Life Office Practice Definitions

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A

Accrued terminal bonus: the part of the policy’s asset share which has been built up from past investment returns in excess of those investment returns needed to meet guaranteed benefits.

Acquisition costs (initial costs): the initial costs of commission, selling (including branch costs) and marketing (including advertising).

Anti-selection: when those who have most to gain from exercise an option or guarantee are the most likely to exercise it against the life office. If there is a guaranteed option to renew a term assurance at the end of its term, those in poorer health are more likely to exercise it. If the office is known to operate weak underwriting procedures, it will attract the poorer lives who would be rejected by other offices.

Accounts - Technical Account: produced for the Annual Report and Accounts of an insurance company. Similar to a profit test but the investment return includes the return on assets of the life fund i.e. the Technical Provisions as well as the Fund for Future Appropriations (FFA) and not just the Technical Provisions. For a mutual life office the bottom line in the Technical Account is zero but for a proprietary company the bottom line is the transfer to shareholders (who will typically receive all the non-profit profits and one-ninth of the value, on the valuation basis, of the bonuses declared in that year). To achieve this bottom line, an additional item representing the transfer to/from the FFA is included. The Technical Account takes the form:

- Premiums
- +Investment return (which may be split (a) interest/dividends (b) realised appreciation (c) unrealised appreciation)
- Expenses/costs
- -Claims (death/surrender/maturity)
- -Increase in reserves from end of previous year to end of current year
- -Transfer to FFA

Zero for mutual but equal to shareholder transfers for proprietary.

Accounts - Balance Sheet: will contain assets on one side and liabilities on the other (totals must equal) as follows:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of assets at market value</td>
<td>Shareholder capital (proprietary only)</td>
</tr>
<tr>
<td>Assets held to cover linked liabilities</td>
<td>Retained shareholder profits (proprietary only)</td>
</tr>
<tr>
<td>Deferred acquisition cost asset (DAC)</td>
<td>Technical provisions</td>
</tr>
<tr>
<td>Debtors</td>
<td>Technical provisions for linked liabilities</td>
</tr>
<tr>
<td></td>
<td>Fund for Future Appropriations (FFA)</td>
</tr>
<tr>
<td></td>
<td>Creditors</td>
</tr>
</tbody>
</table>

<table>
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<th>Assets</th>
<th>Liabilities</th>
</tr>
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Accounts - Non-Technical Account: effectively the shareholder account including the shareholder transfer (the bottom line of the Technical Account).
Admissible value of asset: the assets to which the company, under statutory rules, is allowed to give value. If a company was to invest all its assets in the shares of one single company (British Petroleum say) then it could only count 2.5% of the value of British Petroleum as admissible (97.5% would be inadmissible). The rule provides a good encouragement for not putting ‘all your eggs in one basket’! You could however put 2.5% of funds into each of the shares of 40 separate companies and be able to count the full value of each.

Asset share: the retrospective accumulated value of past premiums less the expenses, cost of mortality etc. accumulated at the rate of investment return (net of tax) earned on the assets. In the case of with-profits contracts, allowance may be made for miscellaneous profits from non-profit contracts and profits from surrenders and lapses and also for the cost of any guarantees or options and the cost of any capital support provided from the estate to finance initially the valuation reserves for comparatively new policies as these reserves are not yet self-financing.

Actuarial Value of Assets: a value arrived at by discounting the asset-proceeds (i.e. the stream of income and capital deriving from the assets) The value may not be the same as the market value. Often used for value of assets of a pension scheme along with value of liabilities calculated on a consistent basis to determine the funding rate (contribution rate) for a pension scheme.

Analysis of profit: an analysis of the profit (in a profit test) into its constituent components e.g. loading profit, mortality profit, expense profit etc.

Appraisal Value: the Embedded Value plus an amount (termed goodwill) which represents the value of shareholder profits which will emerge from new business to be written in future.

B

Book value: the cost of buying the security i.e. acquisition cost.

Bonus earning power: for existing business, starting with the asset share, the reversionary bonus that can be supported in the future usually with a stated level of terminal bonus (e.g. 33.33% say) and based on certain assumptions. For new business, the reversionary bonus that the premiums can support usually with a stated level of terminal bonus (where no terminal bonus is stated, the terminal bonus is taken to be nil).

Bonus - simple reversionary: calculated as simple interest on the sum assured. Sum assured and bonus after n declarations is \(S(1+n.b)\) where \(S\) is initial sum assured and \(b\) is simple bonus.

Bonus - compound reversionary: calculated like compound interest on the sum assured. Sum assured and bonus after n declarations is \(S(1+b)^n\) where \(S\) is initial sum assured and \(b\) is compound bonus.

Bonus - super-compound reversionary: the new bonus in a given year is calculated as a certain fraction \(b_1\) of the initial sum assured to which is added a certain fraction \(b_2\) of the existing attaching bonuses. Sum assured and bonus after n declarations is \(S[1+b_1/b_2((1+b_2)^n-1)]\) where \(S\) is initial sum assured and \(b_1\) and \(b_2\) are the super-compound bonus rates.

Bonus – terminal/final bonus: the non-guaranteed additional bonus paid on termination of the policy (i.e. paid on death or maturity and usually some terminal/final bonus paid on surrender). If the terminal bonus is declared as an addition to the sum assured and the (super-compound) reversionary bonus, the maturity payment is \(S[1+b_1/b_2((1+b_2)^n-1)](1+T)\) where \(n\) is the term of the policy and \(T\) is the rate of terminal bonus.

C
**Commission** :- commission refers to the payments made by a life insurance company to reward those who sell and subsequently service its products, whether these be independent financial advisers (IFAs), tied agents or a direct sales-force. Typically the amount of the commission depends on the type and size of contract.

**Compulsory purchase annuity (CPA)** :- an annuity which must be purchased on retirement for a member of an insured occupational pension scheme.

**Continuing care** :- nursing or medical care provided after retirement.

**Continuing Care Retirement Community (CCRC)** :- a development in which retired persons can live as a community and received chosen levels of nursing or medical care.

**Corporate governance**: The system whereby boards of directors are responsible for the governance of their companies (upon appointment by shareholders) and the need to ensure that an appropriate governance structure is in place.

**Conventional annuity** :- a regular payment usually made during a person’s life, where the payment is a fixed amount. The frequency of the payment may be monthly, quarterly, half-yearly or yearly.

**CPA** :- see Compulsory purchase annuity

**Credibility** :- a statistical measure of the weight to be given to a statistic. This often refers to the claims experience for a particular risk (or class) as compared with that derived from the overall experience of a corresponding parent or larger population. The measure is used to determine a premium when using experience rating.

**Credit risk** :- the risk that the investment may default and the investor may not receive his money back.

**Critical illness policy** :- policy that pays out on a policyholder suffering a critical event- normally diagnosis of cancer, heart attack or stroke plus various less frequent maladies.

**D**

**DAC** see Deferred acquisition costs

**Deferment period** :- a period between an event occurring that triggers a benefit and that benefit becoming payable.

**Deferment of acquisition costs** :- where, for accounting purposes, the acquisition costs (initial costs) are treated in the technical account as if spread over the term of the policy and 100% of acquisition costs are not taken immediately through the technical account.

**Deferred acquisition cost asset (DAC)** :- a ‘pseudo’ asset which is set up in the balance sheet to reconcile the fact that the acquisition costs are, in reality paid out in full at the outset, but, in drawing up the technical account, they are treated as if they were spread over the term of the policy.

**Demutualisation** :- occurs when a mutual company ceases to become mutual life office and becomes a proprietary life office (i.e. a life office with shareholders). This is normally achieved by the transfer of a portfolio of policies (the transferred policies) from the mutual life office into a proprietary life office. The new
shareholders will have the right to take out certain specified cash flows from the new proprietary company. The purchase price the new shareholder will pay will depend on their entitlement to future cash flows.

<table>
<thead>
<tr>
<th>Cash flows</th>
<th>Entitlement to cash flow as mutual</th>
<th>Entitlement as proprietary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits on existing non-profit business</td>
<td>100% to W-P policyholders</td>
<td>Normally 100% to shareholders</td>
</tr>
<tr>
<td>Profits on existing conventional with-profits business which is transferred at time of demutualisation</td>
<td>100% to W-P policyholders</td>
<td>Normally 10% of profits to shareholders (the holders of transferred policies will normally have their PRE protected by having their asset shares calculated as if there were no shareholder transfer)</td>
</tr>
<tr>
<td><strong>Estate</strong> (otherwise known as Working Capital) i.e. broadly speaking those assets in excess of asset shares (with-profits) and statutory reserves (non-profit).</td>
<td>Forms the financial strength of the company and used for smoothing maturity values, when guarantees and options ‘bite’, for products with long pay-back periods (like Sandler products) and for other ‘rainy days’ which cannot be predicted.</td>
<td>Some of the Estate ring-fenced for existing with-profits policyholders to protect their PRE (see above). If the balance of Estate is bought out by new shareholder the new shareholders will then own the former Estate and may be very reluctant to use the former Estate when smoothing of maturity values is required, guarantees and options ‘bite’, Sandler products require a long period before the pay back their costs and there may be other ‘rainy days’. For this reason the shareholders of the demutualised company may be reluctant to transact with-profits business or issue Sandler type products.</td>
</tr>
<tr>
<td>Profits from future non-profit business (any future with-profits business will normally be written as unitised with-profits (UWP) business in the non-profit fund and have its investment component reinsured with the with-profits fund)</td>
<td>100% to W-P policyholders</td>
<td>100% to shareholders</td>
</tr>
</tbody>
</table>
The non-profit policyholders of the mutual life office, provided they were allowed to vote at Annual General Meetings (i.e. if they were ‘members’ of the mutual), need compensated for loss of control and this will normally amount to a few hundred pounds. The with-profits policyholders in a mutual will be included within the definition of ‘members’ and need to be compensated for those rights and cash flows given up to shareholders under the new proprietary life office as certain profit streams which went to policyholders will now go to shareholders. The compensation for the holders of with-profits policies will be considerably in excess of that for non-profit policies.

**Directives - First, Second and Third Life Directives of the European Union:-** legislation passed by the EU and which had to be implemented into each country’s own laws, in order to harmonise the life market across the EU.

**Discretionary bonus payments**: additional payments under the policy which are at the discretion of the directors of the life office.

**Embedded Value**: the value in the proprietary life office which is attributable to shareholders i.e. the money in the shareholders’ fund (shareholder capital and retained shareholder profits) and the money in the life fund which has been attributed to shareholders plus the PVSFP (present value of shareholder future profits). The PVSFP will be the value of 100% of future non-profit profits (starting the profit test with assets equal to the statutory reserves for non-profit business) plus the value of future shareholder transfers from with-profits business. The embedded represents the worth, to shareholders, of the existing business. It represents the value of the future profit stream (payable to shareholders) from the life office’s existing business together with the value of any assets attributable to shareholders.

**Enhanced Capital Requirement (ECR)**: following FSA Consultative Paper 195 and the FSA’s Policy Statement (PS 04/16) the new regime for determining the capital required in a life office allowing for its policyholder liabilities (unsmeared asset sharing, the smoothing of asset sharing, all guarantees and options) and furthermore allowing for the market risk (the risk of a sudden change in financial conditions), credit risk and persistency risk. The market risk, credit risk and persistency risk stress tests are specified by the FSA. Nonetheless a given stress test may proportionally effect one office more seriously than another particularly where theses risks are not limited by the investment policy (i.e. these risks are not hedged by matching assets and liabilities or these risks are only hedged to a limited degree).

**Equity (of treatment)**: this is a term that is difficult to define. In essence, it means that all policyholders are treated fairly. That is that some groups of policyholders do not benefit at the expense of other groups. In a proprietary company, equity also needs to be considered between policyholders and shareholders. Questions of equity arise in the distribution of surplus (i.e. the maturity payout), in the determination of surrender values and alteration terms and in the determination of variable charges.

**Estate** (also known as Working Capital): it gives the life office financial strength. It is monies built up in the funds of a life office over a long period of time either from profits from non-profit business or by taking a very small slice of the payouts from with-profits policies and letting compound interest do the rest. It pays for smoothing of policy payouts, for the cost of any guarantees and options in excess of unsmeared asset shares and is there for a ‘rainy’ day. It pays any additional monies necessary to safeguard policyholders’ reasonable expectations i.e. allowing for smoothing of payouts, guarantees or options. It is measured by the excess of total policyholder assets in excess of (a) a realistic assessment of policyholder with-profit liabilities taking account the cost of smoothing of maturity pay-outs and the costs of all guarantees and options and (b) assets required for non-profit policyholders.
For a proprietary life office, the question arises as to how to split the estate between policyholders and shareholders. Normally, in the absence of special circumstances, the FSA will deem 10% to belong to shareholders because, if the shareholders have traditionally received 10% of future profits (i.e. shareholder transfers are one-ninth of the cost of bonus) 10% of the estate should belong to shareholders. Life offices may plead special circumstances e.g. that a part of the estate was earned before the office had with-profits policyholders and therefore more than 10% of the estate should belong to shareholders.

**Expense ratio**: the ratio of management expenses plus commission to premium.

**Extra premium**: an extra premium is an addition to the standard premium payable under a contract in order to cover an extra risk.

**Extra risk**: an extra risk arises where a proposal for life insurance is not acceptable at standard rates.

**Financial strength**: usually measured as the ratio of the **Estate** (also known as Working Capital) to the total assets in the with-profits fund.

**Financial Condition Report**: a report on the financial position of the company prepared by the Appointed Actuary for the Board which shows, among other things, how the financial position of the company would change under a variety of future economic/financial circumstances and if there are any threats to the company being able to meet PRE (or even being insolvent). This is recommended practice – see GN2.

**Financial Services Authority (FSA)**: the U.K. body which regulates financial services in the UK.

**Flexible annuity**: an annuity that need not be fully defined when the first payment is due.

**Free assets**: see estate.

**Free cover**: the maximum amount of death or disability benefit which a life office (covering a group of lives) is prepared to insure for each individual without production of evidence of health.

**Functional costing**: a process used within an expense analysis to split the expenses of each line department between the different classes of business covered by that department. The process usually relies upon fixing relative unit costs for each of the processes carried out by the department and counting the number of times that each of the processes is carried out over the period in question.

**Fund for Future Appropriations (FFA)**: appears on the liability side of the balance sheet and represents funds of the life office, the allocation of which to policyholders or shareholders has not yet been determined. The **Estate** broadly equates to the FFA.

**General insurance business**: short term insurance i.e. motor insurance, fire insurance, house insurance, travel insurance etc.

**Generally Accepted Accounting Principles (GAAPS)**: the accounting rules for production of accounts which are set by the accounting standard setters in the various countries. The accounting standard setter in the UK is the Accounting Standards Board (ASB) and in the USA is called the Financial Accounting Standards Board (FASB). US GAAP refers to the American way of accounting.
**Genetic testing** :- this refers to the laboratory testing of a person's genetic characteristics as stored in the molecule DNA (deoxyribonucleic acid). The aim of the testing is to detect diseases which may cause a significant reduction in life expectancy or increase in sickness risk before any symptoms are apparent. Guidance has been issued by the Association of British Insurers on the use of genetic tests for underwriting purposes. Companies are not expected to request an applicant to undergo a genetic test, but they are permitted to ask applicants to provide the results of any tests that have already been carried out.

**Going-concern basis** :- the accounting basis normally required for Companies Act Accounts, which is based on the assumption that the insurer will continue to trade as normal for the long term future.

**Group contract** :- this is a contract that covers a group of lives, where the group is specified but not necessarily the individuals within it.

**Group personal pension scheme (GPP Scheme)** :- an arrangement made for employees of a particular employer, or for a group of self-employed individuals, to participate in a personal pension scheme on a grouped basis. This is not a single scheme, merely a collecting arrangement for premiums.

**Guaranteed Equity Bonds** :- single premium investments which contain a guaranteed element or a conditional guaranteed element (e.g. money back as long as FTSE index does not fall etc.). They may provide income or may grant capital growth related to the growth of an index.

**Guarantee (investment)** :- in the context of life insurance, this refers to a promise that the company will pay a specified sum of money - or sums of money – at specified times if a specified condition is fulfilled. The condition can be an event such as the surrender or maturity of a contract. The term can also refer to the situation where the company guarantees the rate it will use, at some future date, to convert a lump sum into an annuity or vice versa.

**Guidance Notes (GNs)** :- guidance issued jointly by the Faculty of Actuaries and the Institute of Actuaries to guide actuaries in carrying out their professional duties.

**H**

**Hedging a risk** :- investing in such a way as to offset the risk e.g. for a single premium non-profit endowment maturing in 5 years the interest rate risk can be hedged by investing in a zero coupon bond that matures in 5 years.

**I**

**Immunisation - Asset-proceeds** :- the coupons/dividends and repayments of capital from existing assets together with future premiums.

**Immunisation - Liability-outgo** :- the cash flows out of the life office in respect of claims, expenses etc.

**Immunisation** :- ensuring that the mean (average) term of the discounted asset-proceeds equals that of the discounted liability-outgo and that the spread (standard deviation of the discounted term) of the asset-proceeds is greater than the spread of the liability-outgo. The discounted mean term of the assets is also called the **Macaulay duration**.

**Income withdrawal** :- withdrawal of income, from a SSAS (small self-administered scheme), personal pension or defined contribution scheme, while annuity purchase is deferred.
Indemnity commission: the payment of initial commission to independent financial advisers, and sometimes other types of salesperson, is usually spread over a period of months, with the aim of encouraging the intermediary to ensure that contracts do not lapse shortly after entry. Many life companies will, however, permit an intermediary to receive all the initial commission as a commuted amount at the start of a contract. In exchange, the intermediary agrees to indemnify the life company if the contract lapses before all the initial commission has been earned. Due to the default risk involved, the life company will only pay indemnity commission if it it satisfied as to the financial standing of the intermediary.

Individual capital adequacy framework (ICAS): a framework where the particular risks being run in the life office with-profits fund are considered and whether the life office has sufficient financial resources to meet these risks.

Individual capital assessment: an assessment of how much Estate (Working Capital) a life office needs to have sufficient financial resources to meet the risks in its with-profits fund.

Integrated Prudential Sourcebook (PSB): the book setting out the regulations for valuing assets and liabilities as set out by the Financial Services Authority (FSA).

Insurable interest: under UK legislation, someone can only take out a life assurance contract on another person if they have an insurable interest in that person, i.e. that they stand to lose financially on that person's death. Spouses are assumed to have an unlimited insurable interest in their partners. If there is no insurable interest when the contract is effected, it would not be enforced by a UK court.

Lapse: a life insurance contract lapses if the policyholder ceases to pay premiums, i.e. withdraws. Some people use the word ‘lapse’ only in the situation where no surrender value is payable and refer to ‘surrender’ where a surrender value is payable. Other people use the word lapse to refer to termination of the policy with or without a surrender value. When a policyholder, having been invited to renew the policy, does not do so, the policy is also said to lapse.

Lapse rate: usually defined as the ratio of the number of lapses to the in-force business.

Liabilities: the liabilities of a life insurance company are the benefits that the life office reasonably expects to pay its policyholders, plus its future expenses less the future premiums which the life office expects to receive.

Liability: a duty or contract to fulfil an obligation to another person or organisation.

Loan (on a policy): where a life assurance contract has a surrender value, the life insurance company may allow the policyholder to take out a loan using the contract as security.

Long-term business: UK legislation divides insurance into long-term and short-term business, which broadly correspond to life and non-life business. Thus long-term business consists of life assurance, annuity, pension and sickness (permanent health) insurance contracts.
Mathematical reserves: in the context of Returns to the FSA, the mathematical reserves consist of the value of a company's contractual liabilities. The liabilities may exclude the policy's terminal bonus as this is not guaranteed and is therefore not contractual.

Medical evidence: see underwriting

Minimum solvency margin (MSM): the minimum level by which an insurance company's assets should exceed its liabilities according to EU (and UK) legislation. For conventional contracts a company must have assets in excess of liabilities as least up to an amount of 4% of the reserves plus 0.3% of the sum at risk (sums assured and bonuses less reserves) - the sum of these two numbers being the EU Minimum Margin. For unit-linked business where the policyholder bears the investment risk and there is no cap on the charges that may be taken out of the policy, the EU Solvency Margin is zero.

Mismatching reserve: an additional reserve that it may be necessary for an office to hold, over and above its statutory reserve, to ensure that, under a prescribed change in financial conditions, the office still has enough assets to cover its liabilities.

Mutual insurance company/mutual office/mutual insurer: a life or general insurance company that does not have any shareholders. An insurer that, unlike a proprietary insurer, does not have equity shareholders to whom all or part of the profits are allocated.

Market value adjuster (adjustment factor) MVA: a reduction factor applied to the face value (face value=number of units * price) of unitised with-profits (UWP) units on surrender/transfer (or switching to unit-linked units) to allow for the fact that the true value of the units may be less than the face value owing to stock-market conditions. No market value adjuster (MVA) is normally applied at maturity or normal retirement date.

Option (health): a health option is where the life insurance company gives a policyholder the right to increase or extend the death - or sickness – cover under a life insurance contract at some future time or times without further evidence of health.

Orphan assets (orphan estate): see inherited estate.

Overheads: the term overheads is used to refer to that part of a life insurance company's total expenses which are independent of the volumes of business it is currently writing or has already written. A company will usually allow for its overheads in pricing by allocating them on a per policy basis using an estimate of the number of contracts it expects to write. However, provided certain conditions are met, a company may decide for competitive reasons to price a contract ignoring any contribution to overheads.

Paid-up policy: this is a policy under which no further premiums are payable. It can arise either where the premiums are contractually payable for a shorter term than the term of the contract and the premium paying term has expired or because the policyholder decides not to pay any further premiums. In the latter case, the company would reduce the benefits under the contract to correspond with the actual premiums paid.
Permanent Health Insurance (PHI), (Income Protection Policy): policy that pays out if the policyholder becomes unable through illness or injury to perform his profession. Some policies pay out if policyholder is unable to perform his normal occupation (‘own occupation’ definition) while others only pay out if policyholder is unable to follow his own occupation and is not following any other occupation (‘any occupation’ definition). The may be a waiting period i.e. a period of time before a person is eligible to join a PHI scheme and once they have joined a deferred period may apply. The deferred period is the period following the commencement of their sickness or disability before the benefits are paid.

Persistency: a measure of the length of time for which a policy remains on the books before it is surrendered or lapsed by the insured.

Persistency risk: the risk that there will be far more surrenders/lapses than expected.

Policy fee: This is an amount, usually independent of the size of benefit under a contract, included in the office premium to cover part of a life insurance company's expenses.

Policyholders’ Reasonable Expectations (PRE): this relates to policyholders’ expectations with regard to the level of payout or charges under contracts where these are at the discretion of the life office. They will take into account such things as the past practice of a life office and any literature issued by it, so they can vary from life office to life office. If these are not safeguarded by the life office, the regulatory authorities have a right to intervene. The Board of the life office are responsible for safeguarding these but the Appointed Actuary has a duty to advise the Board as to what his interpretation of these are. Broadly it means managing the life office in a way that is fair and equitable and in a way that a policyholder would find reasonable. As asset shares, subject to any guarantees or options, form a proxy for the payout under a policy, accrued terminal bonus is included within PRE.

Present Value of Future Profits (PVFP): usually these are the present value of shareholder transfers normally being 100% of profits from non-profit business and one-ninth of cost of bonus (both reversionary and terminal) for with-profits business. The present value is normally calculated at a risk discount rate.

Preferred lives: these are lives who can demonstrate, by fulfilling certain specified criteria, that they are in particularly good health. A company may then offer such lives lower premium rates for life assurance contracts, in particular for term insurances.

Principles and Practices of Financial Management (PPFM): a written document produced by each life office as required by the Financial Services Authority which sets out how the maturity (and the surrender) payments, particularly the discretionary part of the payments, will be determined by the life office particularly with regard to the smoothing of pay-outs and the degree to which it may be permitted to change these maturity payments from year to year.

Product pricing: product pricing is the determination of the actual office premium (or the rates of office premium per mil of sum assured). This will take account of current market conditions.

Profit test: an analysis of the profit emerging in a year from a group of policies starting with the reserves/provisions at the end of the previous year. The analysis is of the form:

\[ + \text{Premiums} + \text{Investment return} (\text{which may be split (a) interest/dividends (b) realised appreciation (c) unrealised appreciation}) - \text{Expenses/costs} - \text{Claims (death/surrender/maturity)} \]
- Increase in reserves from the end of previous year to end of current year

Profit

Proprietary insurer: - an insurance company owned by shareholders, i.e. not a Lloyd's syndicate or a mutual insurer.

Prudential regulation: - regulation concerned with whether the assets of the company are enough to cover its liabilities. The other sort of regulation is called ‘conduct of business’ regulation and is concerned with the selling of the insurance policy.

Purchased life annuity: - an annuity purchased privately by an individual. In accordance with Section 656 Income and Corporation Taxes Act 1988, instalments of the annuity are subject to tax only in part.

Q
R

RBC: - see Risk-Based Capital

Reduction in yield (RIY): - the part of the investment return achieved which is needed to cover costs/expenses and the cost of life cover. For example an RIY of 1% means that if the gross investment return is say 6% pa. then the net (of expenses/costs and the cost of life cover) return is 5% pa..

Regulatory Returns: - a standard set of documents which under the Insurance Companies Act 1982 must be submitted each year to FSA. These documents are looked at by the Government Actuary’s Department (GAD). They are colloquially known for historical reasons as the DTI (Department of Trade and Industry) Returns.

Regulatory solvency: - a life insurance company satisfies regulatory solvency if its assets are adequate to enable it to meet its guaranteed liabilities.

Reinsurance: - where another insurance company (the reinsurer) takes on part of the insurance risk from the original company (the ceding company or cedant) in return for a premium. The reinsurer may pay commission to the ceding company as a ‘thank-you’ for the business. Reinsurance is therefore the process by which a direct-writing life insurance company transfers part of its risk under a contract to another life insurance company. This may be another direct-writing company or a professional reinsurance company. The reinsuring company may in its turn reinsure some of the risk with someone else.

Reinsurer: - an insurer providing reinsurance cover. Some reinsurers do not write any direct or primary insurance business.

Cedant (ceding company): - an insurance company which passes (or cedes) a risk to a reinsurer.

Treaty: - in the context of reinsurance, a treaty is an agreement between the cedant and the reinsuring company. The cedant usually agrees to cede all business that comes within the treaty with the reinsuring company and the latter agrees to accept it.

Facultative reinsurance: - a reinsurance arrangement covering a single risk as opposed to a treaty arrangement; commonly used for very large risks or portions of risk written by a single insurer, that are shared among several reinsurers. On the part of the cedant, facultative means that it is free to seek cover from any reinsuring company. On the part of a reinsuring company it means that it is free to accept the reinsurance or not, and, if it does accept, on what terms.
Terms of reinsurance :- may be original terms or risk premium

**Original terms reinsurance (coinsurance)** :- all aspects of the original contract with the cedant are shared by the reinsurer.

**Risk premium reinsurance** :- the cedant reinsures part of the sum at risk (i.e. the difference between the benefits payable and the reserve).

Retention:- the cedant may retain only up to a certain amount of risk -the retention- (e.g. life insurance risk up to £500,000) and reinsure the rest.

Proportional reinsurance :- a reinsurance arrangement where the reinsurer and cedant share the claims proportionally. Usually, premiums and introduction commissions follow the same proportions. Two types commonly arise: quota share reinsurance and surplus reinsurance.

**Quota share reinsurance** :- a form of proportional reinsurance where the proportions used in apportioning claims and premiums between the cedant and reinsurer are constant for all risks covered by the treaty e.g. 60% to cedant and 40% to reinsurer.

**Surplus reinsurance** :- a form of proportional reinsurance where the proportions are determined by the ceding office for each individual risk covered by the treaty, subject to limits defined in the treaty. The cedant will retain all risks below its retention. If the risk is bigger than the retention then the proportion reinsured is such as bring the cedant’s share down to the retention e.g. if the retention is £100,000, the proportions cedant/reinsurer are 100%/0% for risks up to £100,000 but for a risk of £150,000 the proportions are 66.67%/33.33% and for risk of £200,000 the proportions are 50%/50%.

Non-proportional reinsurance :- reinsurance arrangements, where the claims are not shared proportionately between the cedant and reinsurer.

**Excess of loss reinsurance (XL)**:- a type of non-proportional reinsurance where the cedant retains the first so many pounds sterling (the retention limit) of any claim and passes the increase to the reinsurer i.e. the sharing of losses between cedant and reinsurer does not begin until the retention is exceeded.

**Stop loss reinsurance** :- an aggregate excess of loss reinsurance which provides protection based on the total claims, from all perils, arising in a class or classes over a period. It works on giving protection if the sum (i.e. total or aggregate) of all the claims together exceed a certain limit.

**Retrocession :- reinsurance** purchased by a reinsurer in relation to its (inwards) reinsurance liabilities (i.e. reinsurance of reinsurance).

**Return commission** :- a commission paid by a reinsurer to the ceding company for proportional reinsurance business to recompense the cedant for acquisition expenses.

**Outwards reinsurance** :- reinsurance ceded by an insurer, as opposed to inwards reinsurance accepted.

**Financial risk reinsurance** :- this is a form of reinsurance usually involving minimal underwriting risk. It transfers the immediacy of certain cash flows to the reinsurer. The cedant will pay these cash flows (with interest) to the reinsurer at a later time.
**Required minimum margin**: European Legislation and implemented into the law of each member country, the **required minimum margin** is an amount of capital being defined as 4% of the mathematical reserves and 0.03% of the (sum assured less the mathematical reserves).

**Requirement for capital**: on a per contract basis, the requirement for capital is the amount of finance a company needs in order to be able to write that contract, i.e. the new business strain. This can be extended to the whole company where its requirement for capital is the finance it needs in order to be able to carry out its new business plans.

**Retirement annuity contract**: an annuity contract (between an insurance company or friendly society and a self-employed individual or a person in non-pensionable employment) which was established before 1 July 1988 and is approved under Chapter III Part XIV of Income and Corporation Taxes Act 1988.

**Return on capital**: this arises in the context of product pricing. A company will usually need to provide capital in order to finance the **technical provisions** required by the new business (new business strain). The expected return on that capital will influence whether or not the company writes particular types of business and the price at which it will write them. The required level of return on capital will depend on the expected return from other uses of the company's capital.

**Risks - Diversifiable risk**: risks like mortality or morbidity which become increasingly predictable (and therefore less risky) as the number of policyholders increases (law of large numbers).

**Risks - Non-diversifiable risks**: things like interest rate risk where if it goes wrong for one policy (i.e. you are not earning enough interest) it goes wrong for all policies- having a lot of policies does not help.

**Risk-Based Capital (RBC)**: the assessment of the capital requirement for a general or life insurer by considering the risk profile of the business written and its operations. In the US, the required minimum margins of solvency are determined after considering RBC requirements.

**Risk Capital Margin (Market, Credit and Persistency risk)**: **market risk** refers to the assets and liabilities not being perfectly matched and there performing differently when there is a sudden change in financial conditions, **credit risk** refers to the risk that the investor will not be repaid by the company in which the investment has been made (e.g. the risk that the company or counterparty goes insolvent) and **persistency risk** refers to the risk that there will be a sudden increase in policies being surrendered. The capital (spare resources) in the life office must be sufficient to cover these risks.

**Risk discount rate (RDR)**: the risk discount rate is the rate at which future cash flows are discounted. Future cash flows will normally have a degree of uncertainty surrounding them because they are random variables. The risk discount rate represents the risk-free rate of return that the providers of capital demand plus an amount to allow for the risk that the profits may not emerge as expected from the contract. The RDR also arises in the determination of the embedded and appraisal values of a proprietary life insurance company.

**Risk premium**: the amount of premium required to cover claims arising under a particular risk heading. This usually refers to a single premium that covers a specific risk for a specific period of time. For example, in pricing unit-linked contracts, a company may cost for death or sickness cover by applying a monthly risk premium to the appropriate amount at risk in each month. The term also refers to a method of reinsurance, which operates in very much the same way.

**Solvency**: see regulatory solvency
**Solvency margin** :- the solvency margin of a life insurance company is the excess of the value of the assets over the value of the liabilities. The solvency margin is available to cover its minimum solvency margin. In the case of a proprietary company this excess includes the shareholders' assets. The **minimum solvency margin** is an amount determined according to rules laid down in EU regulations. A life insurance company is required to demonstrate in its supervisory returns that it can cover its minimum solvency margin.

**Statutory returns** :- annual statements and accounts that an insurance company is obliged to file under the UK Insurance Companies Acts and Regulations. The purpose is to enable the authorities to supervise the insurers’ financial position by requiring the insurance company to carry out a valuation of its assets and liabilities. These are now submitted to FSA.

**Stress test** :- a test of the financial strength of the life office usually under an instantaneous change in financial conditions. A certain instantaneous change in financial conditions is assumed to occur and the assets of the life office and its liabilities are valued under the new financial conditions. The difference between assets and liabilities are compared between the original financial conditions and the changed financial conditions.

**Surrender value** :- this is the amount paid out to a policyholder who surrenders his or her contract

**Switching option** :- a switching option arises under unitised contracts where the policyholder has the right to switch his or her unit-holding into a different choice of linked funds including into or out of a unitised accumulating with profits fund.

**T**

**Technical provisions** :- the accounting entries in the balance sheet which represent the insurer's realistic liabilities to policyholders from the business which has been written.

**Twin peaks approach** :- the FSAs new (from end-2004) approach. The first peak is the value of the contractual (guaranteed) benefits but the more important peak is the realistic value of all the benefits taking into account likely discretionary payouts including the smoothing of these benefits and all guarantees and options.

**U**

**Underwriting** :- the process of medically assessing the state of health a life-it will involve looking at his/her medical evidence i.e. replies to medical questions on the proposal form, and may involve a Private Medical Attendant’s (PMA) Report i.e. a report from the person’s G.P., a medical examination carried out on the applicant and could involve a report from a medical specialist.

**Underwriter** :- an individual who assesses risks and decides the premiums, terms and conditions on which they can be accepted by the insurer.

**Underwriting factor** :- any factor which is used to determine the premium, terms and conditions for a policy. It may be a rating factor or some other risk factor that is accounted for in a subjective manner by the underwriter.

**Units - Offer price** :- this is the price a life insurance company uses to allocate units to a unitised contract
**Units - Bid price** - In the context of a unit-linked or unitised with-profits life insurance contract, it is the price the life insurance company uses to redeem the units it has allocated to the contract.

**Units - Bid/offer spread** - The difference between the buying price (offer price) and selling price (bid price) of the units in a unit-linked fund or a unit trust.

**Unit-linked - Back-end loaded contract** - The emergence of charges is greater towards the later durations of the contract (example - management charge levied on funds under management). **Front-end loaded charge structure** - Takes the charges out at the beginning to try to match the incidence of acquisition expenses. (Examples - low initial allocation rate or actuarial funding of initial units).

**Unit reserve** - This is part of the reserve that a life insurance company needs to set up in respect of its unitised contracts (the other part is the sterling reserve). The unit reserve represents its liability in terms of units under the contracts.

**Unit-linked - Non-unit (sterling) reserve** - A company may have non-unit liabilities under its unitised contracts - for example the expenses of managing the business - for which it receives monetary payments in the form of the charges it extracts. If it expects that the charges will not be sufficient to meet these liabilities, it has to hold a non-unit reserve to provide for the deficiency. It may be possible for a life insurance company to hold a negative non-unit reserve where it expects that future charges will be more than sufficient to meet the future non-unit liabilities.

**Unit-linked - Permitted links** - Refers to unit-linked business. You can link the value of units to the price of certain property (in its widest sense) e.g. listed shares, a portfolio of such shares etc.-permitted links but you could not link the price of units to, say, the price of land in Morocco (non-permitted links).

**Unit-linked contract** - Each premium (possibly after a policy fee or a % deduction) is used to buy units at their offer price. These units are added to the contract's unit account. When the insured event happens the amount of the benefit is the then bid price value of all the units in the contract's unit account. The price of the units normally relate directly to the value of the assets underlying the contract.

**Unitised with-profits (UWP)** - The policyholder normally buys units (as in a unit-linked policy) with the premium. The units grow steadily, the ‘bonus’ normally being declared from time to time, as a rate of increase in the unit price (e.g. 6% pa.) for a certain period ahead. At maturity, a terminal bonus may be declared on the value of the units (number of units times the unit price). There is often a guarantee for the rate of increase in the unit price e.g. it will be at least 0% (i.e. the price will not fall) or say 3% pa. A life office have to clearly identify whether the guarantee applies only to units already bought or to units still to be bought as well i.e. also to the units that will be bought with future premiums.

**Unit-linked - Actuarial funding of units in a unit linked policy** - Applies to the case of Initial (Capital) units in a unit linked policy where the value of the initial units is subject to a surrender penalty on surrender. Instead of investing the allocated part of the premium in initial units and receiving a flow of management charges at the rate applicable to initial units, only part of the allocated premium is invested in units and the balance of the allocated premium paid directly into the sterling fund. The management charges emerging are then used to buy further units for the policyholder and are not paid into the sterling fund. The surrender value payable to the policyholder is the same in both systems.

**Unit-linked - Initial (capital) units** - Are subject to a higher management charge than ordinary (accumulation) units. The first one or two years premiums may buy initial units.

**Unit-linked - Ordinary (accumulation) units** - Are subject to the normal management charge.
Valuation: this is the process by which a life insurance company will place a value on its assets or its liabilities.

Valuation rate of interest: rate at which future liabilities are discounted back to the valuation date to determine the technical provisions.

Valuation - Net premium: the premium required to pay the benefits ignoring expenses and calculated on the valuation basis. The net premium calculation for a with-profits policy ignores both expenses and the bonus. The net premium is normally capped at say 95% of the office premium.

Valuation - Net premium valuation: this is a method for placing a value on a life insurance company's liabilities that involves valuing the contractual liabilities to date allowing for mortality and interest and deducting the value of future net premiums.

Valuation - Negative reserve: the value of a life assurance contract will be negative if the value of future valuation premiums exceeds the value of the benefits plus future expenses. This is a negative reserve and it means that the contract is being treated as an asset.

Valuation - New business strain: new business strain arises when the premium paid at the start of a contract, less the initial costs including commission payments, is not sufficient to cover the technical provisions that the company needs to set up at that point.

Valuation - Office premium/Gross premium: the office premium is the premium that the policyholder pays under a life insurance contract. It is also called the gross premium. This is the total premium charged for the period of cover.

Valuation - Gross premium valuation: for non-profit, values the sum assured plus the value of future expenses from which subtract the value of future office premiums. For with-profit, values the sum assured and existing bonuses (S+B) and an allowance for future bonuses (reversionary and perhaps terminal) plus value of future expenses from which is subtracted the value of future office premiums.

Valuation - Resilience reserve: the valuation of liabilities regulations specify that companies must make prudent provision against the effects of future changes in the value of the assets on their adequacy to meet the liabilities as valued in accordance with those regulations. The resilience test reserve is one approach to making such provision. It is therefore a type of stress test where the assets instantaneously change in value to the new financial conditions and the liabilities have to be valued under the new financial conditions.

Valuation - Sterling (non-unit) reserve: if a unit-linked or unitised with-profits policy is not going to be self-financing (i.e. future charges will not cover future expenses) a sterling reserve needs to be set up such that, allowing for drawing down the money in the sterling reserve, the policy will be self-financing.

Valuation - Unit reserve: the value of the units held.

Waiver of premium: a PHI rider which is attached to a policy such that the premiums are treated as paid (even although the policyholder does not pay them) when the policyholder is unable through sickness or injury to carry out his normal (or any other suitable) occupation.
With-profits (participating or ‘par’ business) :- a life insurance contract is with-profits if the policyholder is entitled to receive part of the surplus of the company. The extent of the entitlement is usually at the discretion of the directors of the company.

With-profits annuity :- in contrast to a conventional annuity an annuity where the payment varies according to the surplus earned (i.e. the investment experience) of the life office.

Without profit (non-participating or ‘non-par’ business) :- a life assurance contract is without profit if the life insurance company has no discretion over the amount of benefit payable, i.e. the policy document will specify at outset either the amount of the benefits under the contract or how they will be calculated.

Z

Zillmerisation :- this is a method for allowing for the uneven incidence of expenses in a net premium valuation. It involves an increase - Zillmer adjustment - to the net premium which has the effect of reducing the reserve and thereby reducing the new business strain.

Zillmerised net premium:- where the net premium is increased by an amount equal to the initial expenses divided by an annuity value for the term of the contract.

Zillmerised net premium reserve:- uses Zillmerised net premium in place of net premium.