INSURANCE: REGULATION & MANAGEMENT

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CHAPTER 1 Management of the Insurance Company's Financial Decisions

In the financial world today the only thing that seems constant is change. Still, in the midst of rapid, complex and sometimes confusing developments, the fundamental principles and concepts of finance continue to apply. The insurance professional needs to be aware of these principles in order to function efficiently. The time value of money, the balancing of risk and return factors, market interest and leverage mechanisms still drive economic development as they did during the shift from agricultural to industrial societies. Under current conditions a major change resulting from this drive is the emphasis on cash management.

Before 1965, money management was more or less a straightforward matter. Its simplistic expression was the old "3-6-3 banking rule": pay 3 percent on savings, lend the money out at 6 percent and be on the golf course by 3 p.m. Changes in interest rate levels now have made cash management a crucial function. The cost of holding cash has dramatically increased. This change directly affects insurance companies and their representatives and clients through cost of policies, reserve requirements, operating expenses and many other factors. Cash flow analysis has become a very important tool for insurance company operation.

The most striking result of changing interest rates is the development of new products. Just as in the banking world the money market CD and money market deposit account resulted from changes in the interest rate environment, so too, the emergence of such products as variable life and universal life policies is a result of the competitive environment created by interest rate behavior and its effect on the insurance industry.

New institutions have developed as a result of the rapidly changing economic environment and the interest rate climate. Money market mutual funds and personal financial counseling have expanded rapidly in the last decade. Such innovations have created a need for financial managers to acquire a great deal of specialized knowledge. A view of this financial environment with special attention to the needs of the insurance professional will be explored here.

SHORT AND LONG TERM DECISIONS

Short-term decisions made by a financial manager are concerned with the current assets and liabilities of a firm. Long-term decisions deal with the amount and type of financing needed. The costs of fund sources and the potential returns from their use must be considered by the financial manager in making both types of decisions.

The insurance industry has unique problems because of the nature of its transactions. Basically, an insurance company collects premiums from insured clients and invests

these funds for the highest possible return at the lowest possible risk. Complicating this procedure is the fact that both income and investment decisions by insurance company financial managers have to be made in an environment of strict control by state insurance regulation. The U.S. Supreme Court has held that insurance is "affected with a public interest" and thus is subject to government regulation. This regulation in general is left to the individual states rather than the federal government. State approved reporting forms emphasize valuation of assets and liabilities for insurance companies on a liquidation basis rather than a going concern basis. Solvency is the primary consideration

The importance of fulfilling social goals in addition to business objectives, set out in the Supreme Court decision, is emphasized under this and other regulations which recognize the important role of insurance in the overall economic picture. Nevertheless, an individual insurance company, like any other type of business, must be managed profitably to stay operative for very long. Analytical tools to help executives make sound financial decisions which will keep their firms in business are provided by sound financial management.

Business Goal Types

Financial decisions for a successful firm are determined by the goals of that firm. Two generally recognized objectives or goals from which a business may choose are maximization of profits and maximization of wealth. The profit maximization goal encounters several problems. It usually ignores the risk associated with different profit streams. It also ignores the timing of cash flows and increases the difficulty of deciding between projects with short and long lives. It does not indicate whether the firm should aim for maximization of short or long-term profits.

The objective of the firm aiming at the maximization of wealth goal is to maximize its value to stockholders. Thus it requires the maximization of the market value of the firm's stock. The impact of risk, profits, dividend and growth on the market value of the stock are taken into consideration under this approach. As the maximization of stockholders' wealth seems to be the most generally accepted view about the primary goal of a business firm, the financial manager's role is to plan, acquire and use funds in order to achieve this maximization of the value of the firm.

Decision Types

Obtaining and using funds for the purpose of maximizing a firm's wealth are essential duties of a financial manager. Some decisions are for a short term, relating to current assets and current liabilities of a firm. Long-term decisions are on major issues involving the amount and type of financing to be obtained. Selection of sources from which funds can be obtained and the potential returns from various uses of these funds are basic to successful operation of a business.

Involving forecasts for only a few months, short-term decisions may seem easier to make than long-term, but they are no less important. Careful management of assets is necessary for a business to prosper. The current assets of a firm make up its working capital. Net working capital is the difference between current assets and current

liabilities. Determining the best level at which to maintain a cash balance is one of the important duties of a financial manager. The cash account consists of currency, demand deposits and time deposits. Cash is required to meet immediate expenses of a firm, but the manager has to bear in mind that cash earns no interest. For financial businesses such as insurance companies, marketable securities provide an important source of income as well as liquidity. Such securities include U.S. Treasury bills, local government bonds and commercial paper.

Short-Term Loans

Financing through short-term commercial loans is flexible and usually less expensive than long-term financing, but at the same time it increases the risk of the firm and may for that reason become very costly. The financial manager's responsibility is to decide on the best strategy for minimizing the cost of credit and guaranteeing that it will be repaid on schedule. A line of credit with a commercial bank can provide short-term loans or notes payable when needed. The cost can be based on simple interest, discount rates or add-on interest rates. Some banks also require the firm to maintain compensating balances. This practice has the effect of increasing the effective interest rate being paid on the loan.

Bank policy on risk, the size of the bank and its area of specialization, as well as its policy on service and degree of loyalty, all need to be considered in the selection of a bank for short-term credit. A business needs a minimum operating cash balance to take care of unexpected cash demands. Beyond that, cash budgeting forecasts future sources and uses of cash for the firm. This is usually done quarterly, but if necessary it can take place as frequently as weekly or even daily. The availability of cash in every budgeting period must be estimated, along with payments to be made for administrative expenses, accounts payable, salaries, taxes, interest, capital expenditures and dividend payments. Computer techniques are now available to assist in this process.

Larger firms may use commercial paper as a source of short-term credit. This can be cheaper than notes payable because the interest rate is usually lower than the bank prime rate, but it may be hard to get funds during temporary financial difficulties. The commercial paper market is sometimes closed.

Long-Term Financing

Fixed assets of a firm usually are financed with long-term debt. A financial manager needs to find the combination of securities that will be most attractive for potential investors and most advantageous for the firm. There are many types of long-term securities. The firm may consider bonds or preferred stock, additional shares of common stock, or long-term loans. Bonds are sold to the public, while term loans are arranged with a small group of lenders. Bonds and preferred stocks ordinarily pay a fixed return. Of the two types of securities, preferred stocks are less risky because the firm can postpone payment of dividends. Bonds are long-term contracts issued by the firm, usually with fixed interest and principal payments to be made on specific dates. Some bond issues now have floating rates of interest.

A term loan is faster and more flexible than a bond issue and has a lower issuance cost. The term loan is amortized in equal installments over the loan period and can be

arranged to match the payment schedule with the expected productive life of the fixed assets being financed by the loan. Common stocks, with a given initial value, represent the ownership of the firm and are expected to pay dividends. They have higher flotation costs than bonds and are riskier. Holders of the stock have the right to elect and remove the management. Common stocks are traded in securities markets, either organized exchanges such as the New York Stock Exchange or over-the-counter markets.

Preferred stocks have characteristics of both bonds and common stocks. They pay fixed dividends and do not have a maturity date. To appeal to a wide variety of investors with differing risk preferences, a firm needs to offer a wide variety of carefully designed securities.

Capital Cost

Determining the cost of capital is an important element in maximizing the value of a business. To arrive at this cost the financial manager needs to estimate the costs of capital components, including long-term debt, bonds, common stocks and preferred stocks, as well as retained earnings. Decisions on financing, capital budgeting, leasing and working capital depend on the manager's knowledge of capital costs.

The after-tax interest rate on debt determines the cost of debt, because interest is deductible from income tax. The cost of capital is a weighted average of the cost of its different components, according to the target capital structure of the firm. The capital structure represents the proportions of the total assets of a firm funded with liabilities, with preferred stock and with common equity. The Capital Asset Pricing Model is one means of estimating the required rate of return on common equity. It states that the return on a security is given by the risk-free rate of return plus a risk premium. Another method is to add a subjective risk premium to the interest rate on the firm's long-term debt. The dividend yield plus growth rate can also be used.

Insurance Liabilities

For insurance companies, liabilities are mainly the obligations to policyholders and claimants rather than long-term debt, but there are still major financial decisions to be made about the relationship of these liabilities to total assets. Determination of the best capital structure for a firm requires a balance between the risks and returns of the different components of the firm's capital. Decisions on capital structure are judgmental. There is no final agreement among experts on the ideal relationship between leverage, the value of the firm and the cost of capital.

Some have said that firms should use 100 percent debt financing because the interest on debt is deductible. This tax shelter benefit of the debt causes an increase in the value of the firm, so the higher the debt, the higher the firm's value. Other authors take into account the cost of bankruptcy, agency costs and personal taxes, and say the best capital structure requires a debt level below 100 percent. The ultimate aim for a successful business is the capital structure that will maximize the market value of the firm and minimize its cost of capital at the same time.

Policy on Dividends

The decision of whether to reinvest earnings in the firm or to pay them out in dividends is the expression of a firm's dividend policy. Two opposing effects can be noted from dividend policy. High dividends have the direct effect of increasing the stock price, but at the same time they tend to lower the value of the stock by slowing the future growth rate of the business. One approach to the dividend decision, the residual theory, holds that a firm should first retain earnings to finance capital projects and pay dividends only if some earnings are left available. This theory is based on the assumption that investors would prefer to have the firm retain earnings if it can earn a higher return on them than the return investors could expect from investing funds from their own dividends. Another idea that has been advanced is that dividend policy does not affect the stock price or the cost of capital. This conclusion leaves various possible factors out of account.

Influences on the dividend policy can include investment opportunities open to the firm, the different tax rates on dividends and capital gains, alternative sources of capital, preference of stockholders for present or future income, and how dividend policy affects the required rate of return. The relative importance of these and other possible factors can vary over time, making it difficult to generalize about the most acceptable dividend policy. When a policy has been decided on, there are three payment schedules to choose from. Dividends may be paid at a stable or increasing dollar value per share, at a low regular rate plus extras, or at a constant payout ratio causing the amount of the dollar dividend to fluctuate.

Analyzing Investments

Steps in the process of analyzing investment projects and making decisions about fixed assets make up the process known as capital budgeting. Cash flows expected to be provided by fixed assets have to be analyzed for a number of years in the future for successful capital budgeting. The first step in the process is to develop new investment ideas. The potential projects then are classified by type of investment, whether for replacement, expansion or safety. Cash flows and the riskiness of the project are estimated in the third step.

The projects then are ranked by net present values, internal rate of returns or other methods. In this fourth step projects with net present values greater than zero or internal rates of return greater than the cost of capital are decided on for acceptance. The chosen projects are implemented in the fifth step, and in the sixth, the actual performance of the projects is compared with the predicted result for feedback.

CONCEPT OF RISK AND RETURN

For financial managers in any type of business, decisions require a trade-off between risk and return. The aim of a successful manager is to obtain the maximum return possible with no more than an acceptable level of risk. As accepting a risk is the business of insurance companies, their financial managers need to be especially alert in making the choice between risk and return. Four major types of risks for insurance companies in their normal operations are excessive claim costs, sales declines, losses in investments and policy loans and cancellations for life insurance companies. Natural

disasters can produce excessive claim costs, as can inflation raising claims amounts to unexpected levels or actual losses exceeding estimates. Economic downturns can cause sales declines. Rising interest rates can result in portfolio value loss for bonds and fixed-rate mortgages, and a recession can bring on declines in stock value and defaults on bonds and mortgages. Life insurance companies that offer whole life and endowment policies can face cancellation and policy loan risks, usually during high interest rate periods.

The financial manager's role is to offset such risks with conservative investments designed to compensate for losses and with matching maturity structures. Risk in insurance operations is uncertainty about the occurrence of an economic loss. Risk in investments concerns the possibility of receiving lower returns than expected from an investment. Investors can only estimate what future returns will be. Actual returns may differ from expectations. The deviation of the actual from the expected return represents the risk associated with this particular investment. There are different uses of the term "risk" in insurance. One concerns the outcomes of events depending on whether they can produce losses or both gains and losses. A pure risk or exposure, such as the possibility of an automobile accident, can only produce a monetary loss, while a speculative risk, like playing the lottery, can produce either a loss or a gain. Only pure risks are considered insurable.

A second way of using "risk" in insurance applies to the variability in distribution of losses for a pure or insurable risk. There are also "objective" and "subjective" risks. An **objective risk** is the variation of an actual loss from an expected loss, which is directly measurable. It is equivalent to the use of the term in financial theory, with the concept of risk as deviation of actual values from the expected value. Objective risk concerns the tightness of the probability distribution of potential losses and can be measured by the standard deviation of losses.

Subjective risk is an individual's perception of risk. It exists in the mind and is not directly measurable, but can be inferred under utility theory. This theory classifies individuals into three groups

1. Risk averters, who dislike risk.
2. Risk neutral individuals, who are indifferent to risk
3. Risk lovers, who enjoy risks.

Only risk averse individuals, who wish to avert risks, are willing to buy insurance in order to avoid the uncertainty of future losses. Risk neutral individuals and risk lovers are not good insurance prospects.

The Portfolio Approach

In financial theory, individuals are assumed to be risk averse. Because they dislike risk, higher compensation must be offered to persuade them to risk losses. With this assumption, the higher the risk of a security the higher the expected return must be. A risk-free security, such as a Treasury bill, will not have as nigh a return as a risky security. The difference in returns between two such securities is known in financial theory as the risk premium.

The portfolio theory offers a means of reducing risk through diversification. A portfolio is the term applied to a collection of securities. As part of a portfolio, a security is less risky than it would be if held in isolation, because returns of securities in a portfolio are correlated. Most securities are not held in isolation. State law requires insurance companies to hold diversified portfolios of securities. The return and risk relationship of an individual security is analyzed as to how it affects the return and risk of the portfolio. The weighted average return of individual securities in the portfolio gives the expected rate of return of the whole.

If the securities in a portfolio were in perfect negative correlation, all risk would be diversified away, that is, eliminated. In real life, however, most securities are positively correlated. Stock prices or investment returns tend to move up or down together. Thus while combining investments in a portfolio reduces risk, it cannot be expected to eliminate the risk completely. How effective the diversification effort is in the selection of securities with the needed positive or negative correlation to add to the portfolio will determine the amount of risk that will be eliminated.

The total risk of an individual security is judged accordingly in proportion to its diversifiable or nondiversifiable status. The portion of risk which cannot be eliminated by diversification is known as nondiversifiable, market or systematic risk. What can be eliminated is called diversifiable, company-specific or unsystematic risk. Related to the firm whose securities are being considered, unsystematic risk is caused by such factors as new projects, revised marketing programs or personnel problems.

Systematic risk is related to the behavior of the market as a whole and is caused by factors such as inflation or interest rate changes. Since unsystematic risk can be diversified away, the market measures only the portion of the total risk of an individual security that is systematic. Thus the riskiness of a security most important to a prospective investor is not its total risk, measured by standard deviation, but the effect its individual risk will have on the riskiness of the portfolio.

An insurance company handling a number of different lines can be thought of as having a portfolio of insurance investments. The return from underwriting this portfolio would be the weighted average of the underwriting return on each insurance line, and the systematic risk would be the weighted average of the individual lines' systematic risk. Insurance lines, however, are not traded on the market as investment securities are. In practice, indirect methods have to be used for estimating the systematic risk of underwriting various insurance lines.

Risk in Leverage

Two new dimensions of risk are involved in considering the subject from the viewpoint of the individual firm. They are business risk and financial risk. Business risk refers to the riskiness in the specific operations of the firm itself when it is using no debt. Financial risk is the additional risk facing the owners when they decide to use debt. The two kinds of leverage associated with these two types of risk are operating leverage and financial leverage. Operating leverage depends on the effect of sales on the operating income. Financial leverage deals with the effect of debt on the earnings of firm owners. The combination of operating leverage and financial leverage determines the firm's total leverage. The leverage levels depend on the degree of risk the owners of a firm are willing to accept.

Business Risk

Uncertainty in projecting future income, or earnings before interest and taxes (EBIT), produces business risk. This varies among industries and among firms within an industry. Changes in demand for a product, fluctuations in price and cost of operation, and fixed costs as a percentage of total costs can affect EBIT. A firm with high fixed costs has a high degree of operating leverage, meaning that a relatively small variation in sales will cause a large change in the operating income of the firm. Operating leverage is directly related to business risk, which is measured by the variability of EBIT. The degree of operating leverage is the percentage of change in operating income associated with a given percentage of change in sales.

The technology involved in a business operation determines operating leverage. An industry with heavy investment in plant and equipment, such as a utility, has high fixed costs, a high degree of operating leverage, and therefore a high level of business risk. In contrast, a corner newsstand would have relatively low fixed costs, low operating leverage and low levels of business risk. However, even though the level of operating leverage depends to a great extent on the type of business, an individual firm usually still has some control over its operating leverage through appropriate decisions with regard to capital budgeting.

Financial Risk

The use of debt in the capital structure of a firm relates to financial leverage. This use of debt, while it generally increases the firm's equity, also increases its risk. Stockholders may receive a higher return when a company uses debt, but they also face a higher level of risk because of the potential for lower returns. Earnings after interest and taxes are affected by financial leverage. These are the earnings available to common stockholders. Such earnings are associated with a given percentage change in earnings before interest and taxes, which indicate the degree of financial leverage. Operating leverage affects EBIT and financial leverage affects earnings per share. Operating leverage, which is related to fixed production costs, and financial leverage, which is related to fixed debt charges, is combined in total leverage. A trade-off usually has to be made between operating and financial leverage. A combination of different levels of the two is needed for successful capital budgeting to achieve the proper operational balance of a firm.

INSURANCE COMPANY FINANCIAL MANAGEMENT

A financial manager in any line of business faces legal and regulatory constraints that have to be dealt with in working toward the firm's goal of maximization of wealth. In the insurance business these constraints are especially specific because of state regulation for the protection of policyholders. Statutory accounting rules, differing from those in general use, are designed to reinforce solvency regulations.

Various types of insurance company ownership also affect operational decisions. Mutual insurance companies are owned by their policyholders rather than by stockholders, but both types have the same goal of financial management. They must

grow at least as rapidly as inflation to maintain successful operations. Regulations require that a company's volume of business must be in proportion to its residual value or net worth. Under statutory accounting this is the policyholders' surplus. This is the figure that must be maximized to meet the goal of financial management. The basic business of an insurance company is to collect premiums from individuals and businesses being insured and to invest the resulting funds for the highest possible return at the lowest possible risk. Funds available for investing are made up of the unearned premium reserves, loss reserves and policyholders' surplus.

The investment department of an insurance firm manages its portfolio of bonds, stocks and real assets. The portfolio must be diversified in order to increase return and minimize risk. State insurance regulations usually define investments that are permissible for insurance funds and set percentage requirements for U.S. government bonds, other bonds issued by public entities and various additional types of investments. This is the framework within which the insurance investment manager must make decisions. Interrelationships between underwriting and investment operations must be considered in order to move successfully toward a firm's goal. This is usually a function of top management. It involves taking into account underwriting losses, expenses and tax position.

When the strategy is decided upon, the investment department implements it. Specific investment decisions are backed by research into the prospects of various securities. Information also is sought from stockbrokers and investment bankers.

Liquidity Important

Insurance investment portfolio managers have to maintain a high degree of liquidity so as to be able to meet loss claims and expenses. They usually maintain a minimum balance level above which funds are moved from demand deposit accounts into money market or other short-term investments. It is also important to match portfolio maturities with periods when the firm will have to make payments or will have major expenses. Accounting rules for insurance companies are designed to protect policyholders' surplus against fluctuating market values. Government, municipal and corporate bonds can be valued on their books at amortized cost rather than at their current market values.

Investments Vital

Property-liability insurance companies have made the greater part of their profits in recent years from investment income. Thus efficient financial management is of the highest importance to them. Financial models are used to determine the best investment allocation strategies and help insurance financial managers achieve the best mix of short, intermediate and long-term investments. Successful investing allows insurance companies to earn maximum income while being able to meet cash needs for paying claims and expenses.

Financial Considerations

Whether or not a firm is legally classified as an insurer determines a number of factors

in its operation. Special regulations, statutes and common-law principles apply to insurance. Some of these limit an insurance company's activities and some give it advantages. The tax status of an insurance firm, who will regulate its business and whether or not its contracts are enforceable all depend on its conformity with the legal definition of insurance. Therefore it is important for a financial manager to be familiar with the terms of that definition.

Federal income tax laws have special provisions for insurers which are considered by some to be more favorable than those for other corporations. States, however, may levy premium taxes on insurers which cause a heavier cost burden in comparison with other services.

Insurance Defined

In determining whether or not a firm is an insurer, the Internal Revenue Service requires that the majority of the company's business be issuing insurance. The definition of insurance has as key elements the transfer of risk and the distribution of losses.

Basically, an insurance policy transfers a risk from the insured to the insurer. For a genuine transfer to take place, this shift of risk from one party to another must be specified in a legally enforceable contract. In a court decision, it was held that deposits by one party into a fund administered by another did not constitute insurance because the firm making the deposits was actually paying its own losses and there was no transfer of risk. Bona fide insurance distributes the cost of losses by pooling coverage to apply to a homogenous group of policyholders exposed to such losses. Pooling of exposures and proportional sharing of losses are stressed in the IRS definition of insurance.

When arrangements such as rating plans adjust the insurance premium according to individual loss experience, that adjustment must be subject to maximum and minimum limits to provide for some loss distribution. If this were not done, the insurer would only be transforming the cash flows of the insured; a banking rather than an insurance function.

Contract Interpretation

Court rulings usually hold insurance contracts to be contracts of adhesion. In such an agreement one person agrees to the terms of a contract drafted by another. The purchaser of an insurance policy agrees to make specific payments in return for the insurer's promise of future benefits, the covering of losses. If this type of contract is found to have ambiguities, the court usually rules in favor of the person who was asked to adhere to the contract (the insured). In other cases an insurance contract may be held to be *uberrimae fidei*, of the utmost good faith. This type requires both parties to disclose all relevant facts about the contract. If an insured person answers a factual question incorrectly, even though innocently, under a contract *uberrimae fidei* the insurer might be able to deny a claim if the correct answer would have caused the contract not to be issued in the first place. Other legal decisions have dealt with such matters as when a contract takes effect and whether the rights of an insured may override policy provisions.

Forms of Organization

Insurance may be provided by several types of business organizations. It is important for the financial manager to be familiar with regulations and practices governing the particular kind he is associated with. A stock company is a corporation owned by stockholders, who elect a board of directors to oversee the business. The directors appoint the executive officers. They are in charge of operations and hire other employees as necessary to get the day to day work done. The greater part of property and liability insurance in the United States is written by stock insurers. These may be large companies writing practically all kinds of policies or small firms offering only one line of insurance. Stockholders participate in gains or losses of the company through dividends on the stock they own as well as through increases or losses in the value of that stock.

Mutual insurers are also corporations, but they are owned by the policyholders instead of stockholders. The board of directors is elected by policyholders, although in practice few of them exercise their right to vote. The directors, who thus actually control the operations of the company, name executive officers. They in turn hire the other employees of the company.

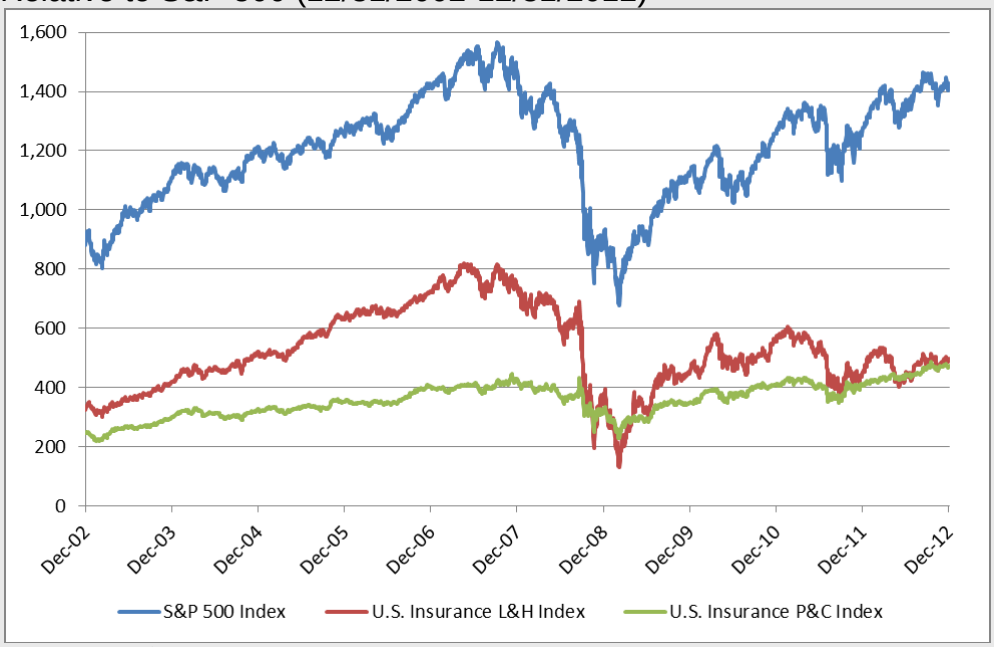
Types of Mutuals

Mutual companies are of two types. Assessment mutuals may charge their policies for losses and expenses after they have been incurred. Advance premium mutuals cannot assess their policyholders for expenses. To be allowed to issue nonassessable policies, mutual companies under state regulations must exceed a stipulated amount in their policyholders' surplus. Therefore advance premium mutuals usually are larger than assessment mutuals.

Most of the advance premium firms charge more in premiums than they expect to need and return some of the excess to policyholders in regular dividends. Others charge lower initial premiums as a form of dividend, setting a price closer to their actual needs. Conventional dividends are paid by such firms only when warranted by special circumstances and voted by the board of directors. Many of the largest U.S. insurers are advance premium mutuals, handling close to half of the life insurance in force in the country and about a fourth of the property and liability insurance.

Publicly-traded insurers represent a significant share of the total life/health and property/casualty sectors. Market perception of insurers and insurer future earnings capacities, as measured through equity prices and other market valuation metrics; have generally moved in parallel with broader market indices. L/H sector equity market prices have mirrored those of the broader market more closely than has the P/C sector. Figure 23 compares L/H and P/C sector equity prices with the S&P 500 index from year-end 2002 through year-end 2012

Figure 1-1 L/H and P/C Sector Equity Prices
Relative to S&P 500 (12/31/2002-12/31/2012)



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As these insurers attempt to balance financial soundness with capital management, they continually seek new risk management techniques to reduce capital needs. Often, this means persuading regulators and rating agencies that the risks that they have assumed have materially diminished. Most static capital adequacy models assess risks while maintaining a standard of comparison among companies. This means classes of risk can be evaluated similarly from company to company as part of a ratings service's review of the capital needs of insurers.

Unincorporated Firms

Unincorporated associations of individuals writing insurance are known as reciprocal exchanges. Each member writes policies as an individual, but agrees to insure individually all other subscribers in the exchange and in turn to be insured by each of them. Rather than separate contracts for such an arrangement, the reciprocal exchange issues one contract to each subscriber setting out the nature of the operation, which is a reciprocal exchange of insurance promises.

The organization is managed by an attorney-in-fact, who has authority to seek new subscribers, collect premiums, pay losses, underwrite new and renewal business, and handle investments. In return he collects a percentage of the gross premiums. For larger reciprocals the attorney-in-fact is usually a corporation. Assets of the individual members of the reciprocal provide the financial security for the operation.

Originally separate accounts were kept for each subscriber, the balance in each account being the amount by which premiums and share of investments credited to that subscriber exceeded his share of the expenses and losses charged to the group. Subscribers could be assessed for the difference if account balances were not

sufficient to cover obligations. Usually there was a maximum amount for such an assessment. On termination of membership, the subscriber would receive the balance remaining in his account.

Modified reciprocals supplement or replace individual surplus accounts with undivided surplus accounts, and in this case a member on termination does not receive a refund. With enough undivided surplus funds, such a reciprocal would be able to issue nonassessable contracts. In this form a reciprocal resembles an advance premium mutual. Reciprocals write only a small fraction of property and liability insurance in this country and do not write life insurance. There are fewer than 100 such firms in the U.S., although in some foreign countries they are more important. Some U.S. reciprocals are associated with trade or similar associations and write policies only for association members.

Insurance Accounting Because insurance companies have relatively few fixed assets and different types of liabilities in comparison with other businesses, their accounting procedures are different. State regulators have fixed these procedures by statute in order to emphasize the importance of solvency in reporting on the status of insurance firms. The statutory requirements involve a mixture of accrual and cash accounting methods in establishing a more conservative approach than GAAP (the generally accepted accounting principles) used by other businesses. Assets of insurance companies are made up chiefly of securities such as stocks, bonds and mortgages. GAAP accounting recognizes all assets, but under statutory rules for insurance company accounting, only assets that are readily convertible into cash are recognized, or admitted. Such items as furniture and fixtures, automobiles, premiums due over 90 days, and other insurance firm property are known as nonadmitted assets are not included when balance sheets are prepared.

Rather than debts, insurance company liabilities consist principally of reserves. Their equity is known as policyholders' surplus, or capital and surplus for stock companies. The statutory system recognizes unrealized capital gains or losses, which is not done under GAAP. Investments are reflected under GAAP at market or cost, whichever is lower. Statutory accounting carries stocks at market value and bonds at amortized value.

Expenses of acquiring policy owners are handled on a cash basis for insurance companies, being charged when incurred, while income from premium revenues is deferred on an accrual basis, until earned with time. The ratio of premiums written to policyholders' surplus ratio indicates the degree of risk for that surplus and thus is the fundamental operating ratio for an insurer. It is the equivalent of other businesses' operating leverage, which measures the sensitivity of operating profits to changes in sales.

Importance of Investments

Insurance companies generate investment income by accumulating funds as they collect premiums from customers before they pay claims. These funds when invested are an important source of income for insurers. Sometimes they are the only source of profit. Property and liability insurers especially, facing unexpected losses through natural disasters or through increasing replacement costs, depend heavily on investment income. In one year the industry had an underwriting loss of nearly $12

billion, but in the same year more than recouped these losses with an investment profit of nearly $28 billion.

Although insurers, unlike banks and other financial institutions, do not specify interest rates for the use of their clients' money over time, market competition makes it necessary for them to give consideration to the time value of money in setting their policy prices. In some states this practice is required. Life insurers do include credit for use of policyholders' money when calculating their premiums. In some financial models for setting insurance rates, a negative term is included to represent interest payments a policyholder could reasonably expect for funds being held by the insurance company.

Assets Specialized

Property-liability insurance firms, whose policies are usually written as short-term contracts, also must concentrate their investments in marketable securities like government bonds and blue chip stocks that can be sold quickly. In this way they can match the maturity of liabilities and assets. They also are required by state regulations to invest in approved securities that can be listed as admitted assets in their financial statements. Life insurance company contracts usually are longer term than those for property-liability insurers. Therefore they invest primarily in mortgages and corporate bonds rather than in stocks and other quickly marketable securities. Mortgages and bonds are carried on the books at their amortized values, making the book value of life insurance company assets as a rule more stable than those of property-liability firms.

There is also a difference between lines of insurance in the property-liability field. On property lines, payments usually have to be made more quickly than for liability claims. Thus liability lines are likely to have larger loss reserves outstanding for a longer period than property lines, and therefore they have higher leverage ratios than those for property lines. Even if a firm is having regular underwriting losses, it can continue in business if it has enough income from investments. Financing adds to the firm's income as long as the cost of financing is less than the returns from invested assets. This situation produces the high leverage rates that characterize insurance companies.

Role of Reserves

Long-term debt usually is not as important in the capital structure of insurance companies as it is for other types of business firms. An insurer has as major liabilities its reserves representing obligations to policyholders. State regulations require these reserves to guarantee that insurers can fulfill their future obligations. The premiums that have been paid in advance for insurance coverage by property-liability companies are guaranteed by the unearned premium reserves required by state regulations. A separate reserve fund, the main liability for property-liability insurers, covers loss and loss adjustment expenses to meet unpaid claims.

A decrease in the relative importance of the unearned premium reserves and an increase of the loss and loss adjustment reserves over recent years for property-liability insurers reflects their tendency to move to policies with shorter terms. Increased replacement costs to cover losses plus fears of inflation have caused this trend, which in turn decreases the importance of the unearned premium reserves. Also liability lines are more popular with insurers than property lines because there is usually a longer delay in payment of liability losses than of property losses

Surplus Accounts

The equity of an insurance company is known as the policyholders' surplus or capital and surplus. This amount is usually larger relatively for property-liability insurers than for life insurance firms because property and liability insurance involves more economic uncertainty than life insurance. Unearned premium reserves for life insurance companies are known as policy reserves. These are created by the fact that premiums for level-term life insurance policies are set at a higher figure than the cost of protection during the early years of the policy. The policyholder's investment element produced by this practice can be partially recovered if the policy is surrendered for its cash value before death benefits are paid.

Life insurers also must establish reserves for policyholders who leave policy dividends on deposit with the insurance company, and for supplementary contracts with beneficiaries who leave policy proceeds with the company for investment and annuity purposes. The unpaid claims reserve for life insurers is the equivalent of loss reserves for property-liability firms, but much less important in the capital structure of the life insurer because death claims are usually settled promptly. Policy reserves are the most important life insurance firm liability.

Policyholders' surplus is a much smaller element in life insurance company capital structure than for property-liability firms because of the more stable nature of life insurance operations. Less of a cushion is required than for unforeseen adversities that may strike a property-liability insurer. Also for mutual life insurance companies the level of surplus that can be accumulated is limited by law. This provision is established in order to force the company to pay dividends rather than accumulate surplus, thus evening out equity between generations of policyholders.

TIME VALUE OF MONEY

Sound financial decisions require knowledge of the time value of money. Values and rates of return on assets are influenced by the timing of cash flows. The effects of this influence can be analyzed by using the principles of present and future values. A sum of money increases in value over time because of the compounding of interest. A deposit of $1,000 in a savings account paying 6 percent interest compounded annually will earn $60 in one year. The resulting total of $1,060, if left on deposit at 6 percent compounded annually, would amount to $1,123.60 at the end of two years. At the end of 10 years it would total $1,791.

The formula for calculating one year of interest is FV (future value) = PV (present value) times 1 + r (interest rate) -- that is, FV = PV(1 + r). For two years at 6 percent, FV would equal PV times (1 + 0.06) times (1 + 0.06). For 10 years it would be PV times (1 + 0.06) to the 10th power, or $1,791.

More Frequent Compounding

If the interest were compounded semiannually, the total at the end of 10 years would be $1,806. In this case the formula is modified by dividing r, the interest rate, by m, the number of times pet year interest is paid, and multiplying the (1 + r/m) factor by the number of years times m. Tables, the Internet, and many types of hand held calculators

are available for arriving at future value figures automatically.

$$FV = PV(1+i)^t$$

Using Future Value Figures

In insurance decisions the risk manager of a business firm uses the knowledge of future value to arrive at valid choices. If a machine is expected to last through five years of operation in a high fire risk area and its replacement cost at the end of that time is estimated at $10,000, is it better to insure the machine or retain the risk?

The risk manager after analyzing the situation decides the business should self-insure with a reserve fund. A one-time deposit of $7,500 in a fund earning 6 percent interest will produce a total of $10,035 at the end of the fifth year, thus providing the needed capital for replacement of the machine.

Calculating Present Value The present value of a sum of money to be received in the future is calculated by discounting, the opposite of compounding.

$$pv = fv\left(\frac{1}{(1+i)^n}\right) or \qquad pv = \frac{fv}{(1+i)^n}$$

An insurance salesman might offer a prospective client a $10,000 whole life insurance policy which does not pay dividends but will have a cash surrender value of $2,000 at the end of the 20th year. A lump sum premium of $2,400 will purchase this policy. With the cash surrender value subtracted, the net cost of this policy over 20 years will be $400, the salesman says, making the annual cost only $20 a year.

This computation ignores the time value of money. Using the compound interest calculation formula in reverse--that is, dividing instead of multiplying the FV figure by (1 x r) --the present value of $2,000 for the cash surrender figure would be $623.64, assuming a 6 percent interest rate. Subtracting the rounded-off figure of $624 from the lump sum premium of $2,400 would give a net cost of the insurance policy over 20 years of $1,776. This figure divided by 20 makes the annual net cost of the insurance $88.80, more than four times the cost given in the figures provided by the salesman.

The same salesman might offer a $12,000 whole life insurance policy with a cash surrender value of $2,500 at the end of 20 years. Annual premiums of $100 for 20 years would pay for the policy, for a total of $2,000. Thus the insurance costs the buyer nothing and in fact offers a net profit of $500 at the end of 20 years, the salesman says. Again he has ignored the time value of money. His figures indicate that the insurance company is paying the client for buying the product. At an interest rate of 6 percent, the present value of the $2,500 cash surrender figure is $2,500 divided by 1.06 to the 20th power, or 3.207. The answer is $779.54 for the present value of the $2,500 payment at a point 20 years in the future.

It is also possible to determine the rate of interest being paid on a loan or an installment purchase by using the discount formula. Tables available on the internet or on computer programs make it possible to arrive at such figures quickly and easily.

CHAPTER 2 Insurance Companies and the Financial System

Specialization is the key to success, now more than ever before. In a simple barter society, a farmer might haul surplus crops to market and trade them for someone else's surplus, but the time it took to find someone offering a useful trade, arrive at terms and haul the result back home was time lost from production. A financial system in which specialists make possible the quick and efficient exchange of goods and services is the mark of a developed society.

FINANCIAL INSTITUTIONS

There are many convenient ways available under modern conditions for individuals to exchange goods and services. Banks, from small town Main Street operations to national and international networks, offer probably the most familiar facilities. They store surplus funds, pay for the privilege, put the funds to work in the marketplace and provide the day to day means of conducting commerce. Many other types of institutions also are engaged in the exchange of financial claims rather than in the production of goods and services. The producers, however, could not operate without the exchange specialists. Their special knowledge of the behavior of markets and the volume of transactions they handle combine to make it possible for them as well their clients to do business profitably.

Kinds of Financial Firms

Commercial banks, credit unions and savings and loan associations accept the deposits of small savers and put them together to make large market transactions possible. These are known as depository institutions. Other financial intermediaries do not take deposits but still operate to channel funds from those who have them (known as surplus spending units) to those who need them (known as deficit spending units). These intermediaries are called nondepository institutions. They include insurance companies, investment companies, pension funds and finance companies.

Functions of Insurance

An insurance company specializes in eliminating risks for individuals and businesses. Unpredictable events which put individuals at risk are a predictable expense for the population as a whole. Through insurance coverage, a risk of loss for an individual or business is pooled with similar risks and converted to a regular expense for the individual or business by means of payment of premiums. The premium funds are then invested by the insurance company in corporate or government bonds, stocks, mortgages, real estate and other opportunities which contribute to economic growth. There are more than 2,000 life insurance companies in the United States with more than $1 trillion in assets, making this one of the largest financial intermediaries. Individual life insurance policies are typically long-term contracts with predictable outcomes. Many individuals also are covered by employers' group insurance.

Property-liability insurance firms offer policies covering losses to homes, automobiles and commercial property as well as workers compensation, malpractice, fidelity and surety losses. There are more firms in this field, around 4,000, than in life insurance, but with smaller total assets. Contracts are shorter term and losses tend to be cyclical. Investment income is sometimes needed to make up for underwriting losses.

Insurance companies also market such financial products as annuities, mutual funds, IRAs, tax shelters, money market funds and investment securities. Large amounts of money in pension, employee benefit, profit-sharing and retirement plans are managed by insurance firms.

Pension Uses

Pension funds totaling in the trillions are important suppliers of capital for securities, money markets, real estate and commodities. Private pensions made up of contributions from employers and employees for retirement benefits cover half of all full time employees in commerce and industry in this country. Three quarters of state and local government employees are enrolled in pension plans aside from social security. Life insurance companies play a major role in pension fund investments by issuing life annuities to retired workers and investing the pension plan's funds in securities.

Finance Companies as Lenders

A finance company, another type of nondepository institution, sells common stock or borrows capital and then lends funds for mortgages, consumer loans or commercial accounts. There are also captive finance companies which are owned by a parent firm and finance only its products or services.

Investment Company Expansion

Investment companies sell shares and invest the funds in stocks, bonds, money markets and short-term financial instruments. An open-end investment company operates as a mutual fund and is primarily used by small investors who want professional management of their money. The variety of mutual funds and the number of investors in them have increased greatly in the last 20 years.

Depository Institutions

Of financial institutions permitted by law to accept deposits, by far the largest in asset holdings are commercial banks. Other types of depository operations receive most of their funds from individual households, while commercial banks are used by governments, businesses and international firms as well as individuals. Large money center banks may have assets of more than $100 billion and do business in worldwide financial markets. As of 2016 the Dodd-Frank Wall Street Reform and Consumer Protection Act defines a 'large' bank as one with consolidated assets of $50 billion or more. Banks make loans for mortgages, construction, business operations, consumer credit, Treasury securities, tax-free municipal bonds and foreign operations.

For smaller local banks, most business is done in supplying credit to individuals for mortgage and installment loans, and to local firms, farm operators and community government units. Small banks draw most of their funds from consumer and business checking accounts, time and savings deposits, CDs and money market accounts.

S&L Activities

Savings and loan association funds come mostly from consumer deposits in savings certificates, passbook transactions and money market accounts. They may lend up to 10% of their assets to

businesses and up to 30% to consumers.

During the 1980s there were many large losses in the savings and loan field because of inadequate credit controls, mismatched investments in long-term fixed rate assets and variable rate short-term liabilities, failure to diversify loan portfolios and in some cases outright fraud. The market share of S&Ls for single family mortgage loans went from 53% in 1975 to 30% in 1990. The crisis led to revision of the federal deposit insurance mechanism for S&Ls. There were 936 Savings and Loans in 2013 according to the FDIC.

Non-Profit Credit Unions

Credit unions are cooperative organizations formed for non-profit operations by a group of people who have the same occupation, association membership or other common bond. They are designed to encourage members in saving and to provide them with credit on reasonable interest terms. There are some 20,000 credit unions in the United States. Credit unions 96 million members, make up some 44% of the economically active population. Total credit union assets in the U.S. reached $1 trillion as of March 2012.

FINANCIAL FUNCTIONS

In a modern economy there are individuals and organizations with excess funds and there are those who need more funds to take advantage of financial opportunities. The financial system makes it possible for funds to flow efficiently between the surplus and deficit units.

Types of Financing

This flow of funds may occur either by direct financing or indirect financing. In direct financing, money and financial claims are exchanged directly between surplus and deficit units. The deficit units issue claims on themselves and sell them to the surplus units, which hold them as assets and collect interest on them.

These primary securities, such as stocks, bonds or notes, are known as direct claims. An individual might sell a house in this way to a buyer who gives a mortgage on the house in exchange. A corporation might sell an entire stock offering to a single investor or a group. Such claims can be sold in direct credit markets such as money or capital markets. This type of financing gives surplus units an outlet for their savings with a known return. Market specialists help in this process by bringing buyers and sellers together. They include brokers, who search out and match up surplus and deficit units and collect a commission on the transaction. Dealers may act as brokers and also carry an inventory of securities to buy or sell. Underwriters help bring security issues to market and may purchase an entire block of stocks and offer them for sale individually at a higher price.

Indirect Financing

In the indirect financing process, such financial intermediaries as banks and other depository institutions, as well as nondepository institutions like insurance companies and mutual funds, are involved between the ultimate lenders (surplus spending units) and the ultimate borrowers (deficit spending units). These intermediaries purchase direct claims with one set of characteristics from the ultimate borrowers and issue claims with another set of characteristics which they sell to the ultimate lenders. This exchange process is called intermediation, and firms that participate in it are known as financial intermediaries. The function of these intermediaries is to transform direct claims into instruments that are more attractive to both borrowers and lenders. They can achieve this result

because as specialists they handle large numbers of transactions, have specialized equipment available, expertise in the field and good information sources. They can access credit information and make valid lending decisions at lower costs and in less time than individuals can.

Examples of Intermediation

When an individual deposits surplus cash in an account with a thrift institution, which in turn makes home mortgage loans to other individuals, intermediation occurs. If a household buys car insurance from a nondepository institution (an insurance company), this financial intermediary may invest the funds in municipal tax-exempt bonds as a form of intermediation. Services of financial intermediaries through asset transformation thus include aid in transactions, risk pooling, liquidity and investment over time. Through the intermediation process, investing in projects can be diversified while funds are protected, used to earn interest and refunded on short notice if necessary to provide liquidity. Investors diversify by becoming owners of small shares in a wide variety of projects.

Intermediation Services

In asset transmutation, a financial institution accepts funds from savers on terms to meet the savers' needs, holds assets with terms to meet the needs of borrowers and converts the borrowers' obligations to assets with maturities to meets the needs of the savers. The intermediaries achieve this transmutation of assets by providing these services;

- Denomination divisibility. A depository institution will accept almost any size deposit. Small savers who do not have enough funds to take part in large denomination transactions can join other savers to enter the markets.
- Maturity flexibility. Financial intermediaries can create securities with any maturity from one day to 30 years. They buy direct claims from borrowing units and issue indirect securities with the maturities wanted by savings units. Because of this maturity intermediation, both borrowers and savers can achieve more satisfactory transactions than they could by dealing directly with each other. A thrift institution can take funds acquired through savings certificates with various maturities and lend these funds for long-term home mortgages with variable interest rates.
- Credit risk diversification. Returns from investments in many different securities are not severely affected if one security defaults. If an investor has only one security, its default spells disaster. Through intermediation, lenders can choose investments best suited to their needs. After putting funds in growth oriented mutuals for many years, an investor approaching retirement age might want to shift to mutual funds specializing in stable returns.
- Liquidity. Deposits with financial intermediaries can be converted to cash easily and quickly at low cost. Because timing of revenue and expenses often does not coincide for individuals, such deposits provide needed liquidity and safety, as well as interest income. Savers can borrow from financial institutions when they need cash and make deposits when they have more funds than needed.
- Income allocation over time. Financial intermediaries assist in allocating present income for individuals to future income or retirement needs through depository accounts, investment company shares or pension fund reserves. They also in an opposite transaction assist young borrowers to make major purchases such as homes or cars, thus allocating future income to fill present needs and making it possible for assets to be paid for while they are being used.
- Risk pooling. Financial intermediaries licensed as insurance companies provide pooling of risks, which is a form of income allocation across varying conditions rather than over time. The process of pooling risks converts uncertainty for individuals or businesses into a routine, bugetable

expense in place of a disastrous loss. Financial stability is increased in this way for the insured individual or business, making other transactions easier and improving economic efficiency in general.

- Transaction facilities. Without financial intermediaries the modern economic system could not function in an efficient way. Payments for goods and services and for settlement of financial claims are handled through these institutions.
- Demand deposits, savings accounts and money market funds can function as money in making daily worldwide business exchanges possible.

THE CONCEPT OF MONEY

The essential difference between a barter economy and an advanced one is the use of money. This is what enables a producer to spend time producing rather than trading. With money, a standard unit of account makes rapid economic transactions possible. Money can be anything that is a generally accepted medium of exchange or standard of value. In addition to being a unit of account in the exchange of goods and services, it is a store of value when held by savers. Money must be something that is generally accepted in the society using it. Convenience in size and weight is essential for public acceptance. Money must be durable physically, easily recognizable and uniform in value.

Ideally, whatever is being used for money should have an established and unchanging value, but in real life conditions such an exchange medium is hard to find. When prices rise too much, money becomes a less efficient medium of exchange and its storage value is reduced. Fixed investments and financial instruments such as life insurance and annuities see their value erode. Such inflationary conditions discourage savings and make trading difficult.

Nevertheless, a modern economy cannot operate without money. Large scale, rapid transactions are only possible in a society where the value of goods and services is expressed in terms of units of account. In this way, goods are sold for money and the money is used to purchase other goods. Such transactions, taking the place of the direct exchanges of a barter society, can occur anywhere and at any time because the value of everything is expressed in terms of money, and relative values can be compared accurately.

Who Controls the Financial System?

When a person who is neither an elected official nor a captain of industry can influence financial markets with a few words spoken at a congressional hearing, it is a safe bet that individual wields considerable power in the U.S. economy. Even though the few words are mildly optimistic in tone, they can imply that the Federal Reserve System will (or will not) be cutting interest rates in the near future. Financial markets listen when the chairman of the Federal Reserve board of governors gives Congress the semiannual report on the economic outlook for the country.

The Fed chief’s pronouncements might be taken as good news by the country as a whole and by politicians preparing for an election year to come. Financial analysts, however, may see the comments as a hedge to keep overly enthusiastic investors from sending the markets into an inflationary spiral.

Calming Effect

More modest expectations, even in the face of favorable reports on employment, industrial production and consumer spending, are the aim of the report as they are of the Fed's interest rate policy as a whole. A "wait and see" attitude is encouraged, in spite of complaints from the financial sector that the Fed was too quick or too slow to raise interest rates in a particular situation. The strong reaction to Fed policies on the part of the financial markets is understandable considering the power these policies have over banking and the economy as a whole. Commercial banking has been called perhaps the most regulated industry in the U.S.

Development of Controls

Federal control over the economy is not new, but it has increased with catastrophic events in the 20th and 21st centuries. The office of Comptroller of the Currency was created in 1864 by the National Bank Act, which authorized the federal government to charter and supervise national banks and to regulate the national currency. This legislation created dual regulation of U.S. banks by applying only to national banks and not to state-chartered institutions regulated by the individual states. The Federal Reserve Act of 1913 added another regulatory tier to the existing two. The Depression of the 1930s brought about additional regulations. It was widely recognized that frequent bank failures worsened the periodic boom-to-bust swings in the financial world. For a smoothly functioning economy, public and business confidence in the stability of the banking system had to be assured.

Congress felt the primary responsibility for achieving this stability lay with the banking industry because of its reliance on money as its primary commodity and control of the money supply by the Federal Reserve. Security of depositors' funds was the first consideration. Also, to avoid over-concentration of financial power, Depression-era legislation separated product lines into commercial banking, insurance, investment banking, savings and mortgage lending specialties. The interest banks could pay on deposits was limited in an effort to control costs. Bank activities in the securities business were curtailed, and commercial banks were left primarily with the business of taking deposits and lending money. Interstate banking by national banks was prohibited, and state laws also restricted branch banking.

Changing Times

At the time these restraints were established they were considered acceptable by most of the public, the government and the banking industry because of the traumatic events of the Depression era. Since that time, however, economic and technological changes have brought about the realization that many of these regulations have become outmoded and are having undesirable effects on competition and efficiency. They also put U.S. banks at a disadvantage in dealing with foreign banking institutions which do not have such regulations. There have been changes in the system and more are on the way.

In addition to consumer protection, banking regulations over the years have been designed to encourage allocating credit in ways appropriate to community needs and promoting adequate competition in the banking industry. Many regulatory agencies are involved in the system. They include the Federal Reserve, the Federal Deposit Insurance Corporation, the Comptroller of the Currency and 50 state banking commissions.

Banking Controls

Commercial banks in the United States must be chartered either as national banks or state banks. Chartering and supervision of national banks are under the direction of the Comptroller of the Currency. State banking departments oversee the state chartered banks. Banking examiners under the Comptroller of the Currency examine and supervise all national banks. The Federal Reserve examines all state banks that are members of the system. Most state banks are not members, but nearly all of them voluntarily carry insurance with the Federal Deposit Insurance Corporation. The FDIC examines insured banks that are not members of the Federal Reserve System. Uninsured non-members are subject to state laws and examinations.

All national banks must be members of the Federal Reserve System and must have deposits up to $250,000 insured by the FDIC. During the high-interest years of the 1960s and 1970s many state banks dropped out of the Federal Reserve because of high reserve deposit requirements which cut down on their ability to use their assets productively. Consolidation of the Federal Reserve System, the Comptroller of the Currency office and the FDIC has been proposed by some financial analysts a means of eliminating duplication of functions and raising banking standards as a whole by increasing efficiency and uniformity. A step in this direction already has been taken by merging the FDIC and the Federal Savings and Loan Insurance Corporation.

Fed Functions

All depository institutions in the United States, including banks, credit unions and savings and loans, must hold a proportion of their deposits in reserves either in cash or on deposit with the Federal Reserve System. It is the central bank for the nation's economy, acting as a bank for commercial banks by accepting deposits and clearing checks as well as making short-term loans to them.

The system includes 12 district reserve banks as well as 25 branch banks. The Federal Reserve System board of governors is located in Washington, D.C. It approves the appointment of the president of each Federal Reserve Bank and appoints three of the nine directors of each. These three represent the interests of the public. The other six directors are chosen by depository institutions in the region. Three are from the financial community and the other three from the business community. Functions of the regional Federal Reserve Banks include holding enough currency in reserves to assure the safety of deposits in member banks, providing check clearing services and a wire service for interbank fund transfers, and sorting the paper money and coins in circulation to maintain quality. The regional banks act as fiscal agents for the Treasury and accept bids for Treasury bill auctions.

Overall, the Federal Reserve System is in charge of regulating the supply of money and bank credit so changes in them will benefit rather than hinder economic activity. In times of volatile interest rates the Fed aims for a balance by adjusting the inter-bank borrowing rate downward when necessary to keep the economy moving but raising it when necessary to prevent inflation.

Board Appointments

The board of governors in Washington has final approval over the functions of the district banks. The seven members of the board are appointed by the President, subject to confirmation by the Senate. The President also names the chairman and vice chairman of the board, subject to the Senate's approval. Commercial banks' mergers and acquisitions proposed by district banks are

granted or turned down by the board of governors. Budgets of the district banks also are approved or revised by the board.

Comptroller's Functions

The Comptroller of the Currency, an office in the Treasury Department, grants charters for national banks and examines their financial condition, enforcing capital and asset distribution regulations. The Comptroller, the director of the Office of Thrift Supervision and three additional members appointed by the President make up the board of governors of the Federal Deposit Insurance Corporation

FDIC Insurance

The FDIC sets standards for and examines its member banks and provides insurance for all deposits in those banks up to $250,000. It also has arranged bailouts for major failing banks in recent years. After the savings and loan difficulties during the 1980s the administration of the Federal Savings and Loan Insurance Corporation, which insured S&L deposits, was consolidated with that of the FDIC. Powers of the FDIC were broadened to allow it to close insolvent banks or S&Ls promptly.

Safeguarding the public's funds in depository institutions is the main purpose of the tightened control made possible by the Financial Institutions Reform, Recovery and Enforcement Act passed by Congress in 1989. Regulation of the S&L industry is now overseen by the Office of Thrift Supervision under direct control of the U.S. Treasury. The act created the Resolution Trust Corporation, which could close or merge problem S&Ls. It also permitted banks to acquire S&Ls that were in good shape in order to encourage thrift industry consolidation. As a result of the financial crisis in 2008, over 300 banks failed in a three-year period. All accounts under the statutory limits were made whole. Capital security in a non-depository institution can be an issue. Food for thought for those with the potential to get caught up in meltdowns from Madoff to crypto-coinage.

Nondepository Regulation

For consumer protection in the case of nondepository institutions, which are not under the control of the Federal Reserve System or the FDIC, other regulatory systems have been developed. Although insurance is considered interstate commerce and could be regulated by the federal government, Congress up to the present has left insurance regulation to the individual states. Laws of each state regulate companies selling insurance there. As a result, national insurance companies often encounter 50 sets of differing regulations. As well as being subject to laws of the state in which they are incorporated, they are also governed by extraterritorial regulations of other states where they conduct business. Federal regulation of insurance firms is limited to antitrust and fraud cases.

Solvency Stressed

State insurance regulations apply to areas involving contracts, reserves, investments, and setting of rates. Because of the nature of the insurance business, adequate reserves are required to assure solvency and performance of contract duties.

Insurance policies are contingent performance contracts promising that the insurer will pay for specific future losses incurred by the insured. The price of the contract must be set before the cost of most such losses can be known. The complexity of contracts and the invisible nature of the protection being sold make it difficult for individual consumers to judge product reliability.

Trend to Uniformity

Although specific rules may vary from state to state, insurance activities in areas of finance, licensing, solvency, examination, investment policy, reserves, rates, contract provisions and agent competency are regulated in all states. There has been a tendency recently toward more uniformity in state insurance legislation. This trend is encouraged by the National Association of Insurance Commissioners, which is composed of representatives from all states.

Consumers naturally want to buy insurance only from dependable insurance companies. Agents and brokers also have a vested interest in placing insurance with financially sound firms. They may have a fiduciary responsibility to return unearned premiums or to fund loss payments if they have sold policies issued by an insurer who becomes insolvent.

Examination Goals

State financial examinations of insurance operations are designed to identify as soon as possible firms that may be having difficulties or violating regulations. The examiners are instructed to confirm that the companies are operating and reporting in accordance with National Association of Insurance Commissioners instructions for annual statements of insurance firms. If regulatory action is needed the examiners develop the information necessary for proceeding. Some state regulations make use of insurance company investment income figures in developing premium rate structures.

State Guaranty & Federal Action

The federal government has provided flood and storm insurance programs when necessary, in addition to other public assistance, retirement benefits and depository institution safeguards, there is an ebb and flow toward federal expansion in the area of insurance regulation.

State guaranty funds vary in capacity for protecting policyholders against insolvent insurers. The first guaranty funds were narrow in focus and covered a particular line or area of insurance such as workers compensation which was the first coverage to be made compulsory. In the 1940s and 1950s a few states created auto insurance guaranty funds. Among them was New York whose Motor Vehicle Liability Security Fund, created in 1947, and was expanded to cover other areas of insurance in 1969 when the National Association of Insurance Commissioners (NAIC) proposed its model guaranty fund program. The guaranty fund concept was gradually adopted and by the end of 1982, all 50 states, the District of Columbia and Puerto Rico had established procedures under which solvent property/casualty insurance companies absorb losses of claimants against insolvent insurers.

The NAIC's Model Property/Casualty Guaranty Association Act recommends that states adopt a "post-assessment" or post-insolvency approach to financing the program, under which assessments are made only after an insurer has been declared insolvent. When a company becomes insolvent, other insurers doing business in the state are assessed the amount needed to pay policyholders and claimants of the insolvent company. New York is the only state that does not use the post-assessment system for any line of insurance. New York has a "pre-assessment" arrangement. Insurance companies are assessed in advance, according to a percentage of net direct premiums written, and contributions are held against future claims on insolvent companies. The fund halts

contributions when the amount held exceeds $200 million and does not call for new payments until the balance falls below $150 million (Some states, including New Jersey, New York and Pennsylvania, have pre-assessment funds for workers compensation).

Total P/C Guaranty Fund Net Assessments over Five Years

2012	450,415,322
2013	456,953,717
2014	481,082,306
2015	458,510,638
2016	392,031,219

Source- NCIGF

Outlook for Insurers

Nearly three-fourths of life/health insurer revenue is derived from premiums charged for insurance and financial products; the rest is largely comprised of earnings on investments and administrative fees charged for asset management services. Net written premium is a principal measure of size and growth. In 2015, life/health insurer aggregate premiums totaled $638 billion. Policyholder surplus is the regulatory measure of capital available to an insurer (assets exceed liabilities). Surplus is also indicative of the capacity to write new business.

Figure 2-1 P/C Sector Net Income

($ billions)

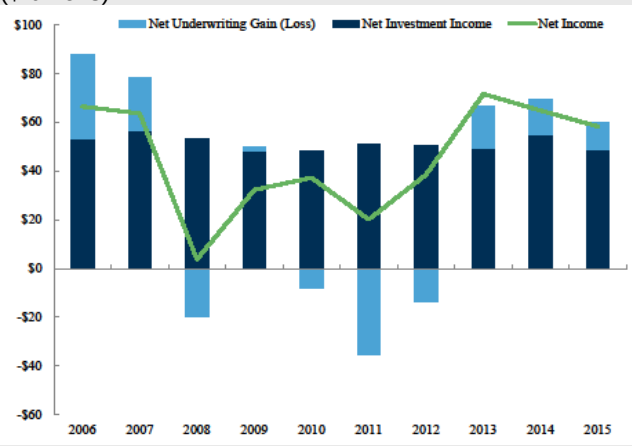
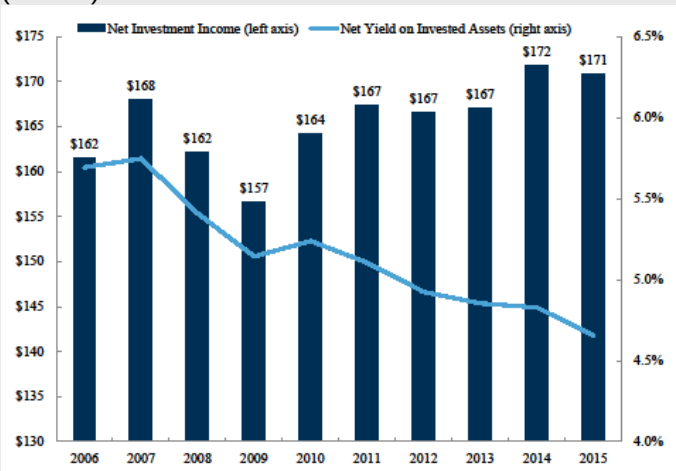


Figure 2-2 L/H Sector Annual Net Investment Income and Net Yield

(billions)



Source: FIO Report 2016

Property/Casualty

The property/casualty industry is subject to heavy competition, which can lead to pricing inadequacy and a lack of underwriting discipline. The combination of soft prices and market saturation created concerns over capital adequacy throughout the industry. This led to market hardening and increased underwriting discipline through the latter part of the early 2000's, the industry began to make up lost ground in these areas. The continued capital concerns required companies to price aggressively to

mitigate capitalization pressures going forward.

Simultaneously, the events of Sept. 11, 2001 created a change in perception of terrorism risk, which prior to Sept. 11 was an additional coverage for which policyholders were rarely charged. In addition, the global property/casualty industry saw an influx of nearly $30 billion of capital after the beginning of the century, of which U.S. property/casualty insurers accounted for about $5 billion.

Both mold and asbestos claims affected the property/casualty industry through the first decade of the 21st Century. Historically, property/casualty insurers have seen a higher percentage of failures than either life or health insurers. After three years of declines, the property/casualty sector annual net written premiums nearly returned to pre-financial crisis levels by 2011 and continued to grow in 2012. In 2015, P/C sector aggregate net written premiums increased three percent to a new record high at $520 billion The P/C sector was also profitable, but net unrealized capital losses caused surplus to remain essentially flat at $687 billion as of year-end 2015. Property/casualty underwriting results are most often measured by the combined ratio; the measure of losses, loss adjustment expenses (LAE), and underwriting expenses as a percentage of premiums. A ratio above 100 indicates that premiums were not enough to cover losses and expenses. Underwriting activities again produced positive contributions to the bottom line; while the combined ratio for the P/C sector increased slightly, to approximately 98 percent in 2015; it remained below 100 for the third consecutive year. Property/casualty insurers rely on income derived from investing policyholder premiums. As with life/health insurers, the property/casualty sector grew steadily in the years prior to the financial crisis of 2008. Unlike the life/health sector, property/casualty insurers still managed positive income growth in and after 2008. The sector held $1.53 trillion in invested assets at the end of 2015 and earned $48.7 billion net investment income that year.

Health Outlook

Rising medical costs, the current economy, and a growing demand from consumers for increased choices are some of the pressures facing health insurers; to say nothing of the uncertainties of the Affordable Care Act. Small and geographically concentrated companies-as well as those with weaker balance sheets or lackluster earnings-are seen as most susceptible to pressure.

Life

Positive net income raised the reported capital and surplus level of the L/H sector to $367 billion at the end of 2015. Capital and surplus is the regulatory measure of capital available to an insurer (i.e., the amount by which reported assets of an insurer exceed its reported liabilities), and measures financial health by reflecting the ability of an insurer to satisfy obligations to policyholders and consumers (particularly in the event of unexpectedly large or catastrophic losses). Surplus is also indicative of the capacity of an insurer to write new business (i.e., to make insurance products more available to consumers)

Moving Forward

While the asset-to-surplus ratio is the conventional measure of leverage for the life/health sector, the premium-to-surplus ratio is used for measuring property/casualty sector leverage. The difference in traditional leverage metrics can be attributed to the longer-term nature and lower volatility of life/health sector liabilities, relative to the shorter-term nature and higher volatility of property/casualty sector liabilities.

State insurance regulatory guidelines require that property/casualty insurers maintain premium-to-surplus ratios of less than 3-to-1. The property/casualty sector aggregate premium-to-surplus ratio has generally been declining over the last decade. The 2015 premiums-to-surplus ratio of 76 percent was below the ten-year average, although it increased slightly from the 2014 level as surplus growth was slowed by lower profitability.

Property/casualty sector reserves represent estimates of the ultimate incurred losses and loss adjustment expenses for events that have already occurred, but that remain unpaid as of the balance sheet date. As is the case for life/health sector reserves, the estimation of property/casualty sector reserves includes a significant degree of professional actuarial judgment. Total P/C sector reserves increased by slightly more than one percent in 2015 to a total of $608.8 billion.

Publicly-traded insurers represent a significant share of the total life/health and property/casualty sectors. Market perception of insurers and insurer future earnings capacities, as measured through equity prices and other market valuation metrics; have generally moved in parallel with broader market indices. Life/health sector equity market prices have mirrored those of the broader market more closely than has the property/casualty sector.

Due to the difference in business models between life/health and property/casualty insurers (*i.e.*, long-term versus short-term liabilities and investment portfolios, and L/H sector activity in capital and derivative markets), the equity prices of life/health insurers have been more pro-cyclical (*i.e.*, correlated with the S&P 500 index and the broader macroeconomic environment) than those of property/casualty insurers.

Regulation of Securities

Unlike the insurance industry, the securities market is primary regulated at the federal level even though a number of state laws also apply. Depression era disasters resulted in the passage of strong and specific laws setting out rules for the securities industry. Manipulation of the marketplace to mislead investors as well as use of inside information for profit is the target of regulatory mechanisms.

SEC Establishment

The Securities and Exchange Commission was created to take charge of overseeing the securities industry by the Securities and Exchange Act of 1934. The SEC is a quasi-judicial, independent agency of the federal government, charged with supervising the full and fair disclosure of all material facts about publicly traded securities. All firms issuing such securities must submit regulation statements and annual reports to the SEC.

Securing SEC approval of a prospectus or financial report does not mean SEC recommendation of the security as an investment. The SEC is responsible only for seeing that relevant facts are disclosed correctly. Investors are left to make their own judgments about the security's value.

Rules for Exchanges

The SEC also sets rules for organized securities exchanges, which must register with the agency and follow its rules. The exchanges must submit their own rules to the SEC in order to assure their

orderly operation and ethical behavior by their members. Proxy solicitations, along with price manipulation schemes and insider trading, are prohibited. The SEC acts in cooperation with associated Federal Reserve regulations to control credit for brokerage firms and their customers.

Protection for Investors

A backup form of consumer protection for securities investors similar to the FDIC for bank depositors was provided by the Securities Investor Protection Act of 1970. Brokerage firms pay a type of insurance premium to the Securities Investor Protection Corporation (SIPC) so that investors can receive securities held for their account by a failed brokerage firm up to a limit of $500,000 per customer. If necessary, the SIPC may borrow money to meet its obligations from the SEC.

Pension Plan Funding

In an effort to insure payment of private plan retirement benefits, Congress passed the Employment Income Security Act of 1964 establishing the Pension Benefit Guaranty Corporation. Sponsors of private retirement plans pay insurance premiums to the PBGC, but these premiums do not relieve the sponsors of the responsibility for unfunded pension liabilities. If such liabilities exist, the PBGC can attach a lien of up to 30 percent of the firm's net worth in case of a bankruptcy proceeding or forced termination of the plan.

In spite of improvements in the funding status of such private pension plans during the last two decades, many in declining industries are still underfunded, exposing the PBGC to a potential for severe risks. Several large underfunded plans sponsored by steel and other industrial companies have been terminated, increasing the PBGC deficit. Legislation tightening requirements for funding private pension plans, in addition to improved economic conditions, have produced some improvement in the situation.

Regulation of Mutuals

Among the strictest regulations of business under the federal securities laws are those affecting mutual funds. Such laws require complete disclosure to the SEC, state regulators and fund shareholders. Regulation of fund operation is continuous. The laws, however, do not include supervision of the investment judgment of fund management. Full information about the fund must be filed with the SEC, and potential investors must be provided with detailed disclosure of the management, investment policies and objectives of the fund. Purchase and sale of mutual fund shares come under the anti-fraud provisions of the Securities Exchange Act of 1934.

The Investment Company Act of 1940, requiring all mutual funds to register with the SEC, has many provisions against self-dealing and other conflicts of interest. Integrity of fund assets must be maintained and the fund and its shareholders are prohibited from paying excessive charges and fees. State laws also regulate mutual funds. Combined with federal regulations, these are designed to require appropriate disclosure to investors as to potential returns and risks associated with individual funds, and to insure the operation and management of mutual funds in the interest of shareholders.

Bond Market Changes

The nation's interest in a vital housing market is strong. Congress originally created the housing

GSEs -- the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Federal Home Loan Bank System - to improve consumers' access to mortgage credit. These three GSEs have done much for home ownership in this country. Fannie Mae and Freddie Mac, along with government-owned Ginnie Mae, helped create a market for mortgage securitization. GSEs (Government Sponsored Enterprises) are privately owned but federally chartered companies, created by Congress to help overcome barriers to the flow of credit into certain segments of the economy. The GSEs have become the dominant institutions in the secondary mortgage market. In 2016, Fannie Mae reported profits of $12.3 billion and Freddie Mac reported profits of $7.8 billion.

Fannie Mae and Freddie Mac buy mortgages from lenders and either hold these mortgages in their portfolios or package the loans into mortgage-backed securities (MBS) that are sold. Lenders use the cash raised by selling mortgages to the Enterprises to engage in further lending. The Enterprises' purchases help ensure that individuals and families that buy homes and investors that purchase apartment buildings and other multifamily dwellings have a continuous, stable supply of mortgage money. By packaging mortgages into MBS and guaranteeing the timely payment of principal and interest on the underlying mortgages, Fannie Mae and Freddie Mac attract to the secondary mortgage market investors who might not otherwise invest in mortgages, thereby expanding the pool of funds available for housing. That makes the secondary mortgage market more liquid and helps lower the interest rates paid by homeowners and other mortgage borrowers.

However, there are other types of bonds that appeal to insurers. In 1997, there was the placement of the "Bowie Bonds." This debt offering raised millions in immediate cash for rock-and-roll legend David Bowie. In exchange for $55 million, Bowie pledged to pay the bond investors all future royalty payments generated through the sale or public performance of his early recordings. Credit-card and automobile-loan receivables long have served as collateral in public-debt securities. The Bowie Bond issue, though, represents but one in a recent string of privately placed asset-backed deals that convert future income streams from various forms of collateral into tradable commodities. This includes medical bills, lottery winnings and tax liens. Deals like this have helped narrow the spreads between exotic bonds and more time-honored issues, such as mortgage-backed securities (MBS). When the market turns down, as it did after the late 90's, the demand for the unusual asset-backed instruments falls as investors seek refuge in low-risk products.

Prudential Insurance Company of America purchased the entire bond deal, which received a high-quality A-3 rating from Moody's Investor Service. Prudential will receive interest payments of 7.9 percent on its investment in exchange for taking on the risk of repayment from the earnings of a rock star dating from the '60's and '70's. Every time a radio station plays, a fan buys, or a juke box spins "Let's Dance," (not the Benny Goodman version) a royalty payment is made to the trustee administering the security, which then uses the cash to pay back the investor.

This deal entitled the bondholder to receive the royalties-plus interest-until the $55 million IOU is retired in 15 years. Although a security backed by a rock star's royalties is unique in itself, the truly remarkable fact is that insurance companies would stand in line to lend a sizable sum to Bowie at an interest rate of just under 8 percent. For that, they earned a slight 150-basis-point premium over the ultimate in risk-free investments, U.S. Treasury securities. By March 2004, the bonds' rating was set to one notch above junk status. The downgrade was prompted by lower-than-expected revenue "due to weakness in sales for recorded music."

From the broad perspective, better information availability has prompted a change in the bond market's behavior. Institutional investors now bring a high degree of sophistication to analyzing the

risks and cash flows that structured-debt deals present to them. Similarly, issuers now are more adept at structuring cash flows and more willing to provide comprehensive disclosure information to investors. The advent of better informed bond-finance players has helped fuel the enormous growth in the debt market, which nearly tripled from 1990-2000. Another big reason, of course, is the size of the federal budget deficit. In the past, investors made do with a limited choice of bonds. The main staple, Treasury securities, represented nearly one-third of the U.S. debt market at the end of 1986 The alternate selections-corporate bonds, municipal bonds, preferred stocks, government-sponsored enterprises (GSE) debt securities and GSE mortgage-backed securities-made up the remainder of the outstanding debt. At that time, the insurance company investment officers focused on Treasuries, corporates and municipals. The risk present in these sectors was well understood and the cash flows were highly predictable. Conversely, investors showed little appetite for mortgage-backed securities because of the prepayment risk inherent in those bonds. As a result, MBS accounted for only 10 percent of the debt market at the beginning of the 1990's.

Bond Innovation

The bond market had already begun to change in the mid-'80's when Freddie Mac introduced the collateralized mortgage obligation (CMO). This innovation combined many individual mortgage-backed securities into a much larger structure and redistributed the aggregate cash flows into discreet classes of securities called tranches.

By directing mortgage cash flows into separate tranches, issuers could create debt instruments with different cash flows. For the first time, individual mortgage-backed securities became the basis for the full range of short-, intermediate- and long-term maturities. With cash-flow variability under greater control, the same investors who had previously shunned mortgage-backed securities began buying CMOs and, later on, real estate mortgage investment conduits (REMICs). Mortgage-backed securities, driven by the popularity of REMICs, have since won significant investor enthusiasm and attracted substantial capital to the housing-finance system.

CHAPTER 3 Structure of Insurance Company Capitalization and Cash Management

When one examines the capital structure of any company, it can be seen as the mix of long term debt and equity maintained by the company. Decisions concerning capital structure are very important to the company. The mix of long term debt and equity can significantly affect the company's value by affecting risk and return. Capital structure decisions are made at senior levels of management. These decisions focus on the composition of the right side (liability + owner's equity) of the balance sheet. They determine how a company employs its resources.

Financial policy decisions involve the optimal mix between debt and equity for a company producing goods. An insurance company makes similar decisions when determining the appropriate premium volume for any given level of surplus. The goal of financial managers is to maximize shareholder value while maintaining a capital structure that meets the needs of the company.

For a company producing goods, current assets are defined as cash and other resources reasonably expected to be realized in cash within the normal operating cycle or one year, whichever is longer. For an insurance company there are four major types of current assets; cash, securities, premiums receivable, and reinsurance recoverables. Managing current assets requires constant attention. The financial manager must be aware of costs and benefits associated with the level and risk of each investment. This is to ensure that desired and legally mandated levels are maintained in each asset category.

Working Capital

This is a term often used in reference to current assets. Net working capital is the term given to the dollar value that results from subtracting current liabilities from current assets. Insurance companies do not maintain inventories like manufacturing concerns. Working capital management is thus essentially a process of credit management and cash management.

CAPITAL STRUCTURE AND COST

The decision of how to raise and spend capital for the firm is made by financial managers. Funds flow in a cycle similar to the one shown in figure 3-1. A sale of stock, debt or some other type of security is made by the firm. Cash from the sale is used to purchase real assets. Cash returns from the real assets are then distributed to entities that have supplied capital or else it is retained by the firm to purchase more assets.

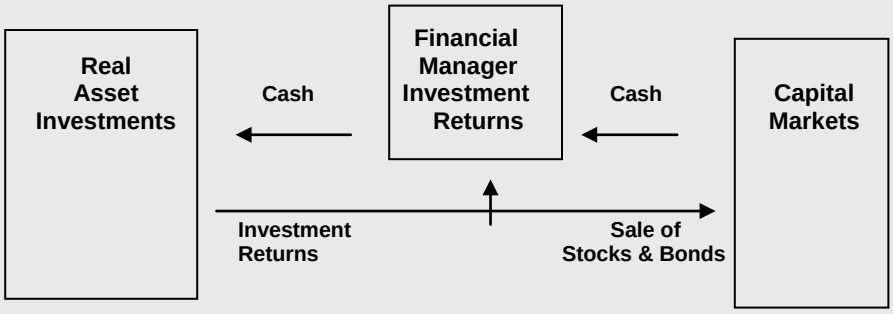
Liabilities

Liabilities of a manufacturing concern are usually classified two ways. There are short term liabilities whose liquidation requires the use of current assets, usually within one year. All others are long term liabilities. Short term liabilities are properly termed current liabilities. They are used to manage net working capital or to smooth variations in cash flow within an accounting cycle. Current liabilities include bank loans, trade credit, commercial paper, and other sources of funds.

Long term liabilities include bonds, mortgages, leases, and other debt financing. Debt capital is usually raised through the sale of securities in the capital market. If specific assets of the company are pledged as security, the debt instrument is a bond. The securities are referred to as debentures if the security pledged by the debt issuer consists of the general assets of the company. Both types of debt are referred to as bonds.

Sinking fund provisions may be found in the debt issue to provide for the ultimate retirement of the debt. The sinking fund provision requires the company to set aside a certain sum of money annually in order to eventually provide enough to retire the debt. Such instruments might also contain a call provision that allows the optional retirement of outstanding debt on some future date

Figure 3-1The Movement of Funds in a Firm



Equities

A firm's stockholders have an equity interest in the business. They have a right to all profits remaining after debt obligations have been satisfied. The equity of insurance firms is usually referred to as policyholders' surplus or, for stock companies, capital and surplus. Equity means ownership and the owners must bear losses whenever they occur. There are two kinds of stockholders. Preferred stock has a superior claim to asset and earnings of a firm. Dividends associated with this type of stock can be cumulative. Any dividends not paid when due accumulate and must be paid before any other stock benefits. Common stock is the first security issued by a firm and the last to be retired. These shareholders receive the residual earnings of a firm after bond and preferred stockholders have been paid. They bear the highest risk.

One of management's jobs is to act in the best interest of these shareholders. Management should take those actions and pursue business strategies that maximize share price.

COST OF CAPITAL FOR INSURANCE COMPANIES

The managers of insurance companies, like any other business, try to maximize share price. A manufacturing concern requires capital to invest in real assets. An insurance company raises non financial capital (surplus) to cushion the variability in the insurance portfolio. Insurance is designed to handle the financial consequences of uncertain future events. When these future events occur, they can cause claims payments to exceed expected claims. In such conditions, the insurer's equity capital is called upon to finance the shortfall in the short run. Actuarial theory teaches that in the long run, premiums will be brought into balance with claims and the company's surplus will be restored.

The company's surplus serves other functions as well. It finances the creation of reserves required by statutory accounting principles for those companies whose premium volume is increasing. Fluctuations in the value of the company's investment portfolio are absorbed. Insurance companies hardly ever sell debt securities in capital markets. If debt is used, it will be classified as a surplus note carrying a stated rate of interest. This debt is considered by regulators to be part of policyholder's surplus. It is subordinate to policyholder's claims if a firm becomes insolvent.

Cost of Liabilities from Insurance Operations

Huge amounts of money are raised by insurance companies through the sale of insurance policies. The policy face value or coverage limit is a liability for the insurance company. They are similar to a manufacturer's accounts payable liabilities in the fact that they arise spontaneously from the firm's normal course of business. The named insured remits a premium at the start of the policy period in exchange for the company's promise to pay for certain losses. The company can only earn the premium with the passage of time so it establishes an unearned premium reserve if some portion of the premium must be returned.

The identity of those who will make a future claim is not known but the company has an expected claims payment ratio from previous experience. As claims occur they are recognized by the creation of loss reserves similar to accounts payable. When claimants are paid the loss reserve is decreased by the value of the cash payment. Unearned premium reserve and loss reserve are the largest liabilities of insurance companies.

When the unearned premium to surplus ratios are combined with the loss reserve to surplus ratios, the combined 'debt/equity' ratio is obtained. The overall ratio for mutual companies is lower than the overall ratio for stock companies. Predominately property companies show an average loss reserve to surplus ratio that is below the average. Companies specializing in long-tailed lines were above average. 'Long-tailed' refers to lines such as liability, workers compensation, and medical malpractice for which claims payments for policies written in any given year are spread out over several years. Because of the time lag between an insured event and the claim payment for that event, the loss reserve is relatively large.

One can obtain the combined debt/equity ratio for insurers by combining the unearned premium to surplus ratio with the loss reserve to surplus ratio. Once again, the overall ratio for mutual companies is lower than that for stock companies. Life companies have a higher degree of insurance exposure. They also have a higher proportion of liabilities in reserves than property-liability companies

Book value states the worth of a business entity according to the values assigned in the company's financial statements. In computing the equity ratios where total net worth is employed, it is important that all components of capital and revaluation of capital increment be included. For this reason, most financial analysts would prefer to use market values in calculating capital structure ratios. With non-financial companies such as manufacturing concerns, securities are publicly traded and market determined prices are available. With insurance companies, the task is much more complex. Only stock companies equity prices are available. Mutual companies are owned by the policyholders. It is even more difficult to obtain market values of insurance company liabilities. Casualty companies normally report undiscounted values of their liabilities. Whenever there is an earthquake in California or a Gulf Coast hurricane, we gain insight into the difference between the stated liabilities and the present market value of a company's loss reserves.

Current market value of a firm's assets may have little relationship to book value per share for the reasons stated above. For this reason it is important that agents, especially independent agents, have some understanding of the financial position of the insurance companies with which they work. One needs to be familiar with financial ratios and financial statement terminology. This is not to say that an agent can pass judgment on the financial health of an insurer. Still, it makes sense to become familiar with the financial aspects of carriers. A financial catastrophe at an insurance company will result in a serious erosion of confidence that can affect the relationship with long-term clients.

Insurance companies make their money two ways, from operations (underwriting profit) or from investment returns on policyholder surplus (investment income). Few companies actually have underwriting profits. Their returns are tied to the amount of money they earn from investments. Underwriting profits are guided by two key ratios, the loss ratio and the expense ratio. If either gets out of hand, the combined ratio (expense ratio plus loss ratio) increases. A combined ratio under 100 indicates an underwriting profit; a combined ratio over 100 indicates an underwriting loss. When investment income is high, companies can "live with" a higher combined ratio, or underwriting loss, and still maintain an expected return on capital.

Capacity has to do with amount of policyholder surplus, which is the sum of the assets of the company needed to satisfy statutory capital requirements plus any excess profits which have been retained in the company. If a company has a lot of excess profits retained, they have excess capacity. Keeping this money in cash or physical assets does not generate a return, so the company needs to "do something" with it. In time of excess surplus, companies put this money to use by writing more business. This is generally done by lowering premiums, loosening underwriting requirements or writing new lines of business. Excess capital, loose underwriting requirements, entry into new markets, reduced premiums and rising loss ratios are generally a signal of a "soft market". Once the excess surplus has been "absorbed", underwriting requirements tighten and premiums rise.

The chart below displays key measures of returns for the P/C sector. Each of these metrics declined for a second consecutive year, but remained higher than the corresponding values recorded in all other post-crisis years with the exception of the peak year of 2013. The 2015 return on average equity of 8.5 percent was slightly below the average of nine percent for the past ten years.

P/C Sector Net Income ($ thousands)

	2011	2012	2013	2014	2015
Net Premiums Earned	$438,355,661	$453,055,061	$470,899,065	$493,521,266	$511,832,397
Losses and Loss Adjust Expense Incurred	348,267,037	336,797,760	317,646,867	340,555,139	354,744,960
Other Underwriting Expense Incurred	123,919,420	129,777,721	135821,072	139,104,986	145,066,499
Other Underwriting Deductions	1,475,530	322,517	(471,454	(475,218)	840,613
Net Underwriting Gain (Loss)	**(35,306,326)**	**(13,842,937)**	**17,902,579**	**14,225,359**	**`11,180,325**
Policyholder Dividends	2,315,009	2,656,168	3,018,673	(2,931,501)	(3,016,579)
Net Investment Income	50,890,625	50,278,403	49,180,450	54,970,232	48,720,206
Net Realized Capital Gains (Losses)	7,576,363	9.659.766	18,412,731	11,772,541	10,069,696
Finance Service Charges	3,179,564	3,287,910	3,392,739	3,271,709	3,332,974
All Other Income	(868,718)	(1,062,516)	(1,745,529)	(6,158,575)	(1,808,534)
Net Income After Capital Gain (Loss) Before Tax	**23,155,391**	**44,663,458**	**84,124,297**	**75,149,624**	**68,478,086**
Federal Income Tax	3,027,893	6,254,180	12,035,100	10,318,140	10,188,552
Net Income	**$20,124,876**	**$38,409,278**	**$72,089,197**	**$64,830,436**	**$58,289,534**

Note that investors look for Generally Accepted Accounting Principles (GAAP) reporting while insurance regulators ask for Statutory Accounting Principles (SAP). Another problem in measuring capital structure of insurers is the distinction between an accounting definition of reserves and a cash flow definition. The accounting definition of unearned premiums is 'the portion of written premiums that the company has not had time to earn.' Unearned premiums may also be defined as 'the prepayment of future cash flows to the insurance company.'

Look at this scenario: An insurer writes a one year policy and agrees to a premium payment plan of equal quarterly installments. The unearned premium reserve might be valued at 11/12 of the premium after one month, but only 1/4 of the cash would have been received by the insurer. The difference would appear as accounts receivable under the heading of 'premium balances'. This amount would not be an investible asset. A cash flow definition of reserves recognizes only investible assets and yields a lower debt/equity ratio.

Under statutory accounting rules, the insurer must show an unearned premium reserve that overstates the company's true liability if all policies were to be canceled. The amount of this overstatement represents equity capital rather than debt capital. This item is significant because the cost of funds from these two sources will differ substantially.

The accounting versus cash flow distinction is also important with respect to loss reserves. Some companies follow a policy of maintaining loss reserves until the claim is closed even though they might have made partial payments during the intervening period. This practice causes the loss reserves to be overstated and decreases surplus since the decline in assets caused by a partial payment will be matched by a decrease in surplus if loss reserves remain unchanged.

Cost of Capital Generated by Insurance Operations

An approximation to the cost of capital generated by insurance operations includes two components. One is the company's underwriting result for the year. The other is a rate of return differential that the company suffers because its investments are restricted by regulators. Insurance companies are required to keep their cash in conservative investments by regulators. The return differential is presumed to be positive. In other words, insurance companies would have their cash in higher yielding investments if not for regulatory restraint.

With higher yield comes higher risk. That is precisely what state regulators are trying to minimize. High risk has no place in the portfolio of companies whose assets must be available when the consumer needs them. There is serious political fallout and public outcry whenever an insurer becomes insolvent. For this reason, it is in the regulator's best interest to keep a tight rein on insurance company investments. It is difficult to estimate the size of the regulatory investment differential.

If a firm has an 8% underwriting loss during a given year and suffered a 1% lower return on its investments because of regulatory action, the cost of debt capital would be 9%. An underwriting profit of 4% with the same rate of return differential would yield a negative cost of debt capital of 3%.

COST OF EQUITY CAPITAL

Equity or surplus is the foundation on which the insurance operation rests. Potential investors look

at the expected return from engaging in the insurance business and compare it with the return available in other areas that have equivalent risk. Depending on whether the comparisons are favorable or unfavorable, capital will flow into or out of the insurance industry.

The cost of equity capital is an opportunity cost concept that compares the return on insurer shares to the return on other shares in an equivalent risk class. If other investments with the same level of risk have a return of 11%, this becomes the cost of equity capital for insurers. If insurance company shares offered less than 11% return, investors would leave the insurance industry and share prices would fall. Lower share prices means higher return on investment. Equilibrium would be re-established when share prices reached a point so that expected return rises to 11%.

When analyzing the equity value of an insurance company, one thing to look at closely is the growth rate of the firm. More often than not, a firm's growth rate will vary over time as new products are introduced and new strategies are implemented. For example, a firm specializing in a new type of coverage might achieve rapid growth as the new policy becomes accepted. As more players enter the market prices for the product will fall with the increase in supply. Eventually the market becomes mature. The firm's growth rate slows and settles into a more normal rate of growth.

There are several economic models that can be used to express cost of equity. We will briefly look at two of them. A detailed discussion of such models is beyond the scope of this book.

Dividend Discount Model

$$V_0 = \frac{d_1}{1+k_e} = \frac{d_2}{(1+k_e)^2} + \ldots + \frac{d_{\infty}}{(1+k_e)^{\infty}}$$ where:

V_0 = value today of 1 share of common stock
d_t = cash dividend per share received at the end of time *t*
k_e = appropriate discount rate to apply to future dividends

The Dividend Discount Model states that the value of a share today is equal to the discounted value of a perpetual stream of cash dividends expected to be paid by the company. The cost of equity is the discount rate that equates the future cash dividends with the current market price of the stock. This model assumes that growth will last forever. For simplicity, we assume growth rate in dividend to be constant. The model can be rearranged like this;

$$k_e = \frac{d_t}{V_0} + g$$

Assume that Heart of Kansas Insurance has a dividend of $4.00 per share, share price of $80.00, and dividend growth of 8% per year. The dividend at the end of next year will be $4.32 ($4.00 x 1.08). Using these figures, the cost of equity capital will be 3.4% as illustrated;

$$k_e = \frac{\$4.32}{\$80.00} + .08$$

= 0.054 + .08

= 0.134

Capital Asset Pricing Model

Nothing lasts forever, especially economic growth. The economic boom of the '90's was gone with the dawn of the 21st century. The Capital Asset Pricing Model (CAPM) is another approach for

estimating the cost of capital. It separates the risk of owning an asset into two components; the first category is called nonsystematic risk. This is diversifiable risk. It represents the risk that is unique to a specific company. The second component is called market or systematic risk.

This type of risk applies to all assets in the same market. The measure of systematic risk is called beta. Beta is an index of the degree to which a security's price moves in relation to a change in the market. A beta factor of 1.0 indicates that a security has the same risk as its market. A beta lower than 1.0 indicates a security has less risk than the market. Greater than 1.0 means a security is more volatile or has more risk than the market.

The beta factor of a security can be determined in several ways. The most common method is to perform a statistical analysis of the historical relationship between an individual security's returns and that of the market. There are many investment newsletters that publish betas for firms and market sectors. Figure 3-3 illustrates the risk, as expressed by beta, of a sampling of insurance companies

Figure 3-3 Sample Selected Beta Estimates for Insurance Firms

Category	Beta
	(1.00 = market)
Life Insurance Companies	
MetLife, Inc	1.96
AFLAC	2.40
Travelers Companies, Inc	1.87
Manulife Financial Corp.	2.41
Sun Life Financial Inc	1.16
Lincoln National Corp	0.86
Property/Casualty Insurance Cos	
Allstate Corp	0.38
Chubb Corp	0.72
American International Grp	0.89
The Progressive Corp.	0.83
ACE Limited	0.72
CAN Financial Corp.	0.64

The capital asset pricing model is shown below:

$$R_j = R_f + \beta_j (R_m - R_f)$$
$$R_j = .06 + 1.0 (1.4 - .06)$$
$$R_j = .14$$

where: R_j = **required return on equity for security j**
R_f = **risk-free rate of interest**
R_m = **expected return on the market**
β = **beta coefficient**

Let's assume that Heart of Kansas Insurance has a beta of 1.0, a risk free interest rate of 6%, and the return for this market sector is 14%. The capital asset pricing model gives us an estimated cost of capital of 14%. Note that the Gordon model with its separate set of assumptions yields 13.4%. The difference in the two figures comes from the assumptions inherent to the models. Economic

models are not perfect and both methods are subject to error.
The capital asset model assumes that investors should only be concerned with the market risk of a security. Any other risk is diversifiable and can be eliminated by spreading the risk through inclusion of some quantifiable number of securities in a given portfolio.

Optimal Form of Capital Structure

Whether a firm can measure its optimal capital structure by measuring the cost of different sources of capital depends on the relevance of debt policy. The big question is whether debt financing increases a firm's value compared to its value when it relies solely on equity. Some theoretical models suggest that financial leverage has no effect on the firm capitalization rate since the rate depends not on how the firm is financed but on the risk class of the firm itself. If the firm issues more and more debt, the discount rate on equity will rise to offset the use of low cost debt and leave the capitalization rate constant.

As stated before, insurance companies do not, as a rule, issue debt. The capital structure question for insurance company management is how much insurance to write for a given amount of surplus. Writing insurance policies is analogous to issuing debt. Liabilities are created for the insurance company either way. So far this chapter has shown how to measure the cost of capital for insurance companies for equity capital as well as for policyholder supplied capital. What is the optimal capital structure for insurance companies? The firm should underwrite policies if they have a positive net present value, but should it do so without limit? If the company relaxes underwriting standards to gain market share, eventually it will face policies whose expected net present value is negative. Such policies should be rejected.

Net present value is the difference between the present value of cash inflows and the present value of cash outflows. In other words, when a policy is written on an applicant that consistently results in a casualty loss, the firm has crossed the threshold to overly relaxed underwriting procedures. An underwriting procedure such as this is not acceptable. It is difficult to make it clear at what point a policy should be rejected even though it will be profitable. At some point the acceptance of marginal policies will cause the market to increase the discount rate on equity so much that the overall value of the insurance company will decline.

An insurance company can increase its leverage by selling more insurance. As premium volume expands, the underwriting department might have to relax its standards to gain new business. The marginal incremental addition of a policy will at some point have a negative net present value and cause firm value to decline if underwritten. The firm could be small in relation to the market and find that it can write virtually any number of positive net present value policies. However, at some point things will turn against the insurer and net present value will head towards negative territory.

Factors Affecting Market Value

Research has been done to address the question of how the market values insurance companies. In 'Valuation Parameters of Property-Liability Companies,' (1977) George Foster said that firm value depended on earnings, risk and growth. Underwriting plus investment plus capital gains on equity securities provided the best measure of expected earnings for valuation purposes. Other studies have been done on life insurance companies that seem to contradict the capital asset pricing model. Evidence was found indicating a relationship between expected return and systematic risk. There was also a relationship between expected return and nonsystematic risk

(risk unique to ownership/holding stock in a specific company).

Ownership type can also affect capital structure. Stock companies are under greater pressure to perform than mutual companies because of stockholder pressure. It is unclear as to the relationship between type of ownership and capital structure. Stock companies seem to be more successful from the standpoint of raising capital. This would give them the advantage of raising capital to compete with other major financial service firms. The mutuals would also gain a tax advantage by converting to stock companies.

If a mutual company decides to convert to a stock company, problems still remain. It is difficult to draw up an acceptable plan to compensate current policyholders. Perhaps a faster route is for a mutual company to raise capital via a holding company. It could sell securities and channel funds to the mutual company. In the spring of 1995 at least one mutual company was bought out by a stock company. This is another route taken to maximize or at least make clear the market valuation of an insurance firm.

Risk of Default

When a firm sells its first policies, the benefits to the owners far exceed any increase in risk. As more policies are sold, the risk of default starts to rise. The costs of financial distress restrict the amount of debt that a manufacturing concern can use. The same situation exists for insurers. Whether a property/casualty or life/health concern, selling more insurance on a fixed dollar amount of equity or policyholders surplus increases the expected return to the owners of the insurer. This is true as long as the 'spread' is favorable. 'Spread' is financial jargon for the difference between the return on two assets. A positive 'spread' exists when the cost of insurer equity supplied funds is less than the available rates of return on other investments.

As an insurer sells more policies, the risk of default starts to rise. Eventually the market perceives that the firm's exposure (as measured by the premiums written/surplus ratio) has risen to a threshold level that indicates danger. At this point the spread declines. At some point, the exposure ratio is so high that the spread turns unfavorable and the firm's value would decline if additional insurance were sold.

Risk increases because a larger number of policies cause an increase in the standard deviation of total claims. As stated in the first chapter, standard deviation is a measure of dispersion around the expected value of the mean. Since the standard deviation of total losses is increasing, there will be greater variability in total losses paid each year. The role of surplus is to absorb the financial shocks that can arise from the increased fluctuation of losses. Look at a hypothetical company where the dollar value of surplus is fixed. When it is required to support more and more variability in losses, there is an increasing probability of surplus being insufficient to absorb the excess losses in a bad year. The chance of financial distress increases as more insurance is written on a fixed amount of surplus.

A reduced willingness to pay premiums is the market response to this type of higher risk. High quality firms are able to charge higher premium rates. The opposite is true for firms of lesser quality. This means the insurer has a reduced ability to pay future claims. In order to persuade potential insurance purchasers to buy a policy, lower quality insurers will have to cut premiums. Lower premiums raise the cost of policyholder-supplied funds. Because of this higher risk firms face higher costs associated with default.

Marketplace monitoring of the risk level of insurers is done by many groups. Sophisticated policyholders have an incentive to do this when they bear the cost of insolvency. Large businesses who do not receive protection from guaranty associations have an interest in monitoring their insurers' financial health. Individual policy holders who are protected by a state guaranty association do not have an incentive to track the insurance company's solvency. Some individual policies are not protected by the state fund. Public awareness and perception of this fact will determine the level of individual policy monitoring.

Agents and brokers also have an incentive to monitor insurers. This is done mostly by relying on rating agencies that sell their assessments of company financial condition. Such rating agencies include A. M. Best, Duff and Phelps, and Standard & Poor's Corp. Under state law, insurance regulatory agencies monitor company financial conditions for those companies operating within the state. They rely on several types of financial analyses to determine financial ratings for insurers.

Naturally, companies try to maintain high ratings. If financial leverage becomes too high the regulator might instruct the insurer to change its investment or underwriting policies. Management could lose actual or effective control of the firm to the regulator. This possibility serves as strong incentive for managers and owners to maintain reasonable premium writings and avoid incurring the costs of financial distress.

To summarize, measurement of the cost of capital and leverage are important issues. Insurance companies face problems similar to manufacturing concerns when making capital structure decisions. Both stock and mutual companies require an equity base to support their insurance operations. Insurance company leverage differs from the leverage typical to a manufacturing concern. The nonfinancial company uses planned, scheduled fixed cost financing. Insurer leverage involves the use of variable cost policyholder supplied capital. As the firm's sales increase, capital from policyholders increases. Insurance leverage can be considered spontaneous and similar to trade-credit for other companies.

The cost of equity capital is difficult to estimate. The cost of debt acquired in the market is obvious. Insurance companies seldom issue debt. For these reasons, making a capital structure decision for an insurance company requires considerable thought on the part of management. Discounted cash flow analysis is one method that can be used to calculate the cost of policyholder supplied capital. The underwriting result might be an accurate measure of the cost of capital, depending on the claims payment lag and the rate of change in premium volume.

Insurance company management faces the capital structure decision of optimizing the premiums written to surplus ratio. Insurance companies face an ongoing search for this goal. Changing economic, demographic and business volumes make this goal a moving target. Further research is warranted for this issue. It has tremendous management and regulatory implications.

TECHNIQUES FOR CAPITAL MANAGEMENT

Issues Affecting Credit Policy: Premiums from all policyholders are needed to create the pool of dollars from which losses will be paid. Policyholders do not want to pay for protection that has already been provided. This is the chief reason that insurers avoid granting credit whenever possible. The reality is that competition often forces them to extend credit to policyholders. Premium finance companies often extend credit to consumers where insurers are unwilling to provide this service.

Premium payments should be collected and immediately remitted to the insurance company. At times, agents can extend credit to the extent of their authority to bind coverage on behalf of the insurer. Considerable resources and skill are required to manage this policyholder -> agent -> company credit relationship. The credit manager is a specially trained employee reporting to the financial manager. This manager handles daily decisions regarding credit policy.

To the uninformed policyholder, the value of the unseen protection of insurance is not recognized. This makes the problem of collecting accounts receivable exceptionally difficult for insurance companies. Sophisticated policyholders realize that their premiums are pooled with other policyholders' money so that the significant losses of the few can be paid by the low premium payments of the many. If money is not collected at the beginning of the policy period, policyholders will be reluctant to pay their premiums. The resistance can be rationalized by arguing, 'Because I have no claim, I owe no money'. Situations like this always arise so it is important for insurers to have a credit policy in operation. Guidelines are created to determine when credit will be extended, payment plans, and to whom credit will be granted.

Two methods used to maintain a sound credit policy are credit scoring and credit analysis. Credit scoring is a way to measure credit strength frequently used by banks and credit card companies. Variables are plugged into a quantitative model in order to evaluate applicants for consumer credit. Characteristics like income, assets and home ownership are given a value and then included in a weighted average to arrive at an overall point total. The weighted score for an individual is compared to a mean credit standard. The criteria could be, say, one standard deviation from the mean equates to creditworthiness. The predictive ability of such a model depends on the depth of historical data and the continuous update of mean scores and weights.

This credit model resembles underwriting scoring models used by some personal lines insurers where permissible. Auto insurers may assign points for young drivers, new or expensive cars, moving violations, etc. If the points exceed those allowed by an established formula, the driver is rejected or sent to a substandard pool. Credit analysis may also be used as a factor in the underwriting decision. Paradoxically, fiscal responsibility can be a factor in extending insurance coverage but credit worthiness is usually not evaluated to determine the ability to pay premiums.

The financial stability of an applicant is an important underwriting consideration. Credit analysis is the process of evaluating credit information for a credit applicant. Financial data needs to be analyzed to detect the potential existence of moral hazard. This is an existing attribute of a policyholder that tends to increase the probable frequency and severity of loss. A prospective policyholder may have poor cash flow or be near bankruptcy. Such attributes may cause the future submission of a fraudulent claim.
One assumption of modern economic theory is that all relevant information is available to business decision makers. Unfortunately, underwriters do not live in such a perfect world. Complex decisions on the acceptability of applicants for coverage must be made with incomplete information. The physical aspects of the exposures involved must be made as well as extensive credit and financial analysis. This review will help to determine the desirability of an insurance applicant.

There is a set of procedures or underwriting guidelines for most insurers that indicate the circumstances under which financial and credit analysis is necessary. Applicants in the construction industry or those requesting surety bonds are required to submit a financial statement as a matter of routine. The quality and quantity of the information can vary according to the size of the entity. On accounts for which the premium is determined based on loss activity under the

policy, audited financial statements are necessary. In these instances, the policy period is over and the policyholder might try to avoid being held accountable for commitments made at the policy's inception. Comparing current financial statements with the prior period allows the underwriter to make inferences concerning the business' health. Basic financial ratios such as working capital, current accounts, and capitalization ratio help determine how well an economic entity is doing.

Insurers recognize the need for the underwriting process to include an effective financial analysis. Such skills are not normally within the realm of activity normally associated with insurance underwriting. For this reason underwriters frequently obtain financial information through credit rating services such as Dun & Bradstreet, Moody's, or Standard & Poor's Their reports are issued periodically and include financial information on businesses across the United States. An alphanumeric rating system is used to reflect financial and credit strength of listed firms.

Credit Decisions

The decision process used by insurance underwriters and loan underwriters are similar. Credit decisions are primarily based on the creditor's probability of repayment. Most firms limit the amount of credit made available to customers in order to limit exposure of the company in the event that the customer does not repay his debt. Credit is extended in order to increase sales and to avoid losing the customer to a competitor because they do not wish to pay cash. When extending credit, heavy reliance on financial data, characteristics of the entity and the moral character of the individual or business owners.

There are five 'C's of credit that lenders rely on;

- Character; the customer's desire to pay off debt
- Capacity; the ability of the customer to pay debts as reflected in the cash flows of the entity
- Conditions; the general economic conditions related to the firm or individual's operating environment
- Capital; the financial strength of the customer
- Collateral; any asset that is pledged by the customer against the debt

Decisions that must be made by insurance companies regarding credit should be based on these general guidelines

Some states have special statutes that relate to insurance premium financing. Many insurers offer payment plans as an alternative to paying the entire premium at the beginning of the policy term. This method usually does not involve separate interest charges related to the amount of premium deferred or the time value of money. There is no percentage finance charge but a service charge is levied to cover the extra cost of handling the deferred billings. Controls are imperative to assure follow up on collection or cancellation procedures. Many commercial line payment plans are one of a kind. The accounting department of the insurer must be familiar with the plan and stay up with billing and collection.

Insurance companies will at times agree to finance the premium owed by policyholders. Federal and state law applies to this as well as any other type of financing. It is required that the effective interest rate be disclosed. Federal laws relate primarily to the financing of personal lines insurance. State regulations and usury laws are, by nature, not uniform.

One such payment plan may involve a down payment and later, periodic payments. Most payment schedules are arranged so that the unearned premium serves as collateral to any defaulted amount. This could be looked at as breaking the premium down into smaller increments. Such an arrangement results in an increase in transaction costs for the insurer. That cost increase will be passed on to the insurance consumer. It will be reflected as a handling charge or anticipated in the deferred payment pricing process.

Most insurance companies forgo the problems of credit by offering a product to producers of policyholders that can be purchased without an interest charge. A producer is a term commonly applied to an agent, solicitor, or other person who sells insurance, producing business for the company and a commission (if so paid) for himself. The producer's ability to offer insurance coverage on credit is a significant selling tool. Monitoring the payment performance of producers is a crucial financial task for insurance companies. Credit evaluation procedures apply to producers. A complicating factor is that insurance companies rely on their producers to generate new business. Timely collection is only one factor in the evaluation of an agency relationship. Insurance companies are likely to tolerate a slow paying producer who consistently generates high quality business. However, overdue agents' balances are not admissible as part of surplus under statutory accounting rules. For that reason collection needs to be monitored closely when a producer's payment history shows signs of deterioration.

Insurers use three types of billing plans. Account current billing permits the producer to pay the insurer premiums due from insurance sold based on the billing statement prepared by the producer. This offers the producer great flexibility and cash flow advantages. The producer can submit monthly statements that do not reflect all the insurance sold. This gives the producer the use of the money with which he is entrusted. The insurance company knows that the unpaid policy has been issued but usually allows a 60 to 90 day grace period before trying to collect the premium. If the producer does not remit the premium and retains the policy documentation, the insurer does not know a policy has been issued or that a premium is due. This opens the door for potential abuse so insurers monitor such situations carefully. Only the most reliable producers are afforded this method of billing.

Statement billing is the second type of producer billing. With this method the insurance company keeps track of policies that have been issued by the producer. The producer pays the company based on an account developed by the insurer. This arrangement requires the producer to pay for policies that the insurance company shows as issued whether or not the agent has collected the premium from the policyholder. The producer can choose to pay the current statement by using money obtained from other applicants not currently due. This gives the policyholder some payment flexibility with the producer. Money transfer between accounts is not as likely because of the reduced flexibility granted the producer.

Item billing is the most restrictive billing program. Producers must account for each policy individually. This arrangement requires more supervision by the insurance company. It is more expensive to administer. The insurer forces accountability for all policies issued and all premiums collected. As a result, the insurer is likely to have fewer agents' balances to write off. This system eliminates almost all cash flow benefits that accrue to the producer in the billing methods above.

One of the billing agreements above will be a factor in the agency agreement. This contract details the relationship between the insurer and producer. Payments, commissions, costs and authority are outlined in the agreement. The agency agreement standardizes the relationship between the two parties. It does allow for incentives for the improved performance by the producer. Also, the

agreement outlines steps for enforcement of company procedures

A more common arrangement for insurers is direct billing of policyholders. With this method the producer is responsible for obtaining initial payment from a policyholder with the application for insurance. Subsequent renewals are mailed directly from the insurer to the policyholder with an invoice. This type of billing is frequently seen with personal insurance lines and small commercial policies.

Collateral

Credit is generally extended based on the perceived ability of the creditor to repay debts. Collateral is used to secure the assessment made by the creditor in granting credit. Insurance companies use collateral to assure that money owed the insurer by policyholders or reinsurers is paid.

The collateral supporting the loan is the unearned premium for the paid portion of the financial policy then insurance premiums are financed. In the contract with the named insured, insurers obtain the right to cancel the policy and collect the unearned premium refund. This allows payment of the past due balance of the loan. The unearned premium provides a high degree of security for the insurer and makes this form of financing attractive.

Under statutory accounting rules, a deferred premium cannot be considered an asset unless guaranteed by a foolproof method of payment. The same standard applies with reinsurance. Reinsurance is the sharing or spreading of a risk too large for one insurer by ceding part of the risk to another company or reinsurer. Unauthorized reinsurers are those which are not licensed in the primary insurer's state of domicile. Moneys recoverable from unauthorized reinsurers are deducted directly from policyholders' surplus unless acceptable collateral is present. Acceptable collateral includes letters of credit, trust agreements, or funds deposited by or withheld from reinsurers.

Issues Affecting Cash Management Policy

Most activities related to cash flow involve one of two issues. Transaction costs are the costs involved in initiating and completing a transaction. Time value costs result from the delay in time associated with a transaction. That is, the lag between closing an agreement and being paid for it. When interest rates are high, cash management is critical. Reduced cash flow is directly related to the need to borrow money for cash shortfalls. Interest expense drives up the cost of doing business. It is the goal of cash management to efficiently track and control the flow of funds through a company.

Increasing the speed of cash inflow and slowing down its outflow is a means of achieving this efficiency. Float refers to the lapse in time between the payment of an obligation and the receipt of those funds by the payee. Insurance companies receive huge amounts of cash in the form of premium payments. By minimizing float, insurers seek to quickly realize funds owed to them but not yet available. Conversely, they attempt to maximize the period before debts owed must be paid. The ongoing revolution in information technology is helping the Federal Reserve Bank reduce the time it takes to process checks that it clears. Commercial banks are also gearing up to make funds available more rapidly.

Banks compete with each other for large clients with the promise of large cash inflows. Because of their sophistication with fund transfers, banks have been able to create many services and products

that insurance company cash managers can use. Lockbox service provides for the collection and immediate deposit of accounts receivable or, in this case, premium payments. A specific post office box or address is obtained to collect incoming mail containing accounts receivable payments. Bank personnel are authorized to collect and deposit funds received. This increases cash flow and reduces float time for the insurer. Such a system also allows an insurer to outsource the labor and administration of cash collection.

Advances in technology have also facilitated the ease of using bank drafts for insurance companies. This type of pre-authorized transaction allows an account to be automatically debited to pay recurring bills like mortgage, utility, or insurance premium payments. This type of electronic funds transfer allows commerce to flow without the burden or costs of paperwork. The new frontier of home banking/finance on the Internet promises to even further modernize the flow of funds in the financial industry in the future.

Managing the cash and near cash resources of an insurance company involves controlling credit and cash operations. Insurers have significant cash inflows generated by premium payments and need liquidity to pay claims in a timely fashion. Cash managers project cash needs to minimize excess cash. Current inefficiencies in the banking system create float that can be used to meet cash needs. Much of cash management involves taking the maximum benefit of the available bank balance. For this reason, the assistance a bank can provide in managing the firm's cash resources is an important part of the insurer-bank relationship. Insurance company financial managers must keep up with short-term cash resources. Too little available cash will cause the firm to convert assets or borrow. Too much cash on hand is an idle resource. A coordinated cash and credit policy is important in order to maximize value of the insurance company.

Chapter 4 Financial Decision Making for the Insurance Company

MEASUREMENTS OF PROFITABILITY

Financial Planning can be described as the analysis of an entity's financial condition, including sources of income and expenses, budgets and investments to achieve financial objectives and the eventual transfer of assets to designees. Economic theory assumes a business entity is ongoing. That takes the 'estate' portion of financial planning for businesses out of the picture. Statutory accounting principles assume a 'worst case' scenario. That is, an insurance company must maintain conservative investments in order to be able to liquidate assets in order to pay off policyholders in the event of a large movement upward in claims. A large part of planning for a firm is management of the asset side of the balance sheet. The allocation of capital resources to their most productive uses is called capital budgeting.

A business has many productive investment opportunities available that involve purchasing real assets. Which, if any, of the assets should be purchased? The question involves measuring the risk adjusted profitability of those alternatives. All decisions concerning the allocation of the entity's financial resources involve the same concept. There are four commonly used measures of profitability

Accounting Rate of Return

This measure of profitability is found by dividing the average annual investment in a project into average annual net income. The resulting quotient is then compared to a standard selected by management such as average historical rate of return. The big problem in this method is that it incorrectly weights revenues and costs. Distant cash flows receive the same weight as early flows. The opportunity cost to earn additional return on the earlier cash flow is not discounted at all. All other things being equal, a project with higher cash flows at earlier periods would be preferred over one that strung out the return into later periods.

In addition to weighting annual cash flows incorrectly, the accounting rate of return depends on accounting income rather than cash flow. Accountants distinguish between a capital outlay and an operating expense. Capital outlays are expenditures that are expected to produce revenue over several fiscal periods. As a result, accountants spread the capital outlay over these fiscal periods. Such cost allocation decisions affect net income but they do not affect cash flows and should not influence the decision making process for capital budgeting.

Payback Rule

This measure is defined as the number of years it takes before cumulative cash flows equal the original investment. This time period is compared to a standard. The project is accepted or rejected based on how it compares to the standard. With this evaluation method, a project that delivers lower level but consistent returns over a longer period may be rejected in favor of one that delivers a minimal profit in a short time period. See figure 4-1. Again, the incorrect weighting given to the back end of the project is the method's inherent flaw. Since it is simple, many managers use the payback rule. Some firms may not be able to wait for long term 'down the road' profits. Near term cash flows are more certain and involve less risk.

Figure 4-1 Three Hypothetical Capital Projects

End of Period Cash Flow In Year

Project	0	1	2	3	Payback (Years)
1	-30,000	30,000	0	0	1
2	-30,000	10,000	20,000	15,000	2
3	-30,000	15,000	15,000	20,000	2

Internal Rate of Return

The gist of this rule is to accept those investment projects whose expected rate of return is greater than their opportunity cost of capital. Expected rate of return is defined as that discount rate that makes the discounted cash flows equal to a project's cash outlay. The net present value (NPV) is zero. The mathematical formula for NPV can be stated as follows:

NPV = 0 = -Investment + Discounted Cash Flow

NPV= $0 = -C_0 + \sum_{t=1}^{n} \cdots \frac{C_1}{(1+r)^t}$

where

NPV = net present value
C_o = cash flow at the beginning of the project
C_t = cash flow at the end of time t
n = number of time periods that the project will produce cash flows
r = internal rate of return

$$NPV = 0 = -30{,}000 + \frac{11{,}500}{1+r} + \frac{17{,}900}{(1=r)^2} + \frac{16{,}100}{(1=r)^3}$$

Although in practice a financial analyst can determine **r** with a hand held calculator, it can also be approximated by trial and error. An initial value of *r* is selected, the NPV is calculated, *r* is adjusted to find a new NPV, and so on. The opportunity cost of capital is a market determined required rate of return for the firm. The investment rule is to accept those projects that offer an internal rate of return (IRR) greater than the opportunity cost of capital. Following this rule results in the company selecting projects that increase company value as long as the NPV continuously declines as the discount rate increases. As long as the firm's opportunity cost of capital is below the IRR, accepting the project will increase company value.

Net Present Value

The net present value rule requires that the firm accept all independent projects whose NPV is greater than zero. The terms for the IRR equation can be rearranged to facilitate the calculation of NPV as follows;

NPV= $\sum_{t=1}^{n} \cdots \frac{C_t}{(1+i)^t} \cdots - C_0$

where

NPV = net present value C_0 = cash flow at beginning of project

C_t = cash flow at the end of time

n = number of time periods that the project will produce cash flow

i = discount rate

Present Value Rule vs. Internal Rate of Return

Sometimes it is necessary to weigh the two methods and determine which signals the correct strategy. Refer to the projects in figure 4-1. Each project involves a cash outflow in year 0 followed by an unbroken series of cash inflows during the project's useful life. Now look at the two projects in figure 4-2. Both projects have an identical IRR and are therefore presumably equally attractive under the IRR rule. Note that the NPVs differ greatly.

Figure 4-2 Lending Versus Borrowing Projects

Project	C_0	C_1	IRR	NPV (15%)
1	$ -30,000	$ 40,000	33%	$ 4,783
2	30,000	-40,000	33%	$ -4,783

Project 1 is a typical lending project while Project 2 is a borrowing project. Project 1 will add to value because it pays to lend money at 33% (the IRR) when the cost of capital is 15%. With project 2 the firm borrows $30,000 in this time period and repays $40,000 in the next time period. When a firm borrows. It should do so at a rate (the IRR) that is less than the rate that must be paid for capital from alternative sources (the opportunity cost of capital). The firm desires borrowing projects with a low IRR. If the NPV rule is used, the need to distinguish between borrowing and lending projects does not arise since Project 2 has an NPV of $-4,783 and would be rejected. The cash flow pattern of Project 2 resembles insurance policies, which can be considered as borrowing projects.

Our examples have been simplified to the extent that the lending projects all had negative initial cash flows followed by positive cash flows. Similarly, the borrowing project was characterized by a change from a positive flow at time 0 to a negative flow at time 1. Real life is not so simple. An insurer may consider investing in a project with cash flowing in and out over the life of the project. Such a project could have alternating negative and positive cash flows over the life of the project. The methodology required to evaluate such problems is beyond the scope of this text.

Insurance Policies as Borrowing Projects

As noted above projects that have an initial cash inflow followed by one or more cash outflows are called borrowing projects. The cash flow pattern of insurance contracts follows that of borrowing projects. The insurer receives the gross premium less production and other expenses and subsequently pays claims from these funds. The decision to accept or reject a particular policy can be evaluated using the NPV rule. For example, suppose an insurer is considering writing a general liability policy for a $20,000 premium. The company anticipates a 70% loss ratio, 28% for expenses, and a 2% underwriting profit. In our simplified example, the cost of capital is 15%, and all cash flows are net of reinsurance. Claims are paid aver 4 years as shown in Figure 4-3.

The expected rate of inflation is 12% per year. Note that the use of a high rate emphasizes the effect inflation can have on cash flow projections. This policy produces a net cash flow of $14,400 at the time of issue [$20,000(1-.28)] followed by cash outflows over the next four years as claims are paid. If there is no inflation in claims payments, the policy adds $5,079 in value to the company. However, there will probably be inflation of some sort. At the 12% rate the projected claims of $8,400 at the end of year 3 will eventually cost $11,801 [$11,801 = $8,400$(1.12)^3$]. The policy's

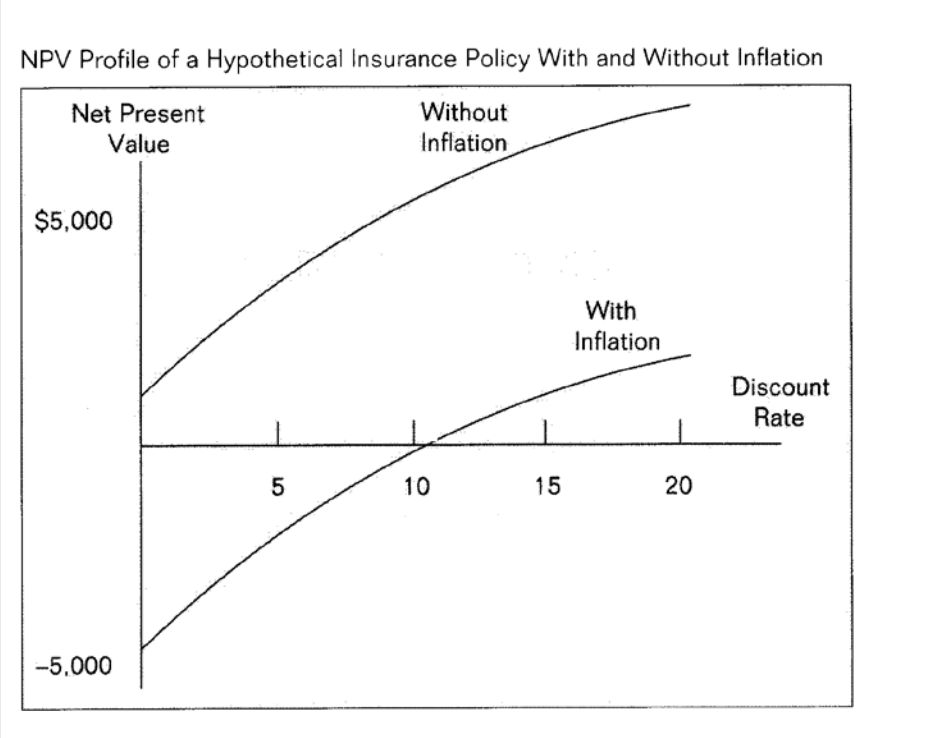
NPV is still positive and will continue to be positive for any discount rate greater than 11%.

Figure 4-3 Expected Cash Flow on a Hypothetical Insurance Policy

	C_o	C_1	C_2	C_3	C_4	Cost of Money	NPV (15%)
No Inflation Expected	$14,400	$ -700	$ -2,100	$ - 8,400	$ -2,800	-0.95%	$5,079
Inflation of 12% Annually	$14,400	$-784	$-2,634	$-11,801	$-4,406	11%	$1,448

For this policy the NPV profile is upward sloping, as indicated in Figure 4-4. As the discount rate increases, the policy adds more value to the firm. This makes economic sense because the firm is able to invest the borrowed funds at higher and higher rates of return. The value increase for an insurance policy is derived from the spread between the discount rate and the inflation rate.

Figure 4-4 NPV Profile of an Insurance Policy



This is similar to the concept of 'real rate of savings', the difference between the inflation rate and the rate of return on a savings account, U. S. Treasury instruments, stock fund, etc. The greater the spread, the higher the value added. This can be seen by noting that the NPV profile with no inflation (spread = 15-0 = 15%) lies above the NPV with inflation profile (spread = 15-12 = 3%). When the spread becomes negative, the NPV will be less than zero (a negative number).

Businesses face many demands for capital expenditures and must screen them to decide how many projects will be funded. Capital Rationing is the limiting of the amount of money by management that will be invested in a given time period. One method of prioritizing capital projects is to arrange them in order of declining profitability. The projects with the highest IRR, theoretically the most profitable, are selected.

Moving down the list one finds additional investments that are less profitable but still have positive NPVs and an IRR greater than the cost of capital. As dollars available to the firm for investment purposes dwindle, the cost of acquiring more money for projects goes up. The marginal cost of capital is the cost of the last dollar of capital raised by the firm. If the firm faced no constraints, it would invest until the marginal cost of capital equaled the marginal internal rate of return on available projects. This would be the ultimate value maximizing strategy. A capital rationing strategy limits the company's investments to less and causes the firm to reject projects with positive NPVs.

Companies ration capital for many reasons. Management may be unwilling to sell debt because of the burden it could cause the firm during a recession. They may not want to sell additional stock to raise cash for fear of losing the firm. Uncertainty about future cash flows is also a limiting factor. Investment choices under a capital constraint become more difficult as more variables are added. Imposing capital constraints on future periods as well as the current period results in problems whose resolutions can only be attempted through sophisticated mathematical techniques.

Risk Adjusted Valuation

So far the examples have assumed that the cash flow from each project was known. In reality, cash flows are merely projections that may or may not be realized. For this reason it is necessary to adjust for risk. The discount rate might be used to adjust for risk. The greater the risk involved in an undertaking, the higher the discount rate applied to its cash flow. The capital market can provide information on the rate of return that investors require on the company's securities. This estimate of the cost of capital can be used to discount the cash flows of all the potential projects being contemplated. Investments have different amounts of risk associated with them. Some investments may involve speculative activities while others are relatively safe. If the same discount rate were applied to all projects, high risk projects might be incorrectly accepted while low risk projects could be rejected. Each investment project should be discounted at an appropriate risk adjusted discount rate to find its NPV.

The capital asset pricing model (CAPM) discussed previously (Chapter 3) can suggest an appropriate discount rate. It relates the firm's required return to the project's beta (the measure of its riskiness in comparison to the overall market). The beta theory states that the returns on an asset and the returns in the market are related. Again, any assumption concerning risk is difficult to apply to multiple period cash flows. Using a constant risk adjusted rate is acceptable if management believes it is appropriate that future cash flows receive a larger and larger risk charge the further in the future they occur.

THE UNDER-WRITING CASH FLOW CYCLE

The insurer's principle source of cash flow is that generated from underwriting. Every policy or renewal involves a premium inflow used to cover production and other expenses. The balance is then invested. The amount of cash available depends on product price and rate of expenses. The net amount of cash ultimately available is a function of the rate of return on investments and the loss rate for business written. Underwriters use a combination of price and historical underwriting data to develop a book of business that will yield an expected underwriting profit margin. Rate filings historically indicate a maximum 5% underwriting profit margin.

Claims occurrence is random. In the absence of other controllable factors such as loss reserving, the actual underwriting profit should also be a random amount fluctuating around its mean. In practice, there are many controllable factors influencing incurred losses. The result is that the observed underwriting profit does not exhibit random characteristics but instead behaves in a cyclical pattern. This phenomenon is called the underwriting cycle. During the downswing or bottom of this cycle insurers normally engage in cash flow underwriting. This is the practice of pricing risks to maximize aggregate written premium rather than underwriting profit. In other words, lowering price to gain more market share. The problem is that reduced premium rates results in underwriting losses. Companies try to compensate by anticipating overall profitability from increased investment income. Net cash flow is that which is generated from underwriting results. Cash flow from investment income is ignored.

Cash Inflows

Writing an insurance policy does not produce an immediate cash inflow from the premium. Cash receipts might be delayed because the policyholder paid the premium to an agent who holds the premium before sending it to the insurer. Another reason for a delay might be that not all policyholders pay premiums immediately when they are due. For this reason, companies need to make assumptions based on historical data to forecast when cash will be received. For example, for a $400 written premium on June 1, the distribution of premium receipts is as follows:

Period	Premium Percentage	Received
June	10%	$ 40
July	80%	360
August	10%	40

In addition to the policy above, the insurance company will receive other cash inflows for other policies written before and during the same period. Assume that beginning on July 1 the insurance company writes one policy each month and that the policy is written on the first day of each month for a $200 premium. In our example, the company discontinues writing policies at the beginning of the subsequent year. The company's cash inflow for each month is shown in Figure 4-5.

The amount of premium receipts for any period is affected by the amount of premium written for that period and preceding periods and by the distribution of receipts. Note that in our example the total cash inflow available to the insurance company increases through September, then holds steady through January. After January it decreases. The growth, equilibrium, and decline in cash inflows indicate expansion, equilibrium, and contraction (or cessation) in written premium

Figure 4-5 Monthly Cash Inflows From Insurance Policies

	Month of Receipts				
Policy Date	**July**	**Aug**	**Sept**	**Oct**	**Nov**
July	$ 30	$ 150	$ 20		
August		30	150	$ 20	
September			30	150	$ 20
October				30	150
November					50
December					
January					
Total Cash Inflow	**$ 30**	**$ 180**	**$ 200**	**$ 200**	**$ 200**

Policy Date	**Dec**	**Jan**	**Feb**	**Mar**
July				
August				
September				
October	$ 20			
November	150	$ 20		
December	30	150	$ 20	
January		30	150	$ 20
Total Cash Inflow	**$ 200**	**$ 200**	**$ 179**	**$ 20**

Cash Outflows for Expenses

Included as underwriting expenses are commissions, premium taxes, overhead and all other non-loss related expenses of the company. In the examples that follow, the expense payout distribution assumes that premium taxes plus commissions plus one-half of other acquisition and non-loss related expenses are paid in the first month and the balance is paid over the policy term. Payment pattern of 80% is assumed in the first month, with the remainder distributed over the lesser of either ten months or the policy term. The assumptions are styled to show that most non-loss related expenses occur early in the policy term. To simplify matters, we again assume the policies provide only six months coverage

Figure 4-6 shows the amount of cash outflow for non-loss expense payments in each period for the case in which the expense ratio is 25%. Total cash outflow for underwriting expense payments increases through December. After January the outflow declines. The change in cash outflow for non-loss expense payments is attributable to changes in written premiums.

Figure 4-6 Monthly Cash Outflows From Insurance Policies for Non-loss Expenses

	Month of Outflow					
Policy Date	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**
July	$40	$2	$2	$2	$2	$2
August		40	2	2	2	2
September			40	2	2	2
October				40	2	2
November					40	2
December						40
January						
Total Nonloss Expense Paid	$40	$42	$44	$46	$48	$50

Policy Date	**January**	**February**	**March**	**April**	**May**	**June**	**July**
July							
August	$2						
September	2	$2					
October	2	2	$2				
November	2	2	2	$2			
December	2	2	2	2	$2		
January	40	2	2	2	2	$2	$0
Total Nonloss Expense Paid	$50	$10	$8	$6	$4	$2	$0

Cash Outflows for Loss & Loss Adjustment Expenses

The major cash outflow in almost all lines of insurance is the amount paid for losses and loss adjustment expenses. The total of cash paid for claims depends on the amount of losses incurred in the past and present as well as the payment pattern once the loss is reported. So a property claim or a life insurance claim generally results in a cash outflow within a few weeks or months. Conversely, a workers compensation or life income option on a life policy may result in cash outflow over many years.

For example, assume that loss payment distribution for dwelling fire policies extends six months from the date the claim occurs and that the following pattern represents how claims are paid:

Month	1	2	3	4	5	6
%Paid	0	10	15	25	30	20

For a claim incurred in any month when a dwelling fire policy is in force, 0% is paid that month, 10% in the succeeding month, 15% the next, until the entire claim has been paid at the end of six months. Assume that each policy from the preceding example incurs a valid payable loss of $140 one month after it is written (a 70% loss ratio). The amount of cash outflow for loss payments appears in Figure 4-7. The amount of cash outflow for loss payments depends exclusively on the dollar amount of the loss and the distribution of payment over time. For a six month distribution such as that below, six months are required before the full effect of past results ($140 incurred loss) is transmitted to current results. Incurred losses weigh heavily on current cash outflows.

Net Underwriting Cash Flow

This term is defined as premium receipts minus payments for underwriting expenses, loss expenses, and losses. Applying this definition to the previous example results in an estimate of the periodic net cash flow to the company, as shown in Figure 4-8

Figure 4-7 Monthly Loss and Loss Adjustment Expenses Paid on Policy

Policy Date:	July	Aug	Month of Sept	Outflow Oct	Nov	Dec
July		$ 0	$ 14	$ 21	$ 35	$ 42
August			0	14	21	35
September				0	14	21
October					0	14
November						0
December						
January						
Total Loss Expenses Paid	**$ 0**	**$ 0**	**$ 14**	**$ 35**	**$ 70**	**$ 112**

Policy Date:	Jan	Feb	Mar	Apr	May	June	July
July	$ 28						
August	42	$ 28					
September	35	$ 42	$ 28				
October	21	35	42	$ 28			
November	14	21	35	42	$ 28		
December	0	14	21	35	42	$ 28	
January		0	14	21	35	42	$ 28
							$ 0
Total Loss Expenses Paid	**$ 140**	**$ 140**	**$ 140**	**$ 126**	**$ 105**	**$ 70**	**$ 28**

Net cash flow is the actual amount of cash retained by the company during each month. The cumulative net cash flow to date shown in Figure 4-8 represents the sum the company would have available for investment during each period. The sum begins as a deficit amount in July ($10), peaks at $539 in February, and declines to $70 in the succeeding July. The final sum is the net cash gain to the insurance company (excluding investment earnings) for having underwritten these insurance policies. Note that the cumulative net cash flow to date does not equal the cumulative underwriting profit from these insurance policies except at the end of the final period.

The statutory underwriting result for any month is defined as earned premium minus loss and loss adjustment expenses incurred minus non loss underwriting expenses incurred. Changes in the insurance company's reserves for loss and loss adjustment expenses are deducted as incurred. Non loss underwriting expenses are also deducted as incurred. The statutory underwriting profit formula ignores cash flow patterns and emphasizes immediate recognition of losses and expenses.

Figure 4-8 Monthly Net Cash Flow From Fire Insurance

	Month						
	July	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	
Premium Receipts	$30	$180	$200	$200	$200	$200	
Underwriting Expense Payments	(40)	(42)	(44)	(46)	(48)	(50)	
Loss Payments	(0)	(0)	(14)	(35)	(70)	(112)	
Net Cash Flow	(10)	138	142	119	82	38	
Cumulative Net Cash Flow to Date	($10)	$128	$270	$389	$471	$509	
Policy Date	Jan	Feb	March	April	May	June	July
Premium Receipts	$200	$170	$20	$0	$0	$0	$0
Underwriting Expense Payments	(50)	(10)	(8)	(6)	(4)	(2)	(0)
Loss Payments	(140)	(140)	(140)	(126)	(105)	(70)	(28)
Net Cash Flow	10	20	20	(132)	(109)	(72)	(28)
Cumulative Net Cash Flow to Date	$519	$539	%411	$279	$170	$98	$70

The earned premium for any one of the six month policies in the example for any given time period is 1/6 times $200. Using the same assumptions as before, the statutory underwriting results can be seen in Figure 4-9.

When the net cash flow data of Figure 4-8 is compared to the statutory profit numbers in Figure 4-9, several important operating characteristics of fire/casualty companies can be seen. First, the net cash flow data tells us that fire/casualty companies can accumulate large pools of cash in a short time from their underwriting activities. The degree of cash buildup depends on variables such as premium growth, loss ratio, and cash payout patterns.

Also, as indicated by the statutory underwriting result data, as long as premiums are increasing, fire/casualty companies can accumulate large cash holdings despite the threat of severe losses. If premium growth is not achieved, then the net periodic addition to cash balances will equal the periodic statutory result. If premium volume declines then the final resulting accumulated net cash flow will equal the accumulated underwriting profit (or loss) for the entire period. Provided that net cash flow is positive, additional funds are being generated for investment. When net cash flow is negative, investments must be converted to cash in order to meet the insurer's obligations. When interest rates are high, investment income might increase to such an extent that it surpasses underwriting income. In periods of underwriting losses investment income could presumably exceed these losses to such an extent that a profit is still earned for the year.

Figure 4-9 Monthly Statutory Gain From Fire Insurance

	July	Aug.	Month Sept.	Oct.	Nov.	Dec
• Written Premium	$200	$200	$200	$200	$200	$200
• Earned Premium	33	67	100	133	167	200
• Loss Incurred	140	140	140	140	140	
• Expense Incurred	50	50	50	50	50	50
• Statutory Underwriting result	(17)	(123)	(90)	(57)	(23)	10
• Cumulative to date statutory Under-writing result	($ 17)	($140)	($230)	($287)	($310)	($300)

	Jan.	Feb	Mar.	Apr.	May	June
• Written Premium	$200					
• Earned Premium	200	$167	$133	$100	$ 67	$ 33
• Loss Incurred	140	140				
• Expense Incurred	50					
• Statutory Under- writing result	10	27	133	100	67	33
• Cumulative to date statutory Under-writing result	($290)	($263)	($130)	($30)	$37	$70

MEASURING INSURANCE COMPANY INCOME

Businesses are able to survive in a market economy only if they earn sufficient income to reward investors with returns commensurate with the risks inherent to the business. This is also true of insurance companies. Even if they (like mutuals) do not compete in capital markets for funds, their capacity to expand insurance operations ultimately depends on their ability to earn income.

Stock insurers have direct access to capital markets and the relationship between return on investment and market value is straightforward. Mutual insurers do not have stockholders and generally do not issue debt. Their only source of funds is earned surplus or retained earnings. Even if a mutual insurer does not increase the number of exposures insured, it needs to expand its insuring capacity in order to provide coverage to existing insurers as their insurance values increase with time. All insurance managers must set growth objectives and determine how to finance that growth. Maximizing net worth of a mutual insurer through profitable operations makes it possible for the company to pursue an increasing growth pattern.

Periodic income is determined through the application of income measurement rules. The framework of rules selected must address the problem of allocating changes in values to arbitrary periods of time. Depreciation, for example, allows assets with a limited service life extending beyond one period to have changes in their values noted and recognized during each time period. The fact that alternative allocation methods exist compounds the problem of income measurement. The financial decisions of insurance companies are significantly affected by income determination rules. Calculation of income involves the application of income and expense measurement rules to the economic events affecting the business. Income can be defined in at least two ways;

Accretion concept

In accounting, an accretion expense is a periodic expense recognized when updating the present value of a balance sheet liability, which has arisen from a company's obligation to perform a duty in

the future, and is being measured by using a discounted cash flows approach. The flow of services to an enterprise during a period in excess of those needed to maintain the wealth position existing at the beginning of the period.

Matching concept

In accrual accounting, the matching principle states that expenses should be recorded during the period in which they are incurred, regardless of when the transfer of cash occurs. Conversely, cash basis accounting calls for the recognition of an expense when the cash is paid, regardless of when the expense was actually incurred.

Accounting Income

This measurement refers to the income determined by applying a particular set of accounting rules to the financial events affecting a firm. The rules might be Generally Accepted Accounting Principles (GAAP), Statutory Accounting Principles (SAP), income tax accounting procedures, or principles found in another country. Reported income is dependent on the interpretation of the firm's economic activities via the evaluating criteria within the chosen measurement rules.

An example of the issues raised can be found in the concept of revenue and expense recognition. Property/casualty companies recognize premium revenue as earnings prorated over the protection period offered under the insurance contract. As with our previous examples, assume a fire insurance contract for one year beginning on July 1. The $200 total premium would contribute $100 to premiums earned in each of the calendar years. The insurer incurs $60 in underwriting expenses when the policy is issued and no other costs related to the contract. Under GAAP these expenses are recognized evenly throughout the protection period. The insurer recognizes net revenues of $70 in each calendar year. SAP rules require that all expenses be allocated against revenue as incurred. This results in recognizing net revenues of $40 and $100 in each calendar year respectively. The contract contributes $140 under both sets of rules, but the timing of income and expense recognition is different.

Economic income

This concept addresses the change in the actual value of the firm's net worth during any given period. Accounting procedures are not designed to nor can they accurately measure value changes. In a dynamic economic environment, market price levels may change but book values do not. Book values reflect a static economic environment. Rising prices create extra profits on goods held in stock. Similarly, fixed assets that appreciate because of inflation have understated service values allocated against revenues. This raises taxable income while replacement becomes more costly. These are examples of issues that make the determination of the firm's true economic value very difficult.

All accounting systems emphasize four basic measurement standards; relevance, verifiability, freedom from bias, and the quality of being measurable. The consistent and objective application of rules based on these standards provides information useful in decision making. All entities have difficulty in measuring economic income. Insurance companies have to contend with the differences in SAP and GAAP accounting rules compounding the difficulty of income measurement.

Measurements of insurance company income are meant to provide data for financial planning and control. Whether income or cash flow provides a more relevant variable for decision making is debatable. Accounting allocations required for income measurement are not always compatible with

the uses of income date. In many respects, knowledge of an insurer's cash flows is more useful than various income measures for profit planning, solvency monitoring, and public policy decisions concerning taxation. Nonetheless, periodic income serves well as a guide to investment policy if it measures the change in the true wealth of the company during an accounting period.

INCOME COMPONENTS

There are five sources of economic income for an insurance company; underwriting gain, net investment income, realized capital gains and losses, unrealized capital gains and losses, and other income.

Underwriting Gain

This occurs when premiums earned in an accounting period exceed losses incurred and underwriting expenses incurred. The different rules for expense recognition under SAP and GAAP result in timing differences in income realization. These differences are overcome in the commonly used combined ratio, which, when subtracted from one, gives the profit margin on underwriting.

$$P_m = 1 - \left(\frac{LI}{EP} + \frac{EI}{WP} \right)$$

where:
EP = Premiums earned during period
LI = losses and loss adjustment expenses incurred during period
EI = expenses incurred during period (on a statutory basis)
WP= premiums written during period

This part of the equation; $\left(\frac{LI}{EP} + \frac{EI}{WP} \right)$ is the **combined ratio** of losses incurred to premiums earned plus expenses incurred to premiums written. The underwriting profit margin is not affected directly by premium volume when there is not a change in underwriting standards.

It will be a constant percentage of premiums earned. If the insurer increases its insurance exposure, the underwriting contribution to total return will be magnified. The leveraging effect of increased premium volume works the same whether underwriting margins are positive or negative. If the ratio of premiums written to policyholders' surplus represents insurance exposure, then expanding premiums written simply magnifies the negative effect of underwriting's contribution to total return.

The failure of most insurers to earn underwriting profits has typically been attributed to competitive market conditions, the existence of a cyclical profit pattern in insurance, and the influence of high investment earning opportunities. For lines of insurance with long term loss payout patterns like worker's compensation and medical liability, competition forces prices down to the point of reflecting the time value of money.

Net investment income

This is composed of the interest, dividends, and real estate income earned on invested assets minus expenses incurred in conducting investment operations.
Insurers earn income by investing in securities. There are two primary sources of investible funds. The first is insurer's net worth. It consists of paid in and contributed capital plus retained earnings. The second is policyholder supplied funds. This source consists of reserves for unearned premiums and losses and loss adjustment expense. These funds are commingled and become indistinguishable when invested.

Initial surplus and advance premium payments are the primary source of funds for investment. Premium payments increase the unearned premium reserve for an insurer experiencing continuous sales growth because premiums are collected faster than they are earned. Claims settlements are not made until after the policies' coverage period has expired. Because of this, loss reserves also accumulate as the company grows. As long as underwriting operations continue to generate positive cash flows, the funds provided by loss and unearned premium reserve growth can be used as part of the company's capital structure.

Positive cash flow from underwriting operations allows the company to expand investment operations without other sources of financing. Insurance companies operate with a leveraged financial structure. They obtain funds from their policyholders by selling more insurance and increasing the size of unearned premium and loss reserves. This insurance leverage is analogous to financial leverage used by debt issuing businesses. Insurance leverage can multiply returns to net worth if assets earn more than the costs associated with policyholder supplied funds. The costs of this capital are net losses on underwriting operations and adverse changes in the risk profile of the insurer caused by greater insurance exposure. If there are no changes in the degree of risk, insurance leverage is always favorable so long as underwriting is profitable
.
Underwriting does not have to generate a profit of itself in order to maintain a positive cash flow. There are timing differences between cash receipts and disbursements and revenue and expense recognition inherent in the use of accounting systems. Because of this an insurer can experience continuous increases in funds supplied by policyholders without earning a profit on underwriting. Should an insurance company rely on its investment income to offset underwriting losses? The answer to that question ultimately depends on its ability to earn an adequate total return from all income sources.

This is an example of how cash flow from underwriting can generate investment income even without an underwriting profit. An insurer begins business on July 1 with $1,000 of paid capital. On the first day of business it writes a group of one-year fire insurance policies and immediately collects $600 in premiums. The company pays $180 in commissions and other underwriting expenses and accepts no additional business for the remainder of the year. Compare the balance sheets shown in Figure 4-10. The cash flow effects before and after the policies were written can be seen. Premium receipts increased assets by $180. Unearned premium reserves increased by the full $600. Net worth is seen to decline by the $180 amount of the prepaid expenses.

During the year the insurer invested $1,420 in securities that earned a 14% annual rate of return or $99.40 by December 31. Investment expenses are assumed to be zero. The insurer incurred losses of $210 during the period, half of which were paid by year end. The other half of the loss payable remains in the loss reserve. The insurers ending balance sheet shows statutory net worth equal to $1009.40. This amount is equal to the beginning net worth minus the statutory underwriting loss ($90) plus the net investment income of $99.40. Adding the prepaid expenses of $90 results in an adjusted net worth of $1,099.40. The change in the insurer's true net worth equals net investment income earned

Figure 4-10 Underwriting Cash Flow and Investment Income

BALANCE SHEET
12/31/20XX

Assets		Liabilities	
Cash	$ 1,000	Reserves	$ 0
		Net Worth	$ 1,000
Total	$1,000	Total	$1,000

BALANCE SHEET
07/01/ Same Year 20XX

Assets		Liabilities	
Cash	$ 1,000	UPR	$ 600
Premiums	+ 600		
Expenses	- 180	Net Worth	$ 820
Total	$1,420	Total	$ 1,420

Statutory Income for Year Ending 12/31 /20XX-

Earned Premiums	$300.00
Losses I Incurred	210.00
Expenses Incurred	180.00
Und. Loss	($90.00)
Net Investment Income	99.40
Statutory Net Income	9.40
Prepaid Expenses	$ 90.00
Adjusted Net Income	$ 99.40

BALANCE SHEET
07/01/ Same Year 20XX

Assets		Liabilities	
Invested Assets	$1,420.00	UPR	$300.00
Loss Payments	(105.00)	Loss Reserve	105.00
Investment Income	99.40	Net Worth	1,009.40
Total	$1,414.40	Total	$1,414.40
		Prepaid Expenses	$90.00
		Adjusted Net Worth	$1,099.40

Several things can be said about this simple example. This block of insurance business was written with zero underwriting profit. If the insurer had simply invested its initial assets of $1,000, it would have earned $70 instead of $99.40 from investment operations. Insurance leverage increased

investment return on net worth by 42% [($99.40 - $70)/$70]. A higher ratio of written premiums to policyholders' surplus, 1.5 to 1 would have resulted in $143.50 of net investment income, all other assumptions remaining the same. Assuming that a line of insurance produces positive cash flow, the insurer can always increase its investment income by issuing additional policies. This would seem to give impetus to the goal of seeking unlimited growth on the insurer's part. There are several factors that limit how much an insurer can expand earnings by raising its insurance leverage ratio. An insurer reaches the limit of its capacity when the sale of one additional policy raises its probability of ruin to a level considered unacceptable to company management. This is a concept found in actuarial studies of capacity based on the 'central limit theorem in analysis of ruin probability'.

There are several more practical, financial factors that limit the ability to write new business. One factor is statutory accounting. When new business is written, statutory net worth is reduced because of the immediate recognition of underwriting expenses and the deferral of revenues. State laws require that insurers maintain a minimum statutory net worth to remain in business. If policyholders' surplus is impaired, the insurer is considered to be insolvent even though it still has a positive statutory net worth. This accounting requirement places an absolute limit on new premium writings.

Another factor limiting premium growth is the expected declining profit margin as new business is written. The previous example assumed we were writing the insurance at a break-even point. Writing the insurance would have been profitable for the insurer even if a small underwriting loss had been incurred. The insurance company will reach a point at some time where the increases in investment income generated by the new insurance sale's cash flow are offset by the higher rate of underwriting losses. Because of this the insurance company management will choose to limit sales. The uncertainty of the potential losses accompanying the new insurance contracts is the impetus for this.

Logistical requirements play a factor in limiting the growth in sales of insurance underwriters. Consider the growth pattern of a small company. As the demand for its product or service increases, so to do its physical space requirements. This same factor limits an insurer's ability to service and underwrite new business. A practical factor limiting sales growth is the physical requirements to underwrite and otherwise service the new business. An insurance company's back office operations are generally designed with some optimal capacity in mind. Initially, increases in business lead to increasing economies of scale. Another dollar's worth of premium requires a marginally smaller expenditure to process.

At some time the point of diminishing marginal returns will be reached. The next dollar's worth of business will require a marginal increase in overhead to process. In microeconomic theory, this process will continue until the next dollar's worth of business takes one dollar to process. In reality, the firm will either stop accepting new business of be forced to expand at some time before this equilibrium point is reached. Volume increases can be managed by adding another clerk or additional equipment. At some point the company's physical plant will have to be made bigger in order to accommodate an increase in premium volume or sales.

Realized Capital Gains and Losses

A capital gain or loss is realized by an insurer when a capital asset is sold for more or less than its cost. The annual contribution of this income source is, by nature, based on extraneous economic events. Still, according to *Best's* a realized capital loss was recorded in only one of the years from a study from 1974-1992. Net realized capital gains treatment applies to sales of property held for

investment or personal purposes, except for certain items excluded by law from the category of capital assets. Gains and losses *not* reported as capital gains include inventory, depreciable property, and accounts or notes receivable acquired in the normal course of business.

Tax treatment of gains and losses is not the same for all types of property sales. The tax reporting generally depends on the entity's purpose in holding the property. Exchanges of like-kind business or investment property are subject to special rules that allow gain to be deferred. Net realized capital gains appear on the income statement. Investment income earnings are added to capital gains to arrive at net investment gain of loss. This taxation/accounting issue allows some flexibility over income determination for any given period. Company management can decide when to sell invested assets to optimize performance in the investment portfolio. The decision to sell securities or other invested assets is made in the broader context of the insurance company's portfolio management strategy. Tax considerations and the amount of cash available will also affect the decisions involving investment strategy.

Having enough cash available to pay claims and expenses is one of the primary goals of an insurer's investment strategy. This requires the timing of sales and maturation of assets in a manner that provides cash when needed. Asset allocation patterns chosen by the insurance company will affect the cash flows coming from the aggregate investment. Underwriting operations ideally should generate sufficient cash flow to meet current claims and expense payments. That way portfolio strategy can concentrate on selecting investments that provide the highest returns possible for the level of risk chosen by the insurance company managers. When this ideal cash flow situation exists, liquidity characteristics of the investment portfolio are of less importance than the integrity of the investment and the yield. Such a scenario is unlikely. Regulators and stockholders will have a strong voice in the risk level of insurance company investments. High liquidity and low risk have a high positive correlation. Insurers will keep their assets in investments with these characteristics.

Inflation is a chief contributing factor to the underwriting cash needs of insurance companies. The high interest rates like those that accompanied the inflationary periods in the late 1970's and early 1980's had an adverse affect on insurance company investment portfolios. Inflationary pressures on operating expenses and claims settlement increase underwriting cash needs. As interest rates go up, bond prices go down. This causes the stated value of an insurer's investment portfolio to be reduced. Bond values on the company balance sheet are shown at the amortized value. They plan to hold the bond and receive full nominal value at maturity. Because of this portfolio managers are unwilling to subject themselves to realized losses caused by the early sale of a debt instrument in order to raise cash.

Unexpected cash demands can cause the need to sell the bond at a loss. Portfolio immunization is a technique that tries to match the cash inflow from interest income and maturing securities to the expected cash outflows on loss reserves. Unanticipated inflation can change the future cash flow patterns of the insurer. This situation renders full immunization of the investment portfolio difficult if not impossible. Many different mathematical models are used by insurers to help match asset and liability maturities so that insurers can reduce the risk of realizing capital losses on invested assets.

In a typical year, more than 1/3 of losses for property/casualty insurers are typically paid out within 12 months of the time the loss is incurred. Further, 80% of losses are paid out within five years. The distribution of maturity dates for bonds is weighted in the other direction. Approximately 11% of bonds were scheduled for maturity within one year. Almost 38% of bonds had a maturity date of over ten years. This data is contradictory to the theory of portfolio immunization. It tends to illustrate the

gulf between theory and reality in the business world. Mismatches such as these complicate the financial management of insurance companies. Life insurers' aggregate bond portfolio has a time horizon of even a longer maturity. 45% of bonds owned by life insurance companies had maturity dates of over ten years. However, since the U.S. Treasury's 2001 elimination of the 30-year bond, this practice may have to be modified. Life insurance contracts and liabilities are long term in nature.

Unrealized Capital Gains and Losses

Statutory accounting principal rules for asset valuation acknowledge the vicissitudes of using market value on the balance sheet. 'Market values' from the last accounting period are of little significance if a cash flow shortfall causes current liquidation of a portion of the debt portfolio at fire sale prices today. Most bonds are carried at amortized cost rather than market value. Those bonds that do not qualify for amortized cost valuation along with all equity securities are carried at market value on the insurer's balance sheet. Any change in the value of these investments is recognized as an unrealized capital gain or loss. At the end of the accounting period net unrealized capital gains or losses are netted against the insurance company's net worth. By definition, these unrealized gains or losses do not appear on the income statement of the insurer. This precludes their inclusion in either statutory or GAAP statements of net income. These unrealized gains or losses do affect the return on equity of the insurer. As such, they are a component of economic income for the insurer because their existence affects the insurer's total net worth.

Data from investor services and credit rating agencies consistently show that net unrealized capital gains contribute 10-15% of the consolidated total returns earned by all insurers. Net unrealized capital gains accounted for a little more than 3/4 as much income as realized capital gains. From a financial management point of view, equities can have a disruptive effect on cash flow efficiencies. A decline in the market value of equities could cause a drop in policyholder's surplus. This will cause an insurers leverage ratio to reach undesirable levels. In turn, this threatens the solvency of insurers with insufficient net worth relative to their equity investment. A slower than expected growth rate will result if the surplus level is not restored.

Unrealized capital gains make it difficult to compare insurance industry performance with that of other industries. Other industries do not invest in securities to the same extent as insurers. The comparison of total returns for insurers to profits earned by nonfinancial firms requires some adjustment for differences in the treatment given to unrealized capital value changes. One way to reconcile this difference is to average the annual returns of insurers from this segment of their income over a long period of time.

Investors and managers on their behalf are guided by an objective standard to maximize the value of resources devoted to the business enterprise. Income provides a measurement that can be used to evaluate progress toward that goal. It also furnishes a yardstick for judging the success of insurance company managers in dealing with competition and uncertainty. Income plays an important role in determining insurance company dividend policy. State laws require insurers to maintain assets in excess of those needed to satisfy obligations to policyholders. Earnings in excess of what is needed to maintain minimum capital and surplus are available for distribution as dividends.

DIVIDEND POLICY OF INSURERS

Under most economic theories, the dividend policy of a corporation is said to have a neutral effect on the value of the firm. The going concern theory describes the inherent value of a business as the present value of all future income flows. This stream of income can come in the form of cash

dividends received over a finite time period plus a residual amount for the value at the end of the holding period. It is assumed that the firm's rate of return equals its cost of capital. No other costs are factored in such as uncertainty, opportunity costs, or taxes. Owners in this scenario will have no preference between receiving a portion of their periodic income in the form of a dividend or having the firm retain all earnings. This increases the value of each owner's share of the firm.

In the real world markets go up and down, there are taxes on dividends and other uncertainties. Corporations are more likely to retain earnings to plow back into the company than to pay hefty dividends. Managers of corporations with a broad range of ownership have a difficult time determining the optimal level of dividends. Managers generally try to maximize shareholder value. If earnings can be reinvested at a higher rate than the cost of capital, the retention of all income would fulfill a value maximization objective.

At times the absence of a current dividend adversely affects the market price of the firm's shares. Many companies seem convinced that the market value of the firm is based to some extent on its dividend yield. Another consideration is that once the habit of paying dividends is established, perception problems make management loathe to lapse such payment. Changes in the level of dividends are believed to send a signal to the investment community concerning the performance of the company. Often times management believes a higher dividend level equates to a higher market price for the company's stock.

Behavior models of corporate dividend-paying practices have contrasted actions of new, rapidly growing enterprises that pay no or low dividends to practices of mature firms that have a long history of stable dividend payments. In both cases, management's perception seems to be that financial tradition requires payments of a cash dividend and that departures from this practice must be defended vigorously, usually on the basis of long-term benefits to the owners.

As stated before, the optimal dividend policy of a company is one that maximizes its market value. Whatever that policy is depends on the individual company. Perhaps the most important reason for paying dividends is the adverse attitude investors have towards uncertainty. Dividends today are preferable to the promise of future returns because uncertainty increases with the length of the planning horizon. Uncertainty, by definition, cannot be measured. Risk can be measured. Owners are often unwilling or unable to assess the risk of holding an investment. In terms of the risk-return relationship, retention of earnings near term with the prospect of high dividend payment later is a high risk proposition. This implies that a higher capitalization or discount rate needs to be applied in evaluating expected income streams.

Insurance Company Dividend Policy

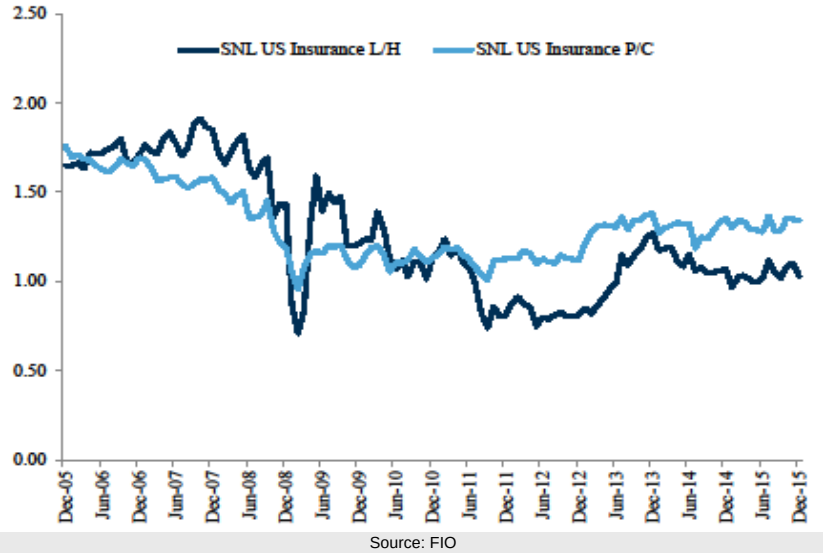
There is more than one way to measure income for an insurance company. Should the insurer base dividend decisions on SAP or GAAP accounting standards? Stockholders receive earnings reports based on GAAP income. Yet insurance management faces unusual obstacles not encountered by other firms. Insurers have stock as well as mutual ownership, special income assessment rules, enhanced and singular regulatory oversight and special capital structure. For these reasons, there is much debate over which income measure should be used in establishing an insurer's dividend level. Using GAAP for dividend criteria creates problems. Dividends require the use of available cash flow. GAAP does not accurately represent the level of dollars available for dividends. A similar circumstance exists with the taxable income. A company cannot pay shareholders money that must be retained to meet loss reserve requirements or other obligations.

Another issue involving use of GAAP is that investors may not be willing to use it to measure insurance company performance. Investors may consider unrealized capital gains and losses when evaluating insurance companies. As noted before, capital gains and losses have a big impact on insurers because of their asset structure. The assets of most firms consist of physical property such as buildings, equipment, and inventory. Insurance companies' assets consist of cash, securities and real estate. The various credit rating services show that in the last two decades unrealized capital gains and losses contributed significantly to total return. Unrealized capital losses were recorded in six of those eighteen years. The unrealized capital losses were especially large for the industry in 1974 and 1990. Distribution of the company's equity capital via dividends would be an unlikely option for management in such a situation.

Dividend decisions of insurers are also affected by company capital structure. Insurers seldom issue debt. Funds can be acquired through more equity financing or through sales expansion. When sales grow or losses increase reserves must be elevated. The bolstering of reserves reduces periodic income and net worth. Such a scenario is not conducive to dividend payment. When there is an increase in new insurance written, insurance leverage will generate earnings for distribution or retention.

Those insurers with access to equity markets can evaluate dividend payments as an enticement in such a case. Companies without external equity financing, i.e. mutuals, should compare expected rates of return from expanded operations. Alternatives to cash dividend payments should be considered by company management in either case. Once a pattern of dividend payment is started, company management is reluctant to change. Only a grave change in the company's fortunes will cause a diminution in dividend level. Dividends are treated as a fixed cost and therefore reduce the company's financial flexibility. Figure 4-11 illustrates dividend levels for segments of the insurance industry

Figure 4-11 Life/Health and Property/Casualty Sector Price to Book Ratios (12/31/2005-12/31/2015)



Source: FIO

The repurchase of shares of company stock is an alternative method of distributing profits to shareholders. This operation causes a reduction in the number of shares outstanding. This normally increases the price of shares outstanding and gives investors income subject to capital gains tax treatment. Dividends are treated as a fixed cost and therefore reduce the company's financial

flexibility. Another alternative to paying cash dividends is to secure ownership in other companies. Examination of opportunity costs may fail to warrant expansion of company business and justify investment in outside activities.

There is not as much research concerning the dividend practices of property/casualty insurers as with life/health. Studies by Messrs. Cheng Lee and Stephen Forbes in 1980 and 1982 provide some information about dividend practices. The first study showed that stockholder dividend policy had some influence on market value of the 34 companies studied. The later part of the period studied was subject to the effects of high inflation at the time. Insurer dividends were also found to be more stable over time than income. In their second study 61 property/casualty companies were grouped according to their ownership classification.

Payout ratios were high for many insurers, at times exceeding 50% of statutory income. Recognition of prepaid expenses and unrealized capital appreciation probably played a part in constructing an earnings basis for decisions concerning dividend distribution. Factors shown to be significant in the dividend model included net worth to admitted assets ratio, current income, and dividends paid in the previous year. Companies with widely dispersed ownership demonstrated a higher level of correlation for these factors than did subsidiaries or privately held concerns. There was an average two-year lag between changes in dividend payments and changes in earnings. In a separate 1982 study, 'Stock Life Insurer Dividend Policy and Holding Company Affiliation', Stephen Herrington found that dividend payments of subsidiary stock life insurance companies exhibited a substantial increase in the years following the insurers' acquisition.

Policyholder Dividends

Insurers pay dividends to policyholders who are not necessarily owners and to owners who are not necessarily policyholders. This is because stock insurers often pay dividends to both policyholders and stockholders. Rather than an allotment of the insurance company's earnings, a policyholder dividend should be regarded as an adjustment in the price of insurance. This view is reflected in the practice of deducting policyholders' dividends when determining the company's net underwriting gain, taxable income, and its loss ratio and combined ratio. For particular insurance lines, policy dividends are a significant part of the pricing schedule. They are also used in adjusting the price of personal insurance. The issue is whether the dividend of a mutual or reciprocal insurer is a partial return of company earnings or a price adjustment factor.

Corporate dividend policy is an especially important financial determination for insurers because of the special attributes of mutual insurers. The use of capital in mutual insurers has many ambiguities. Insurance accounting and tax accounting treat dividends from mutuals in the same manner used for those in stock companies. A distribution of profits to owners is the end result of policy dividends as well as stockholder dividends. There are components of both pricing adjustments and earnings distributions in mutual dividends.

State regulation further complicates the intercourse between dividend policy and insurance pricing. In some states insurers charge uniform regulator mandated rates for certain types of business. Payment of differential policy dividends is the only available form of price competition. Other political entities mandate that prices be set by insurers under competitive ratemaking laws that contain a provision mandating insurers return of any 'excess profits' to policyholders when the state insurance regulators determines such have been earned. When such a determination is made returns must be made by both stock and mutual insurers. Neither type of company can exercise management discretion concerning distribution of the excess. The cost of administration of such a rebate program

is presumably borne by the companies.

Dividend payments also concern regulators because of solvency and equity considerations. The safety and liquidity of insurers would be adversely affected by excess dividend distributions. State laws are designed to limit a company's ability to distribute funds to shareholders of the company as a means of protecting policyholders if such payments would be detrimental to the good of policyholders.

Research studies suggest that property and liability insurers as a group tend to pay out a high portion of earnings as dividends. Insurance company dividend policy appears to incorporate adjustments to net worth arising from unrealized capital gains or losses as well as income. Formulating dividend policy is one of the most complex financial decisions facing management. It requires balancing equity considerations between various policyholder groups and between various policyholder groups and between policyholders and stockholders. Differing tax situations of stockholders and their preferences for liquidity and certainty must be considered.

Conflicts can arise between management's desire to finance company growth with funds generated by profitable operations and stockholders' desire for cash dividends. The financing or investment decision that must be made to apportion earnings to be retained and earnings to be paid out is based on management's judgment of which action will maximize the company's value.

Chapter 5 Insurance Information System Profile

The last chapter discussed the needs of investors to be informed concerning the financial status of insurers. The financial strength of the insurance company directly affects dividend policy. Insurance has a unique social nature. Many special interest groups and regulatory bodies have a vested interest in the operation of the insurance industry. **Meeting information needs for insurance operations demands an understanding of the needs of a variety of users**. Of primary importance is the customer who is buying protection and the agent selling the protection. There are concerns from those associated with the insurance entity itself. This includes stockholders, management, employees, and creditors. Different taxing bodies require specialized information from insurers. The state insurance commissions who regulate the industry have oversight interests. There unique concerns have led to the creation of statutory accounting principles.

The insurance business is singular among businesses in the quantity of statistical data that are compiled and utilized on an everyday basis. Meeting information needs of the variety of users mentioned is difficult. Special credit rating and statistical organizations require information to be used in research, ratemaking, and dissemination of information about the insurance organization. Publicly held companies are also subject to Securities and Exchange Commission (SEC) regulation and to specific legislation requiring adequate internal controls. Financial reports for the SEC are based on generally accepted accounting principles (GAAP). These complex requirements affect development of all insurance data systems.

INFORMATION SYSTEMS

Information systems are as complex and unique as the particular company using the system. It is a system that gives the information needed to direct insurance company operations. External as well as internal groups rely on these systems. To assure the accuracy of system information, internal controls must be in place. The social responsibilities of the insurance industry mandate the need for information requirements that go beyond those of other companies. The consumer's interest in most companies does not go beyond price paid and warranty for a product. Insurance buyers have a direct financial interest in the insurance provider that goes beyond that found at the local shoe store. Insurance buyers are purchasing protection against a possibly catastrophic economic event like disability, property destruction, or death. The loss that is insured against is almost always greater than the premiums paid at the time the policy was bought. Because of this, each state's insurance commission is charged with stewardship of the industry. Such solvency surveillance requires meaningful financial, statistical, marketing, and operating information about insurance companies. State insurance commissions are responsible for representing the public interest in the insurance industry. Statutory accounting principles are part of the regulatory apparatus.

SAP focuses on the insurer's liquidity. In this context liquidity means the ability of companies to cover liabilities from all resources available to the company. Liquidity valuation is used as a valuation perspective for the business rather than the 'going concern' valuation found under GAAP. This conservative valuation provides a margin of error in order to protect policyholders. Insurance regulators concentrate on the adequacy of resources available to the business to meet future concerns.

Information provided by the company must be accurate. The accuracy of financial information relies on **internal control.** A system of internal control consists of all measures employed by a business for the purposes of

- safeguarding its resources against waste, fraud, and inefficiency
- promoting accuracy and reliability in accounting and operating data
- encouraging and measuring compliance with company policy; and
- judging the efficiency of operations in all divisions of the business

The broad sweep of this definition indicates that internal control is much more than a device for the prevention of fraud or the detection of accidental errors in the accounting processes. It is an indispensable aid to efficient management, particularly in insurance businesses both large and small. Internal control extends beyond accounting and financial functions; its scope is company-wide and embraces such varied activities as employee training programs, internal auditing, statistical analyses, quality control, and production scheduling.

Insurance regulators are primarily concerned with internal controls of an accounting nature, those controls which bear directly upon the dependability of the accounting records and the financial statements. Some internal controls have no bearing on the financial statements and consequently are not of direct interest in the regulation of the insurance industry. Controls of this category are often referred to as internal administrative controls. Management is interested in maintaining strong internal control over claims, and sales activities as well as over accounting and financial functions. Accordingly, management will establish administrative controls to provide operational efficiency and adherence to prescribed policies in all departments of the organization. Of course not all internal controls can be neatly classified and separated into mutually exclusive categories of ‘administrative’ and ‘accounting’.

The long-run trend for insurers to evolve into organizations of large size and scope, including a great variety of specialized technical operations and numbering employees in the thousands, has made it impossible for executives to exercise personal, firsthand supervision of operations. No longer able to rely upon personal observation as a means of appraising operating results and financial position, the insurance administrator has, of necessity, come to depend upon a stream of accounting and statistical reports. Frequently, the data provided to managers are inadequate.

At times a manager can be surrounded by volumes of statistical reports yet no clear-cut answer to the question at hand can be found. This illustrates the difference between information and data. Information tells you something while data alone does not. In a business sense information is defined as the carefully constructed compilation of data, qualitative and quantitative, in a clear form that contributes to decision making. The value of information lies in the improved quality of decision making that results. A substantial portion of the operational input essential to an organization is provided by feedback information.

There are three kinds of feedback information: score keeping, attention directing, and decision making. Score keeping information describes what has happened in the past. Financial statements such as income statements and balance sheets are examples of score keeping information. Attention directing information refers to business particulars that receive the focus of the information user. An example of this would be a budget report which provides an analysis of planned vs. actual expenses. Decision making information relates to the future and often provides information which is pro-forma or predicts the results of a series of decisions. Periodic long range plans which are composites of various financial planning forecasts are examples of decision making information.

Information is dynamic in nature. Once presented in a report it becomes only a static representation of a dynamic process. A good information gathering system provides essential input necessary to management in carrying out assigned duties. Information for management should be thought of as organized data in a statistical form. Every insurance company must prepare financial statements. Insurers are always concerned with topics directly affecting the company like market share percentages, incurred loss ratios, numbers and types of agents, and number of employees. Management is also interested in external, qualitative knowledge. Information such as changes in state insurance regulations, releases of new standard industry policy forms, and revised underwriting rules are things generated or promulgated by sources outside the company.

Information may also vary by the degree of aggregation. Data reported to the state insurance department summarize exposures, premiums, and losses by classification and by territory for each line of business. Reports to the National Council on Compensation Insurance, however, are on a policy unit basis. The National Council receives a detailed report of exposures, premiums, and losses for *each* workers compensation policy.

Internally generated management information can be about past or future situations. Often we see future plans based on the interpretation of historical data. Past results can provide a basis for evaluating current operations and assisting in the projection of future trends. The timing of reports can vary also. Information can be provided on a periodic basis; weekly, monthly, or quarterly for example. It can also be provided on an as-needed basis or an exception basis. As-needed information is provided only on request and is delivered if a person is authorized to receive it. 'Exception reporting' occurs only when predetermined elements exist. A critical target figure is not met or is exceeded or not met. An example of this would be when a line of business result exceeds an established target such as incurred loss ratio of 75.0. A report including supporting detail about that line is produced when this happens and sent to the appropriate person. No report will be produced unless the measured variable, in this case a line of business, has incurred a loss ratio result for the current reporting period in excess of 75.0. Quantitative and qualitative evaluations are used together to analyze companies' ability to operate successfully. Qualitative measures are subjective judgments of quality, while quantitative measures deal with financial ratios used in evaluating company operations.

USES OF INFORMATION

There are many uses for insurance information and numerous people who use it. Users include those with an economic interest in the insurer and those whose interest is mandated by law. Typical users include management, actuaries, statistical organizations, policyholders and agents, regulators, and taxing authorities. They rely on the accuracy of the information. As a result, these users have a vested interest in the output of the insurance information system and an adequate audit trail is expected. The audit trail is central to the internal control question.

In thinking of the accounting records as a whole, we may say that a continuous trail of evidence exists- a trail of evidence which links the thousands of individual transactions comprising a year's business with the summary figures in the financial statements. The great mass of detailed information originally recorded is condensed and summarized in report format. When punched card and then electronic information systems replaced manual systems, the audit trail continued to exist. Although there is no paper trail, if care is taken the audit trail can be maintained. The purpose of the audit trail is to allow the stream of evidence to be followed back to its sources. This type of

verification consists of tracing the various items in the statements (cash, sales, and expenses) back to the ledger accounts, and from the ledgers on back through the journals to original documents evidencing transactions. This auditing process of working backwards from the statement figures to the detailed evidence of individual transactions is the exact opposite of the accounting process.

The chief user of information provided by the insurance information system is the company management. They are responsible for planning and the ultimate destiny of the company. Many kinds of information, both internal and external, are available to the company. The insurance company will not be able to provide all the information needed by management. The information system should be able to produce internal information and acquire and present external information when needed.

Planning

Management needs reliable information to facilitate planning for the firm. The planning cycle involves the establishment of goals for the company. The goals are quantified so that success or failure can be measured. Defined targets may be a dollar amount of underwriting or operating profit or profit expressed as a percentage of premium volume. An objective might be set in terms of market share. Growth may be measured in units such as insurance applications submitted or policies issued. The planning process can be divided into short and long term planning. Short term information needs are very specific. As the time horizon goes outward, information needs become less specific. Information from past events can help for the future but information must portray unbroken time series data to allow extrapolation into the future.

Planning is often characterized as "short" term or "long" term. The short term is typically one to eighteen months while the long term may be one to five years. The information needs for the short term are very specific and detailed. Extending into the longer term, they become somewhat less specific. In any case, planning relies on information developed from past experience, as well as forecasts of future economic, industry, and company specific variables. Therefore, information systems for insurance organizations must be designed to facilitate planning. The information needed for planning is no different than for other functions. Mathematical models are used to duplicate the structural relationships found between variables and derived from logic or from the historical record. Insurance companies may use the following variables for planning purposes

- Number of employees for expense purposes
- Number of policies written
- Number of policies-in-force
- Written premium
- Earned premium
- Catastrophe losses
- Noncatastrophe losses
- Expenses
- Profit and losses

Management uses the results of forecasting or modeling to set objectives to be used in budgeting, control, and evaluation for the company.

Budgeting

The health of the organization requires this to be a critical part of the insurer's information system. A set of operating expense classifications has been created by The National Association of Insurance Commissioners (NAIC). The diverse nature of insurance entities requires many different systems for proper expense control. Tax and regulatory needs mandate the use of some systems. For this reason company management can determine if it wants to use the NAIC expense classifications or those structured to its own requirements. Here is a listing of the National Association of Insurance Commissioners (NAIC) operating expense classifications for property/casualty insurers.

1. Claim Adjustment Services
Direct
Reinsurance Assumed
Reinsurance Ceded
2. Commission and Brokerage
Direct
Reinsurance Assumed
Reinsurance Ceded
Contingent-Net
Policy and Membership Fees
3. Allowances to Managers and Agents
4. Advertising
5. Boards, Bureaus, and Associations
6. Surveys and Underwriting Reports
7. Audit of Insured's Records
8. Salaries
9. Employee Relations and Welfare
10. Insurance
11. Directors' Fees
12. Travel and Travel Items
13. Rent and Rent Items
14. Equipment
15. Printing and Stationery
16. Postage, Telephone and Telegraph, Exchange and Expenses
17. Legal and Auditing
18. Taxes, Licenses, and Fees
State and Local Insurance Taxes
Insurance Department Licenses and Fees
Payroll Taxes
All Other (excluding Federal Income and Real Estate)
19. Real Estate Expenses
20. Real Estate Taxes
21. Miscellaneous

From NAIC Examiners Handbook, Financial Condition Examiners Handbook

The key to a successful budget is comprehensive management information. Decision makers need access to succinct, accurate reporting on the status of company affairs in order to implement plans for the future in a quick and economical manner. It is not as important how the information is presented as that the message is correct.

Like expenses, budgets can be arranged in any manner that suits the individual firm. However, there are three general areas under which budget line items are placed: Capital budgeting is the category for physical plant and equipment. Long-term budgeting includes research and developmental costs. The short-term or operating budget is for day-to- day expenditures such as wages, utilities, and taxes. An efficient budgeting process compares periodic expenses to those in the budget. Variances are then analyzed and action is taken to expand the budget or control expenses. This sounds like a very simple procedure. In practice, keeping a dynamic, ongoing business inside budget parameters can be one of management's biggest challenges.

Controlling

The activities and consequences of an insurance company's business plan must be monitored. If the manager could depend upon the flawless execution of plans by a perfectly balanced organization, there would be no need for control because results would invariably be as expected. Plans and operations rarely remain on course and control is needed to obtain desired results. Control is a basic process and remains essentially the same regardless of the activity involved or the area of the organization. The control phase of the management process is its guidance system. It can control the mission of the company. The number of employees, number of policies, premium (both written and earned), losses, and expenses are important control data.

The concept of control is the heart of the information system. No system could exist for very long without control. In the classical management sense (Frederick W. Taylor, *Principles of Scientific Management),* control is seen as a form of coercion or 'compelling events to conform to plan'. A more current, management systems approach emphasizes self regulation through feedback. The objective of control is to maintain the output that will satisfy the system requirements. In the case of information systems, control is a major consideration of systems design and may take the form of a programmed decision rule. The steady state of the system is maintained by feedback of information concerning the functioning of the system within allowable limits.

Monitoring of performance provides management with current assessments of current problems or opportunities within the system. Information required to perform control is different in both type and characteristic from information needed for planning. Planning places greater emphasis on structuring the future while control is based on the immediate past and specific trends.

Product Pricing

Actuaries are responsible for the pricing of insurance products. In the past insurers have pooled their statistics and depended on the expertise of rating organizations. Currently the ratings laws of many states promote competition. As a result, insurers have their own actuarial analysis. The present trend is for rating organizations to calculate and file prospective loss costs. Prospective loss costs are historical loss and loss adjustment expenses that have been trended in anticipation of future loss development. This is a form of linear regression analysis. Every company calculates their own expense data as well as a provision for profit. This expense constant must be independently filed by each company.

Manufactures often warrant their product for a specific time period after sale to the end user. It would be impossible to predict the cost of a one year automobile or computer hard drive warranty without past experience as a guidepost. Similarly, insurers have no way of knowing the ultimate cost of their product at the time of sale. The cost depends on the future occurrence of events

covered by the policy. This makes it difficult for companies to determine the best price for their product. Insurers estimate the cost of their future losses based on historical data. The need for accuracy of assessment is acute. If the insurance product is overpriced, competition will drive customers to other companies. If there is an underestimate of costs of future losses, the obligation to pay those costs could drain company surplus and impair its financial condition.

Actuaries need data on premiums, losses, and expenses to facilitate ratemaking. It is important that premium, loss, and expense data represent the same group of policies for actuarial projections. The most accurate method is to tabulate all data on a policy-year basis. Data may also be grouped by calendar year or calendar-accident-year depending on the purpose. The amount, exposures, and number of policies are included in premium data. Statistics on loss need to include the number of claims and properly coded amounts for the relevant statistical plan. Expense data must also be incorporated into the ratemaking process. This includes loss adjustment expense, commissions and other acquisition expense, taxes, and general expenses. At times budgeted expenses may be more appropriate than past experience.

The potential profitability of new products is also analyzed by actuaries. By paying attention to specific segments of the business, new marketing plans, underwriting standards, or other improvements to operations could result. Special studies such as these require grouping or provision of data in unconventional ways. Information systems must remain flexible to keep up with evolving report needs.

Reports to Regulators

Insurers have to submit periodic status reports to regulators in the states where they operate. Data has to be collected and organized so that the instrument fulfills the state's reporting criteria. This feedback to the states is basically score keeping information. The information is collected by independent statistical agencies and then reported to the various states. One advantage here is that instead of making reports to each individual state, the company sends the data to the contracting agency. The agency then reports needed information to each state. Companies that offer this statistical service include the Insurance Service Office and the National Association of Independent Insurers.

Premium and loss statistics are given for areas such as state, county, and zip code. Other details on the risk include policy type, deductible, and amount of insurance. Insurance rate data such as this is necessary so that insurance departments can develop rates or analyze rates (depending on the state's rate structure) in order to determine that rates are reasonable, adequate, and not discriminatory. Regulators also need information concerning the volume of each line of insurance written in the state.

Reports to regulators are also required for loss information. Standard categories for such losses might be catastrophe code and loss cause. Sub-headings for these would include; written exposures and premium, losses-paid and unpaid, and the totals of both types of losses. The electronic information revolution has made the reporting process much easier. Statistical agencies coordinate report timing and content between the states and insurers. This cuts down on redundant or superfluous information flow, making the reporting process easier and more economical for all parties. Also creating efficiencies is reporting via electronic media rather than paper.

Regulators require that the quality of information provided them be verifiable. The Insurance Department of New York's Regulation 103 requires private passenger automobile reports to follow a

designated Statistical Data Monitoring System. Beyond the data described previously, the report must also ascertain that presented information accurately represents the insured entity. A comparison is made between the financial information of the insurer and the statistical data presented. The assumption is that income and expenses correlate with policy and loss data activity.

There are several types of information services providing statistical reports. There are entities that act as third party reporting services for insurers to regulators. Services also provide information for ratemaking purposes, loss prevention, and research. These types of statistical organizations are generally interested in only one facet of the statistical corpus of an insurance company. They do not need as much detail as the rating and reporting organizations. Such organizations include the Insurance Institute for Highway Safety, the Property Insurance Register, the Insurance Crime Prevention Institute, and the National Auto Theft Bureau.

Financial Statements Besides regulators, other groups concerned with the financial condition of the insurer include agents, policyholders, taxing authorities, investors and creditors. In order to accurately assess the unique attributes of the insurance industry, two sets of accounting standards have been developed over time. States require financial information to be reported according to guidelines promulgated by the National Association of Insurance Commissioners. Statutory accounting principles (SAP) place importance on financial date relating to solvency. Other interested groups are accustomed to seeing financial statements presented in the generally accepted accounting principles (GAAP) format. Some of the differences that occur in the two systems are noted:

- The permanent impairment of bonds for GAAP in excess of the SAP write-downs to market mandated by the NAIC
- Restoration of premium balances receivable deemed to be collectible under GAAP, but required to be written off under SAP
- Capitalization of certain policy acquisition costs
- Certain furniture and equipment counted as GAAP assets, not admitted under SAP
- Formula loss reserves required by SAP restored to retained earnings under GAAP
- Shareholder equity, GAAP vs. SAP
- Premiums written
- Increase in unearned premium reserves
- Premiums earned
- Amortization of deferred acquisition costs
- Dividends to policyholders
- Realized investment losses, net of taxes
- Required addition to loss reserves

Statutory accounting principles have developed over the years to help regulators complete their most important task. That job is to keep watch over the solvency of insurers and have them maintain ample liquidity to be able to fulfill their obligations to policyholders. To achieve this goal, SAP differs from GAAP:

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Business acquisition costs under SAP are charged against income as they are incurred

- Certain assets are nonadmitted under SAP (physical plant and equipment) and their values are removed from the balance sheet.
- Until collected, salvage and subrogation are not recognized under SAP

- Under SAP a number of states prohibit the accrual of debit adjustments (additional premiums)on policies with retrospective premium provisions
- No accrual required for a probable loss from premium inadequacy affecting an entire line of business under SAP

The concept of 'generally accepted accounting principles' is a difficult phrase to define. No one group has responsibility for overseeing GAAP. The Securities and Exchange Commission (SEC) has the responsibility of overseeing good financial reporting of firms that offer securities for sale to the public. The Financial Accounting Standards Board (FASB) superseded the Accounting Principles Board (ARB), both under the auspices of the American Institute of Certified Public Accountants (AICPA). Pronouncements by all these independent alpha groups are inclusive in GAAP. No official list exists, but the ARB defines general principles as 'the conventions, rules, and procedures necessary to define accepted accounting practice at a particular time'. The main purpose is to make financial statements comparable under the going-concern assumption.

GAAP statements give a picture at a point in time. Operating expenses, trends in growth and claims, and investment status can be analyzed. Certain acquisition costs related to premium volume variance are capitalized. Physical plant and equipment, balances due from agents, and amounts recoverable from salvage and subrogation are shown as balance sheet items dependent upon the tests of recoverability or realization. Also under GAAP dividends to policyholders are accrued at balance sheet date using the best estimates at hand. It is a requirement that provisions be made for deferred federal income taxes caused by timing differences of balance sheet date and tax payment. With GAAP the deferred tax on the unrealized appreciation on any equity investment has to be shown.

Yearly and quarterly reports of the financials are the major sources of investor information. Investors are chiefly concerned with protecting their investment and earning a good return. But not all insurance companies are owned by stockholders. Mutual companies, reciprocals, and Lloyd's exemplify other forms of ownership. The owners of these companies will have information needs that vary from that of a typical policy holder to more than the company's management.

Client Information Needs

Policyholders look to agents as their chief source of insurance information. Their needs are comparatively basic. Agents and policyholders can be lumped together here because any information needed by the policyholder will have to be provided by the agent. The relatively simple information needs of current or prospective policyholders are similar to those of purchasers of other products; cost, quality, availability, and options. This information can be furnished by the agent in electronic or hard copy format.

Insurance agents have information needs beyond that of the customer. Business information must be readily available to agents for efficient operation. Customer and prospect data, premium, limits, coverages applicable, deductible and production figures are examples.

Information is collected by the agent in talks with the purchaser of insurance. The insurer then issues the policy. It contains applicable premium information along with a description of the risk covered. Customers confirm the correctness of details of insurance items and amounts from their contract copy. Every time the policy is renewed the accuracy of the information needs to be verified. The information must also be available to the insurance company representative to handle customer inquiries.

Claims Administration

When a loss is reported, a file on the claim is set up in the insurer's data base. This serves as an active repository until reimbursement, at which time all information is archived. The agent is normally the recipient of tidings concerning loss. The agent notifies claims personnel and an adjuster is sent to investigate or 'adjust' the claim. For the adjuster to operate efficiently and fairly, information concerning the insurance contract (policy limits, coverages, deductibles) must be readily available. Other facts needed to insure rapid claim turnaround include time, date, and location of loss, amount of damage, and other parties involved.

Company-Agency Contact

The interchange between agency and insurer consists primarily of reporting on the agency's book of business. Insurance companies format their own periodic reports to best present data on each aspect of business. Auto insurance reporting, for example, might separate business into voluntary and high risk pool type business. Numerous categories of information can be furnished. An activity section can display changes in number of policies in force at the start and end of the period. On the same report, a productivity section can illustrate items like cancellations, new policies, and policies not renewed. Frequency of losses, loss per policy, and severity categories and combinations are myriad.

The Internet has created a viable electronic link between agencies and insurance companies. This has provided instant communication to the parties. Information needs have not changed but availability and usability has increased. Computer systems require changes in the ways information is handled. The communication process accelerates so problems can be handled rapidly and more efficiently. Greater focus must be placed on details to insure accuracy of information. Security of the information system is critical.

Regulation by States

In the United States insurance regulation is a matter handled by the individual states. The Commerce Clause of the U. S. Constitution says Congress can regulate commerce among the states. In Paul v. Virginia (1868) the U. S. Supreme Court ruled that insurance is not 'commerce' even if the contracting parties are in different states. Insurance policies, as contracts, do not take effect until delivered to a party to the contract in that part's jurisdiction. The 1944 case U. S. v. South-Eastern Underwriters overturned the Paul decision. The Court said that insurance was commerce for purposes of the Commerce Clause. Congress can regulate insurance and had intended to do so by enactment of the Sherman Act (the 1890 anti-trust legislation). Congress responded in 1945 with the McCarran-Ferguson Act. It says the Sherman, Clayton, and FTC Acts apply to the business of insurance only to the extent that such business is not regulated by state law. All states regulate insurance and have antitrust legislation of their own. Consequently, the insurance business is immune from federal antitrust law.

Each state has its own insurance department. The state insurance commissioner and staff carry out the department's duties as defined by legislative mandate. One of the functions of any insurance department is to appraise the conformity of insurers with state statutes and regulations relating to market conduct. The verbiage found at almost every state department of insurance website addresses the issue;

The four key market conduct areas are

- sales and advertising,
- underwriting,
- rating, and
- claims

The information goes on to state; ‘The department is also concerned with ensuring that a climate of competition continues to exist within the marketplace of insurance. State Unfair Trade Practice Acts prohibit practices in restraint of trade or tending to foster monopoly such as unfairly discriminatory underwriting practices, much as the federal antitrust law applies to other industries.’

Regulators are responsible for monitoring the financial well-being of insurers operating within the state. Financial and market oversight help secure the availability of insurance for the people of the state. Market conduct is supervised in several ways. Methods employed include the use of financial examiners, scrutiny of complaints from the public, review or approval of rates, and licensing of agents, brokers, and companies. Regulators have at their disposal a variety of means to evaluate the business customs of an insurer.

Monitoring Solvency

The main source for information for monitoring the solvency of insurers is the Annual Statement form filed by each company doing business in the state. The statement was developed by the NAIC so that insurance companies could provide consistent information which regulators could compare against a norm or against other companies in an ‘apples to apples’ manner. Financial data included in the Annual Statement includes an income statement, balance sheet, and several exhibits and schedules. This breaks down operations by line of business, and type of transaction. Property/casualty statements require details of premium and loss information by geographic distribution.

IRIS

The Insurance Regulatory Information System (IRIS), begun in 1971, set up a property/casualty insurer monitoring system to help regulators identify early signs of financial trouble. IRIS consists of 12 ratio analyses; three gauge profitability, three adequacies of loss reserves, two for liquidity and four for overall financial results. The analyses allow for rapid, cost effective perusal of financial condition. When a flag is raised, an in depth look at the company can be taken. States may want additional information provided by insurers on state specific documentation. Random periodic audits are also used by the departments to verify accuracy of information and to review insurer’s internal controls.

Overview of IRIS

It helps regulators target resources on more risky companies and is to be supplemented by in-depth financial analysis and/or on-site examinations. There are twelve ratios, each with “usual range.” Falling outside usual range requires attention. On the average 11% of companies (US) have 4 or more ratios falling outside the usual range. This condition brings three possible levels of attention

- Level A: high priority for review
- Level B: may require review, but not immediate
- Reviewed: no level

IRIS Ratios

The twelve IRIS ratios are grouped into four areas:

Area I Overall ratios

Ratio 1 –Gross premium written to policyholders' surplus. Policyholders' surplus is surplus and capital of the insurance company. It is comparable to the total equity of a company. Gross and net premium written are measures of the sales of the insurance company. Ratios are measures of asset turnover and they reflect on management's effectiveness in using the capital. It also reflects on the risk management is willing to take.
Calculation of Ratio 1
A = Direct Premiums Written
B = Reinsurance (Indirect) Premium –Affiliate
C = Reinsurance (Indirect) Premium –Nonaffiliate
D = Capital and Surplus
E = Gross Premium = A+B+C
F = Gross Premium to Policyholders' Surplus = 100 (E/D)

Ratio 2 –Net premium written to policyholders' surplus. Net premium written equals gross premium written minus reinsurance ceded. Ratio 2 also reflects on management's willingness to leverage its equity (capital) for sales. It is important that Ratio 1 does not exceed Ratio 2 by a wide margin as this would indicate that much of the policyholders' surplus comes from reinsurance.

Calculation: 100 (A/B), where:
A = Net premiums written
B = Policyholders' Surplus

Ratio 3 –Change in net premium written. The change is expressed as a percentage of net premiums written in the prior year. It is a measure of sales variability. For an insurance company, there is usually a deficit in the first few years of sale of introducing and marketing products. Such deficits must be covered by surplus of the company. Too much (rapid) increase in sales will cause severe surplus strain to the company.

Calculation: 100 (A-B)/B, where: –A = Net Premium, Current Year –B = Net Premium, Previous Year

Ratio 4 –Surplus aid to policyholders' surplus ratio. Surplus aid is an estimate of commissions on unearned ceded reinsurance premiums. This should belong to the reinsurer but by treaty, it may be retained by primary insurer. If a large portion of policyholders' surplus depends on surplus aid. Continued solvency of the primary insurer depends on the continued co-operation of the reinsurer

Calculation: 100 (E/D) where:
A = Reinsurance Ceded Commission
B = Ceded Premiums Written
C = Total Unearned Ceded Premium
D = Policyholders' Surplus
E = Surplus Aid = A (C/B)
F = Surplus Aid to Policyholders' Surplus = 100 (E/D)

Area II Profitability ratios

Ratio 5 –Two-year overall operating ratio. This is a measure of the profitability of the insurer on a longer term basis, over two years. Negative profit % equals loss ratio + expense ratio -investment return ratio. Loss ratio equals (losses + expenses + dividends paid) / net premiums earned. Net premiums earned equals net premiums written minus increase in unearned premium reserve. Expense ratio equals underwriting expenses/net premiums written. Investment return ratio equals investment income/net premiums earned

Calculation of Ratio 5
A = Losses and LAE Incurred; B = Prior Year's
C = Dividend Paid to Policyholders; D Prior Year's
E = Premium Earned; F = Prior Year's
G = Other Underwriting Expense; H = Prior Year's
I = Total Other Income; J = Prior Year's
K =Net Premium Written; L = Prior Year's
M = Net Investment Income; N = Prior Year's
O = Loss Ratio = 100 (A+B+C)/(E+F)
P = Expense Ratio = 100 (G+H+I+J)/(K+L)
Q = Investment Ratio = 100 (M+N)/(E+F)
Ratio 5, Overall 2 year operating ratio = O+P+Q

Ratio 6 –Investment yield. This is a major component of income for an insurance company •It also indicates the general quality of company's investment portfolio •It is the ratio of net investment income to average cash and invested assets for the current and the prior years

Calculation of Ratio 6
A = Cash and Invested Assets; B = Prior Year's
C = Interest, dividend, real estate income, due and accrued; D = Prior Year's
E = Borrowed Money; F = Prior Year's
G = Interest on Borrowed Money; H = Prior Year's
I = Net Investment Income
J = Investment Yield = 100 I/[(A+B+C+D-E-F-G-H)/2]

Ratio 7 –Change in policyholders 'surplus. This is the ultimate measure of financial condition of the company. A negative change shows deterioration and that is bad. Drastic increase shows instability. It is sometimes related to a change of ownership. Many insolvent companies have high surplus increases prior to insolvency of the company.

Calculation of Ratio 7
A = Total underwriting expense incurred; G= Prior year's
B= Net commission and brokerage expense; H = Prior year's
C = Total taxes, licenses and fees; I = Prior year's
D = Net premium written; J = Prior year's
E = Unearned Premium, K = Prior Year's
F = Deferred Acquisition Expense = [(A+B+C)/2D]xE
L = Deferred Acquisition Expense Prior Year's = [(G+H+I)/2J]xK
M = Policyholders' Surplus; N = Prior Year's

O = Change in Policyholders' Surplus = 100 (F+M-L-N)/(L+N)

Area IiI Liquidity Ratios

Ratio 8 -Liabilities to liquid assets. Liquid assets for IRIS include real estate, up to 5% of total liability. It also includes mortgages. This is different from the treatment in FAST. This is a measure of the company's ability to meet the financial demands using liquid assets. This is different from financial analysis of industrial companies. Current ratio equals current assets/current liabilities. Current means less than one year.

Calculation of Ratio 8
A = Total liabilities
B = Real estate, property occupied by company
C = Real estate, other properties
D = Excess real estate = (B+C)-(A/20)
E = Government Bonds
F = Preferred and Common Stock
G = Mortgage Loans
H = Real estate held for investment
I = Cash and short term investment
J = Other Invested assets
K = Receivables for securities
L = Installment premiums booked but due
M = Interest income accrued
N = Investments in parents, subsidiaries and affiliates
O = Liquid assets = (E+F+G+H+I+J+K+L+M) –(D+N)
P = Liability to liquid assets = 100 (A/O)

Ratio 9 -Gross agent's balance to policyholders' surplus. Agents' balances are often not easily converted to cash in time of liquidation. Too much reliance on that may spell liquidity problem.

Calculation = 100 (A/B), where:
A = Agents' balances (in course of collection)
B = Policyholders' surplus

Area IV Reserve Ratios

Ratio 10 -One-year reserve development to policyholders' surplus. Losses outstanding a year prior and up to the current statement date is the sum of current reserves for those losses outstanding minus loss payments made during last year. One-year reserve development is the difference and it can be expressed as the updated loss estimate above minus reserve at the end of prior year. If the above one-year reserve development is positive then the reserves were deficient. If negative the reserves were redundant.

Calculation: 100 (A/B); where:
A = One year reserve development
B = Policyholders' surplus

Ratio 11 -Two-year reserve development to policyholders' surplus. Reserve deficiency and redundancy are very serious matters. As such the study of both such ratio on one-year and two-year

bases is justified. This ratio is comparable to Ratio 10 on a two-year basis.

Calculation: 100 (A/B), where:
A = 2 year reserve development
B = Prior Year, 2 -Policyholders' surplus

Ratio 12 –Estimated current reserve deficiency to policyholders' surplus. This is a very important ratio. It measures whether the current reserve is enough to cover expected losses or not. Expected losses equals net premiums earned times the average ratio of loss reserves to premium. This is compared to the stated reserves for the current year.

Calculation: = 100 (E/F); where:
A = Prior year 2 losses and LAE to Net Premium
B = Prior year 1 losses and LAE to Net Premium
C = Net Premium earned
D = Loss and LAE
E = Reserve Deficiency = [(A+B)/200 x (C-D)]
F = Policyholders' surplus

IRIS Summary			
		Usual Range	
		Minimum	Maximum
Ratio 1	Gross Premiums Written/Policyholders' Surplus	0	900
Ratio 2	Net Premiums Written to Policyholders' Surplus	0	300
Ratio 3	Change in Net Premiums Written	(33)	33
Ratio 4	Surplus Aid to Policyholders' Surplus	0	15
Ratio 5	Two-year Overall Operating Ratio	0	100
Ratio 6	Investment Yield	5	10.0
Ratio 7	Change in Policyholders' Surplus	(10)	50
Ratio 8	Liabilities to Liquid Assets	0	105
Ratio 9	Gross Agents' Balances to Policyholders' Surplus	0	40
Ratio 10	One-year Reserve Development to Policyholders' Surplus	0	20
Ratio 11	Two-year Reserve Development to Policyholders' Surplus	0	20
Ratio 12	Estimated Current Reserve deficiency to Policyholders' Surplus	0	25

Pricing

The price of insurance products is monitored by insurance departments. Rating laws may differ from state to state, but the overall purpose is to secure equitable rates for the consumer. Of course, 'equitable' is going to get a subjective interpretation from the insurance marketer and the end-user. The insurance department is there to arbitrate the differences. Rates are decreed by the insurance department in some states while in others prior approval or the market may be the method for ratemaking. Corroborating data must be presented to back up rates no matter what the rating system. It can be the company's historical data or aggregate data for that particular market collected by a state approved rating organization.

Taxation

Again, insurers are required to provide data as backup for the company calculated tax payment. Local, state and federal taxes are payable on a periodic basis. Fortunately, much of the information required for other uses can be reconfigured to suffice as tax information. Property, sales, and franchise taxes are going to be paid across the board based on some variable like any other business. There are a number of taxes that are unique to the insurance business. Every state has a gross premium tax. Its computation is based on premium received by the insurer, less deductions or credits for returned premiums, cancellations, and dividends. In some states finance or other charges are counted as a part of the premium. Guaranty fund levies are made against insurers in any state. The purpose of state guaranty funds is to protect policyholders against insolvent insurers. Other unique taxes for insurers include fire department and fire pension fund taxes, workers compensation fund, property pools and retaliatory and reciprocal taxes.

Reinsurance

From time to time it may be beneficial for an insurance company to enter into a reinsurance agreement with another company. Reinsurance is the transference of risk from one company to another in order to increase underwriting capacity. The ceding company is the reinsured or primary insurer. There are various types of reinsurance agreements and both companies need essentially the same information to reflect the transaction on its own set of books. Timeliness and detail of information are two issues affecting the reinsurance relationship. As pointed out previously, electronic information systems will bring greater efficiency to managing this relationship.

Accounting and statistical reporting were two of the areas that received attention when companies first began automating their information systems. Usable information for insurance companies is acquired through a combination of automated and manual systems. More processes have been added to the electronic information web. More dependence is then placed on the information system. Automation means elimination of paper, but not the elimination of work.

Regulation Origination

Insurance regulation originated, historically, from the absolute necessity that insurance companies maintain the financial strength to meet the commitments they make when they issue insurance policies to consumers. Through analysis of financial statements, regular financial examinations, communication with other states' insurance departments and other means, the several state departments of insurance monitor insurance companies and Health Maintenance Organizations to assure their financial soundness. The insurance department's responsibilities include early identification of troubled companies, followed by swift and effective rehabilitation where possible and removal from the marketplace through receivership and liquidation when rehabilitation is not possible. Rehabilitative measures may include merger with stronger companies.

Insurance companies, unlike banks and securities firms, have been chartered and regulated solely by the states for the past 150 years. One important reason for this is the 1868 U.S. Supreme Court decision *Paul v. Virginia.* The Court held that the issuance of an insurance policy was not a transaction occurring in interstate commerce and thus not subject to regulation by the federal government under the Commerce Clause of the U.S. Constitution. Courts followed that precedent for the next 75 years.

In a 1944 decision, *U.S. v. South-Eastern Underwriters Association*, the Court found that the federal

antitrust laws were applicable to an insurance association's interstate activities in restraint of trade. Although the 1944 Court did not specifically overrule its prior holding in Paul, South-Eastern Underwriters created significant apprehension about the continued viability of state insurance regulation and taxation of insurance premiums. By 1944, the state insurance regulatory structure was well established, and a joint effort by state regulators and insurance industry leaders to legislatively overturn the South-Eastern Underwriters decision led to the passage of the McCarran-Ferguson Act of 1945.

The McCarran-Ferguson Act's primary purpose was to preserve the states' authority to regulate and tax insurance. The Act also granted a federal antitrust exemption to the insurance industry for "the business of insurance." 15 U.S.C. §1012(b). The Supreme Court has made clear that the business of insurance does not include all business of insurers in Group Health and Life Insurance Co. v. Royal Drug, Co., 440 U.S. 205, 279 (1979).

After 1945, the jurisdictional stewardship entrusted to the states under McCarran-Ferguson was reviewed by Congress on various occasions. Some narrow exceptions to the 50-state structure of insurance regulation have been enacted, such as one for some types of liability insurance in the Liability Risk Retention Act created by Congress in 1981 and amended in 1986.

Regulatory Authority

In general, however, when proposals were made in the past to transfer insurance regulatory authority to the federal government, they were successfully opposed by the states as well as by a united insurance industry. Most such proposals prior to the 1990s focused on relatively narrow amendments to McCarran-Ferguson rather than large-scale replacement of the state regulatory system.

Such proposals for increased federal involvement usually spurred a series of regulatory reform efforts at the individual state level and by state groups, such as the National Association of Insurance Commissioners (NAIC) and the National Conference of Insurance Legislators (NCOIL). Such efforts were directed at correcting perceived deficiencies in state regulation and forestalling federal involvement. They were generally accompanied by pledges from state regulators to work for more uniformity and efficiency in the state regulatory process. A major effort to transfer insurance regulatory authority to the federal government began in the mid-1980s and was spurred by the insolvencies of several large insurance companies.

Former House Energy and Commerce Committee Chairman John Dingell, whose committee had jurisdiction over insurance at the time, questioned whether state regulation was up to the task of overseeing such a large and diversified industry. He chaired several hearings on the state regulatory structure and also proposed legislation that would have created a federal insurance regulatory agency modeled on the Securities and Exchange Commission (SEC). State insurance regulators and the insurance industry opposed this approach and worked together to implement a series of reforms at the state level and at the NAIC.

Among the reforms implemented was a new state accreditation program setting baseline standards for state solvency regulation. Under the accreditation standards, to obtain and retain its accreditation, each state must have adequate statutory and administrative authority to regulate an insurer's corporate and financial affairs and the necessary resources to carry out that authority. In spite of these changes, however, another breach in the state regulatory system occurred in the late 1990s. Martin Frankel, an individual who had previously been barred from securities dealing by the SEC, slipped through the oversight of several states' insurance regulators and diverted more than $200

million in premiums and assets from a number of small life insurance companies into overseas accounts.

Another state reform largely implemented in the late 1980s and early 1990s was the introduction of state insurance guaranty funds. These funds, somewhat analogous in function to the Federal Deposit Insurance Corporation (FDIC) for banks, provide protection for insurance consumers who hold policies from failed insurance companies. If an insurance company is judged by a state insurance regulator to be insolvent and unable to fulfill its commitments, the state steps in to rehabilitate or liquidate the insurer's assets. The guaranty fund then uses the assets to pay the claims on the company, typically up to a limit of $300,000 for property/casualty insurance and $300,000 for life insurance death benefits and $100,000 for life insurance cash value and annuities.

In most states, the existing insurers in the state are assessed to make up the difference should the company's assets be unable to fund the guaranty fund payments. This after the fact assessment stands in contrast to the FDIC, which is funded by assessments on banks prior to a bank failure and which holds those assessments in a segregated fund until needed. Insurers who are assessed by guaranty funds generally are permitted to write off the assessments on future state taxes, which indirectly provide state support for the guaranty funds.

The Gramm-Leach-Bliley Act

The 1999 Gramm-Leach-Bliley Act (GLBA) (P.L. 106-102, 113 Stat. 1338) significantly overhauled the general financial regulatory system in the United States. Support for GLBA came largely as a result of market developments frequently referred to as convergence. Convergence in the financial services context refers to the breakdown of distinctions separating different types of financial products and services, as well as the providers of once separate products. Drivers of such convergence include globalization, new technology, e-commerce, deregulation, market liberalization, increased competition, tighter profit margins, and the growing number of financially sophisticated consumers.

Functional or Institutional Regulation

GLBA intended to repeal federal laws that were inconsistent with the way that financial services products were actually being delivered, and it removed many barriers that kept banks or securities firms from competing with, or affiliating with, insurance companies. The result was the creation of a new competitive paradigm in which insurance companies found themselves in direct competition with brokerages, mutual funds, and commercial banks. GLBA did not, however, change the basic regulatory structure for insurance or other financial products. Instead, it reaffirmed the McCarran-Ferguson Act, recognizing state insurance regulators as the "functional" regulators of insurance products and those who sell them. Functional regulation would entail, for example, insurance regulators overseeing insurance products being offered by banks, while banking regulators would oversee banking products offered by insurers. Institutional regulation tends to focus on the charter of the institution; for example, banking regulators oversee all the activities of a bank even if the bank is offering insurance products.

Some insurance companies believe that in the post-GLBA environment, state regulation places them at a competitive disadvantage in the marketplace. They maintain that their non-insurer competitors in certain lines of products have federally based systems of regulation that are more efficient, while insurers remain subject to perceived inefficiencies of state insurance regulation, such as the regulation of rates and forms as well as other delays in getting their products to market. For example,

life insurers with products aimed at retirement and asset accumulation must now compete with similar bank products. Banks can roll out such new products nationwide in a matter of weeks, while some insurers maintain that it can take as long as two years to obtain all of the necessary state approvals for a similar national insurance product launch.

In the aftermath of GLBA, the largely united industry resistance to federal intervention in insurance changed. Many industry participants, particularly life insurers, larger property/casualty insurers, and larger insurance brokers, began supporting broad regulatory change for insurance in the form of an optional federal charter for insurance patterned after the dual chartering system for banks. Banking charters are available from both the individual states and the federal government.

Modernizing State Law

GLBA also addressed the issue of modernizing state laws dealing with the licensing of insurance agents and brokers and made provision for a federally backed licensing association, the National Association of Registered Agents and Brokers (NARAB). NARAB would have come into existence three years after the date of GLBA's enactment if a majority of the states failed to enact the necessary legislation for uniformity or reciprocity at the individual state level. The requisite number of states enacted this legislation within the three-year period, and thus the NARAB provisions never came into effect.

The issue of insurance producer licensing reciprocity or uniformity continued, as some saw and continue to see problems in the actions taken by the individual states. Not every state has passed legislation implementing reciprocity, and some have argued that it has not always been implemented as smoothly as desired even in those states that did.

Insurance After the GLBA

Congress passed the Gramm-Leach-Bliley Act to enhance competition among financial services providers. Though many observers expected banks, securities firms, and insurers to converge as institutions after it passed, this has not occurred as expected. In fact, the major merger between a large bank, Citibank, and a large insurer, Travelers, which partially motivated the passage of GLBA, has effectively been undone. The corporation that resulted from the merger, Citigroup, has divested itself of almost all of its insurance subsidiaries.

Although large bank-insurer mergers did not occur as expected, significant convergence continued. Instead of merging across sectoral lines, banks began distributing-but not "manufacturing"-insurance, and insurers began creating products that closely resembled savings or investment vehicles. Consolidation also continued within each sector, as banks merged with banks and insurers with insurers. In addition, although Congress instituted functional regulation in GLBA, regulation since has still tended to track institutional lines.

From the 107th through the 110th Congresses, congressional interest in insurance regulatory issues continued. A number of broad proposals for some form of federal chartering or other federal intervention in insurance regulation were put forward in both houses of Congress and by the Administration, but none were marked up or reported by the various committees of jurisdiction. Broad proposals from the 107th to 110th Congresses included the National Insurance Act of 2007 (S. 40 and H.R. 3200, 110th Congress); the National Insurance Act of 2006 (S. 2509 and H.R. 6225, 109th Congress); the Insurance Consumer Protection Act of 2003 (S. 1373, 108th Congress); and the Insurance Industry Modernization and Consumer Protection Act (H.R. 3766, 107th Congress), and

the 2008 Blueprint for a Modernized Financial Regulatory Structure released by the U.S. Department of the Treasury and available at http://www.treasury.gov/press-center/press-releases/Documents/Blueprint.pdf.

In the same time frame, a number of narrower bills affecting different facets of insurance regulation and regulatory requirements were also introduced in Congress, including bills addressing surplus lines and reinsurance, insurance producer licensing, and expansion of the Liability Risk Retention Act beyond liability insurance.

Insurance and the Financial Crisis

As the 110th Congress approached its close, the financial crisis that began in 2007 reached panic proportions with the conservatorship of Fannie Mae and Freddie Mac, the failure of Lehman Brothers, and the government rescue of American International Group (AIG) in September 2008.

This crisis overlaid a range of new issues and arguments to the previously existing debate on insurance regulatory reforms. The financial crisis grew largely from sectors of the financial industry that had previously been perceived as presenting little systemic risk, including insurers. Some saw the crisis as resulting from failures or holes in the financial regulatory structure, particularly a lack of oversight for the system as a whole and a lack of coordinated oversight for the largest actors in the system. Those holding this perspective increased the urgency in calls for overall regulatory changes, such as the implementation of increased systemic risk regulation and federal oversight of insurance, particularly larger insurance firms.

Last Company Standing

The generally good performance of insurers in the crisis, however, also provided additional affirmation to those seeking to retain the state-based insurance system. Although insurers in general are considered to have weathered the financial crisis reasonably well, the insurance industry saw two notable failures-one general and one specific.

Two Failures

The first failure was spread across the financial guarantee or monoline bond insurers. Before the crisis, there were about a dozen bond insurers in total, with four large companies dominating the business. This type of insurance originated in the 1970s to cover municipal bonds, but the insurers expanded their businesses since the 1990s to include significant amounts of mortgage-backed securities. In late 2007 and early 2008, strains began to appear due to this exposure to mortgage-backed securities. Ultimately some bond insurers failed and others saw their previously triple-A ratings cut significantly.

These downgrades rippled throughout the municipal bond markets, causing unexpected difficulties for both individual investors and municipalities who might have thought they were relatively insulated from problems stemming from rising mortgage defaults.

Assistance Number, Please

The second failure in the insurance industry was that of a specific company, American International Group.AIG had been a global giant of the industry, but it essentially failed in mid-September 2008. To

prevent bankruptcy in September and October 2008, AIG sought more than $100 billion in assistance from the Federal Reserve, which received both interest payments and warrants for 79.9% of the equity in the company in return. Multiple restructurings of the assistance followed, including nearly $70 billion through the U.S. Department of the Treasury's Troubled Asset Relief Program (TARP). The rescue ultimately resulted in the U.S. government owning 92% of the company. The assistance for AIG has ended with all the Federal Reserve assistance repaid and the U.S. Department of the Treasury's sale of its entire equity stake in the company.

The near collapse of the bond insurers and AIG could be construed as regulatory failures. One of the responsibilities of an insurance regulator is to make sure the insurer remains solvent and is able to pay its claims. Because the states are the primary insurance regulators, some may go further and argue that these cases specifically demonstrate the need for increased federal involvement in insurance. The case of AIG, however, is a complicated one. Although AIG was primarily made up of state-chartered insurance subsidiaries, at the holding company level it was a federally regulated thrift holding company with oversight by the Office of Thrift Supervision (OTS).

Dodd-Frank Act

The immediate losses that caused AIG's failure came from both derivatives operations overseen by OTS and from securities lending operations that originated with securities from state-chartered insurance companies. The 111th Congress responded to the financial crisis with the Dodd-Frank Wall Street Reform and Consumer Protection Act, which enacted broad financial regulatory reform as detailed above. Attention on insurance regulation in the 112th and 113th Congresses was largely occupied with follow-up to the Dodd-Frank Act.

The Dodd-Frank Act left many of the specifics up to regulatory rulemaking, and this rulemaking is still ongoing. Of particular concern was the specific approach that the Federal Reserve may take to bank or thrift holding companies who are primarily involved in insurance and the possibility of Financial Stability Oversight Council (FSOC) designating some insurers as systemically important and thus subject to additional oversight.

Supervisory Colleges

Supervisory colleges are authorized under the NAIC's December 2011 Amendments to the Insurance Holding Company Model Act (the "Amended Model Act"), the model statute governing control over and acquisitions of insurance companies. Generally, the Amendments strengthen a state insurance commissioner's access to information so that he or she may better regulate group financial strength.

The Amendments affect a greater sharing of regulatory information among states and countries where the affiliates of an insurer conduct business, with the parent company's central place of business designated as the lead regulatory authority. More specifically, the Amendments authorize multi-state coordination of regulatory filings, authorize insurance commissioners' participation in supervisory colleges, strengthen regulators' access to group affiliate information, and provide for the assessment of group financial strength upon initial application for control of a U.S. insurer.

The implementation of supervisory colleges would not take away any of the state insurance commissioner's power to regulate and supervise the insurers or their affiliates within its jurisdiction-on the contrary, it would afford them more power than they previously had before the Amendments to the IHCA.

The Amendments provide for an insurance regulator, and in particular, a state insurance commissioner, to participate in a supervisory college with other regulators in order to better supervise a domestic insurer that is part of a group with international operations, and to ensure the insurer is in compliance with the state code.

Additionally, the Amendments make weighty changes to the ways in which state commissioners are empowered to oversee and examine not only domestic insurers, but also the insurer's holding company and its affiliates outside the commissioner's jurisdiction.

To facilitate the best use of these new powers, the Amendments provide for a state insurance commissioner's participation in Supervisory Colleges to enhance the regulation of insurers that are part of an insurance holding company system with international operations. The hope is that examination of the entire group's operations will enhance the commissioner's ability to ascertain the potential enterprise risks posed by the holding company system and affiliates to the domestic insurer.

These changes can primarily be found in Sections 6 and 7 of the Amended Model Act. First, Section 6 addresses the insurance commissioner's powers to obtain the information necessary to best examine an insurer. Section 6A grants state insurance commissioners the authority to examine insurance company affiliates to "ascertain the financial condition of the insurer, including the enterprise risk to the insurer by the ultimate controlling party, or by any entity or combination of entities within the insurance holding company system . . . ." An "affiliate" is defined in Section 1A of the Model Act to mean, "a person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the person specified."

Additionally, "enterprise risk" is defined in Section 1F of the Model Act to mean, "any activity, circumstance, event or series of events involving one or more affiliates of an insurer that, if not remedied promptly, is likely to have a material adverse effect upon the financial condition or liquidity of the insurer or its insurance holding company system as a whole."

Section 6B explains how the commissioner may gain access to this necessary information for examination. Under Section 6B(1), the commission may order any insurer to, "Produce such records, books, or other information papers in the possession of the insurer or its affiliates as are reasonably necessary to determine compliance."

If the commissioner deems such information necessary to determine compliance with the act, Section 6B(2) describes the procedure for obtaining information not in possession of the insurer. The commissioner may order an insurer to, "obtain access to such information pursuant to contractual relationships, statutory obligations, or other method." In the event that an insurer does not comply, or cannot obtain the requested information, the insurer must provide to the commissioner a detailed explanation of its reasons for failure.

The commissioner may then use his or her own discretion to determine whether the explanation is compelling, or whether it is without merit. Upon finding the explanation is without merit, after notice and hearing, the commissioner may then charge the insurer who failed to provide the information a penalty for each day of delay, or suspend or revoke the insurer's license. Section 6E further extends how a commissioner may deal with an insurer that fails to produce documents, by providing the power, "to examine the affiliates to obtain the information," and "to issue subpoenas, to administer oaths, and to examine under oath any person for purposes of determining compliance with this section."

Failure to comply with a subpoena is punishable as contempt of court. These changes are significant because prior to the Amendments the commissioner's authority was considerably more restricted. The commissioner could only examine an insurer's affiliates in the limited situations where, "the regulator had ordered the insurer to produce copies of books and records that were 'reasonably' necessary in order to determine compliance with laws, and [where] the insurer had failed to comply with such order."

The Amended Model Act "extend[s] the extra-territorial reach of state insurance regulators to examine and control insurance holding companies and insurers beyond their state borders." Second, Section 7 provides for a state insurance commissioner's participation in supervisory colleges. Under Section 7A of the Model Act, the Commissioner is granted, "the power to participate in a supervisory college for any domestic insurer that is part of an insurance holding company system with international operations in order to determine compliance by the insurer with this Chapter."

Section 7C further clarifies what the commissioner's participation in the college will entail. This section provides that the commissioner may participate in a supervisory college "with other regulators" to assess the "business strategy, financial position, legal and regulatory position, risk exposure, risk management and governance process" as part of his examination process of individual insurers in accordance with Section 6.

The term "Other regulators" includes those other "state, federal and international regulatory agencies," responsible for the supervision of the insurer and its affiliates. Section 7C also gives the commissioner the power to enter into agreements with other jurisdictions' regulators to ensure cooperation, as long as those agreements are consistent with the confidentiality requirements provided in Section 831 of the Model Act.

Regulatory Modernization After GLBA,

Following passage of the Gramm-Leach-Bliley Act, state insurance regulators working through the NAIC embarked on a regulatory modernization program. These efforts were in response to both the mounting criticisms of state insurance regulation and the recognition of the growing convergence of financial services and financial services products. In early 2000, NAIC members signed a Statement of Intent: The Future of Insurance Regulation, in which they pledged "to modernize insurance regulation to meet the realities of the new financial services marketplace." New NAIC working groups were formed addressing issues such as state privacy protections, reciprocity of state producer licensing laws, promotion of "speed to market" of new insurance products, development of state-based uniform standards for policy form filings, and other proposed improvements to state rate and form filing requirements. Highlights of the post-GLBA NAIC efforts include the following:

- Certification of 42 states (as of February 2008) as reciprocal jurisdictions for producer licensing laws, thus exceeding the GLBA requirements to prevent the establishment of NARAB. As discussed above, however, the 114th Congress ultimately acted to create a NARAB despite the state efforts.
- Growth of the System for Electronic Rate and Form Filing (SERFF), intended to be a single, one-stop point of entry for insurers to file changes to rates and forms. More than 637,000 filings were made through the system in 2015, up from about 3,700 in 2001, and 49 states participate in the system.
- State approvals of the Interstate Insurance Product Regulation Compact. This compact is intended to provide increased regulatory uniformity and a single point of product filing for four

insurance lines—life, annuities, disability income, and long-term care. It came into effect in May 2006. States representing over 70% of the insurance premium volume have joined the compact.

The NAIC maintains that states are better positioned than the federal government to serve the interests of U.S. insurance consumers, emphasizing that state regulators are better suited to ensure that consumer interests are not lost in the arena of commercial competition. In 2015, according to the NAIC, the total budget for the state insurance departments was $1.36 billion. The states handled nearly 300,000 official consumer complaints and nearly 1.9 million consumer inquiries regarding their policies and their treatment by insurance companies and agents. The states collectively employed more than 11,300 employees to handle these complaints and perform the other functions of the state insurance departments.

Since the financial crisis, the NAIC has undertaken another round of regulatory changes. Three initiatives specifically identified by the NAIC are the following:

- Holding company oversight reform. Historically, insurer oversight has focused on the individual legal entities and subsidiaries, but the financial crisis brought greater scrutiny on holding company and overall insurer group issues. In response, the NAIC adopted the revisions to model laws and regulations relating to holding company oversight.80 The revisions included expanded ability to evaluate any entity within an insurance holding company system; enhancements to the regulator's rights to access books and records and compelling production of information; establishment of expectation of funding with regard to regulator participation in supervisory colleges; and enhancements in corporate governance, such as Board of Directors and Senior Management responsibilities.
- Enterprise risk management. As part of insurer solvency oversight, emphasis both internationally and in the United States has been placed on companies themselves assessing, and reporting, the risks they are taking. This is generally accomplished through an "Own Risk and Solvency Assessment" (ORSA). An ORSA requires insurers to "issue their own assessment of their current and future risk through an internal risk self-assessment process and it will allow regulators to form an enhanced view of an insurer's ability to withstand financial stress." In September 2012, the NAIC adopted a model law that would require an annual ORSA and has produced a guidance manual on the topic.
- Principle-based reserving (PBR). State requirements for life insurance reserves have remained static for decades, while insurance products themselves have increased in complexity. In response, the NAIC created, and states have begun adopting, a revised model law to transition life insurance reserving to a principle-based approach, from the current formulaic approach. According to the NAIC as of December 1, 2016, 46 states comprising 85.7% of premiums have enacted PBR legislation. To avoid market disruption or an un-level playing field, PBR had not become operational until 42 states comprising at least 75% of the U.S. market approved the law. With these thresholds past, PBR will begin being applied in 2017.

CHAPTER 6 Insurance Risk and Regulation

The central purpose of insurance regulation is to preserve the solvency of firms offering insurance products in order to protect policyholders. Insurance is an important factor in individual and national financial stability because it reduces the possibility of economic loss. This result can only be achieved if the mechanism of insurance itself is secure. Solvency of insurance companies therefore is of major concern to the public and to individual policyholders, investors and regulators, as well as to the insurers themselves. Establishing and maintaining insurance company solvency is thus a major public policy goal...

MEETING MARKET CHALLENGES

The insurance business, like that of any other financial intermediary, is conducted in a competitive and challenging business environment. Solvency regulation aims to make it possible for insurers to take advantage of changing conditions in financial markets while at the same time assuring that consumers do not feel adverse effects from market dislocations.

Insurance regulation developed during the 19th century as a function of individual state governments and it remains on that basis in spite of the widespread trend toward federal regulation of interstate commercial activities. Recognition of the nation-wide scope of the insurance business, however, led to the formation in 1871 of the National Association of Insurance Commissioners. This group, made up of representatives of each state's insurance regulatory body, has been active in maintaining insurance jurisdiction for individual states.

The NAIC acts as a national clearing house for promoting uniform standards in the insurance industry. Its first move was to create an annual statement blank in order to help state regulators in assuring solvency of the firms they were charged with overseeing. As flaws in the network of insurance regulation became evident over the years, the NAIC has new tools for solvency surveillance. In some cases new regulations have replaced outdated ones. More often they are simply added to those already in place.

Federal Threats

In difficult financial times when insurance company failures increased in frequency, there have been threats from Congress of federal takeover for insurance regulation. After insolvency among several large insurers in the 1980s, a congressional investigation was held by the House Oversight and Investigations Subcommittee.

In response the NAIC adopted new recommendations to strengthen state regulation. These included a state insurance department accreditation process as well as measures to improve financial reporting. The NAIC implemented risk-based capital requirements for life-health insurers and for property-casualty firms.

WHAT IS SOLVENCY?

A simple definition of solvency for an insurance company is the ability to meet its obligations as they are due, although some claims from current operations will not be settled until a number of years in the future. Continuous liquidity and maintenance of adequate loss reserves through appropriate premium rates are emphasized by this definition.

There are also legal requirements for an insurance company to maintain a prescribed level of net worth for accreditation of solvency. Regulators consider an insurance company technically solvent if its admitted assets exceed its liabilities by a margin equal to or exceeding the minimum capital or minimum surplus the law requires.

Belated Discovery

On a practical basis, insurance company management must be aware that such a situation probably would not be discovered until impairment of capital already had occurred. In the real world, a solvent insurer needs to collect premiums that can reasonably be expected to provide for anticipated loss settlements while meeting all operating expenses.

The company also must maintain sufficient admitted assets to cover existing liabilities and allow a remaining safety margin at least equal to net worth requirements set by statutes. Most insurance companies operate with a net worth larger than the statutory minimum.

A company is legally solvent as long as admitted assets exceed liabilities, but if the excess is less than the capital and surplus required by regulators, the capital is considered "impaired." At this point the regulating authority issues a "cease and desist" order, meaning that the insurer cannot write new business until it has cured the impairment. The firm may continue to operate, pay claims, or make an effort to obtain reinsurance.

Variation in Capital Requirements

While most property-liability firms are stock and mutual companies writing multiple lines of insurance, there are also reciprocals and Lloyd's associations, and monoline firms. The minimum amount of initial net worth required for a company to obtain a license to transact insurance business is set by laws in the individual states. Most states also have requirements at which minimum levels of net worth must be maintained. It is expected that the growth of an insurance company will cause a drain on its surplus, and for that reason minimum requirements for continuing net worth are usually set lower than those for initial net worth.

The initial minimum net worth required of an insurance company can vary widely between individual states. To be organized in State A, a stock fire insurance company might need $3 million in capital and surplus, while in State B the requirement would be only $750,000, or only $100,000 in the case of an assessment mutual company.

Both the company's legal form and the lines of insurance it plans to write play a part in determining state requirements for initial minimum net worth. This system of minimum net worth requirements set by individual states resulted in criticism because such requirements tended to become inadequate as companies grew.

RISK-BASED CAPITAL STANDARDS

In order to devise a system of establishing minimum capital requirements that would meet this criticism and deflect threats of federal control, the NAIC in 1990 moved to strengthen state regulation. It set up working groups to devise new solvency standards for both life and property-casualty insurers. Separate risk-based capital models apply to life companies, property/casualty companies and health organizations. These different formulas reflect the differences in the economic environments facing these different companies. The common risks identified in the NAIC models include Asset Risk-Affiliates, Asset Risk-Other, Credit Risk, Underwriting Risk, and Business Risk.

In 1993, the NAIC adopted risk-based capital (RBC) standards for the property/casualty industry to take effect the next year. RBC standards replaced individual state surplus and capital requirements which varied widely from state to state and had been widely criticized as being too low and too simplistic to be meaningful thresholds for capital adequacy. In some states, a large insurer could have been insolvent while still meeting the minimum requirements

The blanket minimum requirements were replaced with standards geared to the specific characteristics of the company and its business, a move designed to improve solvency regulation. With formulas that reflect individual capital needs, examiners can more quickly identify insurers that are under financial pressure and take action earlier to avert insolvency. Capital adequacy is linked to the riskiness of an insurer's business activities. An insurance company that insures medical device manufacturers or high rise buildings along California's earthquake faults needs a larger cushion of capital than a company specializing in Main Street businesses in the Midwest, for example.

RBC formulas therefore set out minimum levels of capital that will help maintain solvency in the event of a serious miscalculation. The likelihood and extent of these errors are built into the formulas for various elements of an insurer's business. These include the risk that loss reserves set aside for future claims will be inadequate. (Loss reserve risk is tied to the kind of business the company underwrites. There is more uncertainty in liability than property lines of insurance because of the long tail nature of claims, where it may take years to arrive at a settlement for injuries.) In addition there is credit risk -- the chance that an insurance agent or reinsurer will default on monies owed under contracts.

Premium risk assesses the degree to which insurance policy prices may inadequately reflect the cost of claims. Capital levels are also established for investment and off-balance sheet risks. An allowance is made in the calculations for the fact that everything is unlikely to go wrong at the same time

Risk-Based Capital Rules and Other Solvency Oversight Mechanisms:

State regulation, which directly regulates only insurance entities, requires insurers to satisfy RBC requirements. RBC does not set a capital target for an insurer but, rather, sets a baseline capital level such that, in the event an insurer approaches that baseline level, a state regulator may take corrective action to conserve or improve the insurer’s financial condition. RBC requirements are grounded in a basic risk-based methodology that takes four categories of risk into account. Briefly, these risks are: (1) asset risk, which covers market and credit risks on balance sheet assets, including bonds, equities and other financial assets, as well as reinsurance receivables and investments in subsidiaries; (2) insurance risk, which covers risks related to the underwriting and pricing of policies and contracts, as well as risks related to the adequacy of claims reserves; (3) interest rate risk, which covers potential losses due to interest rate changes and asset/liability mismatch; and (4) business risk, which covers guaranty fund assessments and general business

risks, such as litigation.

The purpose of RBC is to help regulators identify insurers that are in financial trouble and that need regulatory attention. It computes a minimum level of capital adequacy that a company must have to operate.

RBC is used to set capital requirements considering the size and degree of risk taken by the insurer. Risk-based capital is a rough measure of risk where each element of risk is assigned a "risk factor." Each risk factor is multiplied by some measure of volume for each risk class which are then added together resulting in a total "risk requirement" The major categories of risk include:

- Asset risk, which covers market and credit risks on balance sheet assets, including bonds, equities and other financial assets, as well as reinsurance receivables and investments in subsidiaries
- Insurance risk, which covers risks related to the underwriting and pricing of policies and contracts, as well as risks related to the adequacy of claims reserves
- Interest rate risk, which covers potential losses due to interest rate changes and asset/liability mismatch
- Business risk, which covers guaranty fund assessments and general business risks, such as litigation

The RBC Ratio is the main test used to determine whether a company's capital level is adequate given the size and degree of risk that firm has taken

$$\text{RBC Ratio} = \frac{\text{Equity}}{\text{Risk Charges}} = \frac{\text{Total Adjusted Capital (TAC)}}{\text{Risk-Based Capital (RBC)}}$$

The RBC requirement (level of capital required in view of risk undertaken) is calculated by multiplying risk factors times statement values, adding the results together, and then adjusting for covariance between major risk categories. The formula results are compared to the risk-adjusted capital of the insurer to develop the RBC ratio, which is the ratio of risk-adjusted capital to RBC. The ratio results are used to determine the degree to which an insurance company's surplus is impaired. The model act specifies a series of increasingly stringent regulatory responses, as the RBC ratio decreases below 200%. A trend test is included to test whether insurers that were between the 200% breakpoint and 250% level were trending downward, which will trigger regulatory action, but an RBC ratio over 250% for a life company is sufficient to receive a passing grade on this pass/fail test.

Advantages of RBC

Supporters of the Risk-Based Capital system have pointed out that existing laws and rules were frustrating regulators who were trying to take corrective action when a company appeared to be in a hazardous situation. Company attorneys and other consultants could provide opposition preventing intervention by regulators until a firm's surplus had fallen below the statutory requirements.

Because of such delays the insurer would have little or no chance for remedying the situation before regulators gained control of the company. Earlier corrective action under RBC, it was argued, would allow earlier corrective action and thus prevent some insolvencies and improve chances for rehabilitation.

Standards for RBC

Under the RBC requirements, each insurer calculates the amount of capital required for handling the total risk of the company. This figure is then compared by each company to its reported surplus. If the figure is below RBC, it is possible that the company is inadequately capitalized and needs regulatory and management action.

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There are four "action levels" under the NAIC RBC system.

- Company Action Level (CAL). If this level is reached, insurer is required to automatically submit a written, detailed business plan within 45 days that details the causes and actions that have led up to the capital impairment as well as a plan for the restructuring of the insurer's business to rebuild capital to acceptable levels. Alternatively, the company can detail plans to reduce its risk to a level commensurate with its actual capital level.
- Regulatory Action Level (RAL). In this case, insurer must conform to the requirements stated in the Company Action Level, and in addition is subject to an immediate regulatory audit. The regulator can then issue protective orders to force the insurer to either lower its risk profile or increase its capital to a level commensurate with its risk. A company that has reached the Company Action Level and that does not conform to the statutory requirements spelled out in the statute is also automatically deemed to have triggered the Regulatory Action Level.
- Authorized Control Level (ACL) is triggered by having statutory capital that is less than the Authorized Control Level RBC, as computed by the RBC formula or by failing to meet regulatory requirements imposed by the Regulatory Action Level. The Authorized Control Level is the capital level at which the state insurance commissioner is authorized, although not required, to place the insurance company under regulatory supervision.
- Mandatory Control Level. When that happens, the state regulator is required by statute to take steps to place the insurer under regulatory supervision.

Total Risk-Based Capital-
Total RBC is calculated by multiplying the risk factors by some measure of volume for each risk class and adding together the resulting "risk requirements"

Total Adjusted Capital- Total Adjusted Capital (TAC) is made up primarily of capital and surplus, and the asset valuation reserve (AVR)

Steps in RBC calculation

- Apply risk factors against annual statement values
- Sum risk amounts and adjust for statistical independence (using the covariance formula)
- Calculate Authorized Control Level Risk-Based Capital amount
- Compare ACL RBC to Adjusted Capital.

RBC Level	Required Action
Above 200%	No negative trend, No action
150% to 200%	Entity submits a plan to improve capital
100% to 150%	State regulator specifies corrective actions
70% to 100%	State regulator may take control of the entity
Below 70%	State regulator takes control of the entity

The goal is to determine the minimum amount of capital an insurer needs given its risks **Example**- At a 300% RBC level, a company holds $3 of capital for every $1 of "risk" assumed. RBC was designed to differentiate adequate capital from inadequate capital, but not to distinguish "good" from "better." The ratio can be raised by either increasing total adjusted capital or by lowering risk based capital requirements. Action levels under the NAIC RBC system:

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- Mandatory Control Level. When that happens, the state regulator is required by statute to take steps to place the insurer under regulatory supervision.

Major categories in life RBC formula:
C0 – Subsidiary Insurers Risk
C1 – Asset Risk
C2 – Insurance Risk
C3 – Interest Rate Risk
C4 – Business Risk

Major categories in property/casualty RBC formula:
R0 – Subsidiary Insurers Risk
R1 – Fixed Income Asset Risk
R2 – Equity Asset Risk
R3 – Credit Risk
R4 – Insurance Risk – Reserve Development
R5 – Insurance Risk – Written Premiums

Major categories in health RBC formula:
H0 - Insurance Subsidiaries Risk
H1 –Asset Risk
H2 – Insurance Risk
H3 – Credit Risk
H4 – Business and Admin Expense Risk

Life asset risk accounted for:
- Defaults on Fixed Income Investments
- Changes in Market Value of Equity Investments
- Non-recoverability of Reinsurance Balances
- Company-Specific Experience (e.g., Mortgage Experience Adjustment)
- Over-Concentration in Specific Asset Investments
- Additional Risk from Affiliated Investments

Asset risks not accounted for:
- Market Value Adjustments
- Quality of Investments, although the following do adjustments do occur:
    - Bond Factors Differ By NAIC Rating Class
    - Mortgages In Default Have Higher Factors
    - Certain Types of Reinsurance Have Higher Factors
- Common Stock Diversification
- Interest Rate Risk
- Quality of Reinsurance
- Duration/Convexity Risk (not in the asset formula, and even in the C3 part, not directly)

CALCULATING RISKS UNDER RBC

RBC is calculated by identifying an insurer's various activities that create risk. A weight is determined for each risk factor. The dollar amount of capital required to support the firm's activities in that risk factor's area is determined by multiplying the weight figure by the amount at risk. For life-health insurers the four risk factors are:

- asset risk
- insurance risk
- interest rate risk
- business risk.

To illustrate the risk factor calculation, one category of asset risk for a life-health insurer is common stock. Unaffiliated common stock has a risk factor or weight under the RBC classification of 30 percent. For a firm with $1 million in unaffiliated common stock, RBC standards would require the company to have $300,000 in available capital in order to qualify as supporting the risk of a

decrease in that stock's value.

Examples of asset risk categories and their weights

bonds	0.3	to	30
common stock	30.0	to	100
off-balance sheet items	1.0		
preferred stock	5.0	to	30
real estate	10.0	to	15
mortgages (less than 90 days delinquent)	0.1	to	5
reinsurance	0.5		
separate accounts	0.3	to	100
surplus in non-guaranteed separate accounts	10.0		
schedule BA assets (other long-term assets)	20.0		
Concentration factor Increases other factors			

Six classes of bonds are weighted according to the probability of default, like the classes used on the annual statement ranking investment concentration from high grade to junk bonds. A formula is applied by the RBC ranging from 0.30 for riskier bonds to 0.003 for high-grade investments and nothing for government bonds.

Common stock is weighted at 30 percent for unaffiliated firms, going up to 100 percent for domestic and foreign affiliated insurers and affiliated investment subsidiaries. The preferred stock range is 5 percent for affiliated firms up to 30 percent for unaffiliated. Items classified as off-balance sheet are assets not under the company's control, contingent liabilities and guarantees for affiliated companies

Mortgages in general are ranked with those on farm property as the highest risk at 5 percent and city mortgages at 0.1 percent, but these rankings vary with individual companies' experience and an adjustment is provided to reflect this variation.

Real estate at 10 to 15 percent is scored less heavily than common stock as a less volatile asset and because of tax credits given for real estate losses. Properties acquired through debt satisfaction are ranked at the higher range. The reinsurance 0.5 percent charge is for amounts to be recovered from a reinsurer on separate accounts, in which policyholder funds bear most of the asset risk; a low weight is assigned except for situations involving contractual guarantees.

The concentration adjustment factor is used to reflect heavy concentration in particular assets. Weights are doubled for the ten largest investments in each asset category, with a cap of 30 percent on an individual asset's weight. This adjustment does not apply to investments with federal guarantees, policy loans and home office real estate. Category 1 bonds, preferred stock and other assets with an RBC weight of less than 1 percent are also excluded.

Capital needs in relation to the liabilities of a firm are quantified by the insurance risk adjustment. Variables examined for this risk are mortality and morbidity. Errors in pricing of products caused by statistical factors or inaccurate assumptions may affect both variables.

The net amount at risk, whether policies are individual or group, and the size of the insurance portfolio determine mortality weights. Weights decline as the net amount at risk increases because of reduced risk with larger volume. Life insurance has a weight of 0.15 percent on the first $500,000 net at risk. When the net amount at risk exceeds $25 billion, the weight decreases to 0.06 percent.

Morbidity weight is calculated according to premium volume and claim reserves. Premiums are for two classes, medical insurance and disability, with subdivisions into individual and group coverage. The highest capital charge of 35 percent is for noncancellable individual disability policies, and the lowest of 7 percent for group major medical and hospital policies with benefits based on usual and customary charges. A capital charge equal to 5 percent of individual, group and credit claim reserves is also made.

An interest rate risk is created by the possibility that rising rates would encourage more policyholders to withdraw funds than expected. If such an action went beyond the level anticipated in the investment strategy of the insurer, it might result in liquidation of assets that were bringing more favorable returns than those that would replace them. Life insurance long-term contracts, many of them involving a savings element, if terminated early might prove costly for the insurer.

Termination of a number of single premium deferred annuities early would require the insurer to pay contract holders the agreed amount and produce an unusually large demand for cash. The company might be forced to sell assets, perhaps at a loss, if cash reserves were inadequate. A reduction in income and therefore in capital would result. Companies have to hold capital to avoid such a contingency.

An increase in interest rates, to summarize, reduces the market value of a large number of assets for most life insurance companies. This decline in asset value results in a decline in the company's surplus and requires holding capital to allow for this possibility.

Because of the interest rate increase risk, policies are divided into three risk categories based on the withdrawal provisions. Annuity reserves not subject to withdrawal at the policyholder's discretion are a low-risk product. Annuity reserves with a provision for a surrender charge of 5 percent or more make up the medium risk category. High risk policies carry a surrender charge of less than 5 percent. A 50 percent surcharge may be added if the company does not submit an unqualified actuarial opinion regarding adequacy of its reserves.

A final grouping for risks not included in other categories was made as NAIC officials attempted to identify other business risks common to all insurers and susceptible to objective classification. State guarantee fund exposures come under the business risk heading. In most states, insolvency funds have been set up to meet claims which bankrupt insurers could not pay. These are financed generally by assessing the necessary amounts against the state's solvent insurers. The individual company's market share determines the size of its assessment

Reserves for losses on real estate and mortgages are included in the business risk category. Premium stabilization reserves and a portion of the liability for dividends to participating policyholders also fall under this heading.

In case of simultaneous adverse events under different risk factors, a formula specified by the RBC Working Groups included a covariance adjustment to reduce the capital charge for each factor. This would prevent double counting of risks measured by more than one of the four factors when adding them together.

Property-Casualty Risk Factors

The property-casualty risk-based capital system has a different structure from that of the life-health system, although their goals are the same. Contractual promises are different in the two, and the triggering coverage varies. Life insurance claims are long-term and predictable in comparison with those in property-casualty lines, which have uncertain ultimate liability costs. When a claim is made on a life insurance policy, the beneficiary is paid the face amount of the policy with any outstanding loans subtracted. In contrast, the cost of settling property-liability claims is uncertain in timing and hard to predict in amount. The cost in third-party claims like product liability or medical malpractice may approach disastrous proportions. Thus while asset risk is a major consideration for life-health insurers, underwriting risk most concerns property-casualty firms. The risk factors used for property-casualty insurers' calculation of capital needs under RBC are:

- asset risk
- credit risk
- underwriting risk

Asset risk includes exposure to market declines, default and illiquidity. Changes in market value of bonds on asset valuation in balance sheets have been minimized in the past by the accounting convention of valuing bonds on an amortized basis. This practice reduced variability on financial statements but distorted the true economic position of the insurer. A change to requiring that bonds be reported at their market value is under consideration. If this change is made it will add to the importance of the capital charge required to support asset risk.

Requirements for common stock depend on whether the firms are affiliated. An affiliate's stock must equal the amount of risk-based capital that would be required of the affiliate under the RBC formula. Property-casualty insurers invest substantially in common stock, and in developing the asset risk component of the RBC formula there was controversy over the weight given to common stock. The 30 percent weight required for life-health insurers would have had a significant negative effect on common stock investments by property-casualty insurers. After comments and public hearings, the RBC property-casualty working group changed the factor to a 15 percent weight.

Accounts receivable from agents and reinsurers as well as other creditors are included in the credit risk category. Agents or managing general agents are often used by independent agency companies to bill policyholders for premiums and then forward the money collected to the insurer. There is a risk that agents might default on premiums due the insurer. Also if a reinsurer defaults on amounts due, that loss is included in credit risk. It was believed by the NAIC that the loss from reinsurers was substantially higher than that on receivables from agents.

Two areas affect the level of underwriting risk for property-casualty insurers, making it higher than that faced by life insurers. Price risk involves the higher variability in property-casualty premium price levels. Reserve risk refers to the possible understatement of loss and loss adjustment reserves. Both price risk and reserve risk vary by lines of insurance.

A pricing cycle characterized by large swings in insurance pricing and product availability is a well known phenomenon in the property-casualty market. This swing results from competition and interest rate changes.

Economic cycles affected competition in commercial lines over the last two decades, causing

property-casualty policy prices to drop to unprofitable levels. RBC capital requirements were established to cope with price wars through explicit charges based on premiums written and unearned premiums, varying by lines of insurance. Capital charges to cover reserve risk also vary by insurance lines.

Factors Combined

Industry and company-specific factors are combined in setting standards for capital required to support price risk. Varying by line of insurance, a standard factor of 70 percent to 130 percent is applied to all companies. Homeowners insurance is weighted at 75 percent and medical malpractice insurance at 130 percent.

The individual company's underwriting expense ratio less 100 percent is used as a constant to be added to the standard factor. The result is multiplied by the net figure for premiums written. A homeowner's insurer might develop an RBC requirement of 5 percent, reflecting a 30 percent underwriting expense ratio plus the 75 percent standard industry ratio minus 100. The 5 percent requirement would be multiplied by the net written premium figure for homeowners insurance in order to obtain the amount of capital needed to meet RBC requirements.

For a medical malpractice insurer with a 30 percent underwriting expense ratio, this figure would be added to the 130 percent standard industry ratio and with the 100 percent subtracted would give a capital requirement of 60 percent of net premiums written. The figure indicates the higher volatility in premiums and losses characterizing malpractice insurance in comparison with homeowners insurance.

Reserve Requirements

Reserve risk charges, also varying by line of insurance, are based on industry experience over the previous ten years. Homeowners, private passenger automobile and workers compensation insurance all carry a capital charge equal to 10 percent of net reserves. For commercial automobile and medical malpractice insurance, the charge is 15 percent. Commercial multiple peril insurance carries a 25 percent capital charge.

Sources for Data

A permanent task force has been set up to refine the RBC formulas and their instructions as needed during their implementation. The primary source of data for the RBC formulas is the NAIC Annual Statement, but additional data must be submitted by insurers for RBC information. RBC weights will be revised as necessary for more effective regulation.

Meantime the RBC formula is not to be used as a rating or ranking tool, according to the NAIC Working Group. Relative strengths of individual insurers are to be determined by qualitative assessments. These include quality of management, quantity and quality of business planning, valuation assumption for policy reserves, quality differences in real estate holdings, management practices in addressing problem mortgages, and type of capital structure as reflected in the use of surplus notes and financial reinsurance.

Effects of RBC

Long-term effects of risk-based capital requirements on the insurance business remain to be determined, but it is believed RBC will accelerate the "flight to quality," a trend to investing in higher quality assets and dependable reinsurance which became apparent among insurers in the early 1990s. Preliminary tests have indicated a larger than expected variation between ratings by agencies and the RBC ratings. Use of RBC might cause rating agencies to reexamine their solvency testing systems.

In spite of advice by the NAIC Working Group, it seems that RBC rankings will have an effect on prospective policyholders. Of two insurers, one with a surplus to RBC ratio of 80 and the other with a 120 ratio, a consumer interested in safety would rank the firm with the 120 ratio above the one with the 80 ratio. Even with two companies with ratios of 160 and 200, both far exceeding the risk-based capital requirement, a consumer would prefer the one with the higher ranking.

Backlash Possible

On the other hand, there might be a backlash if consumer groups attacked strongly capitalized firms for having too much capital, claiming that the excess amount of capital should go to the policyholders. There might be a call for a special dividend distribution to present and former policyholders. Such a result might lead to the development of an optimal risk-based capital concept, aiming for an amount high enough to meet the market demand for quality but not high enough to be attacked for being too selfish.

Another result of too high RBC ratios might be an inadequate return on equity, which would lead to more pressure for reducing capital. Also a challenge to RBC standards will be probable efforts by some firms to find loopholes for beating the system. There might be restructuring of relationships with affiliates or invention of new securities or insurance policies with lower capital requirements. Regulators will need to meet new changes in fine-tuning the new mechanics for insurance company solvency monitoring.

Covariance Adjustment

The square root calculation within the RBC formula is commonly referred to as the “covariance adjustment.” It is similar to the concept of the standard deviation from the mean. Rather than summing up the individual risk charges (R1 through R5), it is assumed that the individual risk charge categories are independent of one another. That is, the formula reflects diversification among these risk categories, thereby assuming that the aggregate risk is less than the sum of risk of the independent components. This is considered to be a reasonable assumption. For example, the risk of default on an insurance company’s invested assets (e.g., bonds, stocks) is independent of the performance of its loss reserves. Taking the square root of the sum of the squares for R1 through R5 increases the dependency of the larger risks in the calculation and decreases the significance of the smaller risk categories in the overall aggregate RBC requirement.

R0 is kept outside of the covariance adjustment because the risk for investments in insurance company subsidiaries is believed to be directly correlated with the combination of the risks specific to the reporting entity (i.e., the other risk charges R1 through R5). Therefore, the risk for investments in insurance company subsidiaries is additive to the aggregate of the investment and underwriting risks of the reporting entity for which RBC is being calculated.

R1, Asset Risk, Fixed Income contributes little to nothing to the overall RBC charge (industry-wide) because property/casualty insurers tend to invest in relatively safe, high credit quality bonds. Investments in bonds of unaffiliated entities represented over half the risk charge within the R1 category for the industry.
R3, Asset Risk, Credit contributes close to 1% to the overall RBC charge since provision for reinsurance is subtracted from the charge for reinsurance recoverables to avoid double counting the provision for reinsurance, which is included in reserves.

When evaluating RBC the following should be kept in mind;
Affiliate: general term that includes parents, subsidiaries and controlled companies.
Parent: An entity that directly or indirectly owns and controls the reporting entity
Subsidiary: An entity that is, directly or indirectly, owned and controlled by the reporting entity.
Control: hold proxies representing 10% or more or voting interests of the entity.

An investment affiliate is an affiliate that exists only to invest the funds of the parent company. An investment affiliate shall not include any broker-dealer or a money management fund managing funds other than those of the parent company.

The RBC factors for unaffiliated bond investments are determined based on cash flow modeling using historically adjusted default rates for each bond category.

The bond size factor measures the degree of diversification in the investment portfolio.

The risks associated with Off Balance Sheet Collateral and Schedule DL, Part 1, is that the reporting entity will lose money on the reinvestment of collateral posted by the borrower.

Risk Factors

The purpose of the Asset Concentration Factor is to reflect the increased risk associated with large concentrations in single issuers and to create an incentive for insurers to diversify their investment portfolios.

Credit risk reflects counterparty (the entity owing the insurance company money) credit exposure for receivables, including those for reinsurance. It contemplates the risk that the counterparty will default (or not pay in whole or in part) and the risk associated with estimating the amounts recorded for counterparty receivables.

The risk that comprises the largest portion of R3 industry-wide is the risk associated with uncollectible reinsurance (due both to reinsurers unable and unwilling to pay) comprised the largest portion of the R3 charge

A criticism by insurance carriers of the 10% RBC charge for reinsurance recoverables is that the charge doesn't differentiate between highly rated reinsurers or those recoverable that are backed by collateral.

The reinsurance RBC within R4 is equal to the other half of the reinsurance recoverable amount computed in R3 unless the reserve RBC is less than the RBC for reinsurance plus non-invested assets. If this is the case, the entire reinsurance RBC charge is included in R3 and the reinsurance RBC within R4 is zero. The reserve RBC limitation is put in place so the insurance company cannot diversify away a portion of its credit risk in the situation where the company has limited net reserves.

For the R4 Reserve RBC factor, nominal (undiscounted) reserves are used because consideration for investment income is made by applying the same set of discount factors to all property/casualty insurance companies (called the adjustment for investment income).

The use of a common method for considering investment income puts all property/casualty companies on an equivalent basis rather than having differences due to discount rates and payout patterns.

For the R4 Base loss and LAE reserve RBC by line of business, the industry reserve RBC percentage factor, by line of business, is a component in the Company RBC ratio calculation. The Industry reserve RBC factor is selected based on the average for all companies within the property/casualty insurance industry by line of business. For the R4 Base loss and LAE reserve RBC by line of business, the investment income are provided by the NAIC and the discount factors assume a 5% interest rate.

The calculation of the Adjustment for investment income for R5 (that is, the Written Premium R5 RBC charge), uses the same assumptions as used in the reserve RBC, R4, with the exception that discounted years differ since written premium is discounted as opposed to reserves.

An adjustment is made for loss-sensitive business in R4 and R5. The loss experience is shared in whole or in part with the insured. Therefore, the risk of adverse loss development is also shared with the insured. In addition, the insurer would need less surplus capital to survive this risk of adverse loss development than it does if none of the policies were written on a loss sensitive basis. This results in a discount to the company's RBC reserve charge to reflect this reduction in risk.

In the formula for Adjustment for Loss Concentration in R4, the interdependence between lines of business must be recognized. Since all adverse loss development may not always be a random fluctuation in losses, such as when the company increases loss reserves to improve its earnings position, adverse development across lines may not be totally independent. In the formula, the interdependence is recognized in the .7 number. It reduces the discount and would reduce it more if it was higher.

The reasons for the Excessive Premium Growth charge in R4 and R5 are:

- An insurance company does not have as much insight into new business as it does into risks that are currently on the books.
- The estimation of unpaid claims is more difficult for a growing company rather than a company in a steady state.

The Excessive Premium Growth charge in R4 and R5 is calculated on an insurance group basis. The group basis is used to neither punish nor reward individual legal entities that might be growing due to a realignment of business from one company within the group to another. In this case the growth is not attributed to new business but rather a transfer or risks from one company to the other.

Early Warning

The trend test is an early warning of companies that may be on a path to incur an RBC ratio below 200%, thereby triggering the company action level. Companies meeting the trend test criteria are required to comply with the company action level requirements despite having a RBC ratio in excess of 200%.

A company having a RBC ratio of between 200% and 300% and a combined ratio greater than 120% are subject to a trend test.

The combined ratio is calculated as the sum of:

- Loss and LAE ratio = calendar year net incurred loss and LAE / net earned premium from the Statement of Income
- Dividend ratio = policyholders dividends / net earned premium from the Statement of Income
- Expense ratio = (underwriting expenses incurred + aggregate write-ins for underwriting deductions from the Statement of Income)/ net written premiums from the U&IE.

There is no charge for interest rate risk. There is no RBC category for adverse effects on a company's statutory surplus that may be caused by a shift in market interest rates. There is no RBC charge nor is there a risk category for receivables arising from intercompany pooling arrangements.

Companies differ in their reserve estimation procedures, so some companies report less adequate reserves than others and show adverse development in subsequent years. In addition, companies differ in the types of risks they write. An impetus for the development of RBC standards and requirements was the hesitancy of many state insurance departments to take action against financially troubled companies,

The IRIS test array is also intended to assist state insurance departments in evaluation of the financial condition of insurance companies.

The two perspectives on financial health measured by the statutory financial statement are balance sheet strength and earnings potential.

The IRIS ratios focus on balance sheet strength and the earnings quality through measures that assess growth, profitability, liquidity, and reserve development/adequacy.

RBC is another tool that considers balance sheet strength and future earnings. Balance sheet risk is considered in the asset reserve risk charges (R0 through R4), while profitability of future writings is contemplated through the written premium risk charge (R5).

The RBC and IRIS ratios measure different things. RBC considers the risks and relative size of an insurance company in computing a required level of capital, whereas under IRIS, no adjustments are made to reflect what would be "usual" for an individual insurance company.

Unlike IRIS, there is a direct link to regulatory intervention based on a comparison of the RBC required capital to the company's adjusted capital.

RBC is not a fail-safe test for financial impairment. The majority of the factors used to determine the level of required capital are based on industry-wide factors developed by the NAIC. As a result, while a company's RBC ratios may not require any specific action by the company management or regulatory authorities, this doesn't mean that the company is safe from future impairment.

Improve Ratios

Companies can do the following to improve their RBC ratios:

- Enhance capital
    - Receive investment from a parent company (i.e., get cash infusion into surplus)

    - Use reinsurance
    - Structure financing
- Restructure asset portfolio (change investments)
    - Choose higher quality assets
    - Diversify portfolio These remedies do work, but implementing them can create problems: recognition of capital losses, lower yields may result, and there will be expenses
- Reorganize affiliates
- Restructure liabilities
    - Reduce excess liabilities
    - Reduce growth in surplus-intensive products
    - Use reinsurance or pooling
    - Write liabilities that use the properties of the covariance formula.

Quota-share reinsurance affects investment risk and liability risk and can be used as an RBC management tool. Reinsurance on a block of in-force insurance gives a reduction in required RBC. The ceding company is paid for profits embedded in business. Here are the advantages of reinsurance for RBC management:

- Policyholders will understand it and not perceive it as a cause for a run-on-the-bank
- Reinsurer pays the ceding company a ceding allowance, and an ongoing allowance for expenses, so the ceding company still enjoys economies of scale.

Example 1: Shin Plaster Accident and Health Insurance has capital of 10, C1 reinsurance credit is 0.50%, and its original RBC position is as follows:

Risk	**Amount**	**Factor**	**Category RBC**
C1	50	0.60%	0.30
C2 (premium)	30	25.00%	7.50
C2 (amount at risk)	35	5.00%	1.75
C3e	0	0.00%	0.00
C4	30	0.50%	0.20
		ACL RBC =	4.70
		RBC Ratio =	213%

ACL RBC = ½($\sqrt{(0.30+0.00)^2+(7.50+1.75)^2}+0.20$) = 4.70

RBC Ratio = $\frac{10}{4.70}$ = 213%

If Shin Plaster Ins contracts for 10% coinsurance, the new RBC is:

Risk	**Amount**	**Factor**	**Category RBC**
C1	50	0.59994%	0.29997
C2 (premium)	90% (30)=27.00	25.00%	6.80
C2 (amount at risk)	90% (35)=31.50	5.00%	1.60
C3	90% (0)= 0	0.00%	0.00
C4	30 (unchanged)	0.50%	0.20
		ACL RBC =	4.24
		RBC Ratio =	236%

The C4 amount is unchanged, because this is indemnity contract, not assumption. The C1 amount is 0.30 – 10%(0.60% - 0.50%)0.30 = 0.29997.

With 20% coinsurance the results are as follows:

Risk	Amount	Factor	Category RBC
C1	50	0.59994%	0.29994
C2 (premium)	80% (30)=27.00	25.00%	6.00
C2 (amount at risk)	80% (35)=31.50	5%	1.40
C3	80% (0)= 0	0.00%	0.00
C4	30 (unchanged)	0.50%	0.20
		ACL RBC =	3.78
		RBC Ratio =	265%

EXPANSION METHODS

State regulators and company managers expect net worth of insurers to grow as the company grows, even though legal minimum capital and surplus levels required for new insurance firms also apply to experienced insurers. When premium volume, management competency and operating complexity for the insurer are increasing, the relationship of premiums written to policyholders' surplus is still used to judge whether capital and surplus are adequate in an expanding company.

A smaller insurer might experience enlarged sales after undergoing surplus losses because of cyclical earning patterns, and thus show even larger surplus ratios than a long established firm. A company wishing to expand its market share with rapid sales expansion might find the existing surplus insufficient to support the needed growth. The company might then need to change its financial structure by increasing its equity bases, which can be accomplished in several ways.

Although property-liability insurers traditionally have relied on internally generated profits for growth, their retained earnings might be inadequate to sustain rapid increases in premium volume caused by such trends as increases in property value, higher liability coverages and upward adjustments in premium rates. A company in this situation might try to secure more capital from existing owners or from the capital markets.

The most direct way to raise external equity capital is with a new issue of common stock, but the potential for dilution in earnings and ownership might not be agreeable to stockholders. Also the cost might be high in comparison with other alternatives.

Many other financial instruments commonly used by noninsurance companies for raising capital also can be used by insurers. Debentures, preferred stock, and other fixed income instruments can be issued directly by an insurer. The funds obtained can be included in policyholders' surplus with an explanatory footnote.

Aid From Parent Company

A holding company parent of an insurer can issue bonds and pass the proceeds on to the insurer with the purchase of more of its common stock. Public financial markets might be receptive to the idea of providing capital to an insurer in this way. Tax code changes have encouraged rapid expansion of premium volume by property-liability insurance company subsidiaries that can operate at a tax loss and provide their parent industrial company with a tax shelter.

Many factors could influence the exact methods used by a company for capital enhancement, but management presumably tries minimizing the weighted average cost of capital to the corporation while at the same time providing the capital infusion needed to meet growth aims. It should not, however, be assumed because a parent corporation is able to supply funds to a subsidiary insurance company, that this is a legal obligation. The parent company is not required to rescue a financially endangered subsidiary, although such events may occur frequently.

EXAMINATION BY DEPTS. OF INSURANCE

Insurance commissioners of individual states are required or permitted by law to perform periodic examinations of the finances and conduct of all insurance companies that are authorized to operate in the state. Usually the requirement is for examination of all domestic insurers at least once every three to five years. A state examination also can be ordered whenever regulators find it expedient. Foreign and alien insurers also are examined periodically in conformance with NAIC zone examinations.

Examination Purposes

Financial examinations by state insurance departments are designed to make it possible to identify as early as possible insurers who may be experiencing financial difficulties or following improper or unlawful procedures. The examinations also have the purpose of confirming that companies subject to state regulation are operating and reporting according to the uniform accounting instructions from NAIC for completion of the annual statement.

A report on the result of an examination is prepared by insurance department examiners. It is required in some states that this report or a summary of it be read at the first meeting of the board of directors of the insurer after receipt of the report. A copy of the report also must be furnished to each director of the firm in order to notify board members including outside directors about the financial condition and activities of the insurer. Thus the company is helped to protect interests of policyholders and stockholders at the same time regulators are kept informed.

Procedures for Examination

Examiners from the state insurance regulatory agency, usually civil service employees, conduct state financial examinations for insurers. The state usually bills the insurance company for the examiner's salary plus an added factor to cover insurance department overhead and employee benefit costs. The insurer being examined furnishes facilities and supplies for the examination, which is usually done in insurance companies' home and branch offices. Examinations for large property-liability insurers may last as long as a year.

Information is often requested from an insurance company scheduled for examination before the examiners' visit. Such information might include reports from the company's independent public accountants, working papers from internal audits or other management information. Examiners can review this material before visiting the company so as to focus on potential problems and reduce the time and cost of the examination procedure. Close cooperation between insurance company employees and examiners is essential for saving time and expenses.

Examination Revisions

With the aim of discouraging duplication of previous years' reports and encouraging disclosure of current company difficulties or unlawful and improper activities, regulatory procedures have been restructured in recent years and the format of the report on examination has been changed. There is increased reliance on independent audits of insurance company financial statements. Every insurer required to file an annual statement must have an annual audit by an independent certified public accountant satisfactory to the commissioner of insurance and must submit an audited financial report as a supplement to the annual statement.

There has been a large degree of overlap in examinations performed by inside auditors, independent public accountants, state agencies in addition to the insurance commission, and the Internal Revenue Service. Insurance regulators have reevaluated procedures and purposes of field examinations of insurance companies and the resulting reports.

The practice of filing annual audit reports prepared by independent certified public accountants allows insurance departments to spend less time on financial verification in order to target efforts on aspects of operations by the company that have the greatest effect on policyholders' surplus. Still, field examinations of all insurers doing business in a state are needed to examine market conduct and help determine insurers' financial status. An Enron or Madoff doppelganger in the insurance industry would benefit no one.

DIAGNOSTIC TESTS DEVELOPED

A set of financial relationship tests developed by the NAIC evolved as diagnostic tools for evaluating insurance company strength. More than two dozen diagnostic tests were first suggested. This number was reduced through the years because of insufficient staff in many insurance regulatory departments and because there was disagreement about the significance of some relationships being tested.

The diagnostic tests, first called solidity or solvency tests, did not provide a direct measure of solvency. Collectively they became known as an early warning system. They developed into two sets of separate but similar tests, one for property-liability insurance companies and one for life-health insurance companies. Since 1975 these have been called the Insurance Regulatory Information System or IRIS tests.

IRIS Purposes

Early identification of companies that might need close surveillance by insurance regulators is the primary purpose of the IRIS tests. They signal a need for more thoroughly inquiring into the status and operations of the company. Also they might help suggest what specific areas are in need of immediate attention. Priorities for scheduling special on-site examinations can be based on results. The tests are only supplements for traditional forms of financial surveillance and not a substitute for field examinations or timely audits of annual statements.

Members are advised by the NAIC not to use IRIS test results as the only basis for key decisions such as determining whether to issue or renew a company's certificate of authority to conduct insurance operations in the state. The NAIC also advises that test results should be interpreted by experienced examiners familiar with the company's annual statements. In spite of this advice, however, a survey of state insurance departments found 70 percent of respondents using the tests to determine whether companies should be authorized to write insurance.

This practice, it has been argued by critics of the present system of solvency surveillance, implies that state insurance departments are failing to perform traditional surveillance properly. Regulatory tests simply manipulate data readily available in annual statements filed with each state and do not furnish additional raw data. They do not change the ability of the regulator to use administrative powers, but add a layer of regulation on an already deficient solvency maintenance system. The tests are, however, helpful in directing the attention of examiners to specific areas of inquiry and furnish a quick indication of which companies need more detailed examination.

How the System Works

The NAIC requests or requires each insurance company to file its annual statement with the NAIC Support and Services Offices for processing the financial data and performing the regulatory tests. Exemptions from the filing requirement are given by state insurance departments to some insurers with operations that are geographically limited, such as single-state companies or county mutuals.

A fee is paid by each filing company to the NAIC to cover costs of the IRIS program. Fees are determined by premium volume. Results are reported to the insurance departments of states where the tested insurers operate.

Establishing test values which will be meaningful is the key to the IRIS system, as the definition of normal and exceptional values is the basis for discriminating between insurers in need of immediate scrutiny and those needing only normal supervision.

When the value calculated for data from an insurer falls outside the usual range for that statistic, an unsatisfactory test result, that is, one indicating "exceptional value," is obtained. The usual range is defined as including results expected from the majority of companies during a normal year. Greater numbers of companies thus can be expected to fall outside the usual range in years of unusual economic conditions. Four or more test results outside the usual range result in the classification of an insurer as a priority company. For a company with less than four but with some statistical results outside the usual range, the tests are considered as identifying specific areas that should be investigated further when the normal examination process is under way

Two Phases Set Up

Two phases have been included in the IRIS system since 1978. The initial phase is the statistical one in which financial ratios and related data for all companies and groups in the system are developed. These results are fed into the second or analytical phase for experienced financial examiners to review. All companies that required immediate attention of regulators in the previous year and all that received four or more test scores outside the usual range of values are given special attention and are classified on the basis of test results and other information as first priority, second priority and third priority. An insurer not classified in these three groups is in the category of no priority and is reviewed on a basis of the state's normal priority.

Examiners issue commentaries explaining the priority classification and send them to the insurance department in the state where the company is domiciled as well as to the company being examined. Copies are also sent to all other state insurance departments at least two weeks later. The commentaries explain the examiners' reasoning if companies with four or more test results outside the usual range are not identified in the IRIS analytical phase as due for immediate or targeted attention from regulators.

Test Classification

IRIS tests are classified into four groups made up the examinations for property-liability insurers as follows:

1. Overall Tests: Premium-to-surplus ratio, change in writings, surplus aid-to-surplus ratio.
2. Profitability Tests: Two-year overall operating ratio, investment yield, change in surplus
3. Liquidity Tests: Liabilities-to-liquid assets ratio, agents' balance-to-surplus ratio.
4. Reserve Tests: One-year reserve development to surplus ratio, two-year reserve development to surplus ratio, estimated current reserve deficiency to surplus ratio

Means and medians were calculated for all company ratio results. For all ratios except investment yield, ratio results equal to -99.0 and 999 were excluded. For the investment yield ratio the minimum value was 0 and there was no maximum.

Life-Health Firm Results

A summary of IRIS results for life and health insurers showing mean and median figures included the following tests for which all company ratio results were included:

- Net change in capital and surplus, gross change in capital and surplus
- net gain to total income
- adequacy of investment income
- nonadmitted to admitted assets
- real estate to capital and surplus
- investments in affiliates to capital
- surplus relief
- change in premium
- change in reserving ratio

For change in product mix and change in asset mix on life and health IRIS tests, ratio results equal to -99.0 and 999 were excluded. Ratio results are published by the NAIC Regulatory Information System.

RECORD OF SOLVENCY

As discussed above, management tools provided by actuarial science and modern financial techniques give insurance firms some guidance in making decisions involving net worth levels and alternative capital structures, but these methods have limitations.

To be able to make a precise calculation of the best capital and surplus levels for both new and established insurance companies would be of great benefit to all concerned, but that goal has not yet been reached. Neither government regulation nor the best quality management can guarantee that an insurance operation will be spared financial setbacks or even total disaster. Because of solvency guarantees by industry members and efforts of regulators, in most cases of insurance firm failure significant economic loss to policyholders has been prevented. This result has not been accomplished, however, without delays, uncertainty and worry with regard to the financial strength of the industry.

Economic Effects

From 2011 through 2013, 28 property and casualty companies went into liquidation. In 2011 and 2012 the guaranty funds recovered assets from the insolvent companies' estates more than $475 million and $456 million, respectively. To support the solvency guaranty system, 2014 estate guaranty fund distributions totaled more than $494 million.

Number of Insolvencies

Data from the National Conference of Insurance Guaranty Funds show that in 2012 state guaranty funds assessed insurers $311.7 million to pay for insolvencies, an increase of 10.5 percent over the 2011 amount and more than triple 1996 when assessments totaled $95 million. Assessments may fund earlier insolvency expenditures as well as current year costs.

The regulation of insurance company solvency is a function of the state and will continue to be so under the new financial services reform law. State regulators monitor the financial health of companies licensed to do business in their state. With the passage of financial services reform which allows insurance companies and banks to engage in a broad range of financial services and the globalization of insurance, there has been renewed interest on the part of some segments of the insurance industry in federal regulation.

Insolvency Factors

Ineptness and dishonesty were among the factors frequently identified in the management of insurance companies headed for failure. Repeated instances of excessive commissions or management allowances were reported, along with improper underwriting, reserving and claims handling. The financial condition of reinsurers was a factor. There were also inadequate expense controls, questionable investments and abnormal transactions with agents, brokers or reinsurers.

A General Accounting Office (GAO) report on insolvencies noted that insolvencies generally follow the property/casualty insurance company profitability cycle. The GAO report also pointed out that the profile of insolvent companies has changed over the years. In the late 1960s and 1970s, insolvencies occurred mainly among small auto insurers with a limited geographical span. Since that period, the characteristics of insolvent insurers have become more diverse and have included some large multi-state companies. The incidence of large company insolvencies has prompted concern over the ability of the guaranty fund system to pay all covered claims, the report said.

The insolvencies of four large insurers and the fallout from the savings and loan crisis prompted a congressional study which culminated in the oft-cited "Failed Promises: Insurance Company Insolvencies." Known as the Dingell Report; named after the chairman of the committee that investigated the insolvency cases, Rep. John Dingell (D-MI), the study looked at the insolvencies of Mission Insurance Co., and Transit Casualty Co., both with headquarters in California although Transit Casualty was chartered in Missouri, Integrity Insurance Co. of New Jersey and Anglo-American Insurance Co. of Texas and found what it called "disturbing" parallels between the mismanagement and fraudulent activity that led to the four insurer insolvencies and the factors that precipitated the savings and loan crisis. Specifically, it attributed the insurance company failures to rapid expansion, unsupervised delegation of authority, extensive and complex reinsurance arrangements, underpricing, reserve problems, false reports, reckless management, incompetence, fraud, greed, and self-dealing.

COMPARISON- BANK & INSURANCE REGULATORY FRAMEWORKS

This section points out advances in the insurance and banking regulators' understanding of each other's approaches for identifying and supervising financially weakened institutions and enhances coordination between the state insurance departments and the FRS, consistent with the GLB Act mandates for supervision of FHCs. In addition, many other efforts between the FRS and the state insurance supervisors, including the implementation of Memoranda of Understanding now in place between most state insurance departments and the Federal Reserve Board for sharing appropriate confidential, supervisory information and consumer complaints, as envisioned in the GLB Act, have fostered effective coordination of supervisory activities. These accomplishments represent significant milestones in the achievement of effective cooperation between banking and insurance regulators.

Frameworks for Supervising Banks and Insurance

The primary objective of insurance regulation is to correct market failures that would otherwise cause insurers to incur an excessive risk of insolvency or engage in market abuses that hurt consumers. Significant state insurance department regulatory resources are employed to monitor market behaviors, compliance, and solvency. Each state, the District of Columbia, and the U.S. territories are responsible for regulating the insurance business within their own jurisdictions. Each state maintains its own insurance department, which operates under the supervision of a commissioner, director, or superintendent who is either appointed or elected. Some states have combined the regulation of insurance, banking, and securities, activities under one department or office.

NAIC Insurance Supervision

The NAIC provides its members with a forum for discussing common interests and for working cooperatively on regulatory matters that transcend the boundaries of their own jurisdictions. The purpose of the NAIC is to facilitate communication and interaction among insurance regulators, to enhance insurance regulation, and establish national standards where appropriate.

NAIC Objective

The objective of the NAIC is to serve the public interest by assisting state insurance supervisory officials, individually and collectively, in achieving the following fundamental insurance regulatory objectives:
1) Protect the public interest, promote competitive markets and facilitate the fair and equitable treatment of insurance consumers;
2) Promote the reliability, solvency and financial solidity of insurance institutions; and
3) Support and improve state regulation of insurance.

The primary means for NAIC members to be actively involved in the association is through the NAIC committee system. Each commissioner serves, or delegates to state insurance department staff, the responsibility to serve on various NAIC committees, task forces and working groups. The NAIC is committed to conducting its business openly, subject to the discretion of the chairpersons of committees, subcommittees, tasks forces, working groups and subgroups, who may determine those situations in which public discussions would not be appropriate.

Financial Regulation Standards

Insurance companies are chartered by individual jurisdictions and receive a certificate of authority (that is, a license) to conduct business from each jurisdiction in which the company desires to

underwrite insurance. This has been the case since 1792, when chartered insurance companies were first required by the states to limit company activities and investments, and to file financial statements. The states issue a number of different insurance company license types, including life and health, and property and casualty licenses. The states also issue insurance producer license types, including broker, independent agents, managing general agents, and general agent licenses.

Reinsurer Regulation

Reinsurers may either be authorized or licensed to write reinsurance business depending on the states laws and regulations. Under state insurance law, provided the owner meets certain criteria through the regulatory approval process, there are very few outright restrictions on a licensed insurer's ownership by, or affiliation with, other financial or non-financial companies. An exception is the general prohibition on foreign government ownership of an insurer. State insurance law does not provide for consolidated supervision of the insurance holding company or the parent holding company. However, an insurance company is subject to state restrictions and disclosures regarding inter-affiliate relationships, and change in ownership is subject to state insurance department approval. Under state law, a licensed insurance company is generally authorized to own subsidiaries that conduct insurance or insurance-related business activities, including real estate management and real estate development. Investments in higher risk activities are limited by state statutes and indirectly through statutory RBC minimum standards.

Banking Regulation Framework

The FRS is the primary federal banking regulator for state member banks. It also has supervisory authority for all U.S. bank holding companies. In the U.S., commercial banks are either federally chartered by the Comptroller of the Currency (OCC) as national banks, or are chartered by a state. National banks are supervised by the OCC and are members of the FRS. State-chartered banks that are members of the FRS are referred to as state member banks, and are supervised by both the applicable state banking department(s) and the FRS. A state bank that does not choose to become a member of the FRS is referred to as a state nonmember bank and is supervised by both the applicable state banking department(s) and the FDIC. The OCC, FRS and FDIC are the primary federal bank supervisors for national banks, state member banks and state nonmember banks, respectively. A "dual banking system" exists in the U.S. whereby state-chartered banks have both a federal bank and a state bank regulator(s). A state-chartered bank may be subject to supervision in all states in which it operates. Therefore, the FRS actively coordinates its supervision of state member banks with the applicable state banking department(s).

Tools for Identifying Financially Weakened Companies

The NAIC reporting requirements have evolved considerably since its annual statement introduction in 1879. All states require an insurer to use the NAIC annual and quarterly statement reporting forms to satisfy their statutory financial statement filing requirements, except that states may exempt an insurer from this requirement, as appropriate. The complete annual statement filing currently includes a balance sheet, income statement, statement of cash flow, notes to financial statements, general interrogatories, and a significant number of supporting details in various exhibits, schedules and supplemental filings. General interrogatories are limited-scope questions regarding an insurer and its financial position and operations.

Insurance and Financial Reporting

Some of the more important exhibits and schedules provide information about: investment income and realized gains and losses; nonadmitted assets; Asset Valuation Reserve and Interest Maintenance Reserve; premiums and losses; expenses; long-term investments in bonds, preferred stock, common stock, real estate, mortgage loans, and other investments; derivatives; short-term investments; cash and cash equivalents; reinsurance; and transactions with affiliates. Supplemental filings are also required of most insurers, such as the actuarial opinion, the management's discussion and analysis, the annual audited financial report, and the RBC report. Other supplemental filings include specialty information such as the Medicare supplement report, the credit insurance report, and the long-term care report. Since December 31, 2003, insurers are also required to report affiliations with a BHC, bank, thrift or securities firm; to provide the names of each such affiliate; and to identify the relevant federal regulators of each insurer's financial institution affiliate. In addition to the annual statements, most insurers also are required to file the NAIC quarterly statement reporting form that contains key information on assets and liabilities; income and surplus; changes in investments; reinsurance; premiums written; losses and reserves.

Insurance company statutory financial reports are based on statutory accounting principles (SAP), which are designed to address the concerns of regulators. SAP stresses measurement of the ability to pay claims of insurers in the future, while generally accepted accounting principles (GAAP) stresses measurement of earnings of a business from period to period, and the matching of revenues and expenses for the measurement period (source: Preamble of the NAIC Accounting Practices and Procedures Manual). Conservatism serves as a major principle in SAP. For example, some assets are not allowed to be included in an insurer's surplus; these are referred to as nonadmitted assets. Another example of conservatism is the prohibition against discounting reserves, and the fact that specific tables approved by regulators are required to establish reserves for various life insurance products. Under GAAP, the experience expected by each insurance company, with provision for the risk of adverse deviation, is used to determine the reserves it will establish for its policies.

Solvency Screening and Financial Analysis Systems

The fundamental objective of insurance company solvency monitoring is to ensure that companies meet regulatory standards and to alert regulators if actions need to be taken to protect policyholders. To accomplish this task, the state insurance regulators conduct financial analysis using regulatory financial reports, financial tools and other sources of information to detect problems that may jeopardize a company's long-term viability. These sources include SEC filings, corporate reports, external, independent certified public accountant (CPA) attestation reports, financial examination and market conduct reports, rate and policy form filings, consumer complaints, independent rating agency reports, correspondence from agents and insurers, and business media.

State insurance departments generally prioritize the review of their domiciliary companies based on a system of financial ratios and other screening tools, including those maintained by the NAIC. The NAIC has created a network of financial information systems and tools, such as the Financial Analysis Solvency Tools (FAST) System that includes the Insurance Regulatory Information System (IRIS), the Scoring System, and the Insurer Profiles System that are discussed below. The NAIC makes the information systems and tools available to state insurance regulators over the NAIC's Internet-State Interface Technology Enhancement (I-SITE). I-SITE provides a common user interface for more than 50 applications that are used to produce a wide variety of standard and custom reports. To be accredited, a state is required to conduct quarterly financial analysis on their domiciliary multi-state insurers. Most states conduct quarterly financial analysis on their single-state insurers as well. Typically, insurers with anomalous results, or those that have been previously identified for attention

are subject to additional analysis.

The domiciliary state is relied upon as the primary solvency regulator. When there are concerns about the financial condition of an insurer, communications between the domiciliary state and the other states in which the company is licensed are increased. However, any state in which a company is licensed to conduct insurance business may perform its own monitoring, financial examinations, and may take regulatory action, as appropriate.

FAST System

The FAST System is a collection of analytical tools designed to provide state insurance regulators with an integrated approach to screening and analyzing the financial condition of insurance companies. The following are three key tools within the FAST System:

1) Insurance Regulatory Information System (IRIS)
IRIS has served as a baseline solvency screening system for the NAIC and state regulators since the mid-1970s. IRIS is designed to help regulators prioritize insurers for detailed financial analysis. The "statistical phase" of IRIS involves calculating a series of financial ratios for each insurer based on its annual statement data. The IRIS ratio results are available to the public. Because the ratios by themselves are not indicative of adverse financial condition, an experienced team of state insurance examiners and analysts (Analyst Team) reviews the IRIS ratio results and various other financial information in the "analytical phase" of IRIS, called the Analyst Team System (ATS). For the ATS, the Analyst Team meets annually at the NAIC Executive Headquarters to identify insurers that appear to require immediate regulatory attention in order to assist state insurance regulators in prioritizing their annual financial analysis reviews of insurers. The Analyst Team reviews a computer-selected priority listing of insurers that may be experiencing weak or declining financial results. It then validates the listing based on further analysis of those companies, and provides a brief synopsis of its findings in a document that can be accessed only by state insurance regulators and authorized NAIC staff.

2) Scoring System
The Scoring System is based on several financial ratios and is similar in concept to IRIS ratios. The Scoring System, however, includes a broader range of financial ratios and assigns a score to each ratio based on the level of solvency concern each result generates. The ratio results and scores are available only to state insurance regulators and authorized NAIC staff. The Scoring System is evaluated and updated, as appropriate, by the Financial Analysis Research and Development Working Group on an annual basis.

3) Insurer Profiles System
The Insurer Profiles System produces quarterly and annual profiles reports on property and casualty, life and health insurers. These profiles provide either a quarterly or annual five-year summary of a company's financial position. The Insurer Profile reports provide not only a snapshot of the company's financial statement, but also include analytical tools such as financial ratios and industry aggregate information that can be used in an analyst's review of the company. Insurer Profile reports can assist state insurance department analysts in identifying unusual fluctuations, trends or changes in the mix of an insurer's assets, liabilities, capital and surplus and operations.

Peer Review Process

As a check and balance on the solvency screening efforts conducted by the states, a peer review

process was created. The objective of the NAIC's peer review process conducted by the FAWG is to monitor whether domiciliary regulators are taking appropriate and effective supervisory action with respect to nationally significant insurers that are in financial difficulty. The FAWG is made up of commissioner appointed members from sixteen states.

On a quarterly basis, the NAIC's Financial Regulatory Services Division staff identifies nationally significant insurers for review using analytical criteria. Division financial analysts perform preliminary reviews of identified insurers and then select insurers that warrant more in-depth reviews. For those insurers, the FAWG will review the analysts' reports and then query the domiciliary state on various aspects of each insurer's financial condition and any regulatory actions being taken. If the FAWG determines that the domiciliary regulator is taking appropriate actions, then the FAWG may close the file or continue to monitor the company. If the FAWG determines that further measures are desirable, it will recommend the appropriate corrective action to the domiciliary state. If the domiciliary regulators fail to follow the FAWG's recommendation, the FAWG will alert other affected states accordingly and coordinate their supervisory response.

State Insurance Department Financial Examination Process

The purpose of a financial condition examination is to: 1) detect insurers with potential weaknesses; 2) determine compliance with state statutes and regulations; and 3) compile information needed for timely, appropriate regulatory action. On-site financial condition examinations of insurers are either full-scope or limited-scope examinations. The full-scope examination is considered a comprehensive examination with an overall objective to report on the company's financial position and affairs. A limited-scope examination, often referred to as a target examination, is conducted to review specific financial accounts and or specific areas of the company's operations.

State laws and regulations, as guided by the Accreditation Program, require the states to conduct a full-scope examination for each multi-state domestic company at least once every five years. Individual state statutes may require financial condition examinations more often, and several states impose a three-year requirement. Limited-scope examinations do not satisfy the NAIC Accreditation Standards to conduct financial condition examinations at least once every five years. However, failing to conduct limited-scope examinations for financial weakened companies may impact the results of the accreditation review. Frequently, full-scope examinations will be conducted as so called "zone examinations." A zone examination is a process to reduce the number of financial condition examinations of multi-state licensed insurers. The concept of zone examinations developed in response to the fact that states are entitled to conduct financial condition examinations on insurers that are licensed in their state regardless if they are domiciled elsewhere. As this ability could result in multiple examinations of the same company, the process of inviting representatives from other zones to participate evolved in order to reduce regulatory burden and increase efficiency.

Financial Condition Examinations

On-site financial condition examinations investigate a company's accounting methods and procedures, financial statement presentation, and validate what is presented in the annual financial statement assets, liabilities, capital and surplus line items, to ascertain whether the company is in good financial standing. The main thrust of the examination is to verify the company's solvency and determine whether the company has complied with state laws and regulations. In general, financial condition examinations shall at least encompass a review of all of the following matters:
1) Company history;
2) Management and control;

3) Corporate records;
4) Fidelity bonds and other insurance;
5) Officers', employees', and agents' welfare and pension plans;
6) Territory and plan of operation;
7) Growth of company;
8) Business in force by states;
9) Mortality and loss experience;
10) Reinsurance;
11) Accounts and records; and
12) Financial statements.

Examinations are conducted using a risk-based approach, whereby those areas identified as more likely to be prone to material financial reporting error are accorded greater attention during both the examination planning phase and the on-site examination. The state financial condition examination process also places emphasis on the quality of the company's internal control structure. This requires the state examiners to assess the internal control environment based on interviews with company management and personnel and other control testing procedures. On occasion, state insurance departments will engage outside experts to evaluate and test the effectiveness of internal controls (e.g., information system controls). The financial condition examination process also considers the work performed by external, independent CPAs as well as the work of internal auditors.

Regulatory Capital Framework for Insurance Companies

An insurer's capital and surplus provides a cushion against unexpected increases in liabilities and decreases in the value of assets, and are intended to absorb the costs of a rehabilitation or liquidation with minimal losses to policyholders and claimants. States require insurers to have a certain amount of capital and surplus to establish and continue operations. A state insurance department is authorized to take over, or "seize" an insurance company if the state can show to the applicable state court that the insurer will be unable to meet its obligations to policyholders.

Fixed minimum capital and surplus standards for licensing and operating an insurance company typically range in the area of $2 million to $5 million for a multi-line life and health or property and casualty insurer. Because of the limitations of fixed minimum capital standards, the NAIC adopted the Risk-based Capital (RBC) for Insurers Model Act. To be accredited, a state is required to adopt a substantially similar version of the Model Act, which contains separate formulas for life and health insurers and property and casualty insurers, and prescribes regulatory action to be taken if an insurer's Total Adjusted Capital declines below certain thresholds. The stated objectives of the NAIC RBC requirements are to provide a standard of capital adequacy that: 1) is related to risk; 2) raises the safety net for insurers; 3) is uniform among states; and 4) provides authority for regulatory action when actual capital falls below the standard. The model act specifies four levels of company and regulatory action, with more severe action required at lower levels.

The NAIC's life and health RBC formula encompasses six major categories of risk:
1) Asset risk - affiliates;
2) Asset risk - common stock;
3) Asset risk - other;
4) Insurance or pricing risk;
5) Interest-rate risk and health credit risk and
6) Business risk.

The risks addressed by the NAIC's property and casualty formula include:
1) Asset risk - subsidiary insurance companies;
2) Asset risk - fixed income;
3) Asset risk - equity;
4) Asset risk - credit;
5) Underwriting risk - reserves; and
6) Underwriting risk - net written premium.

Databases and Information Systems

The NAIC maintains a number of databases that state insurance regulators and NAIC staff use for financial analysis and other regulatory functions, including:
1) The Financial Data Repository (FDR);
2) The State Producer Licensing Database (SPLD);
3) Valuation of Securities (VOS);
4) Regulatory Information Retrieval System (RIRS); and
5) Special Activities Database (SAD).

The NAIC financial databases serve as the core resource of the solvency surveillance and other analysis activities of state insurance regulators and the NAIC. The FDR database contains the most recent 10 years of annual and quarterly financial statement information for the approximately 5,200 U.S. insurance companies. This database provides source data for reports on individual companies and for analytical tools, such as the FAST System. The VOS database contains credit quality designations and fair values for insurers' securities that are not rated and monitored by a Nationally Recognized Statistical Rating Organization (NRSRO). This database, combined with NRSRO ratings data, allows regulators to assess the relative credit risk of the securities owned and reported by insurers.

The SPLD database contains information on insurance companies, such as consumer complaints, and on nearly 3.5 million individual producers, including producer licensing and appointment information. RIRS database contains formally adjudicated regulatory actions taken by participating state insurance departments against insurance producers, companies and other entities engaged in the business of insurance. The SAD is a confidential database that contains information related to suspicious market activities and legal actions involving entities engaged in the business of insurance. The RIRS and SAD databases enhance state insurance regulators' ability to share information among state insurance departments on individuals or companies suspected of illegal or questionable activities and are tools to assist in the prevention of movement of these activities into new areas. State insurance regulators and NAIC staff also use an electronic mail system on the NAIC's computer network to communicate and coordinate supervisory developments with respect to examinations, regulatory actions, financially weakened companies, and a variety of other matters.

Banking (State Member Banks and BHCs)

All banks, including state member banks, are required to file quarterly regulatory reports known as FFIEC Call Reports consisting of consolidated balance sheets, income statements, RBC data and selected supplementary financial information. All BHCs are also required to file periodic regulatory reports.

Financial Reporting

Those BHCs with consolidated assets over $150 million, and BHCs below that threshold that are categorized by the FRS as "complex," are required to file consolidated balance sheets, income statements and RBC data, as well as parent company financial statements, on a quarterly basis. BHCs under $150 million that are non-complex BHCs are required to file parent company only financial statements semi-annually, but are not required to file fully consolidated financial reports. Additionally, all BHC are required to file periodic regulatory reports detailing certain intercompany transactions and balances between a bank and its nonbank affiliates; balance sheet and income statement data for certain of its domestic, non-functionally regulated nonbank subsidiaries and certain foreign domiciled bank and non-bank subsidiaries; and reports of new activities commenced. There are a number of other regulatory reports that must be filed by state member banks and BHCS. A complete listing of bank and BHC report forms and instructions may be found on the Federal Reserve Board and the FFIEC websites (http://www.federalreserve.gov/ and http://www.ffiec.gov/, respectively).

Surveillance and Monitoring

The FRS off-site surveillance program is designed to monitor the financial condition and performance of individual state member banks and BHCs on a quarterly basis to facilitate identifying deterioration in the condition of companies between on-site examinations and inspections. Monitoring is accomplished, in part, through the use of automated screening systems and econometric models. These tools rely significantly on data reported on standardized regulatory reports and from the findings of on-site examinations. The surveillance program takes into consideration a number of aspects of banking performance, including capital adequacy, asset growth, loan quality and loan concentrations, liquidity, and capital markets activities. These surveillance results, produced by Federal Reserve Board staff, are distributed to the Federal Reserve Banks for further review, analysis, and follow-up. FRS Surveillance screens incorporate the results of two econometric models, together known as the System for Estimating Examination Ratings (SEER). The SEER system developed by a FRS Surveillance Task Force was formerly known as the Financial Institutions Monitoring System (FIMS). The SEER models have been updated since they were first implemented. The SEER rating model estimates a bank's composite CAMELS rating based upon Call Report data and examination rating information. The surveillance screening results are strictly confidential.

To support off-site monitoring of bank performance and condition and on-site examinations, the FFIEC produces a quarterly Uniform Bank Performance Report (UBPR) for each commercial bank and FDIC-insured savings bank. These reports display current and historic balance sheet and income statement items, along with key performance ratios and peer group statistics. The FRS produces a similar report, the Bank Holding Company Performance Report (BHCPR), for BHCs over $150 million in consolidated assets. These UBPR and BHCPR reports are publicly available.

Bank Examinations and BHC Inspections

The FRS's safety and soundness examinations of state member banks and inspections of BHCs are focused on determining the financial condition and performance of an institution, and on evaluating management, internal controls and the risk management structure. The Federal Reserve is required to conduct a full-scope, on-site examination of every insured state member bank at least once during each 12-month period, with the exception that certain small institutions may be examined once during each 18-month period. The frequency of BHC inspections is determined by the size, condition, and complexity of the BHC.

Examiners assign a composite rating to a banking institution reflecting an assessment of the overall condition of the institution, including an assessment of relevant processes and risk management techniques. The rating system used for banks is known as CAMELS, an acronym for the components it evaluates: capital, asset quality, management, earnings, liquidity and sensitivity to market risk. Until January 1, 2005, BHCs were assigned a supervisory rating using a rating system known as BOPEC, which included evaluations of: bank subsidiaries ("B"); "other" (nonbank subsidiaries) ("O"); the parent company ("P"); consolidated BHC earnings ("E"); and consolidated BHC capital adequacy ("C"). A new BHC rating system has been adopted effective January 1, 2005 (SR letter 04-18, *Bank Holding Company Rating System,* may be accessed on the Federal Reserve Board's public website). Under this system, a BHC is assigned an RFI/C(D) rating rather than a BOPEC rating. RFI/C(D) is an acronym for the components of: risk management ("R"); financial condition ("F"); potential adverse impact ("I") of nonbank affiliates on the affiliated depository institution(s); a composite BHC rating ("C") based on an evaluation and rating of the BHC's managerial and financial condition and an assessment of future potential risk to its subsidiary depository institution(s); and a rating for the depository institution(s) ("D") that will generally mirror the primary regulator's assessment of the subsidiary depository institution(s). Bank and BHC supervisory ratings and the reports of bank examinations and BHC inspections are strictly confidential.

FHCs are generally supervised similarly to any other BHC with a focus on understanding and assessing the quality of centralized risk management and control processes for key business lines, as well as understanding the intra-group exposures and risk concentrations across all business lines. To supervise a diversified BHC, the FRS relies to the extent possible on, and coordinates with, the appropriate functional regulators. Financial safety and soundness examinations and inspections generally include a review of compliance with a wide range of laws and regulations. In addition, the FRS also conducts consumer compliance examinations of state member banks to determine adherence with applicable consumer protection laws and regulations and assigns a compliance examination rating. Depository institutions, including state member banks supervised by the FRS, are also evaluated for their compliance with the CRA and assigned a separate CRA rating. An institution's CRA rating is publicly available.

Approaches for Supervising a Financially Weakened Company

The state insurance regulators and the FRS each have enforcement powers to support their ability to carry out their supervisory responsibilities, and both are subject to laws that require the regulator to take specified corrective action based on RBC thresholds for supervised insurers and supervised state member banks, respectively.

State Insurance Departments

Regulatory actions of an insurance department include activities that go beyond the monitoring and surveillance activities described above include:

Hearings/Conferences - These are sessions in which witnesses are requested to discuss, testify, or otherwise provide information to a state's insurance department with respect to a specific insurance company or group of companies. Hearings or conferences may be conducted either informally, involving only the department and insurance company personnel, or formally, involving the presence of an appointed hearing officer to conduct the session.

Implementation of a Corrective Plan - This involves the execution of a plan of action, reviewed and monitored by a state insurance department, for an insurer to correct a troubled or potentially troubled situation. This may include corrective plans required under RBC requirements.

Restrictions on Activities - Such activities may include prohibitions, conditions, or limitations placed by a state insurance department on certain activities or transactions of an insurance company. Examples include requiring pre-approval by the department of specific activities or transactions. The ability to place restrictions on an insurance company depends, in part, on the laws or regulations of the particular jurisdiction.
Notice of Impairment - This is a formal regulatory communication from a state insurance department to an insurance company informing the insurance company that the company does not meet stated minimum statutory capital and/or surplus requirements and requiring the company to correct the deficiency by a certain date.
Cease and Desist/Suspension Order - This is a formal regulatory communication from a state insurance department ordering an insurance company to stop certain activities, such as the issuance of new insurance policies.
Supervision - This is an action taken by a state insurance department under its administrative or legal provisions, under which a supervisor is appointed by an insurance department or by a court to "supervise" the operations of an insurance company. The supervision may be "confidential" (i.e., unannounced or "drawer"), "announced" by the insurance department, or "voluntary" (i.e., assistance was requested or acknowledged by the insurance company).

The Federal Reserve System

The FRS employs a range of tools to identify and address a supervised bank or BHC exhibiting emerging problems or weakened financial condition in order to maintain a sound banking system, minimize potential losses to the FDIC insurance fund, and facilitate the institution's return to financial health, if possible. Routinely, a summary of examiner findings and expected actions is conveyed to the banking organization following each targeted review of a particular business line or business activity, as well as in an examination report that summarizes the key findings of the reviews conducted during the 12- to 18- month examination cycle. For those institutions whose problems warrant additional supervisory action, a range of informal and formal supervisory actions is available, in addition to the PCA measures for banks described above.

Informal corrective actions include resolutions adopted by an institution's board of directors and Memoranda of Understanding between the appropriate Federal Reserve Bank and an institution, whereby the institution's board agrees to implement the actions that the institution will take to correct deficiencies. Informal actions are not made publicly available by the FRS. The SEC requires publicly traded companies to make public disclosure of certain material information that may affect the securities markets. A publicly traded financial institution, therefore, may be required to disclose the existence of certain informal actions taken by the FRS if the actions are deemed to be material.

Formal corrective actions, including Written Agreements and Cease and Desist Orders, are authorized by the Federal Deposit Insurance Act (FDI Act) to correct violations of law and unsafe or unsound practices. These agreements and orders may require a depository institution, a BHC, certain other entities, and any institution-affiliated party, including any director, officer, employee or controlling shareholder to take affirmative action to correct deficiencies or to cease engaging in the violations or other unsafe or unsound practices. Written Agreements and Cease and Desist Orders are made publicly available. They may include measures designed to improve a bank's capital and asset quality by placing restrictions on dividends, requiring the employment of more qualified management and improved oversight by the bank's board of directors. Written Agreements and Cease and Desist Orders against BHCs may also include requirements for capital infusions to an undercapitalized FDIC-insured subsidiary bank; restrictions on additional debt, dividends, and inter-

corporate transactions; and the termination of certain nonbank activities that constitute violations of law or unsafe or unsound banking practices.

In cases where specific violations or practices are likely to cause insolvency, cause dissipation of assets or earnings, weaken the condition of the institution, or prejudice the depositors' interests, the FRS may issue a Temporary Cease and Desist Order to address these violations or practices. A Temporary Cease and Desist Order requires the banking organization to take or cease specific actions and remains in effect pending the outcome of an administrative hearing on the issues. Temporary Cease and Desist Orders are generally not made public by the FRS. In the event that an institution does not consent to supervisory action, the FRS may issue a Notice of Charges to initiate litigation. The FRS is authorized by the FDI Act to suspend or remove institution-affiliated parties who have engaged in a violation of law, an unsafe or unsound practice, or a breach of fiduciary duty, which has caused a bank to suffer a financial loss or other damages or has resulted in a gain to the individual, and that involves personal dishonesty or demonstrates continuing or willful disregard for the safety and soundness of the institution.

Notwithstanding these enforcement powers, the GLB Act prohibits the Federal Reserve Board from requiring an insurance company that is a BHC or an insurance company that is a subsidiary of a BHC to provide capital to a depository institution subsidiary of the BHC if the state insurance authority determines, in writing, that such a funds transfer would have a material adverse effect on the financial condition of the insurance company. Additionally, the GLB Act generally prohibits the Federal Reserve Board from taking enforcement action against an insurance company, unless the action is necessary to prevent or redress a practice that poses a material risk to an affiliated depository institution or to the domestic or international payments system, and it is not reasonably possible to protect against the material risk through action directed at the depository institution. These provisions are codified at 12 U.S.C. 1844(g) and 12 U.S.C. 1848a, respectively.

Receivership and Liquidation

Both state insurance regulators and banking regulators have statutory requirements for receiverships and liquidations of supervised entities. State receivership and liquidation laws vary to some degree. For a state insurance department to be accredited by the NAIC, a state must have laws that substantially conform to the NAIC Model Receivership Act.

State Insurance Supervisors

Delinquency proceedings are instituted against an insurance company by a state insurance department for the purpose of conserving, rehabilitating, reorganizing, or liquidating the insurance company. Among the various types of delinquency that may be permissible under state law are the following:

Conservation - This term has different meanings in different jurisdictions. The scope of conservation efforts can vary from a seizure of certain assets to rehabilitation.

Seizure of Assets - A state's legal or administrative provisions provide for an insurance department to take control of an insurer's assets, books, records, and business premises if the insurer is domiciled in the state, in order to conserve the company's assets for the benefit of its policyholders and creditors.

Rehabilitation - An insurance company may be placed in a rehabilitation status by an insurance department through a jurisdiction's legal or administrative proceeding. The rehabilitation process generally involves, sometimes under a court order, the transfer of operational authority from insurance company management to a rehabilitator with the objective of returning the company to a

sound financial and operational condition. The court order could, among other matters, direct the rehabilitator to take possession of the assets and administer the assets and the operations of the insurance company under the supervision of the court or under a formal plan approved by the court with notice to the company's affected creditors.
Liquidation - In the event that rehabilitation of an insurer is unsuccessful, the insurance department may, through legal proceedings, place the insurer in liquidation. The liquidation process ordinarily would include the seizure and marshalling of the company's assets, a determination of the company's liabilities, and the distribution of the assets of the insurance company under the supervision of the court to address or redeem those liabilities.
Dissolution - An insurance department may petition a court for an order to dissolve or terminate the corporate existence of a domestic insurance company following its complete liquidation.

The nature, timing, and extent of regulatory action in any given troubled company situation depends, in part, on the applicable jurisdiction's laws and regulations to which the insurance company is subject, as well as the circumstances of the particular situation. State insurance law may use different terms to refer to essentially similar actions, and the actions that are available to an insurance department differ among the states. When an insurer is found to be insolvent and is ordered liquidated, the guaranty funds are the source of last resort to provide protection for the insurer's policyholders and claimants. Not all policy obligations, however, are covered. For those that are covered, statutory limits apply. Additionally, not all policyholders and claimants are covered.

Bank Supervisors

In the event that a commercial bank is formally declared insolvent by its chartering agency (a state banking department or the OCC), the chartering agency and the applicable federal regulator - the FRS, OCC, or the FDIC, in its supervision capacity - generally no longer have any responsibility for supervising the bank. Federal statutes name the FDIC as receiver and outline the process of a bank receivership and liquidation as well as the prioritization of claims. The amount of FDIC insurance coverage of $100,000 per depositor is uniform nationwide in the event of a bank insolvency. Deposits of larger amounts have priority over all other non-depositor creditors.
In the event that all of a BHC's insured depository institutions are placed into receivership, the company is no longer a BHC, and, therefore, is no longer supervised by the FRS. The FRS generally has no role in the liquidation of a BHC or a company that was formerly a BHC. Such liquidations are administered in accordance with federal bankruptcy laws.

Chapter 7 Ethics and the Professional

For a society to function, rules are necessary. Without rules and enforcement, there can only be anarchy. Ideally, the values basic to a civilized society are handed down to individuals through customs. These are rules of behavior that over generations have been found to help make it possible for people to live together peacefully. Observing these rules is largely a result of family training and peer pressure.

Ethics and the Law

There are always individuals who through ignorance, lack of training, or sheer perversity will not follow the rules. Penalties for rule-breakers make up the basic legal system of a society, backing up customs with force. Every civilized society is founded on law, and none has ever survived without it.

Ethics goes further than law in determining everyday behavior. Law cannot cover every aspect of human relationships. Personal ethics, or individual morality, has been called "what one does when nobody is looking." Law, on the other hand, sets standards for behavior in situations involving other people, and backs those standards with the power invested in law enforcement.

The subject of ethics has been prevalent in the insurance industry since the early days of insurance. In Europe, regulation was found to be a means of enforced ethics within the industry.

Rise of Regulation

In America, the original pattern of expansion filled legitimate needs. The insurance industry, as well as of other forms of business, grew eventually into a relentless drive for more and more success.

The results of this uncontrolled expansion and unethical practices brought on a demand for regulation. In the insurance business, state laws and licensing practices gradually developed to set required standards for companies and agents.

At the beginning of the 19th century there were only five million people in the United States, 90 percent of them farmers. There were only six cities in the country with a population of more than 8,000.

The growing cities produced an increasingly complex society in 19th century America. Individuals working for wages in a cash economy could no longer live the self-sufficient lives of their rural ancestors. In this setting, insurance rapidly became a recognized necessity for the protection of families and property.

Early insurance companies had waited for customers to come to them. As time went on and more insurers competed for business. It became the practice to advertise and send out agents in an aggressive effort at expansion. Many of these agents had little training or understanding of the principles involved in the policies they were selling.

Insurance stock companies were organized to take advantage of the growing market, and unregulated expansion continued. From 1830 to 1850, insurance in force increased by more than 3,000 per cent. After the Civil War, the growth rate of the industry was even faster. The amount of

insurance in force increased at 50 per cent a year, reaching a total of two billion dollars by the end of the 1860s.

The Civil War brought unprecedented demand for manufactured goods. After the war American enterprise continued at a fast pace. New industries sprang up. Railroads crossed the continent. Cables crossed the oceans. Coal, copper, iron mines fed the factories. America was on its way to becoming the industrial colossus of the world.

Standards Decline

In the excitement, attitudes changed. Business and political life were no longer governed by the ethical standards once taken for granted. Tax and other scandals rocked Washington during the Grant administration. Business was drawn into wildcat schemes, stock-watering, and embezzlement.

Insurance executives and agents concentrated on achieving personal power and prestige through business success. There were exaggerated advertising claims, carelessly written risks, and recklessly raised commissions.

Ethics Made Into Laws

The Massachusetts legislature in 1858 was the first to pass a law making a version of Wright's legal reserve principle a requirement for insurers. A state insurance department was created to enforce the new law and Elizur Wright became its head.

As the western part of the country was settled, the insurance industry again expanded its horizons. New companies grew up to offer insurance in the growing western cities as transportation and manufacturing facilities followed the trails blazed by the pioneers.

People moved about more, and travel restrictions were removed from insurance policies. Prudential pioneered insurance for low-income groups and it became widely accepted. By the end of the 19th century, the total of insurance in force in the United States had risen to seven and a half billion dollars.
Rapid growth again led to difficulties. Since insurance companies were the custodians of much of the nation's wealth, attention focused on them as a new "muckraking" phase of attacks on questionable business practices began shortly after the turn of the century. There was a renewed public demand for investigation of the insurance industry.

The Armstrong Investigating Committee in 1905, with Charles Evans Hughes as its chief counsel, turned its attention to insurance practices in New York. Its recommendations, backed by responsible insurance companies, resulted in the adoption of the New York Insurance Code in 1906. State supervision of insurance practices was tightened by this code, and eventually public confidence in the insurance industry was restored. Throughout the 20th century insurance regulation has grown.

The National Association of Insurance Commissioners (NAIC), a group made up of insurance officials from all states, has drafted model legislation which has been widely adopted by state legislatures.

The unfair trade practices act recommended by the NAIC defines unfair claims settlements, false advertising, defamation, and unfair discrimination and prohibits all these practices. This NAIC model has been adopted by nearly every state.

The resulting laws give state insurance commissioners the power to investigate when such practices are suspected and to levy fines and suspend or revoke licenses when violations are found. Marketing and disclosure standards for life insurance agents also are recommended by the NAIC. These make deceptive practices designed to mislead clients not only unethical but also illegal.

Any statement misrepresenting the benefits or coverage offered by a policy is a deceptive practice which can lead to the loss of an agent's license. Implying that future dividends provided by a participating policy will be enough to take care of premium payments would be such a misrepresentation. So would an implication that future policy dividends are guaranteed.

To tell a prospect that certain benefits in a policy being offered cannot be found in any other policy or that an offer must be taken at once or the opportunity will be lost, would be considered unacceptable tactics. Any misleading use of figures as to cost comparisons or other significant policy features would come under the guidelines. So would statements defamatory to competing agents or insurers.

Legitimate agents recognize such actions as unethical.
They also have been made illegal in states that have adopted the NAIC recommendations. There are other prohibitions, such as offering a rebate to make a sale, or persuading a client to drop a policy just for the sake of selling a replacement that will be discussed later in detail.

While an ethical agent would not knowingly violate these guidelines, it is necessary for any insurance professional to be aware of the particular legal provisions in effect in the state with jurisdiction. The laws are to be followed first, supplemented by one's own ethical standards.

Licensing

Insurers must be licensed by a state to issue policies there. A state's guarantee fund usually covers only insurers authorized to do business in that state. An agent representing an unauthorized company may be held personally liable for losses on a contract placed with an unauthorized insurer. The agent needs to be sure the company being represented is authorized to do business in that state.

It is also important for both the agent and the company office to be aware that laws can change. Actions of the state legislature and regulations issued by the state insurance commission both can vary with time and the pressure of public opinion.

Court decisions in insurance cases can make a change in liability affecting those in the industry. The legal system in this country is not static, but fluid. Company officials need to keep abreast of such developments and let their agents in the field know about them.

Court Decisions

Suits to recover damages in cases of disputes over insurance coverage are increasingly frequent. The growing tendency to consider insurance practitioners as professional people carries with it increased legal responsibility.

Court decisions in many cases do not take into account any responsibility on the part of the insurance purchaser to be aware of policy provisions, even of easy-to-read policies. The outcome in many liability suits has made the agent or insurance company responsible for providing adequate coverage.

In a Louisiana case a plaintiff, the operator of a Laundromat in a leased building, asked his insurance

agent to get as much property damage liability for him as possible. The agent told him $100,000 was the maximum coverage obtainable, and the plaintiff told the agent to get that amount. Through an error, the policy was written for only $10,000. A boiler explosion caused $18,500 in damages at the Laundromat, and the plaintiff sued to recover the $8,500 that was not covered by the $10,000 policy.

The court appeared to place no responsibility on the owner for reading the policy, the declarations page, or the bill for the premium on the $10,000 coverage. The decision was that the insured was justified in believing that the agent had obtained the limit of liability they had discussed. The resulting point of case law is that an insurance provider cannot count on having any responsibility placed on the insured to analyze the coverage provided.

The issue of professional responsibility on the part of insurance agents and agencies is playing an increasingly important part in court cases. In a Georgia decision involving business interruption policies, an insurance agency had been provided with a client's books to use in determining what coverage limit was needed. The agency used the gross profits figure rather than gross earnings to determine the coverage needs, leaving the client underinsured.

Professional Responsibility

The plaintiff's argument in the court case was that the insurance agency had held itself out as an expert in the field with the needed qualifications to examine the books and determine coverage limits. The agency agreement with the client was to maintain adequate business interruption insurance based on yearly audits, and this agreement, the court held, was violated.

Such court decisions set the precedent of requiring a high standard of competence on the part of insurance professionals. Both agents and agencies need to be aware of this situation.

In addition to staying well informed and exercising due care, the responsible insurance practitioner can have professional representation available for claims protection by carrying Errors and Omissions (E & O) insurance. The E & O carrier will investigate claims situations and provide legal representation if necessary.

In the case of claims, the insurance professional needs to be prepared to deal with the claimant in a calm and competent way without overstepping limits on giving legal advice or otherwise prejudicing the case. Quick adjustment and settlement procedures are desirable in case of claims to uphold the reputation of the insurance provider, but it is important to have all the facts at hand before action is taken.

In dealing with a claimant, the insurance provider needs to remember not to give advice or promise to get the claim paid. It is also important, however, not to deny a claim without positive knowledge that it is invalid. Also, a claim should never be paid without certain authority. Any of these actions can create legal liability.

It is helpful in avoiding legal difficulties for the agent to maintain friendly relations with clients and establish a reputation for being trustworthy over the long term. A personal relationship of trust and confidence between agent and client may help avoid lawsuits and make settlements easier.

Ethics Commissions

In addition to court cases, changes in the law can be brought about by an increasingly important agent, the ethics commission. Under pressure from activists, consumer protection groups and others, Ethics Commissions have been set up in state and national legislative bodies as well as in local government agencies.

Ethics Commissions tend to focus on lobbying, gifts to officials, conflicts of interest, and election procedures. They also, however, can consider other areas of public concern and produce legislation in response to consumer complaints.

An ethics commission can hold public hearings. It can determine what legislation needs to be passed in order to prevent abuses. It can investigate whether behavior of a public official has violated existing laws.

Congressional committees in both the Senate and the House have been conducting investigations into insurance cases with a view to possible federal legislation supplementing state level regulation of the industry. A Senate committee probe has centered on offshore insurers and reinsurers which are not subject to state regulation.

One reinsurer listed as its primary assets $22 million in "treasury bills" claimed to have been issued by a Texas Indian tribe. Senate investigators believed this group to be fictitious. One of the tribe officials known as "Wise Otter" was thought to be a British subject.

The House investigation that followed the failures of large domestic insurance companies has focused on the possibility of setting up a federal support mechanism similar to the banking industry's Federal Deposit Insurance Corporation in order to protect policy holders beyond state agencies' limits.
It is important for insurance professionals to keep abreast of such legal developments affecting the industry and its traditional standards.

SEC Requirements

Financial planning, a relatively new field for insurance providers, requires some specialized knowledge relating to securities and investment regulations. The Securities and Exchange Commission through the Investment Advisers Act sets high ethical standards for professional providers of investment advice.

Any transaction or business practice intended to deceive a client or prospective client is strictly forbidden under the act. The agent acting as a securities representative is legally required to act with due diligence, meaning that documented financial information must be furnished on companies whose stocks or bonds are being sold.

Guidelines

In contrast to due diligence for securities salesmen, the standard established in court cases for agents only involved in selling insurance is due care. The client is given financial information on request, but the state insurance department is the agency responsible for requiring reports from companies authorized to do business in that state. The agent's legal obligation is to sell policies of insurance companies licensed in that state and not to sell policies of companies the agent knows to be insolvent.

Claims Defense

An agency can establish a back-up line of defense against claims arising from insurance company insolvency. This can be done by showing proof that the agency has maintained a system for tracking financial conditions in the industry through figures from the various reporting agencies and by other means available.

It is important for the insurance agent to know the specific do's and do not's that constitute ethical behavior. Specifics that will be discussed are advertising, commissions (rebates), agent conduct, clients' files, illustrations and underwriting.

Agent Compliance

Advertising

When the agent advertises, he/she is making the product known to the public at large. There are many different ways to advertise. The following are the major methods, of advertising.

- Printed and/or published materials.
- Newspaper, radio, television, computers, billboards.
- Ads, circulars, leaflets, descriptive literature.
- Business cards, business brochures, prepared sales talks.
- Telephone solicitations.
- Any material used to sell, modify, update or retain a policy of insurance.

Agents wishing to advertise must obtain approval from their respective insurance company. All advertisements for life, accident, and health insurance must include and identify the insurance company the agent represents.

Advertisement that would not require prior insurance company approval would be one in which the only information given is the agent's name, address, telephone number, and description of the services being offered. Agency history and a simple statement of products offered, such as life, health, and/or annuities would also apply. There must be no reference made to specific policies, benefits or cost.

Requirements

The agent must do the following in all advertising:

- Make clear that insurance is the subject of the solicitation; clearly identify the type of insurance being sold, and the full name of the insurer.
- Include all limitations and exclusions affecting the payment of benefits or cost of a policy, as well as disclose any charges or penalties, such as administrative fees, and surrender charges contained in a life or annuity policy, or withdrawals made during the duration of the contract years.
- If a policy offers optional benefits or riders, disclose that each optional benefit or rider is available for an additional cost.

- For a life insurance policy with accelerated death benefits, clearly disclose the conditions, care or confinement which will initiate any acceleration of payment of the death benefit and/or other values under the life policy.
- If a policy includes a payment endorsement, disclose that fact.

Proscriptions

The agent MUST NOT do the following in any advertising:

- Be deceptive or misleading by overall impression or explicit information.
- Refer to considerations paid on an individual policy or annuity, including policy fees.
- Use terms such as "Financial Planner", "Investment Advisor", "Financial Consultant", or "Financial Services" in such a way as to imply the engagement in an advisory business in which compensation is unrelated to insurance sales, unless this is actually the case.
- Use a service mark, trade name or group designation without disclosing the name of the actual insurer, if specific coverages benefits or costs are described.
- Make unfair or incomplete comparisons of policies.
- Disparage competitors, their products, their policies, their services, business or marketing methods.
- Make untrue or misleading statements with respect to another company's insured assets, financial standing or relative position in the insurance business.
- Imply group coverage, certificate or enrollment when the policy offered is actually an individual policy.
- State that the policy is a limited offer and the applicants will receive advantages by accepting the offer, and that such advantages will not be available at a later date, if this is not the fact.
- Advertise a free gift, bonus, or anything of value outside of -the policy contract, which is an inducement to buy and considered rebating.
- Advertise for life, health, accident or annuities, use the existence of the GUARANTEE ASSOCIATION as an inducement to buy.
- Use misleading words or symbols or imply the material is being sent by a government entity.
- Use the phrase "low cost" without providing disclosures and the caveats associated with the particular plan.

Advertising can be one of the best career enhancing tools, when utilized effectively, legally and ethically.

Commissions

Commissions are the direct result of work performed by the agent with a new or existing policy owner. The agent's compensation is paid direct from the respective insurance company for the type of product and services recommended and are willing to provide. In addition to the initial commission, most insurance companies provide "renewal commissions", as an inducement to continue servicing the existing policy owners.

The Concept

This concept, initiated many decades ago, was intended to accomplish two primary objectives:

1. Compensate the agent for future servicing needs the policy owner will require -- such as beneficiary changes, bank draft changes, endorsements, etc.
2. Provide the agent with an opportunity to perform periodic reevaluations of the policy owners' needs, thereby resulting in additional sales opportunities.

The agent, as a licensed insurance person, shall not directly or indirectly rebate or attempt to rebate all or any part of a commission for insurance. Rebating is illegal in most states, and is strictly prohibited. It can be punishable by fine, cancellation of contract with insurance company, and loss of license, or a combination of all three. Rebating can be described as offering any type of inducement other than what is contained in the policy itself, in exchange for purchase of insurance. Examples include, but are not limited to the following:

- Any verbal or written agreement for the agent to pay any part of a policy owner's premium.
- Any payment, allowance, or gifts of any kind offered or given as an inducement to purchase insurance.
- Any paid employment or contract for services.
- Returning any part of the premium to the policy owner.
- Offering any special advantage regarding the dividend, interest, or other policy benefits to the policy owner which are not specified in the policy.
- Offering to buy, sell, or give any type of security (stocks, bonds, etc.) or property, or any dividends or income from securities or property, to the policy owners' benefit.
- Giving anything of value to the policy owner in return for buying an insurance product.

Rebating

Rebating, or the attempt to rebate, is an offense not only under the Code of Ethics, but also under state insurance laws. There may be borderline situations in which it is difficult to determine whether rebating has taken place.

Borderline Situations

It is fairly common practice, as an example, for an insurance agent to entertain policy owners or prospective purchasers with a meal and perhaps give a nominal or token gift such as a policy wallet. Such things are considered to be normal business practice, and not in the nature of a rebate. However, should the agent contemplate anything more than such token gestures of appreciation, then the greatest caution and good judgment must be exercised. Excessive benefits or gifts conferred upon policy owners or prospective purchasers, will at the very least be considered in bad taste, and at the worst, depending on all the circumstances, may expose the licensee to a charge of rebating. In no circumstances should a gift of anything of value be given as an inducement to purchase insurance.

The rules for rebating do not apply to splitting of business with another licensed insurance agent. Joint case work is very common throughout the industry, and splitting of commissions is normal business practice. This practice does not apply to equity and variable life products, since they are sold under the rules and guidelines of the Securities Exchange Commission.

Agent's Conduct

As an insurance professional, the agent becomes part of the insurance industry's public relations arm. The agent meets the public every day, and the manner and conduct exhibited leaves a lasting

impression with everyone with whom that agent had contact.

A big part of professionalism is the attitude toward competition; therefore, agents should avoid criticizing other agents. Such activity is detrimental to everyone in the business. Any criticism of another company's policies should be avoided. An incomplete comparison is not only misleading and harmful to the public; it can also result in license revocation for the guilty party. Respect for competitors helps to keep policy owners satisfied.

The agent is under an obligation to make accurate and complete disclosure of all information which policy owners or prospective purchasers should have, in order for them to make a decision in their best interest.

Representing the Insurance Product
The agent is called upon daily to make many statements and representations, oral and written, upon which policy owners and prospects are entitled to rely. Such statements and representations must not only be accurate, but must also be sufficiently complete to prevent any wrong or misleading conclusions from being made by policy owners or prospects. It is just as wrong for a life underwriter to omit giving essential information, such as, failing to correct a mistaken impression which is known to exist, as it is to give inaccurate or misleading information. Representing insurance products as exclusively "retirement plans", "college education plans" or "savings plans", without noting that the life insurance is primary and the cash value features are secondary, can result in serious charges of misrepresentation of insurance products. Use of the word "deposit" versus "premium" can have a like effect.

Deceptive Practices

As they pertain to the insurance industry deceptive practices have countless examples, a few of which are:

- Passing off the agent's own goods or services as someone else's.
- Misrepresenting the benefits, uses, or characteristics of the product.
- Making disparaging remarks pertaining to someone else's products, services, company, by making false or misleading representations.
- Advertising the product or rates while intending not to sell them as advertised.
- Misrepresenting the agent's authority as a sales person, representative, or agent to negotiate the final terms of the contract with the policy owner.
- Offering, in connection with an insurance purchase, participation in a "multi-level distributorship" under which payments are conditioned on the recruitment of additional sales people rather than the proceeds from the product sales.
- Using the terms "corporation" or "incorporated" or their abbreviations in the name of a non-incorporated business.
- Failing to disclose information during a transaction with the intent of inducing a prospect or policy owner to do something he or she would not do otherwise.
- The law allows courts to award an insured triple damages, court costs, and attorney fees, for deceptive insurance trade practices.
- Insurance is not only a complex product, it is an extremely complex industry. The insurance agent must be very careful not to mislead the consumer regarding any aspect of an insurance transaction.
- Misrepresentations can be in the form of an oral or written statement, advertisement in any

media, use of a business logo or advertising slogan, or anything else that communicates a false or misleading idea. A few examples of misrepresentation include:

- False or misleading statements about a particular policy.
- False or misleading statements about the financial condition of a respective insurance company.
- Telling a prospect or policy owner that dividends or current assumption mortality charges are guaranteed.
- Identifying a term life policy by a name that implies cash value accumulation, or vice versa.
- Indicating that premiums on a policy are payable for a shorter time period, when the premiums may be payable for life.
- Indicating that the agent represents several insurance companies, when in fact the agent represents only one.

A high degree of ethical representation is good solid business. The agent's insurance career can provide financial gain and personal growth. Practicing as an ethical professional will bring both. The agent's actions will gain the respect of the policy owners as well as that of the insurance carriers. The agent's reputation will be significantly enhanced, and people in the community will want to do business with that agent.

Documenting Clients' Files

Documenting the client files involves keeping track of the actions taken in dealing with the policy owner. A properly documented file should contain complete and accurate answers to all pertinent questions. This allows the agent to properly assess the need for insurance and substantiates the reason for the sale.

Paper Trail

After the fact-finding meeting, the agent should send a discovery agreement to the prospective policy owner summarizing the initial meeting and outlining the agent's understanding of the policy owner's short-term and long-term financial goals. This document should also contain information about the policy owner's salary and expenses, and the amount of money in savings accounts and investments. It should also reiterate the amount of insurance in force and the amount of money the policy owner would be able to allocate for insurance premiums. In addition to this, the discovery agreement should thank the policy owner for the chance to work with them, and confirm the date of the agent's next meeting.

The agent should always keep on file a proper ledger illustration. This should be an approved insurance company ledger, a sales proposal/idea that contains the following elements:

1. Insurance company name.
2. A full dividend/interest rate crediting disclaimer.
3. A clear description of the product.
4. The agent's name and illustration date.
5. Guaranteed values.
6. A page containing full explanation of any assumptions or special instructions.

Data Note and Log

Effective case notes should also be kept in the policy owner's file. These should list the date and time of contact with the policy owner and concise summaries of all interactions. It is also recommended that the agent document the level of service provided to the policy owner.

An effective log of all telephone calls should be kept, listing the date, time, reason, and follow-up action of all telephone conversations with the policy owner. The agent should also note all unsuccessful calls to the policy owner in order to verify the attempts to provide proper service, thus, once again, documenting the level of service provided.

A delivery letter should be sent to each policy owner with a copy kept in their file. This letter would reinforce the information already discussed, such as the reason for purchasing the insurance, and the type of plan as well as the face amount of coverage. The agent should reiterate the amount and duration of premium payments, as well as the premium payment method. The agent should also restate the impact on policy values as it relates to borrowing, partial surrenders, advanced premiums, interest requirements, dividend usage, and if appropriate, interest or dividend crediting performance.

Many companies provide a delivery receipt with the policy that must be signed by the policy owner upon delivery. If the company does not, it is recommended that the agent prepare such a document to be signed upon delivery to the policy owners. It should list the date the policy was received by the agent, the policy number, and the insurance company's name. It should also contain the owner's signature and the date they signed for delivery of the policy. All of this should be kept in the policy owner's file.

Illustrations

Illustrations have been used extensively in the insurance industry for several decades to help secure sales. In the past, they were obtained from the respective insurance company, and were fairly bland and standardized for many years. They were straight forward and represented a close approximation of actual future performance.

Changes Cause Problems

Beginning in the early 1980's, a radical change began, primarily due to three events occurring simultaneously:

1. A significant reduction in mortality charges, due to advancement in medical technology.
2. Significant advancement in electronic technology -- also known as low cost personal computers.
3. A significant economic change resulting in double-digit market interest rates.

These three events, coupled with consumer demand, helped produce a product called Universal Life -- an unbundled, interest sensitive, whole life policy with a high degree of flexibility.

Insurance was viewed more as an investment product consisting of "mortality" and "side funds". Illustrations began to change and use historically high double-digit interest rates as the basis for projected values. As interest rates began to fall in the late 80's, projected values did not hold up to reality. Many policy owners received notices that premiums would have to be increased or death benefits reduced to keep policies in force. Policy owners became angry, and many accused agents and companies of unethical behavior.

It cannot be overemphasized that illustrations are mere projections based on current interest rates, current mortality charges and other expenses. These conditions are not contractual obligations. Agents who have competed on the basis of high interest returns will produce projections that are unrealistic. This blatant misuse of illustrations has led to policy owner confusion and dissatisfaction. Agents, companies, and the insurance industry have suffered tarnished reputations.

The results have been fierce disciplinary actions backed by a series of heavy fines on some insurance companies by state regulators. Some examples of illustration abuse are as follows:

- Falling prey to the allure of high interest returns.
- Use of "assumed" interest rates in competitive situations.
- The sales technique of "Vanishing Premiums".
- Heavy emphasis on accumulated values verses death benefits.
- Poor emphasis of contractual guaranteed values and the potential problems that could exist in the future.

Remember, the policy owner does not necessarily see the illustrations as hypothetical. Policy owner dissatisfaction has resulted in increased demands by state regulators for heavy regulations regarding illustrations. Some insurance departments are considering the elimination of current assumptions, and only allowing illustrations based on guaranteed values. The parameters of an illustration under these proposals would be strictly monitored. They have also suggested that disclosure of past performance will be all that is permissible.

Understanding the Hypothetical

Many companies provide guidelines regarding interest rates to be used in product illustrations. The agent is advised to stay within the company guidelines to avoid policy owner dissatisfaction. Policy owners should be aware that current illustrations are a snap shot of how a policy might work if the current rates remained unchanged. To help with this awareness, illustrations should have three distinct columns:

1. Guaranteed Values.
2. Current Return Values.
3. Current Return Minus 1%.

This type of diligence will reward the agent with greater policy owner understanding of how interest rates and dividend scales can affect cash values and premiums.

Illustrations are rarely valid for policy comparisons. They are designed to show how a particular product of a particular company works. There are too many inconsistent variables from one company to another to allow for valid comparison. Policy selection should be made on knowledge of the product and analysis of assumptions underlying each policy. Policy provisions, company financial condition, and quality of service are valid considerations. Illustrations only, can be a dangerous criterion for policy selection without additional considerations.

Transparency and Self-Policing

The vanishing premium concept has been particularly damaging to the public perception of insurance industry ethics. This concept is based on the premise that premiums may be discontinued after a certain number of years through the use of cash value or dividends. It was used as a marketing tool

extensively in the 1980's. Projections of vanishing premiums (typically in six to eight years) were based on high interest rates in effect at that time. Many policy owners did not understand that a continuation of high interest rate was necessary to fulfill illustrated projections. When interest rates fell, policy owners charged that no one explained the fact that the illustrated "vanish" was not guaranteed. This disappointment can be avoided with proper disclosure of illustrated concepts and the effect of changing interest rates. Good ethics and business practice dictates that illustrations show both guaranteed and non-guaranteed values with the difference clearly explained to the policy owner. Any illustrations showing non-guaranteed values may be incorrect after the first year. The agent should be thoroughly informed about "assumptions" and "hypothetical" and the effect of fluctuating interest rates and mortality charges. This additional risk should be communicated to the policy owner in written as well as verbal form.

There are many types of new generation policies which require due care and full disclosure. These include Blended Policies (permanent and term), Adjustable Policies, First-to-Die Policies, and Second-to-Die Policies. When two or more lives are insured under the same contract, particular care should be taken to explain to the policy owners that the death benefit is paid on the death of only one of the insureds.

Falling interest can create a climate where actual performance falls short of illustrated projections. Very often, policy owners do not understand the difference between hypothetical projections and contractual guarantees. This can lead to policy owner dissatisfaction, complaints and potential litigation. Increased policy owner complaints lead to adverse insurance department rulings, state regulations, fines and lawsuits against companies and agents. This affects the public perception of ethical conduct of the entire insurance industry. The solution lies in ethical business practices, particularly concerning policy owner understanding of illustrations. Self-policing through education, discretion and common sense will lead to field practices of a high ethical standard. It is important to remember that the policy owner will retain that information they see as most beneficial. As a professional community, our watch words are, tell the policy owner the truth.

Replacement of a contract of life insurance means any transaction which includes a:

- Rescinded, lapsed or surrendered policy.
- Charge to paid-up insurance, continued as extended term insurance or placed under automatic premium loan.
- Change in any manner to effect a reduction of benefits.
- Change so that cash values in excess of 50% are released.
- Policy subjected to substantial borrowing of cash value, but does not include the purchase of an additional life insurance contract.

The agent should not, when it could be detrimental to the interest of the policy owner, replace an existing contract of life, health, disability and annuity contracts with a new insurance contract. Every reasonable effort should be made to maintain the existing contract in force.

Where it appears that, due to a change in circumstances, an existing contract of insurance should be amended or changed; the agent should ensure that the policy owner is fully informed of any values, credits, or privileges in the existing contract which can be transferred to an amended or changed contract of insurance.

Service

One study indicated that the average insured purchases insurance seven times during their lifetime - from six different agents. Is part of the reason because of poor or lackluster service?

The insurance industry employs and contracts nearly two million people. It is quite evident that insurance is an intricate and essential service in our society. It is a field upon which our society depends more and more for financial protection. Life and health insurance purchases continue to increase each year. Property and casualty insurance is a part of every mortgage contract, auto ownership, and business coverage. Life insurance in force at the end of 1993 was nearly $11 trillion. On a daily basis a large group of people will die, enter retirement, experience a cash emergency, or have a physical asset damaged or destroyed. This is the real world- it affects everyone! These are critical times. The agent's insurance company, the agent, and the policy sold, stand between the client and financial disaster.

Value Added

The insurance agent must be the "value added" benefit for the insured as well as the insurance company. In the decade of high tech mega information highway, the agent has to be the interpreting guide and the analyst for the general public to solve financial problems with an insurance purchase. The agent must also become the motivator, leading a prospect to action.

People like to do business with people they trust. Trust is built on ethical behavior. When potential prospects and existing policy owners find an agent with high ethical standards, they tend to do more business with the agent -- therefore becoming a client. In perhaps no other industry is the element of trust more important.

Charging fees for service is common practice in most occupational groups; however, Texas has an exception for insurance agents. Group I licensed agents are not allowed to charge fees for service unless they are properly licensed as a Certified Insurance Counselor (CIC). Property and casualty licensed agents are also allowed to charge fees for certain services.

Service Essentials

The service to a policy owner/client is not only qualitative, but also quantitative. Periodic contact is essential, but can take various forms:

- Daily phone contact with the same policy owner would not only be extremely expensive and cumbersome, but also non productive and obnoxious. Most policy owners tend to accept three to six months intervals as a good basis for agent contact. This could be in the form of telephone calls, letters, informative announcements, as well as birthday and Christmas cards. Many agents use Thanksgiving cards as an alternative to the more commonplace Christmas card mailing.
- Annual reviews are extremely important with many policy owners, simply because their needs change. This is particularly obvious with business clients.
- It is definitely recommended that the agent staff her/his office with people able to handle day to day service needs, such as change of beneficiary designations, bank draft changes, policy amendments or endorsements, etc. If the agent elects to refer all of these tasks to the respective insurance company home office, it would significantly reduce the "value added" benefit that serve the policy owner. It would also enhance the likelihood of future

replacement from another insurance agent -- who specializes in service.

Generally speaking, policy owners want convenience and immediate response. An agent, who refers policy owner service duties directly to the insurance company, is missing tremendous future sales opportunities, alienating themselves from building the trusted relationship necessary to maintain a strong business practice, and presenting themselves in less than an exemplary fashion.

Underwriting

Perhaps no other area pertaining to compliance and ethics deserves as much attention as agent underwriting. When any type of claim occurs, the insurance application becomes the basis for a claim dispute, denial or acceptance. An agent, who compromises part of the underwriting process with false or misleading information, as it pertains to the prospective insured, is creating potential wealth for litigating attorneys.

Part of the Contract

The agent must always remember that an underwritten application becomes part of any insurance contract. It is critical that all questions be answered completely and honestly. Too often it is tempting for an agent to "trim" ten or twenty pounds off a rather overweight insured or help them grow one or two inches, in order to assure a standard issue from the respective insurance company. Asking a potential policy owner to discard a lit cigarette during the application process may create non-smoker discounts, but in all likelihood would initiate a claim denial. Insurance companies have challenged fraudulent non-smoker rated policies through the court system, and won. It is also naive for the agent to believe that a two-year incontestability clause will exempt him/her or the insured from blatant, fraudulent underwriting. Insurance companies may pay a claim, but they can and do pursue legal action against the insured's estate.

The agent should make every effort to provide the insurance company with all accurate information pertaining to the prospective insured. Cover letters should be submitted with the application to provide details of unusual or extensive medical history or information; unusual business uses of insurance; foreign travel and residence; unusual financial situations; unusual beneficiary and ownership arrangements to clarify the insurable interest; unusual occupational duties; and any case discussions with an underwriter prior to the application submission.

Many insurance agents order medical examinations, attending physician statements, and financial information through third party sources and upon receipt forward these items to the insurance company. This is not an illegal practice, but it may be against the company's practice. Since underwriting information is highly confidential, both the originals and photocopies of financial statements, attending physician statements, hospital abstracts and other confidential records that have been obtained by agency personnel require safeguarding.

Protect Confidentiality

To comply with state and federal privacy laws and to control and protect confidential information provided to the company by applicants, guidelines need to be followed to insure the strictest handling of these documents. Examples to follow are:

- Access to files containing confidential material must be restricted to employees who have legitimate "need to know" in order to perform their assigned duties.

- Confidential information stored in personal files, should be retained only as long as there is legitimate need.
- Some companies absolutely forbid the acquisition and retention of medical examinations, attending physician statements, hospital abstracts or other medical histories.
- It is up to the agent to know what the insurance company's practices are.

Since the application is such an integral part of the insurance contract, care should be utilized in presenting all information to the insurance company in a professional manner. One of the most consistent complaints with insurance company underwriters is illegible applications. Not only does this impair the underwriting process, but it could be grounds for significant dispute during the processing of a claim.

Generally, changes or alterations to the application must be initialed by the insured/applicant. This is specifically important in changes in plan, face amount, owner, beneficiary, medical or financial representations and dates. Some companies are more lenient and allow amendment signatures at the contract delivery.

Agents need to document 2nd residence; unusual financial situations; unusual beneficiary and ownership arrangements to clarify the insurable interest; unusual occupational duties; and any case discussions with an underwriter prior to the application submission. Many insurance agents order medical examinations, attending physician statements, and financial information through third party sources and upon receipt forward these items to the insurance company. This is not an illegal practice, but it may be against the insurance company's practice. Since underwriting information is highly confidential, both the originals and photocopies of financial statements, attending physician statements, hospital abstracts and other confidential records that have been obtained by agency personnel require safe guarding.

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The National Association of Insurance Commissioners has a Model Privacy Act that requires any applicant/insured to be notified of any adverse action taken in regard to their application. This Act

allows an insured the right to know the details of the personal information about themselves in the company files, and has the right to request an insurance company to amend, delete, and correct such information.

Litmus Test

Labeling a decision as an "ethical decision" may disguise the fact that almost every decision holds some ethical issue or impact. Perhaps a better approach would be to develop an ability to judge the ethical implications. What role do ethics play in this decision? How does one recognize an ethical situation or problem? What are the warning signs that this may be a tougher decision with deeper issues and wider impact? Here are some guidelines. Not all apply every time, but they should raise understanding and improve the decision-making process.

Do I put a monetary value on this decision? Would I make this decision differently if cost were not a factor? Am I putting a monetary value on my ethics?

Do words such as right, fairness, truth, perception, values, or principles appear in my reasoning when I am making my decision?

- Do I feel as if I need to search through a standard policies and procedures or contact a legal representative for help with my decision?
- Do questions of fair treatment arise?
- Do my personal goals or values conflict with my professional ones?
- Could this decision generate strong feelings or other controversy?
- What does my heart tell me? Do I ponder this decision on the way home?
- Do I offer myself excuses such as everybody does it, or no one will find out, or I did it for "The Company"?
- Does this decision really need to be made by someone else? Did I inherit it because someone else doesn't want to make it?
- How am I going to feel tomorrow if I do this?

If an individual faces a tough decision and feels as if some guidance is needed, sometimes there is no place else to turn. One must have an internal compass, a value system for guidance. That is why an ethical standard is important for everyone in the insurance industry.