FAS 107* was effective for fiscal years ending after December 15, 1992. Small companies with \$150 million or less in assets had a special exemption to string it out a little bit longer.

At that time, mutual companies weren't all that excited about it. In the last year or so, mutual companies have been getting more and more excited about all these FASB pronouncements because GAAP for mutuals is becoming a reality. So we tried to figure out how *FAS 107* is being applied out in the real world. The first time we saw anything about that was probably in 1992 annual reports.

I took a look at eight or ten annual reports to try and get a feel for what companies are doing in reporting these *FAS 107* requirements. Although there is kind of a general thread running through things, every company has a different way of doing things. I did find one that kind of had everything in one place in its annual report.

This company put its disclosure about fair value of financial instruments in its notes to the consolidated financial statements, and it was all in one place. Some companies strung it all throughout, so I did not know what I was looking for, and I wasn't sure if I was going to see everything. I'd like to quote from that a little bit to give you an idea of how to report for *FAS 107* purposes.

Quoting, "In accordance with *FAS Statement 107, Disclosures About Fair Value of Financial Instruments*, information is provided about the fair value of certain financial instruments for which it is practicable to estimate that value." *FAS 107* goes into great detail about what practicable means. It means without incurring excessive costs. And what does that mean? Two companies have the same type of asset; for

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one company it may be practicable and for another one it might not be. Maybe one is a small company and one is a larger company that has more resources to do something. There's a little bit of subjectivity that you need to disclose if something is not practical.

Going on and quoting, "For purposes of *FAS 107*, the estimated fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties, other than a forced or liquidation sale." That is just telling what value we are looking for. "The fair value amounts disclosed represent management's best estimates of fair value in accordance with *FAS 107*, this disclosure excludes certain insurance-policy-related financial instruments and all nonfinancial instruments." *FAS 107* directly says that you can exclude insurance contracts unless they're guaranty or investment contracts under *FAS 97*. Typical whole-life-type policies, or even universal life policies would be not required to be disclosed. It is important that we remember the words *it is not required that it be disclosed* for those products.

Going on, ". . . the aggregate fair-value amounts presented are not intended to represent the underlying aggregate fair value of the company." In other words, you can't take the aggregate value of all the assets and the aggregate value of all the liabilities that you have reported and subtract them and come up with a fair value for the equity, because not everything is covered.

Going on and quoting from this report, it tells how to report on these various financial instruments. "The methods and assumptions used to estimate fair value are as follows: Fair value for fixed-maturity securities is determined from quoted market prices where available." Where fixed-maturity securities are not actively traded, fair value is estimated by discounting cash flows and using current interest rates, considering credit ratings and the remaining terms to maturity. Fair value for accrued investment income approximates the carrying amount. Fair value for equity securities is based on quoted market prices. Fair value for first mortgage loans is estimated by discounting cash flows and using current interest rates on similar real estate loans, considering credit ratings and the remaining terms to maturity. Fair value for separate-account assets/liabilities is based on quoted market prices of the underlying assets, which approximates the carrying amount. This particular company said, "policy loans have no stated maturity dates and are an integral part of the related insurance contract. Accordingly, it is not practicable to estimate a fair value." So this company decided it couldn't, did not want to, or did not think it needed to disclose anything about the fair value of its policy loans. Other companies that I looked at did disclose the fair value of their policy loans.

It goes on to say, "Fair value for investment-type insurance contracts is estimated by reducing the policyholder liability for applicable surrender or mortality charges, if any." And finally, this company had some outstanding commitments on which it commented. "Fair value for commitments to extend credit, principally mortgage loans, is calculated using current interest rates that approximate the amount a willing buyer would pay to acquire a similar instrument."

And at the end of all this, it has a table of numbers that shows the carrying amount and the fair value for each of these categories. Under fixed maturities, for instance, it

shows \$4.2 billion of carrying amount and \$4.6 billion of fair value. An investor would imply that the fair value is \$400 million more than the carrying amount. So that is what this company did and many other companies did something similar.

Nothing seems to hang together because not all insurance liabilities are covered. In fact, as you remember, I said that it is not required that you disclose fair value information with regard to insurance contracts unless they happen to be the investment contracts under *FAS 97*.

For the deposit contracts under *FAS 97*, it looks like it was kind of a mixed bag. About half the companies that I looked at were using just a surrender value for their fair value, which is fine and in accordance with *FAS 107*. The other half looked like they were using some kind of a discounted present-value setup, which also complies with *FAS 107*. You'll remember that I said that it is not required that you disclose information on the insurance contracts, the nondeposit types. It is not required, but some companies will argue, it is allowed. That is probably a crux of a matter that we need to examine more for *FAS 107*.

FAS 107 was market-value disclosure; *FAS 115* is market-value accounting and has more implications actually than *FAS 107*. *FAS 115*, of course, is called Accounting for Certain Investments and Debt and Equity Securities. Before I briefly describe *FAS 115*, it has a major problem; it only addresses assets and does not address fair value of liabilities. The ACLI was very strongly against that, as a lot of the industry was, but the ACLI wrote a very strong letter to the FASB, dated December 11, 1992. I'd like to quote just a paragraph from that letter to show you how strong it felt about this.

The Council believes that the concept of market-value accounting as set forth in the exposure draft is both inappropriate and unnecessary in the context of life insurance companies. It is inappropriate because it does not constitute a rational accounting solution to the perceived problems of historical cost accounting, and would, without question, result in the presentation of distorted and materially misleading financial information.

That is strong.

Also, hasty acceleration of the Board's financial instruments project is unnecessary, because the principal criticisms made of historical cost accounting, namely the practice of gains trading and the unavailability of fair-value information on portfolio debt securities, have recently been addressed. The possible advantages resulting from gains trading have been neutralized by the implementation of the IMR, under the statutory accounting model utilized by the states. The notes to GAAP financial statements will disclose the IMR, in discussing the reconciliation of statutory and GAAP earnings. Fair-value disclosure relating to portfolio investments has been implemented through *FAS 107*.

In other words, it did not see the reason for applying *FAS 115* to life insurance companies.

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Well, the FASB reacted to the general thought process and was broken up into three camps. The first said to implement *FAS 115*, as it actually did get implemented. Another camp said to get the assets/liabilities all figured out and then it would do *FAS 115*. The third camp said to hold off on *FAS 115* until it had seen what *FAS 107* had done; it was going to analyze the reporting on *FAS 107*. In the effort to maintain the expediency of this whole project for the FASB, I think it went the *FAS 115* route as it currently is.

We'll quickly go through that for people who aren't familiar with *FAS 115*. *FAS 115* defines three categories of assets. The first category includes those that are held to maturity. In other words, there are very few situations in which you would be allowed to sell those assets. You have to say that they're locked off and they will be kept until maturity. The second category is trading securities, which is an actively traded portfolio such as equities. Many companies do active trading of various types of securities. The third type of asset or category is available for sale. Basically, if it is not in the first two categories, it is in the third category.

What are the implications of these? You get to hold the held to maturity at amortized value, similar to what you are doing right now with your bonds. You hold the fair value for trading securities and reflect it in the income statement. In other words, unrealized gains and losses will run through your income statement and can create a lot of variance.

The third category is available for sale. Again, look at the fair value, but it is only reflected in the shareholder's equity account and not in the income statement. But it still does have an effect.

We are thinking that *FAS 107* might help us out with *FAS 115*. With all this inequity of not having the liabilities accounted for correctly, I think, as the ACLI pointed out in its letter, we might have some misinterpretations of financial data. *FAS 107* requires that companies disclose the fair value of their financial instruments, including held to maturity. With *FAS 115*, we had the held to maturity that is amortized value. You still have to tell what the fair value of it is for *FAS 107* purposes, so that will be available to investors.

The expanded use of fair values in GAAP financial statements will lead some companies to reexamine and maybe refine the methods they used on their deposit liabilities. Maybe instead of using the surrender value, we are going to see more sophisticated ways of coming up with a fair value on these deposit liabilities. In the interim, if all the companies decide to disclose the fair values of their insurance liabilities, their nondeposit liabilities, then we can maybe have a better picture of what's going on with the balancing between the fair value of the assets and the fair value of the liabilities. It is not required, but it is not precluded, some will say, by *FAS 107*.

As far as the fair value of liabilities, the ACLI and the American Academy are both very active in trying to do something about this right now. Jim Hohmann from Tillinghast is leading up a group for the Academy. Arnold Dicke is heading up a group for the ACLI, and they're both trying to come up with some recommendations. I know that Dick Robertson and Arnold Dicke have done a significant amount of work on trying to come up with methodologies for fair value of liabilities. We don't

participate, though, that the FASB is going to be quick in responding or in reacting to it. We would anticipate that one, two, or three years may go by with this fair-value-of-liabilities issue not being taken care of. Maybe *FAS 107* might be the end run for us. We can include these fair values through *FAS 107*.

The tax man is trying to get involved in this deal too. I guess it is not clear yet, and it kind of came as a surprise to the industry, but our Internal Revenue Code Section 475 may (I don't think it is been finalized yet) bring in some of these unrealized gains, bringing this market-value concept out of *FAS 115* and onto the income tax return. Possibly we'll be paying income taxes on unrealized gains and losses. It is still a possibility and still under discussion, but I think it is something everyone should be aware of and be ready for in case it does happen.

I hope that *FAS 107* works out, but until we get the fair-value-of-liabilities question worked out, I think we are still going to have some problems with the financial statements.

MR. MCKERNAN: The AVR and IMR have changed the rules on how capital gains and losses impact income and surplus. Companies need to revise their financial-planning models and techniques in order to incorporate these changes and to basically find out where they're heading in the future.

To introduce this process, I'll begin by defining the IMR and AVR. I'll provide a summary of how they impact the statutory balance sheet and summary of operations, and then dive into some of the considerations for implementing the IMR and AVR as part of the financial management process.

The change in IMR is equal to the realized capital gains and losses on fixed-income assets (interest-related gains and losses on fixed-income assets net of capital gains taxes), plus realized liability gains and losses (related to the market value adjusted products and reinsurance transactions), less an amortization of the IMR (an income that can either have a negative or a positive impact on earnings), plus a surplus adjustment.

So what do we mean by interest related? Basically, there is an interest-related gain or loss if the classification of that asset has not changed by more than one class during its holding period. For bonds, the holding period is deemed to be the latter of December 31, 1990 or the purchase date. Also, there's an exception to this rule. If it was ever held in Class 6, then it will always be reported as a credit-related gain or loss, which would flow directly into the AVR.

Mortgage loans are deemed to be interest related if the mortgage is not in foreclosure, is not in delinquency, is not in the course of a voluntary conveyance, and has not been restructured in the last two years. It is worthy to note that prepayment penalties will be considered part of the gain or loss. Likewise, unscheduled sinking-fund payments are treated as gains or losses as well, which would flow into the IMR.

In 1992, preferred stock was reported as a credit-related gain or loss, flowing into the AVR. For 1993 and later, it will flow into the IMR if there has not been more than one class-rating change. Again, there are some exceptions. If it was ever held in

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Classes 4, 5, or 6, then it would be treated as a credit-related gain or loss, and it would flow into the AVR.

There are some exceptions, for government guaranteed assets. Beginning in 1992, 50% of the gains or losses were excluded. For 1993, 25% will be excluded. However, for 1994 and later, there will not be any exclusions for government guaranteed assets.

Concerning reinsurance with a nonaffiliate company, for 1992 100% of the assets sold relating to the simultaneous sale or exchange with the reinsurance were excluded from the IMR. However, for 1993 and later, there will be a liability adjustment to the IMR for material reinsurance transactions. The transaction is deemed to be material if it represents more than 5% of the liabilities. Even if you do not sell the assets supporting the ceded reinsurance, it will be deemed that you sold the assets. The complement of any implied gain or loss would flow to the IMR as the liability portion of the reinsurance transaction. Then, in theory when you actually do sell the assets that were supporting the reinsurance transaction, the effect would offset the liability thereby netting out to zero through the IMR.

For market-value adjusted products, if you have assets valued at book supporting market-value-adjusted products, material gains and losses on the market-value-adjusted policies would be brought into the IMR, if it is material. Material is defined as being greater of 0.01% of your total liabilities are concerned or \$1 million.

As far as excessive withdrawals are concerned, there is an exemption for assets sold supporting withdrawals in excess of a threshold. The threshold is defined to be 150% of the lesser of the last two years' withdrawal rates.

Other elements are associated with the IMR. There are three different methods in which you can amortize the gains or losses back into the income. The first is the seriatim method which is the preferred method. Basically, you are going to reflect the difference in the amortization schedule that was associated with the asset sold and the schedule assuming a repurchase of that same asset at disposition.

The second is the group method for which the NAIC Standard Valuation Office publishes amortization schedules annually. You would group the assets based on years of maturity and apply the schedules. For preferred stocks and bonds that do not have a stated maturity date, 30 years would be the deemed maturity. The maturity date used will be 50% of the expected maturity date for residential pass-throughs.

The third method is an approved company method. In other words, if a company has in existence an appropriate amortization of income supporting its various lines of business, it may seek departmental approval of that method for adoption.

Originally, when the IMR was proposed, it permitted negative values. Theoretically, if you amortized all the gains and losses into income over time, it would all wash out. However, for 1992-93, if you do have a negative, you need to bring that up to zero. This creates a ledger asset, a nonadmitted asset, and it is a direct charge to your surplus. If it is positive, you are amortizing income, and if it is negative, you take the

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hit. It was recommended that there not be a maximum, and it was recommended that there not be a minimum. Right now, it is on the 1994 agenda that a negative IMR be looked at once again. I suspect that if it is permitted, there would need to be a supporting actuarial opinion.

Concerning separate accounts, no IMR is required for market-value-adjusted separate account products. However, it is required for book-value, separate-account products. If it is required, it is to be held in a separate account or in the general-account IMR. In reference to that, California Bulletin 92-7 indicates realized gains or losses should be held in a separate account to support the market-value asset/liability balance.

As far as the future is concerned, for the IMR, permitting the negative values will be reviewed. Also, there may be a clarification of negative yields on loan-back securities. This could occur when there is a substantial change in Public Security Association (PSA) prepayment speed. A negative yield may be brought in through the IMR at that point.

The AVR is to include all unrealized capital gains or losses, having the same effect as the MSVR. However, on realized gains and losses, only those that are credit related would be brought into the AVR, net of taxes on fixed-income assets. This would occur if there is more than one class change or if it was ever in Class 6 for bonds or in Classes 4, 5, or 6 for preferred stock. It includes all realized capital gains on equity investments. The required annual contributions beginning in 1994 will be 20% of the difference between the maximum subcomponent amount and the current component amount. There is a five-year amortization schedule, which is a much faster amortization than is required under the MSVR. For 1993, the factor is 15%. There can be voluntary additions and transfers are permitted among the subcomponents if the maximums are reached, similar to MSVR treatment. Also, there can be adjustments that would bring the components down to the maximum permitted or up to a minimum of zero.

Let us take a look at some of the factors for the default component in Table 1. The factors are the same as for the MSVR. However there is an accrual factor of 20% which is a substantially faster amortization rate than that required by the MSVR.

TABLE 1
AVR Default Component Maximum Factors

NAIC Class	Maximum Percentages	
	Bonds	PS
1	1%	3%
2	2	4
3	5	7
4	10	12
5	20	22
6	20	22

Mortgages are 3.50% Adjusted by Actual to Industry Experience

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Bond components for 1993 have been separately identified between short-term and long-term bonds, although the factors still remain the same. This is likely to be a predecessor for a separate factor delineation for short-term/long-term bonds.

The mortgages are a new addition. The mortgage factor is 3.5% adjusted by company experience to industry experience. In 1991 industry mortgage default experience was 6.32% without restructures. In 1992, it was 14.24%. For 1993, 10.28% is a factor for computation purposes. The 3.5% factor is representative of experience prior to 1990. The mortgage factor is on the agenda for review.

Factors for equities are illustrated in Table 2. Controlled common stock is treated the same as the MSVR. Common stock of an affiliate life insurance company is 0% if the affiliate does maintain an AVR. For controlled companies, the factors are either 20% or 25%, depending on if they are valued by using Standard Valuation Office (SVO) procedures. For unaffiliated public companies, the factor is 30%. However, you may use your portfolio beta and multiplied by a 20% factor, subject to a maximum of 30% or a minimum of 15%.

TABLE 2
AVR Equity Component Maximum Factors

NAIC Class	Maximum Percentage
CS – Affiliate LIC	0%
CS – Controlled	20-25
CS – Other	30*
CS – Unaffiliated Private	25
Real Estate – Improved	7.5
Real Estate – Unimproved	7.5

* May use 20% x Common Stock Beta Adjustment with Max 30%, Min 15%

Real estate is at 7.5%. It is interesting to note that the original recommendation was 10% for improved real estate and 20% for unimproved. There are a number of class breakdown for the type for real estate holdings there may be.

Unclassified assets are at 20%. This includes money market funds that have not been formally approved by the SVO. So money market funds are, in essence, treated as equities. It is interesting to note that money market funds are in the process of being approved. There was an article in the August 20, 1993 edition of *The National Underwriter*, indicating that Fidelity had its First Funds newly approved by the NAIC as a Class-1 asset, and I imagine there are going to be quite a few subsequent approvals.

The AVR excludes separate-account assets if existing regulations provide for separate-account reserves for C-1 risk and they are essentially equivalent to AVR requirements. They are also excluded if the asset default or market-value risk is borne directly by the policyholder. Otherwise, the AVR will need to be established in a separate account or be combined with the general account AVR. Again, in reference to California Bulletin 92-7, the AVR for modified guaranty annuity products are to be held in the general account because it is deemed that the general account is supporting that obligation.

As far as the future is concerned, we talked about classifying the money market funds as Class-1 investments. The basic structure of the AVR is under review in 1994 by the Technical Resource Group. Right now, including derivative instruments' credit exposure as part of the AVR calculation is before the NAIC Blank's task force (a determination may have been made last week). Also, the task force is considering an exemption for federal home loan mortgage corporation securities.

How does this affect the balance sheet? The IMR is held as a reserve in the policy and contract liabilities section. The premise is that gains or losses associated with the change in interest rates still needs to be there to support the policyholder liabilities. So as the gains or losses are released from the IMR, it would then support the increases in policyholder liabilities. This presumes a matched case between the original assets held supporting those liabilities. So as the IMR amortizes the gains and losses into income, it theoretically supports the increase in reserves maintaining a balance between the liabilities and assets.

It is not considered a valuation reserve or an allocation of surplus. However, there are some exceptions and I found this somewhat interesting. Michigan, which a number of Canadian companies look to for guidance, has permitted Canadian branches to not hold the IMR as a policy liability. If the IMR is negative, the adjustments cause a direct hit to surplus.

The AVR is reported on the same line that the MSVR had historically been reported. The Michigan Insurance Department has exempted Canadian companies from posting the AVR. Negatives are adjusted to zero and are not carried forward. Again, that would result in an immediate charge to surplus.

One thing that has impacted a number of companies, especially in the declining interest rate environment, is that realized gains and losses that would have previously spilled over and out of the MSVR are now being captured by the IMR and are deferred for a substantial period of time. Historically, they could have improved the company's surplus position.

As far as the summary of operations is concerned, the amortization of the IMR is brought into the investment-income component. Net realized capital gains and losses exclude transfers to the IMR. The change in AVR is reported on the same line that the MSVR had been historically, and it does receive the same treatment.

Now what does this mean? Basically, with the approach used regarding the IMR, if you are investing longer than your liabilities you can have some very interesting consequences regarding the financial results of the business. Likewise, if you are investing short. The premise is that the IMR behaves well if you are fairly well matched.

Historically, any charges to the surplus account – be it target surplus, RBC, AVR (historically the MSVR) – had never really been brought into the process of your financial management. You were looking at your pro forms before these charges to surplus for your profitability. In the not-too-distant past companies started looking at their A.M. Best ratios or maybe just applied a straight percentage factor to their reserves to represent the cost of supporting surplus in producing business. More

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recently, companies have been adopting target surplus formulas, but even still it is a fairly low turnout. I saw a recent survey in which about 50% of companies have a target surplus formula. Now we have RBC upon us, so I imagine that is going to generate a lot of activity, and companies will start recognizing a charge to surplus to support their business.

I put together some samples to take a look at the effect of the earnings pattern. I picked one single product, one policy issue, as opposed to doing a full-blown model for a couple of reasons. It is a little bit simpler to see the direct impact, and it did not take nearly as long.

When reviewing the results, keep in mind that the IMR presumes a matched case. I looked at several investment scenarios, either having an investment horizon that was short, somewhat matched or long, and then three different interest rate trends: decreasing, level, or increasing. This allows us to analyze the results with a matrix approach.

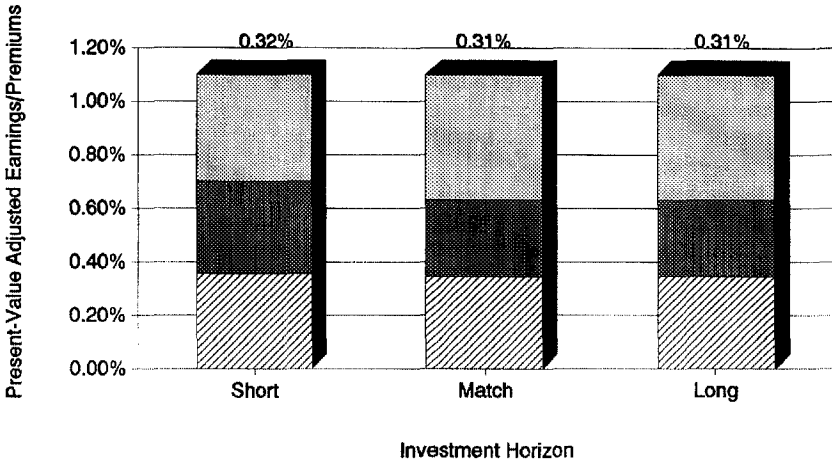
How do we analyze the effect of the IMR and AVR? It is basically taking a look at the cost of capital and how it affects profitability results. What happens if we totally ignore the IMR (the effect that it would have on your earnings stream), the AVR, and target surplus (the cost of the supporting surplus of the company)? In these projections I assumed a floor of the RBC requirement.

Looking at Chart 1, we find that because we are at a level interest rate horizon, it does not really matter how we are invested, because our reinvestment assumption is not going to be a problem. But we find, in looking at these stacked bars, that the lowest bar represents the true cost, or the profitability, on a product recognizing all the charges to the surplus account. Here we are looking at just under 0.33% of premium profit margin. Going up a little bit, what happens if we ignore the target surplus component? In other words, we are only going to look at the impact of the IMR and AVR, but we are going to ignore everything else. We find that we have doubled the profitability. How about if we ignore all these charges to surplus? We are making lots of money; we have got a 1% of premium profit margin! You may be basing your financial decisions on a 1% of premium profit margin but only realize 0.33% of premium profit margin.

Chart 2 looks at an increasing interest rate environment. If we invest short, we are going to do much better because now we can reinvest at much higher rates. However, if we invest long, we have to sell off assets to meet liability cash flows, and we are going to do very poorly.

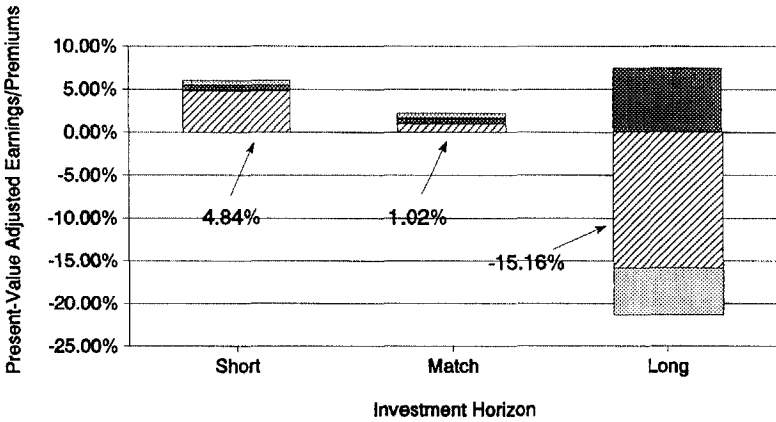
We have to look at each stacked bar as an increment. If we invest long, our profit margin, which had been just less than 0.33%, is now a 15% loss. This is on a ten-year immediate annuity, just a pure payout over a ten-year horizon, so this can be pretty substantial.

CHART 1
10-Year Single-Premium Immediate Annuity (SPIA)
Level Interest Rates



IMR/AVR/TS IMR/AVR None

CHART 2
10-Year SPIA
Increasing Interest Rate

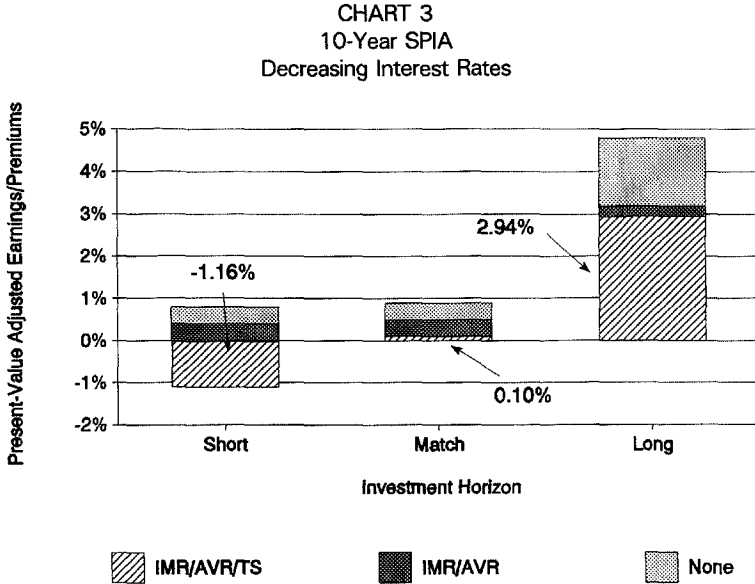


IMR/AVR/TS IMR/AVR None

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If we ignore our target surplus, in other words, we are only including the IMR and AVR, we see a positive increment of about 6% netting out to negative 9%. Ignoring target surplus, we are right back to where we started. The target surplus component and the IMR/AVR components tend to net out each other. You will see this looking at some incidence of earnings.

Looking at decreasing interest rates in Chart 3, the same type of relationships.



What happens if we were to look at this on an annual basis? Chart 4 is our baseline case. We have a ten-year immediate annuity and earnings will be coming out over 11 years, because this was run on a calendar-year basis, as opposed to on a policy-year basis. We have our initial strain associated with the acquisition of business. In addition, some strain is associated with the AVR, and some additional strain is associated with the cost of the RBC or target surplus. As you can see, these elements have a tremendous impact on the cost of putting business on the books. If you choose to ignore these costs, you can make some very erroneous financial decisions.

In the following years, you will see we still have a charge associated with the AVR, because of the 20% amortization. We have some book-profit income, and we are also releasing target surplus back into income. Later on we are releasing some of the AVR back into income as our asset base decreases. The dotted line represents the netting of all those elements. Here we have a typical pattern we would expect during perfect conditions.

CHART 4
 10-Year SPIA
 Matched Assets – Level Interest Rates

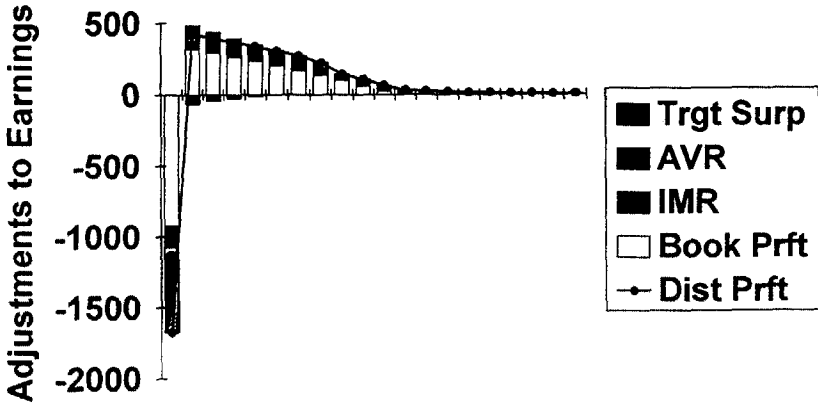


Chart 5 is the same product, the same assets, only we have invested long in an increasing interest rate environment. The profitability pattern in the early years is very similar. We have the initial acquisition strain, the contribution to the AVR, and the cost of our target surplus. However, in renewal years, we are recognizing capital losses to meet cash-flow requirements. Those capital losses are then flowing into the IMR. This creates a negative IMR which is, in effect, a contribution to income, when ignoring the floor of a zero IMR. On the flip side of the coin, we are continuing to increase our target surplus position, which is a pure offset of the decrease in IMR. During this phase, we are increasing the target surplus requirements. Normally we would expect target surplus to be released into income during this period. Book profits are showing losses. The result is an interesting profit pattern. After the liability has run off the books, because we invested long, we are going to have a long tail on the IMR. We are not releasing the IMR into income until long after that liability has run off. We have a corresponding release of target surplus, which nets out to zero during this later period.

In Chart 6 we have invested long in a decreasing interest rate environment. There is just the opposite effect on the IMR. Since we have taken some capital gains, the IMR increases which a charge to income. The AVR is now reduced because of the decreasing asset base. The target surplus is also reduced which also serves as a contribution to income. But what happens is, although we have a 10-year liability, we are recognizing income on this business over the next 20 years. This is a result of the effect of the IMR and the presumed matched case.

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CHART 5
10-Year SPIA
Long Assets -- Increasing Interest Rates

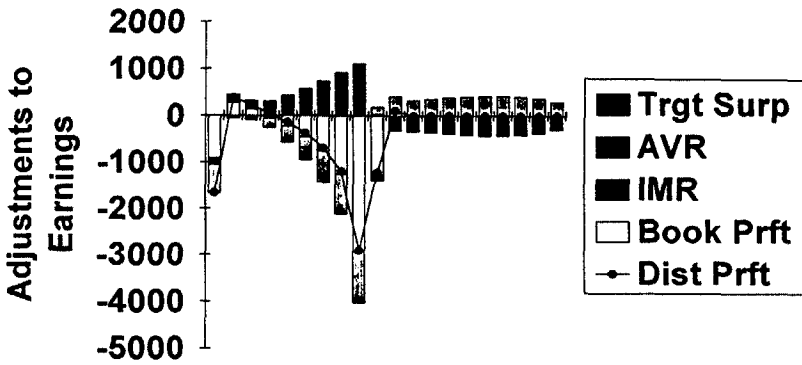
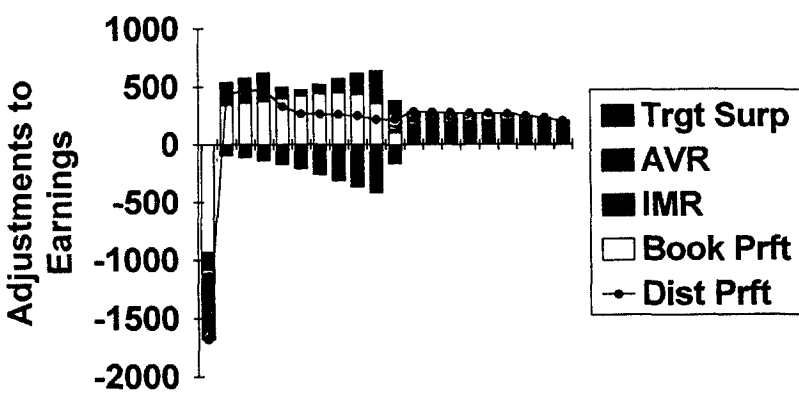


CHART 6
10-Year SPIA
Long Assets -- Decreasing Interest Rates



In conclusion, your investment strategies, crediting strategies, target surplus, RBC requirements, and the impact of the IMR can be very important considerations to make proper financial decisions. All these elements need to be brought into financial models.

