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STATE INVESTMENT REGULATION

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o A discussion of current trends in state regulation of insurance company investments.

MR. MELVIN B. DUNN: About one year ago, Jim Anderson spoke before the New Fellows' Luncheon and mentioned several new areas of practice; one of them was in the field of investment. One of the panelists, Irwin Vanderhoof, might take exception to the use of the word "new," because he has been involved in the investment area for a number of years, as have several other actuaries. More and more we will see actuaries getting involved in the area of investments, and I think it is good that we have some idea of where the regulators are today and where they are heading as far as the types of investments that are appropriate -- in their view, anyway -- for life insurance companies.

MR. WILLIAM S. TAGER: What I am going to talk about really breaks down into four topics. First is a brief consideration of the purpose of regulating life insurance company investments. Second is a short history of the regulation of investments until recent time. Third is a somewhat more detailed discussion of regulatory developments in four specific areas. These areas are

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procedures for authorizing investments, separate accounts, acquisition of subsidiaries and hedging. Finally, I will make a brief reference to three non-insurance laws which affect insurance company investing.

I think it is generally agreed that the primary purpose of investment regulations is to insure the financial soundness of insurance companies to enable them to meet their obligations to policyholders, customers and creditors. In the preamble to the comprehensive revision of the Wisconsin Investment Laws of 1971, the Wisconsin Legislature set forth five objectives of investment regulations: (1) safety of principal to be consistent there with maximum yield, (2) stability of value, (3) sufficient liquidity, (4) diversification of investments, and (5) a reasonable relationship between liabilities and assets.

There have been other objectives. For example, at one time there was a fear that insurance companies with their large accumulations of assets might gain control over other areas of commerce and industry, but with General Electric's recent announcement of a $3.5 billion acquisition budget, fears of insurance company dominance of other areas seems a bit antiquated.

While the primary purpose of regulation has remained the same, concepts of how to achieve that objective may change. For example, in earlier and perhaps simpler times, yield was considered far less important than protecting principal. Today, it is generally recognized that failure to obtain a high competitive return can threaten the long term security of an insurer.

With some exceptions, notably Wisconsin, there was little regulation of insurance company investments until the early years of this century. States like Massachusetts and New York were pretty wide open. In Massachusetts, for example, the only portion of a company's assets subject to regulation was the capital of stock companies. Just prior to the revision of the Massachusetts Law in 1907 the seven Massachusetts life insurance companies had about $158 million of reserves and unassigned surplus. However, the investment laws applied only to the $225,000 of capital of the two Massachusetts life insurance companies which were stock companies.

STATE INVESTMENT REGULATION

We are all at least generally aware of the Armstrong investigation in New York in 1905. Other states, including Massachusetts, Iowa and Ohio, also conducted inquiries, though none nearly as extensive as the Armstrong investigation. The inquiries outside of New York did not generally find the skullduggery and imprudence which, in the words of the Massachusetts Insurance Commissioner in 1906, "became more noticeable in companies managed in the great business center of this country than elsewhere, for there the soil and atmosphere were particularly fitted for the development of pestilential financial growths." Nevertheless, by 1907, 27 states other than New York had followed New York's lead in enacting restrictive investment codes. Although these laws differed obviously in various respects, they characteristically limited investment to government securities, secured corporate obligations and mortgages on real estate.

Direct ownership of real estate was generally limited to that needed for the convenient operation of a company's business as well as property received on foreclosure or settlement of an obligation. Not all states were quite as restrictive as New York, which prohibited ownership of all stock, preferred and common. Massachusetts, for example, did not prohibit investments in stock, and in addition provided a 25% basket of a company's reserve.

As time passed, economic conditions and competition required relaxation of these restrictive investment laws. Eventually, all states permitted ownership of stock and investments in unsecured corporate obligations subject to earnings or dividends tests. These earnings tests have gradually been liberalized. In Massachusetts the earnings tests for corporate obligations were last reduced as late as 1985.

Other investment vehicles or types of security were gradually recognized. Real estate leasehold interests meeting required loan to value ratios were permitted as security for loans. In addition, a loan could be made on the security of a lease of real or personal property if the lessee met required financial tests. Investments were permitted in equipment obligations.

Loan to value ratios for loans backed by real estate mortgages have gradually been increased. The required ratio in Massachusetts went from 60 to 66-2/3% in 1945 and to 75% in 1960. Most states added and gradually increased basket or

leeway provisions permitting investments not specifically enumerated in other sections of the statute.

Investments in Canadian corporations were generally permitted. Other foreign investments were also permitted but generally were limited to a relatively small percentage of assets.

As the length of investment laws and the permitted categories of investments (together with detailed qualifications and restrictions on such investments) grew and grew, some legislatures recognized the need for comprehensive rather than piecemeal amendment of insurance investment laws. Wisconsin passed a comprehensive revision in 1971. One objective of these revisions is to provide broad categories of investments and to eliminate, insofar as possible, detailed restrictions and qualifications which hamper the business judgement of the directors and officers of insurance companies. We are all aware of the New York revision in 1985. On June 11, 1986 the Governor of Pennsylvania signed a comprehensive new life insurance company investment law, which became effective immediately. The Pennsylvania law, incidentally, is the first law of which I am aware which explicitly deals with the lending of securities. Other states, including Connecticut, had already simplified and liberalized their laws.

I believe I can best give you some feeling for the development of state laws regulating life insurance company investments by discussing four specific areas. These are procedures for authorizing investments, separate accounts, acquisition of subsidiaries and hedging.

The investment laws adopted early in this century generally required that insurance company investments, other than policy loans, be authorized in advance by a company's board of directors or a committee made up of board members. However, the board or committee could not stay in continuous session. It often became necessary to acquire or dispose of an investment between board or committee meetings. This need is now generally recognized by insurance investment laws.

In 1939, New York, which had previously required that investments be "authorized" by the board or a committee of the board, added the words "or

approved." A number of other states added similar language which was interpreted to me that the board or committee could ratify action already taken by officers of the company. The new Pennsylvania law uses the word "ratify" rather than "approve."

Massachusetts law is more specific. In 1936, Massachusetts expressly authorized delegation to company officers. In 1969, the authorization was extended to officers of the subsidiary in the investment advisory business and in 1985 was further extended to officers of a non-affiliate investment adviser registered under the Investment Advisers Act of 1940 and having at least $100 million of assets under management.

The New Jersey law provides that an investment shall be authorized or approved by the board or committee or "shall be made in conformity with standards" approved by the board or committee.

Because of the desire to ensure accountability, to measure performance and to provide competitive compensation, it is becoming more common for insurance companies to turn their investment departments into subsidiaries. Thus, provisions of insurance laws respecting delegation of investment authority are assuming a new importance.

Life insurance company separate accounts have grown enormously since the early 1960s. In 1967, assets and separate accounts were $1.7 billion. At the end of 1984, separate account assets had grown to $70 billion. Although separate accounts were created initially for the assets of pension and profit sharing plans, they may now generally accept assets of other entities. In most states, separate account assets may generally be invested as permitted in the separate account contract without regard for provisions respecting general account investment except to the extent a separate account or portion thereof is guaranteed. In New Jersey even the guaranteed portion need not follow general account restrictions. In Massachusetts two 1985 amendments liberalized separate account common stock restrictions. The amendments permitted investment in non-publicly traded stocks and eliminated a 10% limit on the amount of any company's stock which may be owned by a separate account.

Under the strict laws which followed the investigations of the early 20th century, ownership of subsidiaries by insurance companies was generally considered anathema. Today insurance companies are permitted to own a variety of subsidiaries. First, insurance companies were permitted to own other insurance companies or insurance companies engaged in a business in which the parent could engage. By 1962, forty-three states permitted acquisition of insurance company subsidiaries. Gradually the concept of permitting subsidiaries in related business was accepted. In 1967, Massachusetts permitted subsidiaries engaged in investment advisory or management services to an investment company, subsidiaries holding or managing real estate and subsidiaries providing data processing services.

Also permitted were other subsidiaries found by the insurance commissioner to be complementary or supplementary to the business of the domestic life insurance company. The approach of listing various types of permitted subsidiaries, and further permitting complementary, supplementary or ancillary subsidiaries, became fairly common.

A growing number of states are permitting investments in any subsidiary engaged in a lawful business. Included in this number are California, Florida, Mississippi and Texas. Other states go almost this far but prohibit subsidiaries engaged in banking. New York and, to a more limited extent, New Jersey are in this category.

Wisconsin uses the ancillary approach generally but, to the extent there is room under its rather small leeway provision, permits investments in any subsidiary. It is important to note that other state laws may impinge on what seems to be an open subsidiary investment provision in an insurance law. For example, the Illinois Bank Holding Company Act severely limits the ability of an insurance company to own a bank.

Most states place limits on the amount of investment by an insurance company in subsidiaries. These limits are often 5 or 10% of admitted assets or 50% of surplus. In Massachusetts overall investment in subsidiaries is generally limited only by the basket provision. However, no more than 2% of the assets of a Massachusetts life insurance company may be invested in the stock of any

one subsidiary. This limit (which prior to 1986 was 10%) does not apply to life insurance subsidiaries. It is fairly common that limits on investments in subsidiaries are not applicable to life insurance and certain other subsidiaries, such as subsidiaries holding assets the parent could hold.

Related to investment law provisions for subsidiaries are the Insurance Holding Company Acts. These acts impose reporting requirements and regulate certain transactions between affiliates. A revised Model Holding Company Act may have been adopted at the NAIC meeting in Boston this week.

Insurance companies, as well as other investors, have found it increasingly necessary to employ means to protect the value of interest or market sensitive investments. Various hedging devices have been employed, including interest rate futures, options on interest rate futures, puts or calls, forward contracts and interest rate swaps.

Most states now permit use of hedging devices, by statute, regulation or informal understanding. The vehicles employed must of course be used for bona fide hedging purposes. Further, limits are placed on the value of assets hedged or on the amount of initial and maintenance margin which may be outstanding at any one time. These limits usually range from 2 to 10% of admitted assets.

Two surveys, one by Arthur Andersen in 1983 and the other by the ACLI in 1985, show the rapid development of state regulation of hedging. In 1983, seventeen states prohibited hedging. Only nine did so at the end of 1985. In 1983, twenty-two states permitted hedging. By 1985, thirty-six states permitted hedging. In 1983, twelve states had no specific policy on hedging. By the end of 1985 that had dropped to four.

In addition to laws which specifically regulate the investments of life insurance companies, there are other laws which clearly affect life insurance company investing. Among federal laws in this category are the Federal securities laws and ERISA, as well as laws like the Bank Holding Company Act and the Glass-Steagall Act, which affect the holding of certain types of subsidiaries. Certain state laws are also worth mentioning.

In recent years a number of states have enacted environmental or hazardous waste cleanup laws. These laws can be Draconian in their effects. An insurance company which has a mortgage on a offending piece of property may find its lien has been subordinated to a so-called "super-lien" imposed to cover the cost of environmental cleanup. Some of these laws may be even interpreted as imposing liability for the cleanup on an insurance company which takes title or possession of property on foreclosure of its lien, even though the environmental damage took place long before the mortgage loan was made.

In the 1930s a number of states adopted laws to protect debtors, especially farmers, from loss of their property through foreclosure. Because of the recent troubles in the farm economy, additional laws or measures have been or may be passed. These laws may impose moratoriums on foreclosures or require conciliation or mediation in good faith prior to moving forward to foreclose on farm property.

Finally, investment by insurance companies has always been considered as a tool to support socially desirable goals. Thus, state laws permitted insurance company investments in certain entities or programs which might otherwise not completely meet the test of prudent investing. In addition to the policy of encouraging specific investments, governmental bodies have recently taken steps to discourage certain types of investment. A number of governmental entities have prohibited placing or depositing any governmental fund with institutions such as insurance companies which have made investments directly in South Africa or investments in companies where the proceeds of the investment may be used in South Africa. In order to bid for and to retain governmental funds, insurance companies may be required to execute affidavits respecting their investment activity and to monitor carefully their investments.

If insurance companies are to remain competitive with other financial institutions, laws regulating their investments must be flexible enough to permit companies to acquire new types of investments or to employ new investment techniques, all in a prudent manner. Unfortunately, specific amendments to investment statutes cannot always keep pace with new developments. In Massachusetts, in 1985 alone there were ten specific amendments to the law regulating life insurance company investments.

Comprehensive simplified investment codes such as the Wisconsin or New York enactment are a strong step forward, but no legislation can foresee all future developments. Substantial leeway or basket provisions are, of course, a means by which new types of investments may be undertaken provided such investments are not prohibited in a specific or implied way by existing law.

One possibility is to authorize insurance regulators to approve new types of investments. The Wisconsin law, for example, after setting forth broad categories of permitted investments, provides for "such other investments as the Commissioner authorizes by rule."

It will be interesting to look back in about ten years to see how legislators, regulators and the companies themselves have reacted to the rapidly changing investment environment.

MR. STEPHEN MALUK: Insurance touches all of our lives in almost every way imaginable. It is an essential element in our everyday life, securing our standard of living and the stability of our families, as well as our property rights. Everyone feels the protecting arm of some type of insurance, and all of us are affected by most forms of this protection.

As a result of this widespread public interest in insurance, the supervision of this industry is an important part of our governmental process. New York is proud to have an insurance department that for over 125 years has stood as a model for sound supervision. The spectacular growth of insurance over these 125 years has resulted from a continuous search by those in the insurance business for new and better means of financial protection against every existing hazard, and against new ones as they develop.

One of the benefits of this supervision has been the transition from older to newer forms of insurance coverage and facilitating the extension of new forms from experimentation by one company to general underwriting by many. But with this transition comes the requirement that a regulatory agency do everything possible to remain responsive to fundamental changes in the marketplace. While the New York Insurance Department has made significant progress in keeping abreast of the rapid-fire changes in the life industry -- changes driven by

economic forces including volatile interest rates, consumer preference, competition and technological progress -- there are many who feel that not enough is being done. Faced with the fiscal restraints prevalent in all areas of government today, regulatory authorities are confronted with the unprecedented problem of overseeing a dramatically volatile life industry with fewer and fewer resources.

Insurance is regulated because it is "affected with the public interest." The goals of insurance regulation, as you know, are twofold:

1. The financial solvency of insurance companies, so that they have the ability to carry out their contractual obligations, and

2. Fair treatment of policyholders and beneficiaries by companies and their agents.

The first objective is the basis for the regulation of the capital, reserves and investments of insurers, and the second is the basis for the establishment of statutory standards for contractual provisions, for the sale of insurance and for the payment of claims.

The Armstrong Investigation, launched as a result of the life industry's questionable business practices, led to the creation of The New York Code, which called for closer regulation of the election of company officers, the prohibition of investments in common stocks, a limitation on the amount that could be spent securing new business, and the outlawing of the deferred dividend system. All in all, the investigation amounted to a responsible housecleaning of the industry, a plus for both the public and the insurance business itself. It is important to note, and it bears repeating over and over, that, as a result of this statutory tightening, no life company in New York has failed with a loss to its policyholders.

In 1905, 44 life companies were doing business in New York. Today, the Life Insurance and Companies Bureau, with a staff of less than 100, is responsible for over 334 organizations. But while the resources of the department have diminished, the tides of change in the life industry were spilling over the

dam. Since the mid-60s, these changes have affected almost every kind of financial institution. In the process, traditional barriers between types of institutions have been shaken, and the institutions themselves have come under intense competitive and financial pressures.

In New York, in October, 1981, then Governor Hugh Carey established the Executive Advisory Commission on Insurance Industry Regulatory Reform, chaired by John Heimann, and directed the commission to do the following:

1. Identify and evaluate existing provisions of the New York Insurance Law relating to investment practices and permitted operations of New York insurance companies, and

2. Develop and recommend to the Governor necessary changes in such provisions and policies consistent with protection of policyholders and the economic well-being of our licensed insurance companies and New York State.

In the 75 years since Armstrong, the philosophy in New York had been that the legislature would protect policyholders of life companies by highly detailed statutory provisions designed to assure a suitable degree of quality in the investment portfolio. The result was a statute that took six pages of small type to define the types of real estate mortgages deemed suitable investments for life companies and four pages of small type, replete with "earnings" tests and other qualitative standards, to define the acceptable classes of corporate obligations.

As a result of recommendations found in the 114 page "Heimann Report," in July 1983 Governor Mario Cuomo signed into law a dramatic piece of life insurance legislation. This legislation, commonly referred to as the Cuomo/Corcoran Bill, completely changed the regulatory philosophy in New York. Eliminated were the lengthy and highly intricate provisions designed to ensure quality. Instead, the philosophy became that life company management has not only the responsibility for investment decisions, but the authority as well.

Some of the highlights of the Cuomo/Corcoran Bill:

1. *Standard of Prudence.* Prudent management of an insurer's assets requires adequate diversification to reduce risk, and matching assets to liabilities to ensure adequate funds flow. The explicit addition of the prudent management to the insurance law showed the department's concern that the managements of life insurance companies always keep in mind that exemption from the former statutory standards of quality does not attenuate management's obligation to observe the standard of prudence in the making of investments. The former detailed qualitative tests did not, by themselves, establish that any particular investment satisfied the standard of prudence; but those tests, indicating as they did views of the legislature as to investment characteristics and qualities consistent with prudent investment practices, constituted a degree of validation for management's conclusion that the investment decisions were prudent. Now, it is up to the companies, without the support of statutory guidelines, to establish their own criteria of quality and to document their compliance with the standard of prudence.

2. *Subsidiaries.* The bill permitted subsidiaries of domestic life companies to engage in a wide range of activities, in each case as determined to be appropriate by the insurer in the judgment of its board of directors, with overall asset limitation. Previously, subsidiaries of domestic life companies were limited to a list of specified activities, as well as any business activity "ancillary" to an insurance business. The list was limited to meet the needs perceived at the time of enactment of Section 46-A in 1969. At that time, it was concluded that non-ancillary subsidiaries might dilute the attention, talent and resources available to the insurance enterprise. The Cuomo/Corcoran Bill concluded that management, under the supervision of the board of directors, should be relied upon to judge what activities are appropriate in enabling it to pursue its corporate goals and to develop or acquire competent management for the insurance company's subsidiaries.

   New York Law took account of changing economic conditions and market needs. Management, in serving the best interests of policyholders, was given more latitude in making business decisions regarding investments in subsidiaries. Mutual life companies, because of their inability to

diversify through an upstream holding company structure, had been particularly restricted by statute in their ability to adapt to a changing economic environment.

While the bill also provided for an increase to 10% of admitted assets for life subsidiaries, no more than 5% can be in subsidiaries not having their principal operations in New York State. The new limitations on investments in subsidiaries have, as expected, encouraged life insurers to maintain and increase subsidiary operations conducted in New York State.

3. *Hedging.* Domestic life companies can now use futures and options on obligations and foreign currencies for the purpose of bona fide hedging. In March, 1984, Regulation No. 111 implemented the statutory authority granting domestic life companies the ability to trade futures, options, and options on futures to reduce interest rate and foreign exchange risk exposure. It is interesting to note that of the 82 domestic life companies licensed in New York, only 10 have seen the need to avail themselves of these hedging opportunities.

Under Regulation No. 111, a bona fide hedging transaction may be initiated "for the purpose of reducing the risk of market fluctuation and which is intended to be a substitute for the sale or purchase of (1) an underlying obligation, or (2) foreign currency in connection with the purchase or sale of eligible securities." Authorized hedging transactions must offset price changes in eligible investments intended to be sold or acquired, thereby limiting permissible hedging activity to anticipatory hedging. Anticipatory hedging transactions may include futures on obligations, futures on foreign currency contracts, call options on obligations and foreign currency, and call options on futures contracts on eligible obligations.

Currently, put options are specifically prohibited. Additionally, a gain or loss from a hedge must have a high correlation with the price change of the hedged investment; a hedge may be maintained for not more than one year; and the maturity of the hedge must closely match the designated purchase or sale date of the transactions. Insurers may not expose more

than 2% of their admitted assets with respect to the aggregate amount of obligations which are hedged at any one time. The cost for all hedging transactions in effect at any one time is limited to 3% of an insurer's admitted assets.

4. *Accountability.* At least one-third of the directors of a domestic stock life company and at least one-third of the members of each committee of the board of any domestic life company must be non-management directors. A non-management director is a director who is not an officer or employee of the company or of any entity under common control with the company and who is not the beneficial owner of a controlling interest in the voting stock of any such entity. The election of non-management directors is consistent with current corporate practice of publicly-held companies. It was hoped that this reform would bring further strength and objectivity to the boards of New York life companies and better enable those boards to monitor management.

The bill required that the board of directors of any domestic life company include one or more committees comprised entirely of non-management directors. Such committees have the functions of reviewing the company's financial condition, recommending the selection of independent certified public accountants, recommending candidates for election as directors by the shareholders or policyholders, evaluating the performance of principal officers, and recommending to the board the selection and compensation of principal officers.

The bill required that almost every licensed insurer file an audited financial statement accompanied by a report of an independent certified public accountant; required the accountant to notify the superintendent if the insurer's financial condition was materially misstated or if it did not meet minimum capital and surplus requirements; required the accountant to furnish the department with an evaluation of the insurer's internal controls; and required that the accountant's workpapers be made available to the department for review.

5. *Investments.* After many years of piecemeal amendments to the investment sections of the law, the time came to provide a more unfettered structure within which prudent management could meet changing needs and conditions as they occurred. The former statutory requirements served to disadvantage the companies by not permitting them to invest in certain new types of investments and by unduly restricting investment opportunities. In developing a new investment approach for life insurers, the bill relinquished the specific qualitative standards found in old Sections 81 and 80(3) and substituted increased reliance on prudent management under the supervision of the board of directors.

To prevent undue concentration on an insurer's assets, the bill maintained the limitation of 10% of an insurer's admitted assets for investments in any single business entity. The bill also added an overall limitation on equity positions of 40% of a life insurer's admitted assets, with up to an additional 5% for investments of special benefit to New York State. It provided for another 5% for general equity investments to the extent that the 5% for New York State investments is utilized, thus making a total of 50% of admitted assets available for equity-type investments. The bill also increased, from 4% to 14% of admitted assets, the so-called "basket" provision for additional investments by life insurers of the types enumerated in Section 1405, with a limit of 10% for investments outside New York.

Consistent with the concept of greater management responsibility in investment matters, a number of other miscellaneous investment prohibitions were modified or repealed. Specifically, Section 80(4) was amended to allow life insurers a modest leeway for non-interest bearing and non-income paying investments, which had been prohibited. The bill also amended the requirement that the disposition of property be within the control of the board of directors, and substituted a requirement that such disposition be the responsibility of the board of directors. In addition, the prohibition against entering into repurchase agreements in connection with sales was modified to permit such repurchase agreements, extending not more than one year, with respect to securities.

In the 2.5 years since the passage of the Cuomo/Corcoran Bill, it would be difficult to contend that the volatility the life industry experienced in the late 1970s and early 1980s has subsided. If anything, the reverse is true. With the acceptance of the realization that life insurers are no longer just in the protection business, but the investment business as well, life products have become securities that are sensitive to fluctuating interest rates.

Immunization, disintermediation, risk/reward analysis, interest rate swaps, bond portfolio simulation -- terms that only a decade ago would have meant little to many of us -- are now an integral part of the life insurance investment vocabulary.

Swaps, particularly, merit further scrutiny. As we all know, an interest rate swap, basically, is an agreement between two parties whereby one party exchanges a floating rate of interest for the counterparty's fixed rate of interest. Both rates are calculated on an agreed-upon "notional" amount. An interest rate swap, which does not require the exchange of principal but only of cash flows, can be either asset-based or liability-based.

The phenomenal popularity of swaps in the last few years is a cause of concern to regulators. Total swap volume has grown from about $5 billion in 1982 to estimates of almost $170 billion in 1985. In fact, a certain New York company, to date, has completed swap transactions totalling almost 3/4 of a billion dollars. The New York Insurance Department is currently studying how best to monitor the growth of this as yet totally unregulated area, but it is safe to say that, like managements of life companies today, regulators are constantly being confronted by unique investment concepts to which safeguards must be found, and be found quickly. The New York Insurance Department, while ever conscious of the industry's need for greater statutory flexibility, faces a delicate balance with its primary responsibility of ensuring the industry's financial solvency.

A good example of the delicate balance that must be met by regulators today is a piece of legislation recently considered for submission to the legislature which, on one hand, would liberalize the hedging opportunities available to

life companies in New York, while on the other hand, would place some modest restrictions on the holding of junk bonds.

The proposed bill would permit a bona fide hedging transaction of liabilities of more than $10 million that the insurer has or is expected to incur under a single contract, or a bona fide hedging transaction involving more than $10 million of debt obligations that the insurer held or proposed to acquire or sell under a single contract. It would also permit a bona fide hedging transaction of other bonds and liabilities, if the aggregate amount of outstanding hedged bonds and liabilities (other than those involving large contracts previously mentioned) was less than 5% of the insurer's admitted assets. In addition, the bill would place a limitation on the total amount that could be invested in futures and options contracts to .5% of the insurer's admitted assets. This limit would apply to all outstanding futures and options contracts and would be measured against the aggregate amount of initial margin deposits on outstanding futures contracts and the amounts paid to purchase outstanding options contracts.

The purpose of these changes is to permit life insurers to hedge substantial single contract liabilities subject to the new .5% limit on the amount that may be invested in futures and options contracts, but to restrict substantially the aggregate amount of liabilities that may otherwise be hedged by life insurers. Transactions to hedge large single contract liabilities arise primarily in the pension business and are engaged in by large life insurers who have developed special expertise in this area. On the other hand, it was felt that insurers that do not regularly handle large pension transactions have not yet developed the same skill in handling such hedging transactions. Accordingly, it seemed appropriate to retain a relatively small limit on hedging transactions generally.

Other important changes in hedging transactions include:

a. Authorization to effect hedging transactions directly negotiated with a bank or broker/dealer meeting certain stringent financial conditions,

b. A limitation on the authorization to acquire futures and options contracts to those contracts that expire no later than 18 months after issuance, and

c. Express authorization for the Superintendent to regulate all future and option transactions (which the current law limits to hedging transactions involving debt obligations).

Current New York Law permits life insurers to invest an unlimited portion of their assets in high yield obligations that are not in default. Some companies have used purchases of these higher yield securities to support sales of contracts promising high rates of return. Since higher investment yield is often associated with greater investment risk, it is a concern that a downturn in economic conditions could cause the financial deterioration of some of these companies. Accordingly, it was felt that some limitation on the amount of high yield obligations that an insurer may purchase is prudent and necessary.

The bill is not intended to be a criticism of high yield obligations. We recognize that they are appropriate investment vehicles in a diversified portfolio. Prudence dictates, however, that when the risks associated with a form of security are relatively high, principles of diversification and portfolio balance should be guides to the amount invested. The bill would leave all insurers with authority to invest a substantial portion of their assets in high yield obligations, but would prohibit excessive concentration in this form of investment.

In conclusion, it appears that we, as an industry, have come full circle. The pendulum has swung from the unbridled times of the late 1800s, through the inhibiting post-Armstrong, into a new age of regulatory freedom. But what does the future hold? What will the life industry do with this newly-acquired freedom? And when and how will this new investment philosophy manifest itself? These are difficult questions to answer.

It is important to keep in mind that the recent trends in investment regulation in New York deal essentially with changes in long-standing investment practices. A certain period of time is required for company managements to consider, develop and implement changes in such investment practices, and a

longer period of time must elapse before anyone can measure the effect of such new investments, particularly those intended to produce long-term benefits.

Of more importance, however, is the change in attitude the Cuomo/Corcoran bill has fostered, a change that is completely unprecedented in the life insurance industry. Companies that for many years were unable to expand by acquisition, were restrained from innovative financing, and were particularly disadvantaged in responding to the developments in financial services now have a legitimate mandate to respond to the competitive marketplace with all the creativity and aggressiveness that prudence permits, and to do their best to maximize the benefits to policyholders.

MR. IRWIN T. VANDERHOOF: I am going to discuss three topics. The first is a justification for the regulation of the insurance industry based on history and public policy. The second is an attempt to characterize the different possible levels of regulation, providing some of the arguments for and against strict regulation. The third will be a simple description of the recent discussions with the New York Department on certain proposed changes in the law concerning the use of futures and options by insurance companies. I hope that this will provide some insight into the process and how the actuary can become an active participant in the regulatory process. I will try to provide a general framework for the practicing actuary to use in approaching the question of regulation and promote an interest in having a part in the process.

The first question is why we have regulation of the insurance industry at all. An easy answer is that currently almost any industry is subject to some sort of regulation -- why not life insurance? The point is that regulation of almost all industry was not always the case. Regulation of some industries is relatively new, while that of other businesses came about much earlier. Active regulation of life insurance goes back to the last century, particularly associated with Elizur Wright of Massachusetts.

Banks and insurance companies were early beneficiaries of the regulation process because of the importance of the process of intermediation to any commercial society and because of the tempting target they present. Everyone

remembers Willie Sutton's remark about the reason he robbed banks: "That's where the money is." The situation is true of all intermediaries. The ratio of the public's money to the capital would normally be over 10 to 1. As a matter of fact, one of the great temptations is for the management and owners of an intermediary to steal from the company by using company funds to invest in another corporation owned by the owners of the intermediary. If the money goes down a rat hole, then at least there is ten dollars of public money for each dollar of owner capital. Both Baldwin United and Charter Security had insurance company investments in other corporations of the family, and the rat hole principle seemed to apply. Owning an intermediary combines the maximum temptation with the maximum opportunity. Intermediaries need a special kind of regulation for these reasons.

While we may accept that regulation of intermediaries is necessary to keep the operation honest, we have not established that this is the only kind of regulation that they should have. I have already commented on the importance of intermediaries to the economy. We can see that fairly clearly right now. Many communities and businesses refuse to provide certain kinds of services if they cannot get insurance. There has been some threat to cease the manufacture of pertussis vaccine because of insurance problems. There are a number of public beaches that may be closing because they can't get liability insurance. These are easy examples of the importance of insurance companies to the operation of our economy. The continuing crisis in automotive insurance classification and rates is another easy example. The second attempt of regulation is to make sure that the intermediaries don't goof up the economy by going broke and shaking public confidence in the system. The regulatory system tries to do this by keeping the accounting treatment usually so conservative that there is time to get rid of an incompetent management before the clients actually lose money. On those occasions when there is a real problem in the system, the regulations are changed so that the time of day becomes an admitted asset and the balance sheets of all the companies will be made to appear strong. I do not wish to be misunderstood. This is also the way I believe that regulation should be done.

Our first level of regulation was to get rid of the thieves, and this second objective would be designed to get rid of the hopeless incompetents. The

banking industry goes even further. After setting upon required regulation by the Comptroller of the Currency, the Federal Reserve Board, and the FDIC and FSLIC, it actually protects most depositors in banks from losing money for any reason. For insurance companies, there is only the state guarantee funds, though I presume that we could have federal insurance if we were willing to accept federal regulation.

There is an even higher level of regulation that could be imposed. The conditions for an industry could be set so that every company would make a profit, even if the management were of minimal ability. I believe that this is the system in several foreign countries. In Japan, all companies operate nationally, and rates for insurance are set so that the least efficient company will show a profit. In Germany, the regulation of the group business is such that both rates and dividends are set by the government. Foreign companies coming into Germany with ideas of selling new low-cost policies have had expensive educations on the subject of foreign regulation.

That actually sounds all warm and cozy. Wouldn't it be nice to be in an industry where profits are guaranteed by the regulators and all the management had to do was to stay honest and watch the salaries grow, along with their age. We can see that in some countries. There are a few things wrong with that picture. The basic problem is that while everything seems fine for the regulators and the regulated, the customers may be getting a poor result. The fact that the industry exists for the customers must occasionally be remembered.

A regular conflict in the implementation of regulation in this country is the question of rates. The long-run stability of the industry requires that rates be set at a level that will be profitable to at least most of the companies. The short-term objective of most of the public is lower rates, no claim investigations, and no underwriting. We have particular segments of the public that demand special treatment that may reduce the stability of the industry. Examples of this are easy: rates should be the same for males and females; AIDS exposure should be ignored in underwriting; defense against fraudulent claims should be made prohibitively costly so that it becomes less expensive for companies to be cheated than to defend their positions. The regulators must try to work between the differing short-term goals and the long-term needs

of the economy for stability of the intermediaries. Right now, it seems to me that California and New Jersey are in the forefront of catering to the short-term wants of their citizens, and little harm will be done unless they get too far ahead of the rest of the country. If they do, then they will have their own private insurance crises.

Right now in this country we have interesting examples of the effects of decrease in regulation. We have been deregulating the trucking and airlines industries, and even the telephone company. I don't know much about the trucking deregulation; I see the occasional trucker on TV complaining about profits, but I can't tell if that is typical. The effects of airline deregulation are easier to understand. There has been upheaval in the industry. Major airline managements have lost their jobs, and mighty Eastern has become the property of upstart Texas Air. Trans World has been taken over from the outside, and Pan Am has sold its Pacific routes. Peoples Air has made Newark a busier airport than LaGuardia.

On the other hand, air flight used to be a special event reserved for the few and important. Now, almost anyone can afford to go from one coast to the other for a weekend. There have been tremendous benefits to the consumer. There has been a tremendous increase in the amount of flying done. Within the industry, there has been a loss of some higher paying jobs, but an increase in total employment. There has also been some loss of safety, and there will be some increase in deaths on that account.

The deregulation of the telephone system has yet to sort itself out. The situation is interesting in that I don't really know of anyone who likes the change. The eventual advantages of deregulation will have to be striking to overcome the general anger developed so far. The cable TV systems are interesting. They don't want regulation to require them to show any particular shows or do anything specific, but they argue that they are natural monopolies and, therefore, should not have to face competition. Of course, that is always one of the reasons for accepting regulation -- to avoid competition.

With all that as background, what kind of regulation do you want? Are you with a small company with little surplus? Very little regulation sounds attractive.

That would mean that we could do all the things necessary to make lots of money and become a big company. I think that when I was with a small company, I believed that the big companies wanted tight regulation to keep the little companies out of the business. I am with a pretty big company now, and I think that the best interests of the large and powerful are served by less regulation and by small companies getting into some difficulties.

I can give specifics. When SPDAs were all the rage in the stock brokerage houses, the insurance industry was considered to be so safe and tightly regulated that the brokers could safely do business with any company. Charter Security and Baldwin grew with amazing speed because the brokers looked only at the industry and not at the companies themselves. After those companies had their well-publicized difficulties, the brokers are much more interested in the specific company they are doing business with. Charter could not have grown so rapidly if there had been more concentration on the company and less reliance on the industry.

Well-capitalized companies are served by a few smaller companies' going under and the public's being scared of doing business with them. Small companies are better served by tough regulation that convinces the public that they need only to look at the industry. On the other hand, tight regulation will prevent small companies from ever growing, so there will always be some conflict about the level of regulation that the industry wants.

I view insurance and actuarial work as basically part of finance. Finance deals with financial claims. We normally think of finance in terms of stocks and bonds. A bond is a financial claim on a corporation. A certain number of dollars are going to be paid each year. A stock is a financial claim with a variable payment. The dividends are going to be paid in a certain amount as the company earns them and as the board of directors declares them. GICs are often, and can be very legitimately, viewed as financial claims exactly like bonds. What about life insurance? Life insurance again is a financial claim, but now we introduce a new concept, a contingent financial claim. The financial claim matures when an event occurs. Aside from that, it is simply a financial claim. Therefore, an insurance company is in the process of creating certain kinds of contingent financial claims, and its obligation as an

intermediary is to find a set of assets or kinds of assets that will allow it to appropriately discharge its contingent claims with a minimum of risk.

When you look at the laws or regulations describing investments that may be purchased, you have a problem. If the conceptual framework I have described is correct, if the point is to set up your liabilities and then find a set of assets that best matches them, there is no particular asset which is a good asset or a bad asset by itself. The sole criteria is the extent to which that asset comports with the nature of the specific liabilities you have.

We are moving a long way from the kind of investment discussion that used to be common -- the kind of investment criteria that Mr. Tager mentioned -- safety of principal. What is safety of principal? Does safety of principal mean nominal principal or real principal? A government bond provides nominal principal safety, but the real value can be eroded by inflation. So from a point of view of real value, rather than nominal value, real estate is maybe safer than a government bond.

Steve mentioned a very nice question about hedging. There are problems when you discuss hedging, because if what I say is correct, if all we do is set up one set of contingent financial claims and one set of assets that is supposed to comport with them, then everything a life insurance company does in some sense is a hedge. The whole idea of matching the assets with the liabilities is a hedge.

Life insurance companies under the Cuomo/Corcoran legislation can buy calls, but they cannot buy puts. They can buy and sell futures. If you sell a future and buy a call, that is a put. Financially they're identical. So whenever you get into the attempt to define specific terms, there are problems. The only solution to those problems is probably a better definition of the conceptual framework that I have described.

If it's impossible to clearly define what you mean by principal, and if it's impossible in a complete financial market (that is, a market where all financial instruments exist) to define a financial instrument that you can have and one that you cannot have, then the only solution will be to better define

the overall relationship between assets and liabilities which provides maximum safety for the function of intermediation. The law has gotten ahead of us, because I don't think that that conceptual framework has been adequately formulated by the Society of Actuaries within the field of finance. That's being done now in part by the Committee on Valuation and Related Matters under Don Cody. Bob Shapiro is doing some work. We also have C1, C2, C3 and C4 task forces.

That's an attempt to develop this conceptual framework for intermediation. I think that that is the necessary next step. I think the laws have gotten a little bit ahead of us, and we have not developed adequately the theory that will underlie the next step in investment regulations. When we have the theory and can better explain how the intermediation process should take place, then we can better say which assets are right or wrong and under what circumstances, because the relationship between the assets and liabilities is crucial. The nature of one specific asset is not.

With some background set, let's look at some practical questions. You are a working actuary who wants to get involved in the regulatory process. Presumably, you have some specific long-term objectives to accomplish. The simplest one would be that you believed that you had ideas that would help the industry.

One approach would be to present some of your ideas in a formal setting, and if the ideas have merit, then you may get some action. Be helpful to the regulators and sensitive to their needs. One way to demonstrate such a willingness to be helpful would be to testify at one of the many public hearings held in each jurisdiction. When the regulators send out preliminary versions of regulations, they actually do want comments from the industry. There have been several recent New York regulations on reinsurance. There were several different versions of each of these regulations as the New York Department attempted to integrate its need for tighter regulation and the ability to prevent abuses with the needs of the industry to keep functioning in an economically efficient manner. The regulators appreciate the input from the industry, because they want their companies to do well. They don't want to drive business away from their state.

The regulators do not have the same job or interest as the management of a company. The regulators do have jobs that have objectives for the industry that are similar to the executives' objectives for a particular company. To the extent that a company or an individual demonstrates understanding of the objectives of the regulators, I think that you will be able to more easily get across ideas for the industry. I have already mentioned the recent series of New York regulations concerning reinsurance. In this case, the industry had substantial input into the final form of the regulations.

I'll close by discussing a recent case in which a working relationship between the regulators and the companies broke down. The item under discussion was a proposed change in the New York law. The massive changes which took place a few years ago had allowed companies to take modest positions in interest-rate options and futures. The industry had argued that broader limits would have been justified, but the Department had stuck to a limit of 2% of the asset portfolio as the maximum possible hedge. I believe that the position of the Department was based on concerns about the way that industry might use the new-found freedoms before it had adjusted to them. I believe the Department expected that the limits would be liberalized at some future date. There was a real basis for concern on its part. At least one company seemed to manage a quick insolvency some years ago by taking a long position in GINNY MAE futures at the wrong point in the interest-rate cycle.

We therefore approached the Department to see if it would support a substantial liberalization in this aspect of the law. There was an indication that it had no specific objection, but it had a different concern. Some companies were holding positions in junk bonds, the size of which had the Department worried. It believed that a company holding 30% or more of its assets in junk bonds might have a significantly increased risk of trouble in the future. It wanted the law to include a limit. It would support an increase in the limit on options and futures if the industry would support a limit on the junk bond portfolios of domestic companies.

This matter was on the agenda of the New York industry group several times. Votes were taken, and the support for the measure degenerated with each vote. In the last vote, the industry group decided not to support the combination

law. Consistent with the previous position, the Department declined to support the separate law widening the limits on hedging and futures and options.

The industry organization vote was interesting. There was one vote per company; the vote was not based on size. The politicking was ferocious. One company president on his deathbed was called only a few days before he died to try to line up his vote. Very active in the matter were several brokerage houses that specialize in the marketing of junk bonds. If the vote had gone the Department's way, these houses were threatening to lobby the New York state legislature to prevent the passage of a bill which might have reduced their sales.

To me, the most interesting part of the argument by the brokerage houses was that the proposal was an attempt by the larger companies to take away a tool of the smaller companies. The argument successfully ignored the fact that the large companies could buy junk bonds also and seemed to take the position that tighter regulation advantaged the larger companies versus the smaller companies. The argument I presented before is that the large companies are advantaged by a regulatory environment that allows an occasional small company to get in trouble. As a practical matter, I can tell you that our joint venture with a large brokerage house would not have occurred had it not been for the Baldwin-United and Charter Security debacles.

As the matter now stands, nothing has been accomplished, and the industry group is considering authorizing a university center to do a study on the suitability of junk bonds as an investment for insurance companies. This may be the best possible result, because the limitation proposed by the law may not have been the best way to handle the Department's concern about the safety of its own companies. Also, the failure of the extension of the limitation of hedging may keep the industry sympathetic to the Department's concerns.

I've tried to cover some general ideas as to why there is such an intense interest in life insurance company investments: because they're easy to steal, and it's been done. Second, I tried to talk about the levels of regulation and the impacts of regulation. As you go to tighter and tighter regulation, you probably have less service to clients, you probably have higher costs to

clients, but you have more stable industries. We've just seen that in the airlines. When you go to a deregulated environment from a regulated environment, prices come down and the consumer is served by those lower prices; but the industry is in turmoil, and people aren't so happy with it anymore. So different levels of regulation change the nature of the industry, and you might want to think in those terms.

Finally, I talked about a conceptual attitude toward the insurance business and the necessity for refinement in the conceptual framework. We can never, I think, properly define assets that are good for insurance companies until we can find the way that they fit into the intermediation process.

MR. DUNN: Steve alluded to the fact that there have been liberalizations, at least in the New York regulations, and I suspect in other states, which companies do not appear to be taking advantage of. I am not sure if that is because of the lack of knowledge of the investment people or whether it is just because the products that those companies are marketing do not require, as far as matching assets and liabilities, those investment opportunities. I do not, quite frankly, in my own company see that many hedging opportunities being taken advantage of, or the liberalization in the regulation, other than for the investment in subsidiaries which we have done. I was just curious whether the other panelists have seen this.

MR. TAGER: At our company, we have seen some of that. Our chief investment people are anxious to get into hedging of various types. We have done some hedging. Things like financial futures are quite complicated, something that they thought they wanted to get into very quickly but that they have done very, very little of. Though we are in it, we are going much slower now than they thought they would be going.

MR. VANDERHOOF: The Equitable is pretty active in this. Three months after the bill was passed, we put on a hedge for $600 million. We constructed a synthetic put. It was done according to the law -- according to the regulation. We have been active continuously. Options are nice, because you sign papers on a mortgage. You are going to lend money on a mortgage, but you make your commitment now, and the closing can take place in two months. If

interest rates go down, the guy who made the application may walk away and choose not to close. That is an ideal situation for the purchase of an option. If we buy an option and if interest rates go down, then we have a profit on the option, and the profit offsets the economic loss of having to place the mortgage at 9% instead of 10%. I do not know if the Equitable is the company that was mentioned by Steve as having $750 million of interest rate swaps outstanding. Swaps are a great instrument; you can do almost anything with swaps. They are very versatile. We believe they are essentially safe, at least to the extent of the credit backing of the other side of the swap arrangement.

We are very active. For example, say we are doing a swap. We say we will pay London Interbank Rate (LIBOR). We are going to get back five year treasuries plus seventy basis points. Each payment is made only presuming that the payment on the other side is also being made. If the credit on the other side is Citibank, essentially we have got a riskless transaction. That is very nice for, say, interest sensitive products. We go out and do a ten year mortgage, at 150 over treasuries. We swap, say, 80 over treasuries for LIBOR. Now we have 80 basis points left over on the mortgage, and we have LIBOR. Now we will swap from LIBOR into 5-year contract treasuries plus 40. So now we have the equivalent of a 5-year contract and treasuries plus 40 basis points, but we have 80 basis points left over here from the mortgage. So what we are actually receiving are 5-year treasuries plus 120. What happens at the end of 5 years? At the end of 5 years that swap wears off, and we are left with LIBOR and our 80 basis points. At that point we will swap presumably into another 5 year swap. Now that gives us the equivalent of a 5-year obligation, which we can use to jack up the interest earnings for our universal life product, and yet we are getting a lot better than we can get on any 5 year obligation. We are getting a better return. Tremendous amounts can be done there.

MR. MALUK: Only ten companies in New York are hedging, three years after the bill went through, even though the department received considerable pressure with regard to opening up this area of investment activity. I am told there are two ways to look at it. On one hand, only ten companies are hedging because what we permit them to do in New York is of such a restrictive nature that it is not even worth their while to gear up a staff and to get involved in

it. Yet it is difficult for us to continue to analyze LICONY submissions when in fact only ten companies are hedging. It gives us the feeling that we are spending a lot of our time and limited resources on activities that only some of the major companies in New York are involved in. We feel that is not proper either. It is a real struggle.

MR. VANDERHOOF: I would think that would be a problem. There are smaller companies in New York that could do a lot of these transactions and could benefit from them. I could only assume that some of the proper brokerage houses have not spent the time to educate them on what they can get out of hedging transactions. I think swaps are very valuable. If I were in a smaller company, I would go nuts to do swap operations, because it is the one way of getting something that has a rate that floats consistent with what you need for Universal Life and yet getting the illiquidity premium for mortgages and that sort of thing.

There are a lot of things that have to be done. There are a lot of problems with GINNY MAEs. GINNY MAEs produced terrific returns, but GINNY MAEs have very peculiar investment properties. Maybe it is up to some of the larger companies to help get the support for the use of these things by working with some of the other companies more. Maybe we should spend some more time with some of the other companies, because they are missing great opportunities. On the other hand, you can go home and figure out ways to make your companies tons of new money and get fame within the organization and salary beyond your wildest dreams.

MR. DONALD E. KELLER: Two percent seems to me so miniscule that I wonder if companies are bothering to do hedging because it is so small. Do you think the smaller companies are not doing it because of the restriction?

MR. VANDERHOOF: I don't have an answer for it, but I think if that is the reason, I think it is an error. A company with $100 million can do a $2 million overt hedging operation through a future or an option. But that is one deal. You do the one deal and that closes; you do another $2 million. It is not that you're allowed $2 million in one year or $2 million in the history of

the company; you are allowed $2 million outstanding. You are allowed also a limited amount to spend on it outstanding.

Second, the thinking behind work with options is one of the key intellectual developments that is going to see fruit in this decade. When I said everything can be viewed as hedging, I do not know how many of you have come across the mar grade problem. Leland, O'Brien and Rubestein has done a lot of work on this. The *Financial Analyst Journal* recently published an article on this by Bob Ferguson. Basically, it says you can get the same result that you would get by buying an option by buying no option, but by rather investing a certain amount in cash and a certain amount in stock, and, depending upon the movements of the market, changing that balance. It is called dynamic hedging. It is part of the program trading that everybody says makes the stock market go crazy every three or six months. This is a continuous movement between one form of asset and another form of asset. By that continuous movement, according to rigid formula, you can replicate the pattern of an option. There is no particular reason to say that the limit on options limits the amount you can hedge, if you have the proper conceptual framework. My fixed income people are going to put together a sub-portfolio of $100 million. They will start off today with $50 million in treasury bills and $50 million in long term treasuries. They believe they can move the proportions back so that at the end of the year we will get the solution to the mar grade problem. We will get the return on the asset that had the higher return. If treasury bills do better than bonds, we will get the return on treasury bills; if bonds do better, we will get the return on bonds. There is cost for that: an option cost.

If smaller companies do not now try to experiment with options at the lower limit, they are going be out of the game when the really difficult, sophisticated things become norm. Actuaries, I think, should play a much more active role in the whole investment process.

MR. DUNN: Is there anyone in the audience who has found in his own company that its investment department is involved with options or hedging opportunities? Or is anyone involved with the investment areas of his own company? Are there any actuaries involved in any investment areas of their own company?

I am just curious as to how many actuaries are moving into the investment areas.

MR. TAGER: Certainly in our company that is the case. Our chief financial officer right now is a former actuary. Just because of this hedging and the sales of GICs and the matching assets and liabilities, the actuaries are getting much more into the investment areas. Some of them are switching over to investment areas, others just as consultants.

MR. DUNN: Just to repeat, Jim Anderson's observations are probably correct. There are more opportunities in the investment area for actuaries in the future.

MR. VANDERHOOF: We now have a rotation program for students which includes time in a real estate area working specifically on real estate or on fixed income securities. Talking about limits and interest rate swaps, we have just started talking about floors and collars. Have you run across floors and collars yet? They are not defined in the law. We are going to have some conversations, I think, with the New York Department over the next several weeks about floors and collars. Floors are really neat. You can buy a 7% floor having a period of ten years. It pays you the difference between LIBOR and 7%, providing LIBOR is less than 7%. If LIBOR is over 7% it pays you nothing. A floor is clearly not an option or future in any normal sense. I was talking about completeness of financial obligations. A floor is the same kind of thing, however, as a option. It can be substituted for an option. A collars will pay the difference between LIBOR and 7% if LIBOR is less; on the other hand, if LIBOR is over 8% the collar will pay the excess of LIBOR over 8%. There are dramatic new kinds of swap instruments coming out all the time. We are always behind the imagination of the guys in the brokerage houses.