

# Glossary

This glossary provides a listing of actuarial terms, practice area terminology and other definitions related to the actuarial profession.

# 365ths Method

Method for calculating Earned Premium as the total premium multiplied by the number of days elapsed over 365.

# **Accelerated Critical Illness Benefit**

This benefit is provided when a policy pays the sum insured upon death or diagnosis of a critical illness, whichever occurs first.

If the life assured suffers a critical illness which are specified in the policy, then the sum assured is paid and the policy is terminated, i.e. payment of benefit is accelerated forward from payment on death. Some policies accelerate a portion of the sum assured in which case the contract stays in force and pays the balance of the sum assured upon subsequent death. Most policies accelerate 100% of the sum assured.

### **Accident Year**

This refers to the twelve-month period (starting January 1) that is used in accident year experience.

# Accountable Care Organization (ACO)

A group of health care providers who give coordinated care, chronic disease management, and thereby improve the quality of care patients get. The organization's payment is tied to achieving health care quality goals and outcomes that result in cost savings.

#### **Accounting Standards**

Principles that guide and standardize financial accounting practices, such as how a firm prepares and presents its business income, expenses, assets and liabilities. Examples of accounting standards are:

Statutory accounting practices (Stat)

Generally Accepted Accounting Principles for financial reporting (GAAP)

International Financial Reporting Standard (IFRS)

#### **Accrual Rate**

The rate at which benefits increase for each unit of benefit service in a defined benefit scheme.

#### **Accrued Benefits**

The benefits that will be paid at regular retirement age for service up to a given point in time, whether vested rights or not. They may be calculated in relation to current earnings or projected earnings.

### **Accrued Interest**

Interest earned but not received (realized). For example, bonds usually pay interest every six months in form of coupon, therefore interest accrues between one interest payment and the next. The buyer of a bond pays its market value plus the interest earned up to the settlement date of the coupon.

### **Acquisition Costs**

Costs that the Ceding Company expends to sell insurance, such as underwriting and commissions. This also refers to the cost insurance companies incur to write new policies and/or renew existing policies. Â Some of these costs can be deferred in accounting (Deferred Acquisition Cost or DAC in IFRS or US GAAP, DAC Tax for tax purposes)

### **Active Member**

An active member is a pension plan member who is making contributions (and/or on behalf of whom contributions are being made) and is accumulating assets.

# Activity of Daily Living (ADL)

Activities of daily living (ADL) are basic self-care tasks:

eating	
bathing	
dressing	
toileting	
transferring (walking)	
continence	

By testing the performance of these activities, disability can be measured.

Long Term Care and health insurance coverage are often based on the performance or lack of performance of these ADLs.

# **Actual Total Loss**

A form of total loss, defined by the Marine Insurance Act 1906. Actual total loss is deemed to occur in one of three ways:

where the insured item is totally destroyed

where it is so damaged that it can no longer be classed as the type of object originally insured

where the insured is irretrievably deprived of the insured item

#### Actuarial Model (or Model)

A simplified representation of relationships among real world variables, entities, or events using statistical, financial, economic, mathematical, or scientific concepts and equations. Models are used to

help explain a system, to study the effects of different parts of a system, and to derive estimates and guide decisions.

A model consists of three components: an information input component, which delivers assumptions, parameters and data to the model; a processing component, which transforms inputs into estimates; and an output component, which translates the estimates into useful business information. A model evolves through a life cycle as follows:

a specification phase

an implementation phase

a production phase, that consists of one or more model runs.

# **Actuarial Risk**

A phenomenon subject to uncertainty with respect to one or more of the variables: occurrence, timing, and severity.

# **Actuarial Value**

An actuarial value is a numerical value assigned to a given set of actuarial risks that is determined using an actuarial model of those risks.

The percentage of total average costs for covered benefits that a plan will cover. For example, if a plan has an actuarial value of 70%, on average, you would be responsible for 30% of the costs of all covered benefits.

# Actuary

An actuary is a person who applies mathematical approaches to anticipate, measure and manage risk. An actuary identifies, analyzes, and documents risks, monitors risk areas, and surfaces issues related to risk.

The actuary defines problems and generates ideas, develops recommendations that lead to implemented solutions, and continuously monitors results.

The actuary's work is based on theory, data and experience and is performed with professional judgment. Professional judgment is required because the actuary is asked to perform tasks that affect multiple stakeholders who often have different and sometimes conflicting needs.

# **Acute Illnesses**

Any illness characterized by signs and symptoms of rapid onset and short duration. It may be severe and impair normal functioning.

# Additional Reserve (provision) for Unexpired Risk

A reserve account opened at the discretion of the insurer if it believes the amount of funds kept in the unearned premium reserve account is not sufficient to cover the amount of risk perceived.

While unearned premium reserve minimums are set by law, an unexpired risk reserve is voluntary.

Source: businessdictionary.com

### Additional Unexpired Risk Reserve (AURR)

The amount by which the unexpired risk reserve exceeds the unearned premium reserve

#### **Adjustment Premium**

The adjustment premium is additional or return premium payable at the end of a period of cover. This may result from the use of retrospective experience rating or from a situation where the exposure cannot be adequately determined at the start of the period of cover.

### **Adverse Selection**

The greater tendency of people with a more than average likelihood of loss to apply for or continue insurance, when compared with other people. An increase in antiselection often occurs in connection with increased lapse rates, which lead to increased mortality or morbidity rates.

Also known as:

Anti-Selection

# **Affinity Group**

A group of people with something definitive in common, often membership of a particular organization or subgroup of an organization, but not common employment.

### **Age-at-entry Pricing**

This phrase relates to the practice in some PMI markets of calculating premiums using the policyholder's age at policy entry as the basis of risk. The insurer usually retains the right to increase premiums subsequently to allow for medical inflation or medical inflation in excess of levels assumed in the original calculation.

#### **Agents' Balances**

Monies, typically premiums, that belong to an insurer but are held by an agent.

# **Aggregate Excess Of Loss Reinsurance**

Reinsurance where the reinsurance deductible applies to a group of contracts (as opposed to a single contract), for example, a reinsurance contract that pays out when the loss for an entire line of business exceeds 120% of the expected loss.

# All Risks

All risks is a type of property-casualty insurance coverage that automatically covers any risk (beside explicit exclusion). For example, if an all-risks homeowner's policy does not expressly exclude flood coverage, then the house will be covered for flood.

# Allocated Loss Adjustment Expenses (ALAE)

Allocated loss adjustment expenses (ALAE) are attributed to the processing of a specific insurance claim. ALAE are part of an insurer's expense reserves. It is one of the largest expenses for which an

insurer has to set aside funds (along with contingent commissions). Loss adjustment expenses that are assignable or allocable to specific claims. Fees paid to outside attorneys, experts, and investigators used to defend claims are examples of ALAE.

# **Allowed Amount**

The maximum amount a plan will pay for a covered health care service. May also be called "eligible expense,†ⓐ "payment allowance,†ⓓ or "negotiated rate.†〗

# **Annual Basis Of Accounting**

The annual basis of accounting for general insurance business is considered to be an accrual method. A result is determined at the end of the accounting period reflecting:

Profit or loss from providing insurance cover during that period (including the anticipation of losses arising from cover to be provided in subsequent periods in respect of business written prior to the end of the accounting period)

Adjustments to the profit and loss from business written during earlier accounting periods

Depending upon the product, this method may take into account projection of the deferral of acquisition costs, the value of future premiums, and claim and benefits payable to policyholders (those incurred but not settled, as well as future benefits).

### **Annual Deductible Combined**

Usually in Health Savings Account (HSA) eligible plans, the total amount that family members on a plan must pay out-of-pocket for health care or prescription drugs before the health plan begins to pay.

#### Annuity

A financial contract between an insurance company and the policy holder (purchaser) that provides for a series of payments at regular intervals to be received for a number of years or over a lifetime. Earnings of annuities grow tax-free until payouts begin, which is usually around 65. Annuities are hybrids of insurance and investments. Examples include variable, fixed, deferred, and market value adjusted.

# **Appraisal Value**

The appraisal value of an insurance company is the sum of the embedded value of the company and the value to its shareholders of the future profits they expect to receive from future new business. The latter part of the appraisal value is often referred to as the "goodwill" value of the company.

# Arbitrage

Attempting to profit by exploiting price differences of identical or similar financial instruments, on different markets or in different forms.

This term could also refer to a process to settle claim outside the judicial system.

# Ask Price

An Ask Price, also known as an Offer Price, is the price at which a seller is willing to sell a security.

The opposite of the ask price is the bid price, which is the price a buyer is willing to buy shares; the bid price and ask price are always quoted together, and the bid price is always the lower of the two.

# Asset Default Risk

Asset default risk occurs when an asset loses value. When an asset defaults, the company must reduce the value of the asset on its books (following accounting rules), and reduces capital and earnings. Each type of asset has a different default risk.

# Asset Share

Share of the insurer's assets attributable to that policy. In other words, it is the asset that a policyholder has built up in an insurance company. The asset share value is calculated as the amount the policyholder has paid in premiums, less the cost of insurance and other expenses to the insurance company. The asset share value is computed using the amount the insurance company actually spends in expenses, and is not simply an estimate.

# Assets

An asset (or assets) are money or economic goods held, or the right to receive future economic benefits.

# Associate (or ASA)

An Associate of the Society of Actuaries (ASA) is a person who has demonstrated knowledge of the fundamental concepts and techniques for modeling and managing risk through a series of required examinations and learning modules.

The Associate has also learned the basic methods of applying those concepts and techniques to common problems involving uncertain future events, especially those with financial implications.

The Associate has also completed a professionalism course covering the professional code of conduct and the importance of adherence to recognized standards of practice.

# **Assumed Reinsurance**

Assumed Reinsurance (US) represent the reinsurance business accepted by an insurer or reinsurer, as opposed to that ceded to another insurer.

Also known as:

Inwards Reinsurance (UK)

# **Assumptions (also Actuarial Assumptions)**

An actuarial assumption is an estimate of an uncertain variable input into a financial model, normally for the purposes of calculating premiums or benefits.

# Average

General term for smoothing numerical information using a set of data points to arrive at a single value (measure of central tendency) to represent those data points. Examples include straight averages (a sum of numerical data values divided by the number of data value=arithmetic mean) and weighted averages

(putting more or less emphasis on certain data values using a subjective measure of each value's importance).

### Specific insurance definitions:

In non-marine insurance, the term relates to the practice of scaling down the amount of a claim by applying the ratio of the actual sum insured to the amount deemed to have been the appropriate sum insured.

In marine insurance, the term is generally used to describe damage or loss.

#### **Balance Billing**

When a provider bills you for the difference between the providerâ€<sup>™</sup>s charge and the allowed amount. For example, if the providerâ€<sup>™</sup>s charge is \$100 and the allowed amount is \$70, the provider may bill you for the remaining \$30. A preferred provider may not balance bill you for covered services.

#### **Balance Of A Reinsurance Treaty**

The ratio of the total premiums receivable by a reinsurer under a surplus treaty to the reinsurer's maximum liability for any one claim, based on expected maximum loss (EML).

#### **Balance Of Cost Scheme**

A pension scheme in which the beneficiary makes a defined contribution (usually a percentage of pensionable salary) and the main sponsor pays the remainder of the (unknown) cost of providing the benefits. Historically most UK defined benefit pension schemes were established to be of this type.

(Source: Association of Corporate Treasurers)

#### **Bear Market**

A period of time during which investors are generally unconfident and stock market prices decline. Opposite to a Bull Market.

#### Benchmark

A benchmark is a standard against which the performance of a security, mutual fund or investment manager can be measured. Generally, broad market and market-segment stock and bond indexes are used for this purpose.

#### Benefit

An benefit (economic benefit) is the receipt at a specific time of money or economic goods.

(Source: Principles Underlying Actuarial Science)

Also known as:

**Economic Benefit** 

#### **Benefit Limitation**

Any provision, besides exclusion, which restricts coverage in the Evidence of Coverage. An example in

health insurance would be a maximum benefit payable per year for a given product or service; e.g. Â a \$2,000 cap on prescription drugs per calendar year.

# **Best Estimate**

An estimate (eg of an assumption or a liability) that is not intended to be either optimistic or conservative (Source: Understanding Actuarial Management: the actuarial control cycle)

# **Best Estimate Reserve**

This reserve would be calculated using assumptions that are best estimates rather than assumptions that contain conservative margins.

# **Bid Price**

A bid price is the price a buyer is willing to pay for a security. The opposite of the bid is the ask price, which is the price at which sellers are willing to sell shares; the bid price and ask price are always quoted together, and the bid price is always the lower of the two.

Also known as:

Ask Price, Selling Price, Buying Price

(NOTE: the terms "bid price" and "ask price" are much more common in the US than "selling price" and "buying price")

# **Black-scholes Model**

An option pricing model initially developed by Fischer Black and Myron Scholes for securities options and later refined by Black for options on futures. This model has been refined and it applies to a broader scope of financial assets.

# Bond

A certificate of debt issued by a government or corporation that guarantees payment of the original investment on a specified date plus periodic, usually semi-annual, payments of interest until that date.

# **Bonus Earning Capacity**

A UK term used in the context of with-profit business. The term can be applied to an individual policy, a group of policies or even the whole life office. (Source: Insurance Demystified - Reading Beyond The Lexicon)

# **Bonus-malus**

Bonus Malus is effectively a negative bonus. The system rewards discount for claim-free past policy, but imposes surcharges when there are claims.

(Source: Insurance Demystified - Reading Beyond The Lexicon)

# **Book Value**

Strictly, the value (of an asset) shown in the company's accounts (its "books"), but often used to mean the amortized purchase price (similar to the US statutory accounting) as distinct from the market value.

The amount shown on a company's books for a particular asset or liability. A company often maintains separate sets of book values for tax purposes, solvency accounting, and stockholder accounting. Complex rules dictate how book values must be calculated for each type of asset and liability and each set of books.

#### Bordereau

Bordereau describes most lists or reports of premium or losses required under the reinsurance contract from the reinsured to the reinsurer.

A bordereau is not required for facultative reinsurance where an individual risk is reinsured as the premium report is the reinsurance premium paid for the facultative certificate for that individual risk and there is individual loss reporting.

A bordereau may be needed if a facultative certificate generates multiple losses emanating from an individual risk, with monthly or quarterly reports listing all claims and all payments on claims.

### **Broader Financial Services (BFS)**

A term created by banks, insurance companies, investment banks, and brokerages, to describe the industry in which companies providing all those services are fully integrated.

### **Bull Market**

A period of time during which investors are generally confident and stock market prices rises.

Opposite to a Bear Market.

#### **Bundled Payment**

A Bundled payment, or episode-based payment, is a departure from the fee-for-service model. Â It is a single payment for services provided for an entire episode of care. Providers are collectively reimbursed for the expected costs to treat a specific condition that may include several physicians, settings of care, and procedures. For example, a bundled payment for a hip replacement is a single payment for this procedure. Â It encourages savings by the provider (e.g. limiting readmission).

# **Burning Cost**

The ratio of incurred excess losses over the theoretical amount of premium it would take only to cover losses.

# **Business Acumen (or Business Savvy)**

Broad-based knowledge and ability of business disciplines, used to grasp the whole of a problem or situation and develop creative, implementable solutions.

The actuary with business acumen perceives quickly the essence of business situations, and acts accordingly; devises creative, systemic solutions to problems; balances attention between tactical detail and a broad strategic view; gets results by building processes that work and continuously improves them; exhibits a broad knowledge of business disciplines beyond own areas of expertise.

#### **Business Interruption Insurance**

Business interruption insurance is a commercial coverage that includes

lost income if your company is unable to operate due to disaster-related damage that is covered under your property insurance policy, such as a fire.

lost revenue you would have earned, based on your financial records, had the disaster not occurred.

some operating expenses, like utility or rent, that continue even though business activities have come to a temporary halt.

### **Call Option**

An agreement that gives an investor the right, but not the obligation, to buy a stock, bond, commodity or other instrument at a specified price within a specific time period.

# Canadian Association of Pension Supervisory Authorities (CAPSA)

The Canadian Association of Pension Supervisory Authorities (CAPSA) is a national association of pension regulators whose mission is to facilitate an efficient and effective pension regulatory system in Canada.

It develops practical solutions to further the coordination and harmonization of pension regulation across Canada.

### **Canadian Pension Plan 1966**

The Canada Pension Plan provides monthly pension and death benefits to eligible individuals in all provinces except Quebec, whose residents are covered by the Quebec Pension Plan.

# Cancellation

In a general sense, cancellation is the act of reversing a business transaction. It is subject to cancellation policy.

A property and casualty or health insurance policy can be cancelled at any time before its expiration date with the refund any prepaid premium on a pro rata basis and a termination of the converage starting going forward.

Life insurance contracts can be cancelled generally within 30 days. Other termination mechanism (e.g. surrender, lapse) could be used

#### Сар

An upper limit/ maximum amount on something like a benefit, a contribution, benefit growth or a funding level.

# Capacity

The maximum amount of business or exposure an insurer can write, usually measured by premium income, sum assured, etc.

#### **Capital Requirement**

Amount of capital a bank or other financial institution has to hold as required by its financial regulator. In the banking sector, this is usually expressed as a capital adequacy ratio of equity that must be held as a percentage of risk-weighted assets.

These requirements are put into place to ensure that these institutions do not take on excess leverage and become insolvent.

In the insurance industry, this is usually expressed as percentage of RBC.

# Captive

A captive insurance company is a wholly owned subsidiary company that provides risk-mitigation services for its parent company or a group of related companies. A captive insurance company may form if the parent company cannot find an outside firm to insure them against particular business risks, if the premiums paid to the captive insurer creates tax savings, or if the insurance provided is more affordable or offers better coverage for the parent company's risks.

### **Career Break**

A career break is a period of time out from employment. A career break clause in insurance policies allows the policyholder to resume his or her coverage after a break in employment, subject to time restrictions.

### **Case By Case Estimation**

A method of determining the reserve for the full estimated loss on any claim still open at the accounting date. Each outstanding claim is individually assessed to arrive at an estimate of the total payments to be made. The shorter term "case estimation" is often used and the estimates are referred to as case estimates.

#### **Cash Balance Scheme**

A Cash Balance Scheme is a defined-benefit pension plan under which an employer credits a participant's account with a set percentage of his or her yearly compensation plus interest charges. As such, the plan's funding limits, funding requirements and investment risk are based on defined-benefit requirements.

As changes in the portfolio do not affect the final benefits to be received by the participant upon retirement or termination, the insurance company solely bears all ownership of profits and losses in the portfolio.

# **Cash Flow**

Movement of money

### **Cash Plans**

Hospital cash insurance pays a fixed amount of money for each day insured is hospitalised for medical treatment or surgery. The total amount paid under this policy may be more or less than insured's actual medical expenses.

Also known as:

#### **Hospital Cash Plans**

### **Casualty Accumulation Risk**

Casualty accumulation risk is the concentration of insured risks or insurance coverages that may be affected by events or circumstances that cause substantial losses under several insurance policies, and potentially over multiple years and geographies.

### **Casualty Insurance**

A broad category of non-life, non-health coverage against loss of property, damage or other liabilities, including such things as vehicle insurance, liability insurance, theft insurance, machinery, and crime.

### Catastrophe

Catastrophes are infrequent events that cause severe loss, injury or property damange to a large population of exposures. While the term is most often associated with natuaral events (e.g. earthquakes, floods or hurricanes), it can also be used when there is concentrated or widespread damage from man-made disasters (e.g. fires, explosion, pollution, terrorism or nuclear fallout).

### **Catastrophe Reinsurance**

Catastrophe Reinsurance provides protection when losses from a single event such as an earthquake or hurricane exceed the buyer's specified retention.

### **Catastrophe Reserve**

Reserve set aside for catastrophic event.

These pre-event catastrophe reserves are designed to accumulate, over time, a portion of the capital an insurer may require to pay catastrophe claims. The advantage to the insurer is that this capital is put aside on a pre-tax basis and held in a liability account known as a catastrophe reserve.

In noncatastrophe years, the catastrophe reserve reduces federal income tax on the apparent "annual profit" arising from catastrophe-related premium when there are no offsetting catastrophe claims to pay. That federal tax reduction is reversed in catastrophe years when the catastrophe reserve is reduced to pay catastrophe claims.

# **Ceded Reinsurance**

The enterprise ceding (giving up) the risks is said to place outward reinsurance. Reinsurance ceded by an insurer or reinsurer, as opposed to inwards reinsurance which is reinsurance accepted.

Also known as:

**Outwards Reinsurance (UK)** 

#### Ceding Company

An insurance or reinsurance company that transfer the part or all of its risks from its insurance policy portfolio to a reinsurer.

Also known as:

Cedant

# **Central Fund**

A part of third link of Lloyd's capital structure that used to provide financial security to policyholders and capital efficiency to Lloyd's members.

# **Chain Ladder Method**

The Chain Ladder Method (CLM) is a method for calculating the claims reserve requirement in an insurance companyâ€<sup>™</sup>s financial statement. The CLM is used by insurers to forecast the amount of reserves that must be established in order to cover future claims.

# **Change Enablement**

Change is continuous and often rapid. Actuaries apply systematic thinking to change initiatives and act to overcome barriers to change and support change. Implementing change effectively involves developing and executing strategies and action plans.

# **Change Of Occupation**

This is a provision in a health insurance policy that allows the insurer to adjust policy benefits if the insured has changed to a more hazardous occupation.

Change of occupation is also a provision that provides a method for handling disability income claims if the insured has changed occupations since the initial application. This provision allows the insurer to adjust benefits or premiums to reflect the change in occupation. If this provision is not in the policy, then no changes can be made.

This also could exists in other types of policies (e.g. LTC)

# **Chinese Walls**

An ethical barrier within an organization that prevents communication between various teams, as such communication would lead to conflict of interest.

# **Chronic Illnesses / Chronic Condition**

A Chronic Illness / Chronic Condition is a human health condition or disease that is persistent or otherwise long-lasting in its effects or a disease that comes with time. The term chronic is often applied when the course of the disease lasts for more than three months.

Common chronic diseases include arthritis, asthma, cancer, COPD, diabetes and some viral diseases such as hepatitis C and HIV/AIDS.

A Chronic disease may be progressive, result in complete or partial disability, or even lead to death.

# Claim

A document or request filed by a policyholder, beneficiary or other stakeholder stating that an insured event has occurred and that the insurance company should provide coverage.

# **Claim Amount Distribution**

A distribution of claim size within a given period of time. Claims are often characterized by amount, severity or unit size and frequency or utilization.

# **Claim Cohort**

A classification of claimants, based on sharing of a common characteristic. Often times, this is exposure to a certain peril.

# **Claim Cost Inflation**

The rate of increase in the cost of claim payments. It is likely to be influenced by many different types of inflationary force, e.g. general or specific earnings inflation, general or specific price inflation, court award inflation.

# **Claim Escalation Rates**

This is the rate at which open claims (i.e. claims in payment), increase under Disability (referred to as IP/Disability, for "Income Protection" in the UK) or LTC policies. Unless otherwise stated, they compound annually.

The Cost of Living Adjustment (COLA) is a similar concept to the Claim Escalation Rate (which is a UK term)

# **Claim Frequency**

A rate or distribution of the number of claims within a given period of time. Claims frequency is often thought to be a negative-binonimal or possion distribution, with the result being either claim did not did not occur.

# **Claim Frequency Distribution**

Distribution of claim occurrence per unit exposure.

# **Claim Notification Period**

The amount of time after the incurral of a claim during which an insurance company will accept a notification of a claim. Claims received by an insurer after the end of the claim notification period may not be eligible for payment, or may be paid at a reduced rate.

# **Claim Ratio**

The ratio of claims for a given coverage period to premiums for that same coverage period. The loss ratio measures the proportion of premium used to pay claims, and indirectly informs the user of the proportion of premium left over to cover expenses, profit margin, etc.

# **Claims - Late Notification**

To protect itself from financial disadvantage, an insurer will set up rules for dealing with claims that are notified very late (i.e. notification occurs after the end of the deferred period). Practice on the late notification of a claim varies greatly.

A few example options are (may be subject to state regulations):

Back-date the claim to the end of the deferred period if supporting medical evidence can be provided.

Subject all claims to individual consideration.

Treat the date of notification as the date benefit becomes payable.

Assume that incapacity started at a set period prior to notification. The set period is normally in line with the claim notification period required.

Assume the commencement of disability to be the date of notification.

Postpone the commencement of the deferred period.

Do not back date benefits, so that benefits will be lost.

Reduce the benefit payable.

Delay benefit payment if notification is not received within six months of the end of the deferred period.

Refuse claims where written notification is not received within 90 days of the end of the deferred period.

### **Claims Adjudication**

The process of examining the facts in a claims disagreement and rendering a decision.

#### **Claims Experience**

The claims payments for services incurred for a specific block of business over a given time period.

#### **Claims Handling Expenses**

The cost of adjudicating a claim. Some examples are: salaries of claim adjudicators, fees for medical professionals needed for claim review, and the cost of postage related to a claim.

#### **Claims Incurred**

An estimate of the amount of outstanding liabilities for a policy over a given valuation period. It includes all paid claims during the period plus a reasonable estimate of unpaid liabilities. It is calculated by adding paid claims and unpaid claims minus the estimate of unpaid claims at the end of the prior valuation period.

#### **Claims Made Policy**

An insurance policy that provides coverage when a claim is made against the policy, regardless of when the claim event took place.

A claims-made policy is most likely to be purchased when there is a delay between when claims are filed and when they occur. Business insurance policies are often offered as either a claims-made policy or an occurrence policy. While the claims-made policy provides coverage for claims when the event is reported, the occurrence policy provides coverage when the event occurs.

# **Claims Paid**

The amount of liabilities paid for a policy over a given valuation period.

#### **Claims Pre-Authorization**

A decision by health insurer or plan that a health care service, treatment plan, prescription drug, or durable medical equipment is medically necessary.

The health insurer or plan may require pre-authorization for certain services before you receive them, except in an emergency. Pre-authorization is not a promise that the health insurer or plan will cover the cost. Also known as prior authorization, prior approval, or precertification.

### **Claims Reported**

Claims Reported, also known as Reported Claims and Reported Losses, are the sum of cumulative paid claims and case outstanding estimates at a particular point in time (Source: Casualty Actuarial Society)

See Page 15 in the Werner Modlin Ratemaking document.

See Pages 20 and 21 in the Friedland Estimating document.

### **Claims Run-off Analysis**

A table that describes changes in the value of various cohorts over time. The rows show accident years, i.e. the time (years, quarters...) in which claim events occurred, and the columns show the development years, i.e. years elapsed since accident year when the claims are paid out. The development of run-off triangles is generally used for estimating incurred but not reported claims for insurance portfolios, in order to set appropriate reserves that are in compliance with regulatory requirements as well as the company's risk appetite.

Also known as:

Development Triangle or Run-off triangle.

See Page 57 in the Friedland Estimating document

#### **Clash Cover**

A casualty excess of loss reinsurance agreement with a retention level equal to or higher than the maximum limits written under any one reinsured policy or contract reinsured under the reinsurance agreement. Usually applicable to casualty lines of business, the clash cover is intended to protect the ceding company against accumulations of loss arising from multiple insureds and/or multiple lines of business for one insured involved in one loss occurrence.

#### **Clean Price**

A clean price is the price of a coupon bond not including any accrued interest.

#### **Closed Scheme**

A benefits scheme which does not admit new members. (Contributions may or may not continue and benefits may or may not be provided for future service.)

Similarly, insurers can be closed to new business, or have closed funds.

(Source: Pensions Management Institute (PMI) / Pensions Research Accountants Group (PRAG))

### **Code of Professional Conduct**

A code of professional conduct is a necessary component to any profession to maintain standards for the individuals within that profession to adhere. It brings about accountability, responsibility and trust to the individuals that the profession serves.

The Code of Professional Conduct sets forth what it means for an actuary to act as a professional. It identifies the responsibilities that actuaries have to the public, to their clients and employers, and to the actuarial profession. (Source: American Academy of Actuaries, Society of Actuaries)

#### Coinsurance

In health insurance, this is a type of insurance where the cost of care is split between the insurance and the insured, usually ranging from 80/20 to 50/50.

This is also a type of proportional reinsurance where premium, claims, benefits and other cash flows are shared with the reinsurance; it usually also has an expense allowance feature to support the insurer acquisition cost. Reserves and risks are also transferred to the reinsurer.

The ceding company retains its liability to the insured.

#### **Combined Ratio**

The combined ratio is a primary measure of the profitability of the book of business. The combined ratio is the sum of the incurred claims and expenses divided by total premiums collected.

#### **Commercial Lines**

Classes or types of insurance for businesses. Those for individuals or people are usually referred to as Personal Lines.

#### Commission

Commission refers to the payments made by an insurance company to reward those who sell and subsequently service the insurance company's products, whether the seller be an independent financial intermediary, tied (captive) agent or a direct salesforce.

Typically, the amount of the commission depends on the type and size of contract.

Commission could also refers to the fees for asset management.

#### Communication

Communication skills include both verbal and written communication.

Verbal communication refers to both oral and listening skills.

The successful actuary communicates complex issues clearly, accurately, confidently and persuasively in an individual setting or in a group discussion or presentation and uses language that is appropriate for the audience. Effective listening helps the actuary clarify messages and relate understanding. Written

communications demonstrate clear and effective expression of ideas.

### **Community Rating**

A rule that prevents health insurers from varying premiums within a geographic area based on age, gender, health status or other factors.

### Commutation

The giving up of a part or all of the pension payable from retirement for an immediate lump sum.

### **Comprehensive Cover**

The highest level of coverage a person can have if they take out motor insurance in the United Kingdom. By taking out Comprehensive Cover, people in the United Kingdom are not only covered for third party claims after an incident, they are also covered for damage caused to their own vehicle.

### **Consequential Loss Insurance**

Insurance coverage for financial losses arising following damage (e.g. a fire) to business premises.

Also known as:

Loss of Profits

**Consequential Loss Insurance** 

# **Consolidated Omnibus Budget Reconciliation Act (COBRA)**

A US federal law that may allow you to temporarily keep health coverage after your employment ends, you lose coverage as a dependent of the covered employee, or another qualifying event.

If you elect COBRA (Consolidated Omnibus Budget Reconciliation Act) coverage, you pay 100% of the premiums, including the share the employer used to pay, plus a small administrative fee.

#### **Constructive Total Loss**

A constructive total loss is when the cost for repair of an item (e.g., house, boat or car) is more than the current value of that item.

#### Contingency

Cash held for emergencies or unexpected outflows of funds.

An event that may or may not occur.

A condition that must be met in order for a contract to be legally binding.

#### Contingent

An economic benefit that depends on an event whose occurrence or timing is not certain is said to be contingent.

#### **Contingent Cash Flow Model**

A contingent cash flow model is a stochastic model that represents future cash flows as random variables.

(Source: Principles Underlying Actuarial Science)

A contingent event may or may not occur, and depends upon the probability of the event occurring, and the accuracy with which the amount associated with the event can be estimated.

### **Continuation Option**

This is the right for a group participant to continue coverage after leaving a group. Â This is usually used by former employees to continue their health coverage under their former employer group plan, while paying the full premium without former employer's participation. Â In the USA, this is organized under a federal law called COBRA (Consolidated Omnibus Budget Reconciliation Act of 1985).

### **Continuing Care**

The level of care in the health care system that consists of ongoing care of people with physical disability, mental disability, and those suffering from chronic incapacitating illness.

### **Continuing Care Retirement Community (CCRC)**

A continuing care retirement community (CCRC)Â is a residential facility or property that provides housing, meals, health care and social activities for seniors throughout the rest of their lives that are tailored to their changing needs.

CCRCs allow residents to transition from independent living to assisted living and skilled nursing facilities, if needed, as their mental and physical health changes.

#### Contract

A contract is a voluntary arrangement between two or more parties that is enforceable by law as a binding legal agreement.

#### **Contract Law**

Contract law governs how promises between two individuals are enforced.

#### **Contribution Method**

A method of determining a product's contribution to profits and fixed costs, often calculated as price less variable costs.

#### Control Cycle (or Actuarial Control Cycle)

A conceptual framework that is useful in describing the processes needed for the development and ongoing management of a financial enterprise, product or scheme. It is based on a simple problem-solving algorithm:

define the problem; design the solution; and

monitor the results

(Source: Understanding Actuarial Management: the actuarial control cycle 2nd edition Page 3)

### Convexity

Convexity is a measure of the curvature in the relationship between bond prices and bond yields that demonstrates how the duration of a bond changes as the interest rate changes.

#### Copayment

A fixed amount one pay for a covered health care service after the insured pays the deductible.

### **Co-reinsurance**

A reinsurance company that is participating in a reinsurance contract along with other reinsurers.

Co-reinsurance may be done to ensure that the amount of risk that is being taken over from the insurer can be covered. Co-reinsurance may exist in both facultative reinsurance and treaty reinsurance.

Co-reinsurers are often small reinsurance companies that may not otherwise be able to work with a ceding company because they cannot take on as much risk as the contract requires. They may also be less familiar with a particular type of risk, and thus are less willing to take on a large amount of that risk until they are more experienced.

A group of reinsurers participating in a co-reinsurance scheme is sometimes referred to as a pool.

### **Corporate Governance**

Corporate governance is the system of rules, practices and processes by which a firm is directed and controlled.

Corporate governance essentially involves balancing the interests of a company's many stakeholders, such as shareholders, management, customers, suppliers, financiers, government and the community. Since corporate governance also provides the framework for attaining a company's objectives, it encompasses practically every sphere of management, from action plans and internal controls to performance measurement and corporate disclosure.

#### **Corporation Tax**

Tax on company profits.

# Correlation

Correlation is a measure of the extent to which a change in one random variable occurs simultaneously with a change in another random variable.

#### **Cost Plus**

Cost Plus medical or dental arrangements cover claims that are over pre-determined policy limits.

It can be set up with an insurer on a fee per claim basis. Insurers generally charge an administrative fee.

Source: groupbenefits.ca

#### **Cost Sharing**

The share of costs covered by your insurance that you pay out of your own pocket. This term generally includes deductibles, coinsurance, and copayments, or similar charges, but it doesn't include premiums, balance billing amounts for non-network providers, or the cost of non-covered services.

Cost sharing in Medicaid and CHIP also includes premiums.

### Counterparty

The opposite side in a financial transaction.

### Coupon

The interest payments on a bond.

### Covenant

A clause in a contract that requires one party to do, or refrain from doing, certain things, often, a restriction on a borrower imposed by a lender.

This also applies to reinsurance contracts and to specific investment (e.g. alternative asset).

### **Cover Note**

A cover note is a temporary document issued by an insurance company that provides proof of insurance coverage until a final insurance policy can be issued.

A cover note is different from a certificate of insurance or an insurance policy document. A cover note features the name of the insured, the insurer, the coverage and what is being covered by the insurance.

#### Credibility

Given an application and a model, credibility is the relative weight assigned to one of two or more estimates used to generate a more accurate estimate.

#### **Credit Rating**

A credit rating agency assesses the creditworthiness of an obligor as an entity or with respect to specific securities or money market instruments. A credit rating agency may apply to the SEC for registration as a nationally recognized statistical rating organization ("NRSRO").

#### **Credit Risk**

The risk of loss of principal or loss of a financial reward stemming from a borrower's failure to repay a loan or otherwise meet a contractual obligation. Credit risk arises whenever a borrower is expecting to use future cash flows to pay a current debt.

This also includes risk of failure of a reinsurer, a bank or any other counterparty to meet its contractual obligations.

#### **Creditor Insurance**

Insurance that is sold in conjunction with a credit obligation or loan. If the insured loses employment or becomes unable to work due to disability, preventing them from making the loan payments, credit insurance makes payments to the lender on the insured's behalf.

# **Critical Illness**

A life-threatening condition that is usually strictly defined. Critical illness coverage generally provides a lump sum payment to the policyholder upon diagnosis of a specified terminal illness.

#### **Current Monetary Value**

The amount of money a person is willing to trade for an economic good at a specific time is the good's then current monetary value to that person.

### Custodian

A financial institution independent of the investment management function. The custodian keeps a record of a client's investments, settles its market transactions and may also collect income, process tax reclaims and provide other services agreed with the client.

### Debenture

Unsecured debt backed only by the integrity of the borrower, not by collateral, and documented by an agreement called an indenture. One example is an unsecured bond.

### Deductible

Portion of the insured loss (in dollars) paid out of pocket by the policy holder before an insurance provider pays any expenses.

#### **Deep Pocket Syndrome**

A situation where the plaintiff always looks for the defendant with the greatest ability to pay (or usually meaning the one with the highest level of insurance cover.)

# **Deferred Acquisition Costs (DAC)**

Costs associated with the acquisition of a long term insurance contract which are recognized over the duration of the insurance contract.

#### **Deferred Member**

A member entitled to preserved benefit, that has already been earned from an occupational pension scheme when ceasing to be an active member before normal pension age and which is received on retirement.

# **Deferred Periods**

The deferral period of an economic asset or an economic liability is the period of time from the present until possession of the specified economic good is to commence, or transfer of the specified economic asset is to occur.

#### **Deficit (or Underfunding)**

The situation when the value of a planâ€<sup>™</sup>s assets are less than its liabilities, thereby having an actuarial deficiency.

### **Defined Benefit Plan**

A company retirement plan, such as a pension plan, in which a retired employee receives a specific amount based on salary history and years of service, and in which the employer bears the investment risk. Contributions may be made by the employee, the employer, or both.

### **Defined Benefit Scheme**

A benefits scheme where the scheme rules define the benefits independently of the contributions payable, and benefits are not directly related to the investments of the scheme. The scheme may be funded or unfunded. This term is often compared with defined contribution scheme where benefits are directly related to the investments of the scheme.

### **Defined Contribution Plan**

The provision of an individual member's pension benefit by reference to contributions paid into a pension scheme by or in respect of that member, usually increased by the investment return on those contributions.

# **Definition of Disability**

The contractual definition by which an insured's claim is judged for disability insurance.

Essentially, the contract specifies that disability benefits are only payable if the severity of the insured's disability meets or exceeds the Definition of Disability.

Also known as:

Definition of Incapacity (UK)

# **Degree Of Actuarial Soundness**

The probability that a risk management system will be able to meet the success criterion of being able to pay all obligations as promised is called the degree of actuarial soundness of the risk management system.

See Page 42 of the The Role of Actuarial Soundness in the National Flood Insurance Program document.

# **Degree of Uncertainty**

The degree of uncertainty of a random variable is a measure of the variation of the values taken on by the random variable from its expected value.

#### **Delay Table**

A tabulation showing the speed of settlement for cohorts of claims.

#### **Deposit Premium**

The premium charged by the insurer at the inception of a contract under which the final premium depends on conditions prevailing over the contract period and so is not determined until the expiration of that period.

#### Depreciation

A noncash expense that reduces the value of an asset as a result of wear and tear, age, or obsolescence. Most assets lose their value over time (in other words, they depreciate), and must be replaced once the end of their useful life is reached. There are several accounting methods that are used in order to write off an asset's depreciation cost over the period of its useful life. Because it is a non-cash expense, depreciation lowers the company's reported earnings while increasing free cash flow.

A decline in the value of a given currency in comparison with other currencies. For instance, if the U.S. dollar depreciates against the Euro, buyers would have to pay more dollars in order to obtain the original amount of euros before depreciation occurred.

#### **Derivative Instrument**

Any security that derives its value from an underlying financial instrument.

Examples include interest rate swaps, futures, and options.

### **Deterministic Model**

A deterministic model of a phenomenon is a stochastic model in which a given event is assumed to occur with certainty.

### **Development Factors**

Also known as age-to-age factors or link ratios, represent the ratio of loss amounts from one valuation date to another, and they are intended to capture growth patterns of losses over time. These factors are used to project where ultimate amount losses will settle.

#### **Direct Business**

Business acquired by selling directly to customers without using intermediaries.

Also used to qualify business acquired directly and not through reinsurance.

#### **Direct Marketing**

A distribution channel by which an insurance company sells directly to consumers without the use of agents, i.e. through direct mail, telemarketing, direct response, and the internet.

#### **Direct Sales Force**

Insurance sales people who sell the company's product directly to the customers.

#### **Dirty Price**

The price of a bond including accrued interest from the most recent coupon payment.

# **Discontinuance Valuation**

An actuarial valuation carried out to assess the liability of a benefits scheme if it were to be discontinued (i.e., plan termination). The valuation may take into account the possible exercise of any discretion to augment benefits. (Source: Pensions Management Institute (PMI)/Pensions Research Accountants Group (PRAG))

# **Discounted Payback Period**

A discounted payback period gives the number of years it takes to break even from undertaking the initial expenditure, by discounting future cash flows and recognizing the time value of money.

### **Discovery Period**

A grace period given to an insured who has cancelled a bond, during which he or she can still discover and report losses that occurred during the bond's term.

Losses reported in this fashion are paid by the original surety. The grace period is usually one year.

Source: businessdictionary.com

### **Disintermediation Risk**

The risk of having to sell assets at a loss, to fund substantial cash outflows. This occurs when interest rates have increased and thus asset values decreased.

### Diversification

Diversification is the aggregation of sets of future cash flows contingent upon actuarial risk variables that are not perfectly positively correlated.

Due to the less-than-perfect correlation, the relative variability in the aggregated cash flows will be lower than the relative variability in the constituent sets of cash flows.

### **Dividend Yield**

The ratio of the dollar value of dividends paid in a given year to share price of a stock.

#### Duration

In finance, the duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows are received. When the price of an asset is considered as a function of yield, duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields. Duration is also referenced as Macaulay duration. Other duration calculations exist (e.g. key rate duration)

# **Dynamic Financial Analysis (DFA)**

Acronym for Dynamic Financial Analysis.

# **Dynamic Stochastic Model**

A dynamic stochastic model is a stochastic model that incorporates a systematic process for revising the model in response to observed results.

# Early and Periodic Screening, Diagnostic, and Treatment Services (EPSDT)

A term used to refer to the comprehensive set of benefits covered for children in Medicaid in the USA

#### **Early Leaver**

A person who ceases to be an active member of a benefit scheme, other than on death, without being granted an immediate retirement benefit.

### **Earned Premium**

Earned premium is the portion of an insurance premium that paid for a portion of time in which the insurance policy was in effect, but has now passed and expired. Since the insurance company covered the risk during that time, it can now consider the associated premium payments it took from the insured as "earned"

#### **Economic Benefit**

An economic benefit (benefit) is the receipt at a specific time of money or economic goods.

### **Economic Game**

An economic game (game) is a model of a transaction that attempts to determine the strategies that the parties to the transaction will adopt, given the information each has at every step in the process, in order to achieve the result that each considers most economically advantageous.

### **Economic Good**

An economic good is something that has value to a person and that the person can consider exchanging for something else.

### **Economic Risk**

The possibility of losing (typically in part) economic security.

### **Economic Transaction (transaction)**

A transaction (or economic transaction) is an exchange of economic goods or money by two or more persons.

#### Economic Value Added (EVA)

Economic Value Added (EVA) is a measure of a company's financial performance based on its operating profit, minus its cost of capital, adjusted for taxes on a cash basis. EVA = Net Operating Profit After Taxes - Invested Capital x Weighted Average Cost of Capital. It essentially measures the value a company generates from funds invested in it.

# Effective date (or Inception Date)

Effective date is the date at which the coverage of an insurance policy starts.

Also known as:

Start Date

**Inception Date** 

#### Efficient

Used to describe a financial market, with respect to a given class of information. The market is said to be efficient if the prices actually paid in that market fully reflect all information in the specified class of information.

#### **Efficient Frontier**

The efficient frontier is the set of optimal portfolios that offers the highest expected return for a defined level of risk or the lowest risk for a given level of expected return.

# **Efficient Market Hypothesis**

A market theory that evolved from a 1960's Ph.D. dissertation by Eugene Fama, the efficient market hypothesis states that at any given time and in a liquid market, security prices fully reflect all available information.

# **Eighths Method**

This method of calculating the unearned premium reserve relies on the basis that policies are issued evenly within each quarter. The assumption is that all policies are issued midway of the quarter. The portion of premium relating to unexpired liability that runs into the following treaty year would constitute the unearned premium. Policies issued in Q1, Q2, Q3 and Q4 would treat 1/8, 3/8, 5/8 and 7/8 of the premium to the unearned premium reserve.

# **Elective Surgery**

Surgery that is subject to choice (election).

# **Embedded Value (EV)**

The consolidated value of the shareholders' interests in the company.

The present value of all future shareholder cash flows from the covered inforce business and capital and surplus.

EV does not include any values attributable to future sales.

European Embedded Value (EEV) and Market Consistent Embedded Value (MCEV) are formalized way to set parameters in the calculation of the EV.

# **Emerging Market**

Stock markets in developing countries such as China, Mexico, Singapore etc. They offer high expected returns due to rapid industrialisation. They are also very risky markets.

# Endorsement

Amendment or addition to the policy contract that either changes, modify or adds to the provisions in the policy. Â Endorsements may serve any number of functions, including redefining the scope of coverage, clarifying the application of coverage to some unique loss exposure, adding other parties as insureds, or adding locations to the policy.

Endorsements could also be referred as riders.

# **Equilibrium Pricing Model**

An equilibrium pricing model for a financial market is a market value model that estimates prices of the financial instruments based on the assumption that the participants in the market will enter into market trades until each participant has optimized his or her position relative to his or her preferences and beliefs.

# Equity

Equity of an insurance company is the total value of assets less the value of liabilities.

Equity of a given asset is the value of the asset, net of the corresponding liability.

Equity could also refer to fairness and fair dealing of stakeholders

# **Escalation Clause**

This refers to a clause or phrase in an insurance contract that effectively allows for an increase in the sum insured to cover any unexpected costs arising from future fluctuations.

# Estimated (or Expected) Maximum Loss (EML)

The largest loss that is reasonably expected to arise from a single event in respect of an insured property. This may well be less than either the market value or the replacement value of the insured property and is used as an exposure measure in rating certain classes of business. See also the two terms probable and possible maximum loss (PML).

# Event

The result of an experiment is called an outcome; an event is a set of one or more possible outcomes.

# Excess

Excess insurance - see stop loss insurance

# **Excess Loss (XL)**

XL stands for Excess Loss and describes types of non-proportional reinsurance contracts. The reinsurance pays if the total claims over the given period is above the stated amount (retention level). Â This could be for a single loss (Cat XL), for a single risk (per risk XL) or in aggregate (Agg XL).

# **Excess Of Loss (xl) Reinsurance**

XL stands for Excess Loss and describes types of non-proportional reinsurance contracts. Â The reinsurance pays if the total claims over the given period is above the stated amount (retention level). Â This could be for a single loss (Cat XL), for a single risk (per risk XL) or in aggregate (Agg XL).

# **Excess, Deductible**

These terms (the latter more often in the United States) are used to describe the policy condition whereby the policyholder is responsible to pay the first \$ X of any claim out of pocket before insurance provider pays any expenses.

# Exclusion

Exclusion is a provision in the insurance contract that narrow the scope of coverage provided by the insurance policy or bond referring to hazards, perils, circumstances, or property not covered by the policy. Exclusions are usually contained in the coverage form or causes of loss form used to construct the insurance policy. Â Exclusions could be temporary (e.g. waiting period during which dental appliances are not covered).

# **Exclusive Provider Organization (EPO) Plan**

A managed care plan where services are covered only if you go to doctors, specialists, or hospitals in the planâ€<sup>™</sup>s network (except in an emergency).

# **Expected Maximum Loss (EML)**

See estimated (or expected) maximum loss (EML).

# **Expected Value**

The probability-weighted average of the numerical values taken on by a random variable, if the average exists, is called the expected value of the random variable.

# **Expense Ratio**

The share of premium used to pay expenses related to acquiring, writing, and servicing insurance and reinsurance.

# Experience

The experience of a risk management system is the data obtained in the operation of the system.

# **Experience Adjustment**

An experience adjustment is a change in considerations or benefits applicable to the various risk subjects to reflect the experience of the financial security system.

# **Experience Rates**

The experience of a risk management system is the data obtained in the operation of the system. Estimates, based on such data, of rates of occurrence or amounts of payment related to an actuarial risk are called experience rates.

# **Experience Rating**

The act of adjusting a client's premium rates based on the portion of their claims experience that is deemed credible.

A non-credible group would have its upcoming premiums determined purely based on manual rates, whereas a fully credible group would have its upcoming premiums determined based solely on its past claims. If a spectrum of exists in the measurement of credibility, premiums may be determined on a blend of experience and manual rates.

# **Expiration Date**

The date on which the insurance cover for a risk ceases.

# Exposure

A measure that reflects how many persons or contracts were exposed to the possibility or risk of the event under study, and for how long.

# **Exposure Measure**

A scaling factor that relates the expected value of one or more random variables over a collection of phenomena is called an exposure measure.

# **Exposure Rating**

Exposure Rating is a procedure used by reinsurers to calculate risk exposure in a reinsurance treaty. In this calculation, the reinsurer does not need previous exposure to underwriting the specific risk. The exposure rating method is one of two risk calculations used in the insurance industry. The second method is called the experience rating method.

### **Exposure Unit/measure**

The basic unit that underlies an insurance premium

### Extra Premium

An addition to the standard premium payable under a contract in order to cover an extra risk.

### Extra Risk (Sub-Standard)

An extra risk arises where a life insurance is beyond the standard risk/rates.

### Facultative

See Facultative Reinsurance

### **Facultative Reinsurance**

Reinsurance under which the ceding company has the option (faculty) of submitting individual risks and the reinsurer has the option of accepting or declining them (Life, Health & Annuity Reinsurance)

# **Facultative-obligatory Reinsurance**

A form of life reinsurance which is a hybrid between facultative and automatic. An individual risk is submitted to the reinsurer, which has limited rights to decline it. (Life, Health & Annuity Reinsurance)

#### Failure

Failure occurs when a risk management system first fails to satisfy one or more of a set of required conditions fundamental to the system's purpose.

#### **Failure Probability**

The probability that failure will occur within a specified period of time is call the failure probability of the risk management system relative to that model within that period of time.

#### **Fair Value**

A fair value is an estimate of the price of a financial instrument provided by a market value model for another financial instrument that is potentially valid with respect to observations of prices and other market behavior of the first instrument.

It is sometime used as synonym for Market Consistent or Risk Neutral.

#### **Fair Value Liability**

The amount for which a liability [could be] settled between knowledgeable, willing parties in an armâ€<sup>™</sup>s length transaction. In particular, the fair value of a liability is the amount that the enterprise would have to pay a third party at the balance sheet date to take over the liability.

#### **Fair Value Reserve**

Reserve calculated using fair value accounting principles.

### Fellow

A Fellow of a professional organization.

A Fellow of the Society of Actuaries has demonstrated knowledge in all major practice areas of actuarial science and has further concentration in one or more practice areas or fields of study. A Fellow is either already prepared to perform certain actuarial services or has demonstrated the ability to acquire the needed skills and knowledge to provide actuarial services in existing areas or in those that may emerge. A Fellow has also received further education in professionalism.

A fellow of the Society of Actuaries has earned the designation Fellow of the Society of Actuaries (FSA)

### **Fidelity Guarantee Insurance**

Also called Fidelity Bond, Fidelity Guarantee Insurance is a type of insurance bought by an employer to protect against losses (such as embezzlement or theft by employees) that are not generally covered under normal theft or burglary policies. It may either be a blanket bond (applying to all employees) or for each employee on an individual basis. The insurance company may set certain guidelines to be followed in the insured firm's hiring practices, and the protection continues only so long as the duties of the covered employees remain the same (unless arranged otherwise). Some businesses such as brokerages, cash carriers, and security firms are required by law to obtain fidelity bonds.

#### Fiduciary

A person legally appointed and authorized to hold assets in trust for another person. The fiduciary manages the assets for the benefit of the other person rather than for his or her own profits.

#### **Final Salary Scheme**

A defined benefit scheme where the benefit is calculated by reference to the final earnings of the member, and usually also based on pensionable service.

#### **Financial Gearing**

Gearing refers to the debt to equity ratio for a company, usually in percentage form. It is a measure of financial leverage and can indicate the risk of failure.

#### **Financial Instruments**

A legally enforceable agreement between two or more parties, expressing a contractual right or a right to the payment of money. Practically all documents used in credit are financial instruments, including checks, drafts, notes and bonds. (Source: InvestorDictionary.com)

#### **Financial Market**

A market for financial instruments is called a financial market.

### **Financial Parameter**

If the actuarial value can be expressed as a function of any variable associated with the risk management system and independent of the actuarial model, that variable is called a financial parameter of the risk management system.

# **Financial Risk**

Financial impact from financial transactions.

### **Financial Security System**

An arrangement for risk financing in which one person assumes the obligation to provide benefits to offset undesirable economic consequences that may be experienced by a second person, in return for the payment, by or on behalf of the second person, of amounts called considerations.

Examples include insurance products and retirement plans.

Also known as:

**Financial Security Program** 

### **Financial Strength**

An insurers ability to meet its ongoing policy and contract obligations. These do not address a specific policies, but rather the company as a whole. Typically nationally recognized statistical rating organization (NRSRO) issues opinion on financial strength.

#### Fleet

A group of vehicles, ships or aircrafts that are insured together under one policy. The rating approach for such a fleet is based on the commercial usage of the vehicle and does not use the pricing model used for individual risks.

# **Fleet Rating**

The process of determining premium rates for fleets. Different techniques, largely based on the size of the fleet and the amount of claims history available as well as the corporate usage, will be used from those that would be used for the individual risks in a fleet.

#### **Flexible Annuity**

An annuity that need not be fully defined when the first payment is due.

# **Flexible Benefits**

Flexible benefit schemes are formalized systems that allow employees to vary their pay and/or benefits package in order to satisfy their personal requirements. With flexible benefit schemes, employees have the choice to retain their existing salary and simply vary the levels of benefits within their allowance, or adjust their salary by taking fewer/more benefits depending on the offer. They are not the same as voluntary benefit schemes where employees pay for extra benefits.

# Floor

A lower limit, for example on an interest rate, index return, benefit amount, contribution or funding level.

### Franchise

A franchise is the minimum amount of loss incurred before insurance coverage applies. After the franchise deductible is met, the entire amount of the loss is paid (subject to policy limits and other provision). Â After an ordinary deductible is met, the entire amount of the loss in paid, net of the deductible (subject to policy limits and other provision).

Franchise insurance, or wholesale insurance, is insurance for small groups that don't qualify for group coverage. Â Individual underwriting and pricing applies even if these policies are usually sold at a workplace.

### **Free Assets**

The excess of the value of the assets over the value of the liabilities and capital under regulatory basis and required capital.

#### **Free Cover**

The maximum amount of death or disability benefit that an insurance company covering a group of lives is prepared to insure for each individual without production of evidence of health or underwriting.

### **Free Reserves**

Free reserves are the reserves a bank holds in excess of required reserves, minus reserves borrowed from the central bank. Free reserves are amounts available to be lent out.

In the UK, this insurance term designs the company's surplus, excess of asset over liability.

#### **Frequency Distribution**

A frequency distribution is a distribution function capturing how frequencies are distributed over values.

#### **Fully-insured**

A funding methodology in which the insurer assumes the risk that the premium rates charged to groups cover all costs (e.g., claims and administrative costs).

# **Fundamentals of Actuarial Practice (FAP)**

Fundamentals of Actuarial Practice (FAP) is a self-paced, e-Learning course where candidates acquire and apply knowledge that is distributed and facilitated by electronic means. FAP is required for Associateship in the Society of Actuaries

#### **Funding Objective**

A funding objective assesses the required levels of funding a pension plan requires to provide benefits for its members.

See Page 4 of the Defined Benefit Pension Schemes Questions and Answers document.

### **Futures Contract**

A futures contract is a legal agreement, generally made on the trading floor of a futures exchange, to buy or sell a particular commodity or financial instrument at a predetermined price at a specified time in the future. Futures contracts are standardized to facilitate trading on a futures exchange and, depending on the underlying asset being traded, detail the quality and quantity of the commodity.

#### Game

An economic game (game) is a model of a transaction that attempts to determine the strategies that the parties to the transaction will adopt, given the information each has at every step in the process, in order to achieve the result that each considers most economically advantageous.

### Gearing

Gearing refers to the level of a company's debt related to its equity capital, usually expressed in percentage form. It is a measure of a company's financial leverage and shows the extent to which its operations are funded by lenders versus shareholders.

# **General Insurance Technical Account**

General insurance has 3 types of liabilities reflecting in accounting, i.e. unearned premium reserves, or pre-claims liability; loss and loss adjustment reserves, or post claims liability.

Also known as:

Non Life Insurance Technical Account

Property and Casualty Technical Account

# **General Practitioner (GP)**

Another term for primary care physicians/family physicians, used in the UK and several Commonwealth countries.

#### Gilt

A bond issued by the British Government that pays regular coupons.

#### **Going-concern Basis**

In accounting, going concern basis indicates there is no evidence the company will not remain in business for the foreseeable future. This is the default assumption. This term also refers to the company's ability to generate enough money to stay afloat or avoid bankruptcy.

#### **GP** Referral

Referral to a specialist from the patient's General Practitioner (common with HMO's).

#### **Gross Earned Premium Income (GEPI)**

Acronym for gross earned premium income.

#### **Gross Premium**

The premium that the policyholder pays under a life insurance contract.

Total premium charged for the period of cover containing the risk premium, commission, an allowance to cover all other types of expenses, an allowance for any premium tax, and a profit loading.

Premium before subtracting the cost of reinsurance.

Also known as:

**Office Premium** 

# **Gross Premium Valuation**

Gross premium reserves are calculated on a prospective basis using Natural Reserve Assumptions (expected assumptions). They are the present value of future benefits and expenses less the present value of future gross premiums.

# **Gross Written Premiums (GWP)**

Gross Written Premiums (GWP) is the sum of direct premiums written and assumed premiums written before the effect of ceded reinsurance. (wikipedia.com).

# **Grossing-up Factor**

Gross-up refers to increasing the net amount of a payment to account for deductions, such as taxes or expenses.Â

# **Group Contract**

Group contract is a type of contract in which a single contract covers an entire group of people.

Typically, the policy owner is an employer or an entity such as a union organization, and the policy covers the employees or members of the group. Many employers provide a base amount of group coverage and the employees can purchase supplemental coverage through payroll deductions.

In most cases, the cost of group coverage is less than what the employees or members would pay for a similar amount of individual protection.

# **Guarantee (investment)**

Guaranteed investment income is a type of investment product offered by insurance companies that allows its client to invest in an equity, bond and/or index fund while providing a promise of a predefined minimum value of the fund (usually, the initial investment amount) will be available at the fund's maturity or when the client dies.

# **Guarantee Fund**

A capital guarantee fund is an investment in which the investor's principal is shielded from losses. With a capital guarantee fund, any losses experienced by the underlying investments are absorbed by the fund company, which tends to invest the majority of fund capital in very conservative securities to help minimize the likelihood of losses, a move that also limits return.

# **Guarantee Risk**

The risk that interest rates earned on assets will be insufficient to cover the guaranteed rate on the liability, and the company's expense and other charges.

Also known as:

Spread Compression

### **Guaranteed Premium Rates**

The guaranteed premium does not change throughout the life of the term.

#### **Hard Premium Rates**

High, profitable premium rates.

### Hazards

Conditions that increase the probability or expected magnitude of a loss.

### Health Maintenance Organization (HMO)

Partnerships of medical professionals and facilities formed to provide a range of inpatient and outpatient service to patients.

### Health Savings Account (HSA)

In the USA, it is a type of savings account that lets you set aside money on a pre-tax basis to pay for qualified medical expenses. By using untaxed dollars in a Health Savings Account (HSA) to pay for deductibles, copayments, coinsurance, and some other expenses, you can lower your overall health care costs. An HSA can be used only if you have a High Deductible Health Plan (HDHP).

#### Hedging

A program to monitor and manage the risks of economic gain/loss due to change of underlying economic variable.

Such hedging program usually uses derivative contracts to minimize the total financial impact on assets, net of the impact on liabilities, of the change in interest rate, currency rate, equity market value or other exposures.

#### **Hours Clause**

A clause that allows a reinsurer to aggregate multiple losses arising from a covered peril can be recovered as a single aggregated loss under a reinsurance contract, if taken place within a small time window. Typically, the time period is fixed at 72 or 168 hours.

#### **Hurdle Rate**

Minimum internal rate of return on a project or investment required to compensate for the underlying risk.

#### Immunization

Immunization, also known as "multiperiod immunization," is a strategy that matches the durations of assets and liabilities, thereby minimizing the impact of interest rates on an investment portfolio. Immunization can be accomplished by cash flow matching, duration matching, convexity matching, and trading forwards, futures and options on bonds.

# Incurred But Not Enough Reported Reserve Provision (IBNER)

Amount set aside in respect of the expected cost of claims in excess of the case estimate held. It is to meet the development on case estimates as further information becomes known on open claims.

## Incurred But Not Reported Reserve Provision (IBNR)

Amount owed by an insurer to all valid claimants who have had a covered loss but have not yet reported it. Since the insurer knows neither how many of these losses have occurred, nor the severity of each loss, IBNR is necessarily an estimate. The sum of IBNR losses plus reported losses yields an estimate of the total eventual liabilities the insurer will cover, known as ultimate losses.

## **Incurred Claims**

An estimate of the amount of outstanding liabilities for a policy over a given valuation period. It includes all paid claims during the period plus a reasonable estimate of unpaid liabilities. It is calculated by adding paid claims and unpaid claims minus the estimate of unpaid claims at the end of the prior valuation period.

## Indemnity

Indemnity is compensation for damages or loss, and in the legal sense, it may also refer to an exemption from liability for damages.

## **Index Tracking**

Using an investment fund to attempt to replicate the performance of a particular index such as the S&P 500, NASDAQ or EAFE.

## **Index-linked Security**

Security that has a return component that is linked to a specifc stock or bond index.

## **Inflation Risk Premium**

Inflation Risk Premium is defined as the extra yield investors require to hold nominal assets that are exposed to inflation risk as opposed to those that offer a safe inflation-adjusted return such as Treasury inflation protected securities (TIPS) in the USA.

## **Information Asymmetry**

Information asymmetry exists if one party to an economic transaction has more information than the other party or if one party is not allowed to use all the information available to the other party.

## In-patient

An individual admitted to the hospital who occupies a bed for at least one night.

## **Insurable Risk**

An insurable risk is one that meets the criteria of

a potential loss,

that is significant and important,

loss and its economic value are well-defined and out of the policy holder's complete control,

covered losses should be reasonably independent.

Furthermore, the risk cannot be so large that no insurer could hope to pay for the loss.

## **Insurance Certificate**

the insurance certificate is a document provided by an insurance company (or its representative or broker) to demonstrate insurance coverage between the insurer and the insured. It usually includes insurance company, insured name, effective date, and coverage type.

Also known as:

prove of coverage

#### **Insurance Companies**

An institution that provides by a contract binding a party to indemnify another against specified loss in return for premiums paid.

#### **Insurance Cycle**

The tendency of the insurance industry to swing between profitable and unprofitable periods over time is commonly known as the underwriting or insurance cycle. The underwriting cycle is the tendency of property and casualty insurance premiums, profits, and availability of coverage to rise and fall with some regularity over time. A cycle begins when insurers tighten their underwriting standards and sharply raise premiums after a period of severe underwriting losses or negative stocks to capital. Stricter standards and higher premium rates lead to an increase in profits and accumulation of capital. The increase in underwriting capacity increases competition, which in turn drives premium rates down and relaxes underwriting standards, thereby causing underwriting losses and setting the stage for the cycle to begin again.

### **Insurance Risk**

The risk that mortality or morbidity experience differs negatively from expectation due to random fluctuations or from incorrect assumptions. Also includes the risk that persistency, expenses, and investment income are different than expected.

### **Insured Scheme**

A benefit scheme where the sole long term investment medium is an insurance policy (other than a managed fund policy).

### **Interest Rate Risk**

This is the financial risk due to interest rate movement. It consists of disintermediation risk, guarantee risk, and liquidity risk.

### **Interest Spread Risk**

The risk of insufficient interest spreads due to investment and pricing decisions. Interest spread refers to

the margin between interest rate earned on assets and interest rate credited to the liabilities.

## **Internal Rate Of Return**

The discount rate that makes the Net Present Value (NPV) of cash flows for a particular project equal to zero. Alternatively, the rate of growth the project is expected to generate.

## International Classification Of Diseases (ICD)

The International Classification of Diseases (ICD) is a clinical cataloging system owned, developed and published by the World Health Organization (WHO). Healthcare providers, IT professionals, insurers, government agencies and others use ICD codes to record diseases on health records, track epidemiological trends and assist in medical reimbursement decisions.

### **Investigative Surgery**

A medical procedure that is undergone in order to advance the diagnosis of a condition.

### **Investment Portfolio**

An investment portfolio (portfolio) is a set of financial instruments selected from a specified investment universe of such instruments.

#### **Investment Trust**

Type of investment firm formed for holding securities of other firms, and for obtaining its capital from public issues of shares that are traded on stock exchange.

Because investment trusts can issue only a fixed number of shares (traded at a discount on their net present value) which the new investors can buy only from the existing shareholders, they are also called closed-end funds. They differ from unit trusts in that a unit holder is not a shareholder of the unit trust, and a unit is not a share but represents the investor's interest in the unit trust's investment portfolio.

### **Inwards Reinsurance**

Inwards Reinsurance (UK) represent the reinsurance business accepted by an insurer or reinsurer, as opposed to that ceded to another insurer.

Also known as:

Assumed Reinsurance (US)

### **Key Person Insurance**

Life insurance on a key employee, partner or proprietor on whom the continued successful operation of a business depends. The business is the beneficiary under the policy.

Also known as:

**Keyperson Cover** 

### **Knowledge Management And Self-development**

A professional actively pursues opportunities to acquire and maximize knowledge, share knowledge and learn from others. Staying current on new approaches, techniques and tools relevant to the profession

helps the actuary identify, create, and implement effective solutions.

### Lapse

This refers to the termination of an insurance policy because the policy owner fails to pay the renewal premium by the time required or within the grace period.

### Lapse Rate

The rate at which life insurance policies terminate because of failure to pay the premiums.

## **Latent Claims**

A latent claim is a type of long tail liability where there is a time lag between occurrence and manifestation of injury or damage.

They are associated with problems that take a long time to develop and are caused by gradual processes, such as pollution and asbestos.

Often, it is a claim that arises from a risk not anticipated by the underwriter and not priced for in the original policy.  $\hat{A}$ 

## Lead Underwriter

In the context of multiple reinsurers, the lead underwriter is the reinsurer who takes the lead in setting premium rates and policy provisions.

### Leadership Skills

Leadership skills include setting direction and leading change, influencing, decision-making, negotiation, and people management and development. Leadership skills apply to all positions, i.e., an actuary does not need to be an executive in an organization to demonstrate leadership skills. Acting as a positive role model to others, setting clear and realistic priorities, taking initiative to identify and address issues, and acting within a context of achieving shared organizational goals are all examples of leadership skills.

### Leasehold

Leasehold is an accounting term for an asset being leased. The asset is typically property such as a building or space in a building.

## **Letter Of Credit**

A letter from a bank guaranteeing that a buyer's payment to a seller will be received on time and for the correct amount.

In the event that the buyer is unable to make payment on the purchase, the bank will be required to cover the full or remaining amount of the purchase. Due to the nature of international dealings, including factors such as distance, differing laws in each country, and difficulty in knowing each party personally, the use of letters of credit has become a very important aspect of international trade.

### Liabilities

In general, the actuarial present value of future expected payments, or portion of such, to be paid from an insurance company or pension plan (benefit scheme).

Duty or contracts to fulfill an obligation to another person or organization. Within a Finance context: the opposite of assets.

## Limited Benefits/budget Plans

Limited-benefit plans are medical plans with much lower and more restricted benefits than major medical insurance, but with lower premiums. Limited-benefit plans include critical illness plans, indemnity plans (policies that only pay a pre-determined amount, regardless of total charges), and "hospital cashâ€<sup>®</sup> policies.

# Line

Component of Surplus Line insurance used to determine the reinsurer's share.

# Line Slip

A broker-written document describing a prospective risk that is given to underwriters to decide on their willingness to insure what fraction of risk described.

# **Link Ratios**

See development factors.

# Liquidity

The ease and rate with which an asset can be converted into a medium of exchange. Liquidity is considered to be advantageous. Money is the most liquid due to the fact that it does not need to be converted into anything in order to make purchases.

# **Liquidity Preference**

The liquidity preference theory suggests that an investor demands a higher rate of return, or premium, on securities which are difficult to be converted to cash.

All other factors being equal, investors prefer cash or other highly liquid holdings.

## Liquidity Risk

The risk that assets cannot be sold when required in a reasonable transaction time for its full expected value due to the lack of market with active supply/demand for the asset.

## Lloyd's

The business written at Lloydâ€<sup>™</sup>s is brought to specialist syndicates, who price and underwrite risk, via brokers and coverholders. Much of the capital available at Lloydâ€<sup>™</sup>s is provided on a subscription basis – where Lloyd's underwriters join together as syndicates and where syndicates join together to underwrite risks and programmes. This kind of collaboration, combined with the choice, flexibility and financial certainty of the market, makes Lloydâ€<sup>™</sup>s the worldâ€<sup>™</sup>s leading insurance platform.

## Lloyd's Broker

An agent approved by the Committee of Lloyd's to place business with Lloyd's underwriters. Except for some of the smaller risks, business written at Lloyd's must pass through a Lloyd's broker.

## London Market

The type of hazard involved is excess of loss reinsurance of other excess of loss reinsurers; it is also known as retrocessional cover, notes Lloydâ€<sup>™</sup>s in its newsletter One Lime Street.

## London Market Excess Of Loss (LMX)

LMX stands for London Market Excess of Loss. It is not purely a Lloydâ€<sup>™</sup>s of London phenomenon, but refers instead to both syndicates and companies operating in the London insurance market place. The type of hazard involved is excess of loss reinsurance of other excess of loss reinsurers; it is also known as retrocessional cover.

When giving LMX cover, a reinsurer protects all the individual risks written by the syndicate or company he reinsures. In his turn this reinsurer will purchase LMX cover for all of his writings from reinsurers who will (in return) seek their own separate excess of loss protections. It is conceivable that the first reinsurer will participate in the reinsurance programme of one of these reinsurers, thus in effect assuming (albeit indirectly) an element of the risks he himself originally reinsured

## Long

A long (or long position) refers to the buying of a security with the expectation that the asset value will rise.

## Long Term Care

Services that include medical and non-medical care provided to people who are unable to perform basic activities of daily living such as dressing or bathing. Long-term supports and services can be provided at home, in the community, in assisted living or in nursing homes. Individuals may need long-term supports and services at any age. Medicare and most health insurance plans donâ€<sup>m</sup>t pay for long-term care.

### **Long-tailed Business**

Types of insurance in which claims may be made long after the end of the insured period. A long-tail liability is type of liability that carries a long settlement period, over 2-5 years. Long-tail liabilities are likely to result in high incurred but not reported (IBNR) claims because it may take a long period of time for the claims to be settled.

This comes from the distribution of cash flows over time showing a long tail.

The opposite of long-tailed business is short-tailed business.

### Loss

A loss is the injury or damage sustained by the insured in consequence of the happening of one or more of the accidents or misfortunes against which the insurer, in consideration of the premium, has undertaken to indemnify the insured.

### Loss Expense Reserve

Another expression for any type of claims handling expense provision.

### **Loss Of Profits**

This also refers to Business Interruption Insurance, a type of insurance that replaces the business

income lost as a result of an event (i.e. fire or a natural disaster) that interrupts the operations of business.

#### Loss Ratio

The ratio of total losses incurred in claims divided by the total premiums earned.

#### Loss Reserve

An estimate of an insurerâ€<sup>™</sup>s liability from future claims.

Loss reserves are typically comprised of liquid assets, and they allow the insurer to cover claims made against policies that it underwrites.

Estimating liabilities can be a complex undertaking. Insurers must take into account the duration of the insurance contract, the type of insurance offered and the odds of a claim being resolved quickly. Insurers have to adjust their loss reserve calculations as circumstances change.

#### **Loss Sensitive**

An insurance rating plan for which the final premium is dependent on the actual losses during the period the plan is in effect. This risk financing technique places upper limits on the insured's costs if its losses are high but also requires the payment of a minimum premium in the event it experiences low losses or is loss-free. Thus, the risk financing costs tend to vary based on actual loss experience. This type of plan provides an incentive for insureds to emphasize safety and loss control activities. Deductible plans, retrospective rating plans, dividend plans, and retention plans are all examples of loss sensitive plans.

#### **Losses-Occurring Policy**

In a losses-occurring policy, claims will be paid only when they occur during the (typically 12-month) policy period.

### **Managed Care**

Managed Care is a health care delivery system organized to manage cost, utilization, and quality.

#### **Managed Fund**

An investment contract by means of which an insurance company offers participation in one or more pooled funds.

An arrangement where the assets are invested on similar lines to unit trusts by an external investment manager.

#### Mandatory

A financial security system is mandatory if all persons in a group or in society are required to participate; otherwise, it is voluntary.

#### Margin

Margin is the difference between a product or service's selling price and its cost of production.

The ratio between a company's revenues and expenses.

The amount of equity contributed by an investor as a percentage of the current market value of securities held in a margin account.

Margin is the portion of the interest rate on an adjustable-rate mortgage added to the adjustment-index rate.

## Market

A market for a class of economic goods is an arrangement for facilitating transactions involving such goods by matching willing buyers with willing sellers.

# **Market Capitalisation**

Market capitalization (market cap) is the market value of a publicly traded company's outstanding shares. Market capitalization is equal to the share price multiplied by the number of shares outstanding. As outstanding stock is bought and sold in public markets, capitalization could be used as an indicator of public opinion of a company's net worth and is a determining factor in some forms of stock valuation.

# Market Risk

Market risk is the possibility for an investor to experience losses due to factors that affect the overall performance of the financial markets in which he is involved. Market risk, also called "systematic risk," cannot be eliminated through diversification, though it can be hedged against.

# Market Trade

A market trade is a transaction involving the sale, purchase, or exchange of financial instruments in a financial market.

# **Market Value Model**

A market value is an estimate of the price at which a market trade would occur; a mathematical model used to produce such estimates is a market value model.

## **Market Value Of Assets**

The price an asset would fetch in the marketplace. Market value is also commonly used to refer to the market capitalization of a publicly-traded company, and is obtained by multiplying the number of its outstanding shares by the current share price.

## Matching

The practice of matching returns on a portfolio to future capital outlays. That is, cash flow matching involves investing in certain securities with a certain expected return so that the investor will be able to pay for future liabilities.

Pension funds and annuities perform the most cash flow matching, as they have future liabilities that are both large and relatively easy to estimate. Portfolios that perform cash flow matching usually invest in low-risk, investment-grade securities.

The practice is also called portfolio dedication, matching, or the structured portfolio strategy.

## Medical History Disregarded (MHD)

A type of underwriting in which the proposed insured individual's or group's history (pre-existing conditions) is not taken into consideration.

## **Medical Inflation**

Increase in medical premiums at renewal

## Member

A person who has been admitted to membership of a pension plan (pension scheme) and is entitled to benefit under the plan (scheme).

This could also refers to a member of an insured group (in group health, group life, group annuity contracts)

## Money

A means of exchange that can be traded for economic goods.

## **Money Purchase**

A money-purchase pension plan is a pension plan to which employers and employees make contributions based on a percentage of annual earnings, in accordance with the terms of the plan. Upon retirement, the total pool of capital in the member's account can be used to purchase a lifetime annuity. The amount in each money-purchase plan member's account differs from one member to the next, depending on the level of contributions and the investment return earned on such contributions.

### **Moral Hazard**

The propension of an insured who is more likely to take risk knowing that he/she will get compensated when the risk event occurs.

### Moratorium

Moratorium underwriting is an alternative to full medical underwriting, such that pre-existing conditions from the last (usually) five years are excluded from coverage for a set period, usually two years, but may then include them after that.

### Morbidity

The rate of disease in a population. It is measured in various ways, often by the probability that a randomly selected individual in a population at some date and location would become seriously ill in some period of time.

## Mortality

The incidence of death in a population. It is measured in various ways, often by the probability that a randomly selected individual in a population at some date and location would die in some period of time.

### **Motor Insurers Bureau (MIB)**

Motor Insurers Bureau (MIB) in the UK, which is is established to compensate the victims of negligent

uninsured and untraced motorists (policyholder or not). It is funded by partial of insured driver's premium.

In the USA, and in a similar fashion in Canada, a specific coverage called uninsured/underinsured motorists or UM/UIM, is offered as part of the policy to covers the policyholder.

MIB could also refer to the MIB Group, a membership corporation owned by insurance companies in the US and Canada. It collects data and provides services to its members in Underwriting, Actuarial and Compliance area.

## **Multiline Insurer**

Multiline Insurer, or Composite Insurer, is a company that offers a full range of insurance services, including accident, fire, health, investment, life, and pensions.

Also Known As:

**Composite Insurer** 

## **Mutual Insurer**

This refers to a life or general insurance company that is owned by policyholders where its sole purpose is to provide insurance coverage to its members and policyholders. The members have the rights to select the management.

## **Negative Reserve**

A negative reserve arises whenever the expected value of future claim is larger than the expected value of future premium.

## Net Asset Value Per Share (NAVPS)

The net asset value per share (NAVPS) is an expression for net asset value that represents the value per share of a mutual fund, exchange-traded fund (ETF) or a closed-end fund. It is calculated as (assets - liabilities) / number of outstanding shares. In the context of corporate financial statements of publicly traded companies, it is more commonly referred to as book value per share.

### **Net Premium**

In the context of a net premium valuation, the net premium is the premium, calculated on the basis of the valuation assumptions, and payable under the same conditions as the office premium, that will provide the contractual benefits offered at the commencement of the policy.

Premium net of the cost of reinsurance.

Also known as:

Risk Premium (UK)

## **Net Premium Valuation**

Net premium valuation is a reserve methodology, where net premiums are the amounts necessary to pay benefits according to certain mortality and interest assumptions. Company expenses are not

reflected in the net premium reserve, nor are there any explicit margins for profits or adverse experience. This uses theoretical premium with no link to the actual premium paid.

In other words, it is the present value of the liability, net of the present value of the future theoretical premium, net of expense and charges.

## **New Business Strain**

New business strain is the strain on the business created due to inadequate premium amounts in initial years, which are not enough to cover for the expenses, commissions and statutory reserves (and cost of capital in some calculations).

## **New For Old**

A historic provision in marine insurance contracts stipulating that when repairs are made and new parts are supplied in place of old ones that have been lost or damaged, there is an agreed discount for depreciation. Modern marine policies, however, generally provide for the repairs without a deduction for depreciation.

## Nil Claim

A claim that results in no payment by the insurer

## **No-arbitrage Pricing Model**

A no-arbitrage pricing model is a market value model in which arbitrage cannot occur. No-arbitrage models are extensively used for pricing "derivative†financial instruments; that is, financial instruments for which the amounts paid to the instrument owners are based on the values of other financial instruments.

### **Nominal Value**

Nominal value, with respect to bonds and stocks, is the stated value of an issued security, as opposed to its market value.

In economics, nominal values refer to the unadjusted rate or current price, without taking inflation or other factors into account, as opposed to real values, where adjustments are made for general price level changes over time.

### **Non-medical Limits**

Maximum value for a policy without medical examination.

## Non-Participating (Without Profit)

Not allowing the holder a share of the profits, typically in the form of a bonus, made by the company.

### **Non-Proportional Reinsurance**

Proportional reinsurance requires the primary or ceding insurer and the reinsurer to maintain a posttransfer relationship.

It also requires assessment of all risk and uses the known risk to prorate the proportion of premiums, expenses and losses for all parties to the agreement.

## **Non-technical Account**

Refers to Profit and Loss Account on the Statement of Comprehensive Income of an insurance company. Techinical account refers to the underwriting results.

## **Occupational Classes**

The smallest unit of an occupational classification is the concept of a job, defined as a set of tasks to be performed by an individual, and commonly identified by a job title.

## **Occupational Scheme**

A pension plan (benefits scheme) organized by an employer or on behalf of a group of employers to provide benefits for or in respect of one or more employees.

## Office Of The Superintendent Of Financial Institutions (OSFI)

The Canadian Office of the Superintendent of Financial Institutions oversees the solvency and stability of companies chartered by the federal government.

## **One-Year Accounting**

A basis of accounting that presents, at the end of each year of account, the estimated technical account for business exposed during the year. Accident year experience is earned premium and incurred losses during a specific period of time.

Also known as:

Accident-Year Accounting

## **Open Enrollment**

Open enrollment refers to the process in some markets whereby an insurer is obliged to accept all proposers for insurance at standard rates. A period during which a policyholder may freely enroll in or change one's selection of a health insurance plan or other benefit program that is ordinarily subject to restrictions.

### **Operational Risk**

Operational risk summarizes the risks a company undertakes when it attempts to operate within a given field or industry.

It is the risk remaining after determining financing and systematic risk, and includes risks resulting from breakdowns in internal procedures, people and systems.Â

## Option

In finance, an option is a contract which gives the buyer (the owner or holder of the option) the right, but not the obligation, to buy or sell an underlying asset or instrument at a specified strike price on a specified date, depending on the form of the option.

Outside finance, real options are the right, but not the obligation, to act in the future for financial gain (e.g. the right to increase production).

## **Option Premium**

The price paid for an option. An option premium is the income received by an investor who sells or "writes" an option contract to another party. Received by the writer.

## **Option Writer**

The seller of an option. A person who writes, or sells, an option contract in order to earn the premium, which is the fee that the purchaser pays the writer.

## **Original Gross Premium Income (OGPI)**

The gross premium income received by an insurer in relation to business that is covered by a nonproportional reinsurance treaty. Gross premium includes net premium, expenses and commissions. The reinsurance premium is calculated as a percentage of this OGPI.

### **Original Terms Reinsurance**

This method of reinsurance involves a sharing of all aspects of the original contract.

Also known as:

**Original Terms Coinsurance** 

## Outcome

The result of an experiment; an event is a set of one or more possible outcomes. The consequence or end result.

### **Out-patient**

A person who attends hospital for treatment but who does not occupy a bed. Individual receiving medical treatment who is not required to be hospitalized overnight.

## **Outstanding Claims Reserve (OCR)**

A provision for the estimated amount of claims that have not been settled. It can be interpreted to include only claims that have been reported, or to include all claims not yet settled.

Also known as:

**Outstanding Claims Provision** 

## **Outwards Reinsurance (UK)**

The enterprise ceding (giving up) the risks is said to place outward reinsurance. Reinsurance ceded by an insurer or reinsurer, as opposed to inwards reinsurance which is reinsurance accepted. (Source: www.group.qbe.com)

Also known as:

Ceded reinsurance (US)

### **Over-riding Commission**

A commission paid by an insurer to an agent or managing general agent for premium volume produced by other agents in a given geographic territory. In reinsurance, a commission paid to an intermediary in return for placing a retrocession of reinsurance.

## Paid-up

A insurance contract becomes "paid-up" if all premium payments are complete, the insurance contract stays inforce until maturity or termination of the contract.

## Parameter

A definable, measurable factor essential in calculating results.

## **Partial Payment**

This refers to insurance partial payments made in the event that the insured is diagnosed with an illness but doesnâ€<sup>™</sup>t meet the criteria for a full payment.

## **Participating (With Profit)**

An insurance contract that pays dividends to the policy holder, where dividends are generated from the profits of the insurance company that sold the policy and are typically paid out on an annual basis over the life of the policy.

A participating policy is also referred to as a "with-profits policy" in the UK.

### Pay-as-you-go

An arrangement under which benefits are paid out of revenue and no funding is made for future liabilities.

## **Payback Period**

The length of time required to recover the cost of an investment.

The payback period ignores the time value of money (TVM), unlike other methods of capital budgeting such as net present value (NPV), internal rate of return (IRR), and discounted cash flow.

## Pension Benefit Guaranty Corporatio (PBGC)

Pension Benefit Guaranty Corporation (PBGC)Â (U.S.) - An independent agency established by the Employee Retirement Income Security Act (ERISA) of 1974 that insures benefits for participants in private-sector defined benefit plans. Subject to certain limitations and guidelines, benefits are guaranteed by the PBGC in the event a plan sponsor is unable to provide sufficient assets to pay benefits.

### Peril

Probable cause (such as an earthquake, fire, theft) that exposes a person or property to the risk of damage, injury, or loss, and against which an insurance cover (policy) is purchased.

### **Period Of Unexpired Risk**

The time period between the valuation date and the expiry date of the policy contract.

For annual policies this period would be a maximum one year and for multi-year policies the it can be several years from the valuation date. $\hat{A}$ 

## Persistency

Percentage of an insurance company's already written policies remaining in force, without lapsing, being replaced by policies of other insurers or any other decrements.

## **Personal Lines**

Personal lines insurance is property and casualty insurance that protects individuals from financial losses due to damage of personal belongings. Example of personal line insurance are homeowners insurance, flood insurance, earthquake insurance, renters insurance, automobile insurance, life insurance, disability insurance, umbrella insurance and health insurance.

## Phenomena

Phenomena are occurrences that can be observed.

PML

Acronym for probable (possible) maximum loss

## **Points Rating System**

It is used for evaluating solution alternatives with regard to selected criteria.

The evaluation is done by awarding points (grades) to each criteria then adding up the points for each solution alternatives. There is no weighting of the different criteria. The amount of points of each alternative can be a factor when selecting one solution over another. If multiple solutions end up having the same amount of points, they can be differentiated through a more thorough evaluation.

## **Policy Fee**

A one-time charge or flat per policy charge that does not change with the size of the policy.

### Pooling

Pooling means form of group of polices with similar characteristics (e.g., group size and benefit structure) to provide protection to insurance companies against risks. Based on the law of large numbers demonstrates that the larger and more homogeneous the group to be insured, the more certain of the predictions.

This is the root of the insurance concept of transferring individual risks to an entity which could manage these risks by pooling them together, minimizing the variance to an acceptable level.

### **Portfolio Claims**

This is the claims that are included as part of a Portfolio Transfer.

### **Portfolio Premiums**

This is the premium for Portfolio Transfer, which is the net present value of the outstanding claims plus a loading made up of expenses, risk capital, and margins, and will include a level of profit that may be

assessed explicitly or implicitly within the margins.

## **Portfolio Transfer**

It is a means of transferring outstanding claims from one insurer to another insurer. It is essentially capitalizing the time value of loss reserves, and is a form of retrospective reinsurance.

Also known as:

Loss Portfolio Transfer.

## **Potentially Valid**

A mathematical model is potentially valid if it produces results that are consistent with available observations of the modeled phenomena or of similar phenomena and is capable of being validated relative to the specified observed results when sufficient data are available.

## **Pre-Existing Conditions Exclusion**

Many health and travel insurance policies contain an exclusion for "preexisting conditionsâ€. The definition of a PEC depends very much on the wording of the particular policy; loosely, a PEC refers to a medical or physical issue which exists before the policy begins. It can include a symptom or a sign of an illness which you do not know you have.

Also known as:

**PEC Exclusion** 

## **Preference Share**

Preference shares, more commonly referred to as preferred stock, are shares of a companyâ€<sup>™</sup>s stock with dividends that are paid out to shareholders before common stock dividends are issued. If the company enters bankruptcy, the shareholders with preferred stock are entitled to be paid from company assets first. Most preference shares have a fixed dividend, while common stocks generally do not. Preferred stock shareholders also typically do not hold any voting rights, but common shareholders usually do.

## **Preferred Provider Organization (PPO)**

A form of managed care organization. Insurance companies might partner with a newtwork of health care providers, arranging care for the insurance company's subscribers at a reduced rate when they visit these "preferred providers".

Care provided outside of the PPO ("out-of-network" care) may be accessible to the insurance company's subscriber, though likely at a higher cost to the insured.

## **Premiums Trust Fund**

A Premiums Trust fund is a trust fund where insurance premiums are held for specific purposes

### **Present Value Model**

A term used to describe the net present value method and the internal rate of return. The model discounts future cash flows back to the present time.

## **Present Value Of The Cash Flow**

The estimate of the current monetary value of a future cash flow given by a present value model under a particular set of assumptions about future economic or other conditions is called the present value of the cash flow relative to those assumptions.

## Price

The amount of money paid by a buyer to purchase an economic good from a seller is called the price of the good.

## Pricing

The pricing of risk based on probabilities of loss occurrence constructed from statistical distributions.

Actuarial pricing is used to develop premiums that are intended to cover losses from underwritten risks and provide future benefits payable to beneficiaries.

## **Primary Care**

A patient's main source for regular medical care, ideally providing continuity and integration of health care services. All family physicians, and many pediatricians and internists, practice primary care. The aims of primary care are to provide the patient with a broad spectrum of preventive and curative care over a period of time and to coordinate all the care that the patient receives.

### **Primary Insurer**

A primary insurer is the insurance company directly providing coverage to the insured. This is the entity from whom the insured purchases the insurance policy. The primary insurer may in turn cede the business to the reinsurer.

### Prime

Prime is a classification of borrowers, rates or holdings in the lending market that are considered to be of high quality, in opposition to sub-prime.

### **Principle Risk Aversion**

A psychological term:

Risk adverse individuals will often prefer to take a small but certain loss in preference to a large uncertain one. This underlies the p[rinciple of insurance where risk adverse individuals will pay a fixed amount (small but certain loss) to an insurance company to remove the financial risk associated with the large uncertain event. Their willingness to pay above the expected loss allows the insurance company to cover expenses and make a profit.

## Private Medical Attendant's Report (PMAR)

In the course of underwriting an individual, an insurer may request a Private Medical Attendant's Report from an applicant's doctor to clarify certain items on the insurance application.

### Privatisation

The process of selling companies or organizations that are owned by the government to private investors.

### Probability

Probability is a measure that takes on values from zero to one and gives the likelihood of occurrence of an event.

## Probable Maximum Loss (PML)

Probable Maximum Loss (PML) is the maximum loss that an insurer would be expected to incur on a policy. Probable maximum loss (PML) is most often associated with insurance policies on property, such as fire insurance. The probable maximum loss represents the worst-case scenario for an insurer.

Also known as:

Possible Maximum Loss (PML)

## **Problem Solving**

Problem solving includes analyzing complex situations. The problem solver identifies issues and articulates the problem by gathering and analyzing data. This information is used to develop and evaluate a range of solutions. The problem solver then chooses or integrates solutions that best meet needs.

## **Product Costing**

Product costing is the process of tracking and studying all the various expenses that are accrued in the production and sale of a product, from raw materials purchases to expenses associated with transporting the final product to retail establishments.

These costs include direct labor, direct materials, consumable production supplies, and factory overhead.

Product cost can also be considered the cost of the labor required to deliver a service to a customer. In the latter case, product cost should include all costs related to a service, such as compensation, payroll taxes, and employee benefits.

### **Product Pricing**

Product pricing, aka rate making, is the determination of what rates, or premiums, to charge for insurance.

This includes costs and profits and psychological factors, associated with branding, and what the market will bare considering competition.

## **Professional Code Of Conduct**

The code identifies the professional and ethical standards required of acturies who belong to the Academy. Â It sets forth what it means for an actuary to act as a professional. Â It identifies the responsibilities that actuaries have to the public, to their clients and employers, and to the actuarial profession. Â (Source: American Academy of Acturaries)

## Professionalism

Professional status, methods, character, or standards.

Could also refer to the adherence to a Code of Professional Conduct.

### **Profit Commission**

A payment made to a reinsurer from a primary insurance company. The commission is a percentage of the profit earned by the policy.

Also known as:

**Ceding Commission** 

**Expense Allowance** 

## **Profit Test**

The process by which an actuary determines the profitability of a product, using a set of premiums and assumptions to calculate various profit measures such as IRR, NPV, Profit Margin, or Break-even Period. To achieve the desired profitability, this process may be iterative as premiums or other assumptions are revised.

## **Project Management**

The actuary clearly defines and manages assignments and projects consistent with scope. Effective project management includes planning to prioritize and organize work and implementing processes to ensure delivery of high quality products or services. Project management is central to planning and delivering quality work while managing risks and meeting goals.

### **Proportional Reinsurance**

The Primary insurer and Reinsurer share liabilities in a clearly defined proportion as described within the underlying treaty. Premiums and claims are also split up according to the respective share of the risk (i.e. proportionally).

### **Proportionate Benefit**

AÂ proportionate benefit is a type of disability income protection that provides financial compensation if the insured acquires a disability that reduces, but does not eliminate, their capability to work. The compensation is proportional to the disability and the corresponding reduction in capacity to work.

## Protection & Indemnity (P & I)

Acronym for Protection & Indemnity

## **Protection and Indemnity Clubs**

A mutual insurance association that provides risk pooling, information and representation for its members. Unlike a for-profit insurance company, which reports to its shareholders, a P&I club reports only to its members.

### **Put Option**

A put option is an option contract giving the owner the right, but not the obligation, to sell a specified amount of an underlying security at a specified price within a specified time.Â

# Quebec Pension Plan 1966 (Canada)

The Canada Pension Plan provides monthly pension and death benefits to eligible individuals in all provinces except Quebec, whose residents are covered by the Quebec Pension Plan.

# **Quota Share Reinsurance**

Quota share is a form of pro rata reinsurance where the ceding company is indemnified for a fixed percent of loss on all risks that are thereafter covered by the contract. All liability and premiums are shared.

The quota share treaty mandates that the primary company cedes and the reinsurer accepts each and every policy underwritten by the reinsured. The treaty usually includes a maximum amount over which the reinsurer is not committed to pay for any one risk.

# **Random Variable**

A rule that assigns a numerical value to every possible outcome is called a random variable.

# Rate On Line (ROL)

Rate on line (ROL) is the ratio of premium paid to loss recoverable in a reinsurance contract. ROL represents how much an insurer has to pay to obtain reinsurance coverage, with a higher ROL indicating that thte insurer has to pay more for coverage. ROL is the inverse of a reinsurance contract's payback period.

## **Rate Structure**

A rate structure is be based on a given risk classification system if the rule that assigns exposures under the rate structure is an exposure measure for the actuarial model associated with the risk classification system. (Source: Principles Underlying Actuarial Science)

# **Rate Structure For A Financial Security System**

A rate structure for a financial security system is a rule that assigns numeric values called exposures to each covered risk subject for each future time period, and a set of numbers called rates, such that the consideration for or cost related to that risk subject for each such time period is the product of the appropriate rate and exposure.

## Rating

As part of underwriting a policy, an insurance underwriter will determine a "rate" (the cost per unit of insurance) associated with a policy, hence: "rating"

A certain level of confidence in the capacity of a company to reimburse a given obligation, given by a credit rating agency or NSSRO. Ratings are usually represented by letters AAA, AA, A, BBB, BB, B, CCC, CC, C, R along with + or -.

# **Rating Basis**

The collection of assumptions used to associate the risk premium with the characteristics of the risk being insured.

A rational from a credit rating agency or NSSRO for a given credit rating.

## **Real Yield**

Real yield is the nominal yield of a bond minus the rate of inflation. If a bond yields 5% and inflation is running at 2%, the real yield is 3%.

# Reciprocity

The exchanging of reinsurance between two reinsurers, frequently in equal amounts. The purpose of such transactions is to balance underwriting results for both companies.

# Recoveries

Amount of an insurer's incurred losses that reinsurers will pay. Could also refer to the value of an asset after partial default.

# Redemption

A redemption is the return of an investor's principal in a fixed-income security, such as a preferred stock or bond, or the sale of units in a mutual fund.

# **Redemption Yield**

The yield of a stock calculated as a percentage of the redemption price with an adjustment made for any capital gain or loss the price represents relative to the current price. Also known as yield to maturity.

## **Refinement Of A Rate Structure**

A rate structure that

has the same set of exposure measures as the original rate structure

is compatible with a refinement of a risk classification system with which the original rate structure is compatible

assigns the same rates to actuarial risks in any risk class in the refinement that is identical to a risk class in the risk-classification system of the original rate structure, and increased rates to some actuarial risks and decreased rates to other actuarial risks in other risk classes

# **Refinement Of A Risk Classification System**

A risk classification system with the same actuarial model as the original risk-classification system such that each risk class is either identical to or a subset of a risk class of the original risk-classification system. This might be accomplished by changing the risk measure and thus changing the risk classes.

## Regulations

Laws and rules that govern financial services industries.

In every country, there are usually regulatory agencies that is dedicated to the regulation of insurance companies. For example, it is the state insurance departments in the United States and the OFSI in

Canada as primary insurance regulator (but other agencies also have regulations that impact the insurance industry like IRS, Labor Departments, Federal Reserves...

Usually the pension industry is regulated by separate agencies.

# **Rehabilitation/partial Benefit**

A disabled person claiming disability benefits may completely recover from disability and return to work, in which case the disability benefits would cease.

In some cases (e.g. while transitioning from complete disability to complete recovery), the recovery is only partial and the claimant is able to return to work in a reduced capacity. While the person is partially back at work (at a reduced wage), the disability benefit may continue at a reduced rate (offset by the wages earned) - this is a partial benefit.

# Reinstatement

Reinstatement is the process of restoring a person (thing) to their (its) former position. In insurance, reinstatement allows a previously terminated policy to resume effective coverage. In case of nonpayment, the insurer may require evidence of eligibility and full payment of outstanding premiums. In non-life insurance, a reinstatement clause states when coverage terms are reset after an insured files a claim.

## Reinsurance

A reinsurance that is primarily motivated by financial goals; risk transfer is secondary to the primary business purpose. Examples of financial goals that can be met through financial reinsurance are surplus management to reduce statutory surplus strain, RBC management to improve RBC ratios, tax planning, funding acquisitions.

Also known as:

**Financial Reinsurance** 

Financial Risk Reinsurance

## Reinsurance

A transaction between a primary insurer and another licensed (re)insurer where the reinsurer agrees to cover all or part of the losses and/or loss adjustment expenses of the primary insurer, for a premium. Indemnification could be on a proportional or non-proportional basis.

## Reinsurer

Company assuming reinsurance risk, i.e taking on all or part of the risk covered under a policy issued by an insurance company for a premium. It is an insurer for insurance companies.

## **Relationship Management**

Collaborating and networking help actuaries to establish, build, and maintain value-added relationships, both internal and external to the organization of the actuary. Effective business relationships cultivate respect and trust.

## **Re-opened Claim**

A claim that had previously been closed (e.g. because it had been approved or rejected), but is now being reviewed (e.g. due to an appeal of the rejection, or the discovery of a mistake in the adjudication process).

## Replacement

Replacement cost is the actual cost to replace an item or structure at its pre-loss condition.

## **Replacement Ratio**

Also called replacement rate, this represents the percentage of a worker's pre-retirement income that is paid out by a pension program upon retirement.

Also known as:

Net Replacement Ratio

## **Replicating Portfolio**

Portfolio of assets which can be used to replicate the behavior of life insurance liabilities under different economic scenarios.

### **Reserve Strain**

Occurs when an insurer holds an amount in reserve that is greater than the single premium that the insurer actually received. This extra reserve strain comes out of the insurer's own surplus capital and can be released over time.

### Reserves

Liability set aside to pay future claims

### Residence

The place where insured live in when apply for insurance policy.

### Retention

Assumption of risk of loss by means of noninsurance, self-insurance, or deductibles. Retention can be intentional or, when exposures are not identified, unintentional. In reinsurance, the net amount of risk the ceding company keeps for its own account.

### **Retroactive Date**

A provision found in many (although not all) claims-made policies that eliminates coverage for claims produced by wrongful acts that took place prior to a specified date.

### Retrocession

A transaction in which a reinsurer transfers risks it has reinsured to another reinsurer.

### Retrocessionaire

A reinsurer that accepts reinsurance from another reinsurer.

## **Return Commission**

This refers to the part of the commission that is paid back in case of an early policy termination. Also known as Commission Claw Back.

## **Return On Capital (ROC)**

A financial ratio used to measure a company's profitability and efficiency of employed capital.

Return on Capital = Earnings Before Interest and Taxes / Capital Employed.

Also known as:

Return On Capital Employed (ROCE)

## **Rider Benefits**

Living and death benefit riders are a descriptive class of contractual add-ons to insurance and annuity products. These riders provide additional benefits for the contract holder and are purchased at an extra cost.

### Riders

A rider is an add-on provision to a insurance policy that provides additional benefits or coverages to the policyholder at an additional cost.

### Risk

(1) Possibility of failing to meet objectives.

(2) Can only be defined in context.

Consideration of different risks depends on the situation or the entity involved. A risk to one individual may not represent risk to another individual. Or, a risk to one entity (organization, company, business, enterprise, provider) may not represent risk to another entity.

### **Risk Assessment**

Risk assessment is the quantification of actuarial risk.

### **Risk Attaching Basis**

Refers to coverage of reinsurance claims. Risks or policies-attaching contracts only cover reinsured losses on policies attachingâ€"i.e., inceptingâ€"during the reinsurance contract period.

### **Risk Averse**

See Principle Risk Aversion

### **Risk Characteristic**

A risk characteristic (characteristic) is a quality that can be identified for each risk subject in a specified group and to which a numeric value can be assigned.

### **Risk Classification System**

A system used to assign risks to groups based upon the expected cost or benefit of the coverage or services provided.

### **Risk Control**

Risk control is a process that reduces the impact of one or more of the actuarial risk variables associated with the actuarial risk. (Source: Principles Underlying Actuarial Science)

Risk control is a major part of the Actuarial Control Cycle, as a consideration at each step in the process as well as a part of considering external forces.

### **Risk Discount Rate**

Return required by the shareholders on the capital they invest in the insurance company. Capital Asset Pricing Model (CAPM) is the most common method used to determine RDR.

## **Risk Excess Of Loss Reinsurance**

A form of excess of loss reinsurance which, subject to a specified limit, indemnifies the ceding company against the amount of loss in excess of a specified retention with respect to each risk involved in each loss.

### **Risk Factor**

A risk factor is any attribute, characteristic or exposure of an individual/event that increases the likelihood of a future loss in an insurance contract.

### **Risk Financing**

Risk financing is a mechanism that provides cash flows that are contingent upon the occurrence of an event associated with the actuarial risk and that tend to offset undesirable economic consequences. (Source: Principles Underlying Actuarial Science).

Traditional forms of risk financing include risk transfer, funded retention by way of reserves (ofter called self-insurance) and risk pooling. (Source: Wikipedia)

Also known as:

**Finite Reinsurance** 

### **Risk Group**

Risk group is a specific way to group risks under a common area which provides a structured & systematic approach in identifying risks to a consistent level of detail.

### **Risk Identification**

Risk identification is a process for determining whether a given person or object is a risk subject for a given actuarial risk.

### **Risk Management**

The process of identifying, and measuring/assessing risk, and then developing strategies to minimize, monitor, and control the risk. In ideal risk management, a prioritization process is followed whereby the

risks with the greatest loss and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled later.

## **Risk Management System**

A risk management system is an arrangement involving risk identification, risk assessment, risk control, risk reporting and monitoring and/or risk financing.

## **Risk Pool**

A group of polices with similar characteristics (e.g., group size and benefit structure).

## **Risk Premium**

A risk premium is the return in excess of the risk-free rate of return an investment is expected to yield in order to compensate the investor for the risk taken. The risk could be credit risk (risk that the asset doesn't perform as expected), liquidity risk (risk that the asset can't be transformed to cash quickly), market risk (for stock for example) or other nature. An asset's risk premium is a form of compensation for investors to tolerate the extra risk, compared to that of a risk-free asset, in a given investment.

## **Risk Subject**

A person or object involved in an event associated with an actuarial risk is called a risk subject.

## **Risk Transfer**

Shifting risk from one party to another.

## **Risk-Based Capital (RBC)**

The theoretical amount of capital that is needed to absorb the risks of operating a business with financial obligations to customers; the amount necessary to ensure that the business has an acceptably low expectation of becoming financially insolvent.

In the USA, the RBC calculations is a combination of factors applied to statutory accounting amounts and stochastic and deterministic projection calculations. Various actions are taken by the regulator depending on the level of capital owned by a company, in percentage of RBC, from simple monitoring to receivership (taking over).

### **Running Yield**

Running yield is the annual income on an investment divided by its current market value. Running yield is a calculation that divides the income from dividends (for stocks) or coupons (for bonds) by the market price of the security; the value is expressed as a percentage. "Running" refers to a continuous investment, such as a bond held to maturity.

### **Run-off Basis**

A method considering the financial situation that no new business will be written, but that the company will continue to operate with in-force business until the end of the term set by the policy conditions (e.g. the renewal date, end of a fixed return, death of insured person), including the settling of claims eventually arising during this period.

## **Run-off Triangle**

See claims run-off analysis.

### Salvage

Damaged property an insurer takes over to reduce its loss after paying a claim. Insurers receive salvage rights over property on which they have paid claims, such as badly-damaged cars.

## Scenario

A set of assumptions about future conditions, representing expectations or possibilities based on professional judgment, or that may be prescribed by law or by others, used in a model.

## Secondary Care

Secondary care is the term given to such advice and treatment as provided by hospitals, consultants and other specialists, usually after referral by the patient's general practitioner. Secondary care is where most people end up when they have a medical condition to deal with that can't be handled at the primary care level. Your insurance company may require that you receive a referral from your PCP prior to receiving secondary care.

## Selection

Selection is the process by which a financial security system determines whether to accept a specific risk subject and the set of probabilities to which the risk will be assigned. (Source: Principles Underlying Actuarial Science)

## Self Administered Scheme

An occupational benefits scheme where the assets are invested, other than wholly by payment of insurance premiums, with an in house investment manager or an external investment manager.

## Self Funding

A funding methodology in which the group assumes the risk for the claims and the insurer takes the risk for the administrative cost. In essence, the group becomes its own risk pool.

## Self Investment

The investment of the assets of an occupational benefits scheme in employer related investments. (Source: Pensions Management Institute (PMI)/Pensions Research Accountants Group (PRAG))

### Self-insurance

Self-insure is a risk management technique in which a company or individual sets aside a pool of money to be used to remedy an unexpected loss.

## **Severity Distribution**

The probability distribution for the amount of loss.

## Short

A short, or short position, is selling first and then buying later. The trader's expectation is that the price

will drop; the price they sell at is higher than the price they buy it at later. The difference between the sale price and the buy price produces a profit or loss.

## **Short-tailed Business**

Types of insurance in which most claims are usually notified and/or settled in a short period from the date of exposure and/or occurrence. Usually the short period is less than 2-5 years. Health insurance or auto insurance are usually considered short tailed business. This comes from the distribution of cash flows over time showing a short tail.

The opposite of short-tailed business is long-tailed business.

## **Signing Down**

Where a risk is oversubscribed, which is to say that the underwritersâ€<sup>™</sup> written lines exceed 100% (of the allowed maximum) then, absent some contrary instruction, those lines will be proportionally reduced ('signed down') by the broker until they total 100%. An underwriter may insist on preserving his written line in which event the written lines of the other underwriters will be proportionally reduced until they total 100% when added to the preserved written line of the other underwriter.

## **Slip System**

The face-to-face system used within the London market to coinsure risks. Proposed risks are described by a broker on a standard form (slip); terms and the premium rate are added after negotiation with a lead underwriter (who also signs for a certain proportion of the risk), before the slip is circulated by the broker amongst other underwriters who sign the slip to confirm the proportion of risk that they will accept.

### Smoker/non-smoker Rates

In life, health, LTC and annuity insurance, smoker/non-smoker rates are mortality rates used to set premiums for smokers and non-smokers, respectively. They also refer to the rates of insurance paid by smokers and non-smokers, respectively. Everything else being equal, rates for smokers are higher than those for non-smokers reflecting their higher probability of dying, with the exception of annuity payout where rates are lower.

### **Soft Premium Rates**

Low premium rates.

## Solvency

Solvency directly relates to the ability of an individual or business to pay their long-term debts (and any other commitments) including any associated interest. To be considered solvent, the value of an entityâ€<sup>™</sup>s assets, whether in reference to a company or an individual, must be greater than the sum of its debt obligations. Various mathematical calculations can be performed to help determine the solvency of a business or individual.

## Solvency Capital Requirement (SCR)

The solvency capital requirement (SCR) is the amount of funds that insurance and reinsurance companies in the European Union are required to hold, as defined by the Solvency II regulation. SCR

could be computed using a standard formula or an internal model and is calibrated to ensure that all quantifiable risks are considered, including non-life, life and health underwriting, and market, credit, operational and counterparty risks.

## **Solvency Margin**

A business's assets that exceed the amount required to meet its liabilities

## Solvency Margin Requirement (SMR)

Solvency Margin Requirement (SMR) - An amount of extra capital required to be held when compared to liabilities and other commitments.

## **Solvency Ratio**

The free reserves divided by the net (of reinsurance) written premiums.

## **Spot Interest Rate**

Spot interest rate for maturity of n years refers to the geometrical average of the interest on a single cash flow with n years till maturity.

For a cash flow Face\_Value in n years, with a present value of Present\_value, we have the spot rate

sn = (Face\_Value / Present\_value) ^ (1/n) -1

## **Stability Clause**

An index clause is a specialized clause that distributes the effects of inflation on claims costs, which tend to fall on the reinsurer, between the ceding insurer and the reinsurer. It is used most frequently in excess-of-loss reinsurance contracts covering long-tail risks.

### **Stand-alone Critical Illness Plans**

Critical illness coverage that is purchased separately from other insurance, as opposed to critical illness coverage that is purchased as a rider to an insurance contract.

### **Standards Of Practice**

The Actuarial Standards Board (ASB) promulgates actuarial standards of practice (ASOPs) for use by actuaries when rendering actuarial services in the United States. Actuarial Standards of Practice (ASOPs) identify what the actuary should consider, document, and disclose when performing an actuarial assignment. They range from detailed instructions on how to make certain calculations to more general requirements as to what should be disclosed in actuarial reports.

Enforcement of high professionalism standards, as well as the maintenance of high standards for admission to the profession, are necessary to assure that the actuarial profession is appropriately overseeing the work of its members.

In Canada, the Standards of Practice are precise and detailed descriptions of how actuaries, in all practice areas (e.g., actuarial evidence, pensions, life or property/casualty insurance), are to go about their work. They range from detailed instructions on how to make certain calculations to more general requirements as to what should be disclosed in actuarial reports. They are developed and adopted by

the Actuarial Standards Board (ASB) according to its due process and are published by the Canadian Institute of Actuaries.

Most other countries with a developped actuarial profession have similar standards of practice.

## **Statistical Regularity**

A phenomenon to which Principle 1.1 applies is said to display statistical regularity.

Statistical regularity is a notion in statistics and probability theory that random events exhibit regularity when repeated enough times or that enough sufficiently similar random events exhibit regularity. It is an umbrella term that covers the law of large numbers, all central limit theorems and ergodic theorems.

Principle 1.1 (Principle of Actuarial Science, SOA): Phenomena exist such that, if a sequence of independent experiments is held under the same specified conditions, the proportion of occurrences of a given event stabilitize as the number of experiments becomes larger.

## Stochastic Model

A stochastic model is a model for estimating probability distributions of potential outcomes by allowing for random variation in one or more inputs over time.

# Stock Company

Proprietary insurance companies are owned by shareholders, in contrast to Mutual insurance companies which are owned by their own policyholders.

Also known in the UK as:

Proprietary Life Insurance company

Â

# **Stop Loss Reinsurance**

Stop-loss reinsurance is a type of excess of loss reinsurance wherein the reinsurer is liable for the insured's losses incurred over a certain period (usually a year) that exceed a specified amount or percentage of some business measure, such as earned premiums written, up to the policy limit.

## Subrogation (subro)

The right of an insurer which has paid a claim under a policy to step into the shoes of the insured so as to exercise in his name all rights he might have with regard to the recovery of the loss which was the subject of the relevant claim paid under the policy up to the amount of that paid claim. The insurerâ€<sup>™</sup>s subrogation rights may be qualified in the policy. In the context of insurance subrogation is a feature of the principle of indemnity and therefore only applies to contracts of indemnity so that it does not apply to life assurance or personal accident policies. It is intended to prevent an insured recovering more than the indemnity he receives under his insurance (where that represents the full amount of his loss) and enables his insurer to recover or reduce its loss.

## **Success Criteria**

Failure occurs when a risk management system first fails to satisfy one or more of a set of required

conditions fundamental to the system's purpose. The required conditions are called the success criteria.

## **Sunset Clause**

Clause defining the time limit within which a claim must be notified, if it is to be valid.

## Suretyship

Insurance to provide a guarantee of performance or for the financial commitments of the insured.

## Surplus

The remainder after an insurer's liabilities are subtracted from its assets. The financial cushion that protects policyholders in case of unexpectedly high claims

## **Surplus Lines Insurance**

Surplus lines insurance protects against a financial risk that is too high for a regular insurance company to take on.

Surplus lines insurance, unlike regular insurance, can be purchased from an insurer that is not licensed in the insuredâ€<sup>™</sup>s state, though the surplus lines insurer will still need to be licensed in the state where it is based. An insurance agent must have a surplus lines license to sell a surplus lines policy. Also called excess lines insurance, surplus lines insurance makes it possible to get insurance for entities with unique risks that most insurers donâ€<sup>™</sup>t cover or those with a claims histories that makes them otherwise uninsurable.

### **Surplus Reinsurance**

A form of pro rata reinsurance indemnifying the ceding company against loss for the surplus liability ceded. Essentially, this can be viewed as a variable quota share contract wherein the reinsurer's pro rata share of insurance on individual risks will increase as the amount of insurance increases, in order that the primary company can limit its net exposure regardless of the amount of insurance written. First surplus is the amount of surplus on each risk that must apply first to the first surplus contract. Second surplus, third surplus, etc., reinsurances are the remaining portions of the surplus that must apply to each such respective contract after deducting the amount(s) ceded to the underlying surplus contract or contracts.

### **Surrender Value**

The surrender value of a life insurance policy is the amount of money you receive if you decide that you no longer wish to continue with the policy.

## Swap

A contract between two parties under which they agree to exchange a series of payments according to a pre-arranged formula.

## Swing Rated

See experience rating.

### Syndicate

A syndicate is a group of companies who together accept the risk of buying and distributing a new stock issue or an insurance risk. Syndication allows companies to pool their resources and share risks that they cannot handle individually. There are several different types of syndicates, including underwriting, banking syndicates and insurance syndicates. (A Lloyd's Term)

## Systematic Risk

This is the risk of failure of financial market. It occurs when many firms similarly are affected by a particular external risk. Also known as  $\hat{a} \in \mathbb{C}$  and  $\hat{c} = \hat{c} = \hat{c} + \hat{c} + \hat{c} + \hat{c} = \hat{c} + \hat{c} + \hat{c} + \hat{c} = \hat{c} + \hat{c} + \hat{c} + \hat{c} + \hat{c} = \hat{c} + \hat{c} +$ 

## Taxation

System to raise revenue for governments.

The act of levying a tax.

An assessed amount of tax.

## Teamwork

The actuary is often a member of a team. Cooperation and collaboration with others (actuaries and nonactuaries) contribute to shared goals and effective performance.

Teamwork is the process of working collaboratively with a group of people to achieve a common goal where each individual will try to cooperate, using their individual skills and providing constructive feedback, despite any personal conflict between individuals.

### **Technical Reserves**

The accounting entries in the balance sheet that represent the insurer's liabilities from the business that has been written. The reserve is set aside to ensure that insurer is able to meet future obligations. Technical provisions comprise two components: the best estimate of the liabilities (i.e. the central actuarial estimate) plus a risk margin.

Also known as:

Provisions

## Telemarketing

Telemarketing is a marketing method in which insurance company promotes its products and service through telephone. All application procedures are completed over the telephone conversation. The policy will then be despatched together with a direct debit instruction for completion and a copy of the completed application for signature by the applicant confirming the answers given to the underwriting questions.

## **Term Life Insurance**

A life insurance policy which provides a stated benefit upon the death of the insured life, provided that the death occurs within a certain specified time period and was not triggered by a cause of death excluded from the coverage.

## **Terminal Dividend**

A terminal dividend, or terminal bonus, is a bonus that may be payable on policy termination such as maturity, death or surrender of a with profits contract. The bonus is not guaranteed and the rate is depending on performance of the assets that supporting the with profit contract.

Also Known As:

**Terminal Bonus** 

## **Terminal Funding**

Terminal funding is a method of funding a pension plan under which the entire actuarial present value of benefits for each individual is contributed to the planâ€<sup>™</sup>s fund at the time of withdrawal, retirement, or benefit commencement. This may ential the purchase of annuitites for those who retire.

## The Employee Retirement Income Security Act of 1974 (ERISA)

The Employee Retirement Income Security Act of 1974 (ERISA) is a federal law that sets minimum standards for most voluntarily established pension and health plans in private industry to provide protection for individuals in these plans.

## **Time And Distance Reinsurance**

A reinsurance treaty in which an insurer transfers a lump sum of its premiums to a reinsurer, and over time is returned a portion of the unused premiums. Time and distance reinsurance is designed to transfer timing risk, such as claims occur earlier than expected and not underwriting risk. It is often considered a method for insurance companies to smooth their income out over time.

### **Time Value Of Money**

The time value of money (TVM) or the present discounted value is one of the basic concepts of finance. TVM is the idea that money available at the present time is worth more than the same amount in the future due to its potential earning capacity. This core principle of finance holds that, provided money can earn interest, any amount of money is worth more the sooner it is received.

### Transaction

An economic transaction (or transaction) is an exchange of economic goods or money by two or more persons or entities.

### Transfer

A changing of ownership from one party to another or a movement of funds/portfolio from one account to another.

### **Treasury Bill**

A short term government debt security. Usually issued with a term less than a year (usually of 91 or 182 days). No interest is paid, but the bill is issued at a discount to its redemption value.

### Treaty

A reinsurance term.

A treaty is a formal agreement between an insurer and a reinsurer setting out the terms of a reinsurance arrangement. A treaty imposes an obligation on the reinsurer to accept automatically business ceded within the scope of the treaty. It also usually imposes a similar obligation on the insurer to pass business to the reinsurer which falls within that scope and other terms of the treaty. Reinsurance allows the insurer to free up risk capacity and to protect itself from claims of high severity.

A reinsurance agreement between a reinsurer and a ceding company. The three most common methods of accepting reinsurance are automatic, facultative, and facultative-obligatory. The three most common types of reinsurance treaties are YRT, coinsurance, and modified coinsurance.

## **Treaty Reinsurance**

Treaty reinsurance is one of the three main types of reinsurance contracts, the others being facultative reinsurance and excess of loss reinsurance.

Treaty reinsurance is reinsurance a reinsurer is obliged to accept, subject to conditions set out in a treaty.

## Trust

A legal concept whereby property is held by one or more persons (the trustees) for the benefit of others (the beneficiaries) for the purposes specified by the trust instrument. The trustees may also be beneficiaries.

## **Trust Law**

Laws regarding property owned by one person (the trustee) for the benefit of another (the beneficiary)

## Trustee

An individual or company appointed to carry out the purposes of a trust in accordance with the provisions of the trust instrument and general principles of trust law.

### **Twenty-fourths Method**

A method to approximate unearned premiums/exposures which assumes policies are written uniformly during each period. The method assumes all policies are written mid-month.

### **Uberrima Fides**

A Latin phrase meaning "utmost good faith" (literally, "most abundant faith"). It is the name of a legal doctrine which governs insurance contracts.

### **Unallocated Loss Adjustment Expenses (ALAE)**

Costs which are related to claim settlement not attributable to any individual claims.

See Page 3 of the Unallocated Loss Adjustment Expense Provisions document.

### Uncertainty

Uncertainty is a situation which involves imperfect or unknown information. It applies to predictions of future events, to physical measurements that are already made, or to the unknown.

## Uncertainty

Unmeasurable risk.

## Underinsurance

Underinsurance refers to inadequate insurance coverage held by a policyholder. In the event of a claim, underinsurance may result in economic losses to the policyholder, since the claim would exceed the maximum amount that can be paid out by the insurance policy.

## Underwriter

Insurance underwriters are professionals who evaluate and analyze the risks of insuring people and assets and establish pricing for accepted insurable risks.Â

## Underwriting (UW)

Underwriting (UW)Â is the process by which an insurance company decides which people to accept for insurance and on what terms.

Â

## **Underwriting Agent**

An agent of an agency given some underwriting and policy writing authority by an insurer, which allows the pricing and issuance of the policy to the insured withing the authorization guidelines. Underwriting commissions are added to the sales commissions.

### **Underwriting Factor**

The factors that a provider of insurance considers before issuing a policy and determining how much the premium should be.

### **Underwriting Ratio**

The amount of a company's net premiums that were allocated to underwriting costs, like commissions to agents and brokers, state and municipal taxes, salaries, benefits and other operational expenses. This ratio is determined by dividing the underwriting expenses total by net premiums earned.Â

### **Unearned Premium Reserve (UPR)**

The reserve or provision for unearned premiums.

Also Known As:

**Provision For Unearned Premiums** 

### **Unearned Premiums**

The amount of premium for which payment has been made by the policyholder but coverage has not yet been provided. Unearned premium is premium corresponding to the time period remaining on an insurance policy.

### **Unexpired Risks Reserve (URR)**

A reserve account opened at the discretion of the insurer if it believes the amount of funds kept in the

unearned premium reserve account is not sufficient to cover the amount of risk perceived. While unearned premium reserve minimums are set by law or accounting framework, an unexpired risk reserve is voluntary.

Also Known As:

**Provision For Unexpired Risks** 

## Unit Trust

An open ended investment vehicle whereby investors can buy "units" in an underlying pool of assets from the trust manager. If there is demand for units, the managers can create more units for sale to investors. If there are redemptions (sales by investors), the managers will buy in units offered to them. It is often referred to as "open-ended" trust.

## **Universal Life Insurance**

Universal Life (UL) is a type of permanent life insurance based on a cash value. The cash value is credited each month with interest, and the policy is debited each month by a cost of insurance (COI) charge, which is drawn from the cash value if no premium payment is made that month. The interest credited to the account is determined by the insurer; often it is pegged to a financial index.

UL are primarely sold in the USA.

## **Unsecured Loan Stock**

A form of long term corporate debt which is not secured on any specific assets of the borrower.

### Utilitarianism

A Philosophical Term: The maximization of utility over a population. In economics, utility is a measure of benefit, satisfaction, or happiness.

## Valid Within A Specified Degree Of Accuracy

A mathematical model is said to be valid within a specified degree of accuracy relative to certain observed results if it can reproduce these results within that degree of accuracy.

### Valuation

The process by which an insurance company will place a value on its assets and/or its liabilities.

### **Valuation Rate Of Interest**

The rate at which future liabilities and assets are discounted to the valuation date. The rate could be prescribed by the accounting framework.

### Value-Based Care

Value-based care is a form of reimbursement that ties payments for care delivery to the quality of care provided and rewards providers for both efficiency and effectiveness. This form of reimbursement has emerged as an alternative and potential replacement for fee-for-service reimbursement which pays providers retrospectively for services delivered based on bill charges or annual fee schedules.

## Variable Universal Life Insurance (VUL)

Variable Universal Life Insurance (VUL) is a type of Universal Life. In a VUL, the cash value can be invested in a wide variety of separate accounts, similar to mutual funds, and the choice of which of the available separate accounts to use is entirely up to the contract owner.

## **Vested Rights**

A right belonging to a person that cannot be taken away.

## Vesting

Term used to indicate whether an employee has earned any pension benefits provided by the employers' contributions to the applicable pension plan. If an employee were to terminate employment prior to a specified period of time (vesting schedule) they may not be entitled to the employer portion (if any) of the benefits they had earned.

## Volatility

A statistical measure of the range of returns for a given security or index. Can be measured using standard deviation or variance between returns from that same security or index. Typically, higher volatility indicates a higher risk and higher amount of uncertainty with respect to expected outcomes.

Could also be applied to other random variables (asset or liability).

## Voluntary

A financial security system is mandatory if all persons in a group or in society are required to participate; otherwise, it is voluntary.

### **Voluntary Group**

A special case of Group contract where individuals are able to elect or decline participation to the insurance program.

Also known as:

**Voluntary Benefits** 

### **Waiting Period**

The time that must pass before coverage can become effective for an employee or dependent who is otherwise eligible for coverage under a job-based health plan.

Could also be refering to a type of deductible for insurance contracts paying a per diem benefit (e.g. Long Term Care, Worker Compensation)

Also Known As:

**Elimination Period** 

## **Waiver Of Premium**

A provision in an insurance contract with regular premium payments. This provision would, in the event

of an insured becoming disabled, allow the insured to retain insurance coverage while they remain disabled (up to a maximum waiver period, such as age 65).

This provision does not have to apply to disability insurance: for instance, it's not uncommon to find a waiver of premium provision in a group life insurance contract.

# Weighted Average Cost Of Capital (WACC)

Weighted average cost of capital (WACC) is the average after-tax cost of a companyâ $\in$ <sup>M</sup>s various capital sources, including common stock, preferred stock, bonds, and any other long-term debt. In other words, WACC is the rate a company expects to pay on average to finance its assets. Since a company has two primary sources of financing â $\in$ " debt and equity â $\in$ " WACC is the average cost of raising that money. Policyholder reserve is not considered a source of fund.

Formula for WACC

WACC is calculated by multiplying the cost of each capital source (debt and equity) by its relevant weight, and then adding the products together to determine the WACC value:

WACC = (E / V) \* Re + (D / V) \* Rd \* (1 – Tc)

Where:

Re = cost of equity

Rd = cost of debt

E = market value of the firmâ€<sup>™</sup>s equity

D = market value of the firmâ€<sup>™</sup>s debt

V = E + D

E/V = percentage of financing that is equity

D/V = percentage of financing that is debt

Tc = corporate tax rate

### Whole Life Insurance

Whole life insurance is a type of life insurance. Its characteristics are set face amount (death benefit), level premium, and a cash value table included in the policy guaranteed by the company. The primary advantages of whole life are guaranteed death benefit, guaranteed cash values, fixed and known annual premiums, and the fact that mortality and expense charges will not reduce the cash value shown in the policy. The primary disadvantages of whole life are the lack of flexibility around premium and death benefit, in addition to having limited access to the cash value. The internal rate of return in the policy may not be competitive with other savings alternatives.

## Winding-up

The process of terminating a benefits plan/scheme, usually by applying the assets to the purchase of individual insurance contracts for the beneficiaries, or by transferring the assets and liabilities to

another plan/scheme.

## Withdrawal Benefit

Withdrawal benefits refer to the rights of employees with pension or other retirement plans to cash out any accumulated funds upon leaving an employer.

It applies most often to defined contribution plans, under which employers and employees each contribute either a fixed amount or a percentage of each employeeâ€<sup>™</sup>s paycheck. The employee has withdrawal benefits to all his/her own contributions and all interest earned. He/she may have a right to employer contributions if it is applicable, e.g. he/she already worked for the employer for certain years.

In the life / annuity insurance context, withdrawal is the right to cash out accumulated funds of the policy. Surrender changes and tax could apply, as well as a reduction in other benefits of the policy.

## **Working Layer**

A dollar range in which an insured or, in the case of an insurer's book of business, a group of insureds is expected to experience a fairly high level of loss frequency. This is the layer typically subject to deductibles, self-insured retentions, retrospective rating plans, and similar programs.

## World Health Organization (WHO)

The World Health Organization (WHO) is a specialized agency of the United Nations that is concerned with international public health.

It was established on 7 April 1948, and is headquartered in Geneva, Switzerland. The WHO is a member of the United Nations Development Group.

Its predecessor, the Health Organization, was an agency of the League of Nations.Â

### Written Premiums

A written premium is an accounting term in the insurance business used to describe the total premiums on policies issued by an insurance company during a specific period of time regardless of what portions have been earned. Written premiums are the amount of premium charged for a policy that has already become effective.

### **Yield Curve**

A yield curve is a line that plots the interest rates, at a set point in time, of bonds having equal credit quality, but differing maturity dates.

### **Zero Coupon Bond**

Zero-coupon bonds have a single payment at maturity.

### Zero Coupon Yield Curve

A zero curve is a special type of yield curve that plots interest rates on zero-coupon bonds to different maturities dates. These curves enable to price arbitrary cash flows, fixed-income instruments, and derivatives.

## Zillmerisation

Zillmerisation is a method of adjusting a net premium valuation, cash value and other amounts to ease new business strain for premium protection products such as life insurance or critical illness insurance. The method was developed by August Zillmer in the late 1800s and involves increasing the amount of future net premiums allowed for in the valuation.