INSTITUTE OF ACTUARIAL & QUANTITATIVE STUDIES

Class: M.Sc. Sem 4

Subject : Actuarial Practice 2

Chapter: Unit 4 Chapter 14

Chapter Name: Handling Surplus

Table of contents

Table of contents

1 Introduction to Surplus / Profit

Definitions

- **Profit**

Profit = revenue – expenditure

If actual experience turns out to be better than or worse off than expected, then we can make **unexpected profits or losses** respectively.

Because of the long-term nature of financial services contracts, the final profit from a scheme or tranche of policies cannot be determined until all have **gone off the books**.

Waiting until this happens before the terms under which the next tranche of policies are written can be determined is clearly impractical. If a company is selling long term contracts on terms that are not in the best interest of the company or is not profitable, it needs to realize this before the contract ends.

To monitor the progress of the business it is necessary to **value the outstanding liabilities** from time to time, often annually.

1 Introduction to Surplus / Profit

In a particular country, many firms that carry out building work on people's homes provide a 30-year, insurance-backed guarantee. In the normal course of events, if customers have claims for defective building work under the terms of the guarantee, they claim from the building firm. However, there is a risk that the building firm goes out of business, in which case the guarantee would be worthless without the insurance backing.

The insurance backing involves the building firm paying a single premium to the insurer at the start of the 30-year period. In return the insurer is liable to pay any claims under the terms of the guarantee if the building firm is no longer in business at the time of the claim.

The insurance company providing this contract realizes two years after its launch that this product is not profitable.

Describe possible actions the insurance company could take.

1 Introduction to Surplus / Profit

- **Surplus**

Surplus = value of assets – value of liabilities

Surpluses (or deficits) may appear and disappear as the contract's experience unfolds. The size of the surpluses also depend on the **basis** and **methodology** used to value the assets and liabilities.

- **Surplus Arising**

It is the **change in surplus** over a time period.

A_t is the notation for the value of assets at time t and L_t for the value of liabilities at time t, the surplus arising from time t to time $t+1$ will be:
$(A_{t+1} - L_{t+1}) - (\mathrm{A_t} - \mathrm{L_t})$

It should be noted that:
- It is common to confuse **surplus** with **surplus arising**.
- **Surplus arising is equivalent to profit**.

1 Introduction to Surplus / Profit

The two alternative ways of looking at **profit** or **surplus arising** are:

- Referring to the **balance sheet entries of assets and liabilities**
- Referring to the **profit and loss entries** of **revenue** and **expenditure**

These two ways are equivalent because the component parts of $(A_{t+1} - A_t)$ *or* $(L_{t+1} - L_t)$ are exactly the same as the **revenue** and **expenditure** items of the year such as investment returns, payments, expenses.

There are a few subtleties to watch out for:

- Allowance must be made to establish provisions – thus the figure labelled as expenditure will need to include money required to establish provisions and the revenue figure will include any provisions released.
- Any change in the asset value needs to be accounted for – for example the revenue figure may include any capital gain over the year, even if this gain has not been realised.

1 Introduction to Surplus / Profit

- **Impact of basis on surplus arising**

The **choice of valuation** will not affect the total amount of surplus arising over the period of the contract, which only depends on the **difference** between the **actual experience** and the **assumed experience** while pricing the contract.

It affects the timing of the emergence of the surpluses during the life of the contract.

1 Introduction to Surplus / Profit

Reasons for performing an analysis of surplus/profit

An **analysis of surplus** is where the entire year's profit is categorised into its constituent parts.

A provider will want to analyze the change in any surplus arising over a year or a longer period of time in order to:

- show the **financial effect of divergences** between the valuation assumptions and the actual experience
- determine the **assumptions** that are the most financially significant

For instance, even if the actual returns earned on investments are far from what were assumed when pricing a term assurance contract, their impact on the overall surplus might be marginal. This is because investment return is not a financially significant assumption for term assurance policies because of their low level of provisions.

1 Introduction to Surplus / Profit

- show the financial effect of **writing new business**

If a **prudent basis** is being used, where **liabilities will be over-estimated** and **assets under-estimated**, any new business will deplete the surplus in the first year. This is because the premiums would be insufficient to cover the initial expenses as well as any provisions.

- validate the **calculations** and **assumptions** used
- provide a check on the **valuation data** and **process**, if carried out independently
- identify **non-recurring components of surplus**, thus enabling appropriate decisions to be made about the distribution of surplus
- **reconcile the values** for successive years
- provide **management information**
- provide data for use in **executive remuneration schemes**

1 Introduction to Surplus / Profit

The rewards offered in executive remuneration schemes is that the rewards offered depend on the **success of the entity** being managed

- provide detailed information for **publication in the provider's accounts**
- demonstrate that the **variance in the financial effect** of the individual sources is a complete description of the variance in the total financial effect
- give information on trends in the experience of the provider to **feed back** into the **actuarial control cycle**

? Do you remember what is the actuarial control cycle?

Table of contents

2 Carrying Out an Analysis of Surplus

In determining **premiums**, **contributions** and **provisions** for future liabilities, assumptions will need to be made. Where actual experience differs from the assumptions made, a **surplus / profit (or deficit / loss)** will arise.

Projecting expected results

To analyze the **actual performance** of any financial structure, ranging from a single product type to a complex product provider, it is necessary to determine the **expected values** against which the **actual values** can be compared. This is nothing but a comparison of actual vs expected which is one of the main elements of **monitoring the experience** within the **actuarial control cycle**.

When analyzing the results of a product provider, it is usually necessary to project items such as the **revenue account** and **balance sheet** as if the actual experience had been the same as that expected when its business was written. This involves building a model of the expected future experience of the provider.

This results in establishing **hypothetical accounts** based on future values of economic, market and other relevant variables, expected at the time the business was written.

2 Carrying Out an Analysis of Surplus

Modelling considerations

The bases for such an exercise are likely to be **models** used when the **products were developed**.

The results of the initial **product pricing models** can be combined to build a **complete model** of the provider's **future revenue accounts**.

It is important in building such a model to ensure that the elements of the revenue account are self-consistent in their own right. It is not sufficient to project premiums, investment income, death claims, lapses etc. independently.

This means that any projections made with respect to the future needs to be based on a set of **mutually consistent variables**. The model is developed by multiplying the profit test results by the expected number of contracts to be sold in each future year.

2 Carrying Out an Analysis of Surplus

Profit test results are with reference to a single policy, and they need to be **scaled up** by considering the expected number of contracts of each type.

Then for each future year the number of contracts still in force from previous years needs to be added in. This will then give a model that can be used to build up the **expected future progress** of the business as shown by the revenue accounts.

As time goes on, a **second model** can be built up from the **original profit test**, but using the **actual volumes** of business sold, rather than expected volumes. Comparisons of actual results with this model will identify whether differences between actual and expected outcomes are due to:

- differences between **actual** and **expected experience**, or
- **sales volumes** being different from what was expected.

2 Carrying Out an Analysis of Surplus

Comparison of different models

We end up comparing three models:

- Expected experience with expected volumes of new business
- Expected experience with actual volumes of new business
- Actual experience with actual volumes of new business

2 Carrying Out an Analysis of Surplus

The actual revenue accounts for the business showing the actual experience of the provider can then be compared with the projections. This analysis will show how the **actual experience** compares with that **anticipated** when products were designed and will answer questions such as:

- Has the provider earned more by the way of investment than it expected to earn when it designed the product?
- Has the provider spent more than it allowed to be spent in the design of the product?
- Have withdrawal rates followed expectations?
- Has inflation been higher than expected?

The answers to such questions will give an initial indication of whether the **profitability criterion** used in designing the product in the first place is being met in practice. This can be used as **feedback information** in the actuarial control cycle.

2 Carrying Out an Analysis of Surplus

Comparison of expenses

When comparing actual with expected expenses, the **volumes of business sold** or the **average volumes of business** in force during the period must be taken into account. Additional business above that expected brings in **additional margins** and justifies **additional expenditure** to process that business. Therefore, in analyzing expenses it is unit costs rather than the **monetary expenditure** that are the key metric.

Comparing the actual vs expected expenses for individual policies rather than the total expense amount is better.

Table of contents

3 Sources of and Levers on Surplus/Profit

Results tend to differ from the expected ones depend on several reasons. Some of these reasons will be beyond the **management's control** while others will be controllable to a certain extent. Factor that can be managed through **management control systems** to influence the surplus amount are known as **levers**.

Sources of surplus

Possible **sources** of such surplus / profit (deficit / loss) include:

- Mortality
- morbidity
- claim frequency
- claim amounts
- withdrawal / lapses
- investment income and gains
- expenses
- commission
- salary growth

3 Sources of and Levers on Surplus/Profit

- inflation
- taxation
- premiums / contributions paid
- new business levels.

Other **sources of surplus (or deficit)** can arise as a result of more **strategic events**, such as:

- failure of reinsurer or of derivative counterparty
- restructuring of the business / fund, such as bulk sales or acquisitions.

A change to **valuation methods** or **assumptions** may also lead to surplus (or deficit). The impact of assumption changes depends on the extent to which assets and liabilities are **matched**.

When assets and liabilities are almost perfectly with respect to a specific variable, any change in that variable such as inflation rate, should have a **minimal impact** on surplus because assets and liabilities tend to move in a similar manner with respect to that variable.

3 Sources of and Levers on Surplus/Profit

Levers on surplus

The levers that can control the **amount of surplus / profit** are the factors that the provider can affect by using **management controls** to increase value.

There are various ways in which providers can control and manage the cost of the payments they make and their expenses.

For example, management can try to:

- **Reduce the likelihood of claims** through:
  - Good underwriting of new business
  - Good underwriting at the claim stage
  - Encouraging customers to not make claims by providing incentives like no claims discount

3 Sources of and Levers on Surplus/Profit

- **Reduce the cost of claims** through:
  - Cost-effective claims management procedures
  - Using reinsurance to reduce claims volatility and the risk of large claims
  - Limiting the payment of guarantees as much as possible

- **Control expenses**:
  - Reviewing expenses from time to time
  - Keeping premiums open to changes
  - Ensuring that claims expenses are in proportion with the claim size

- reduce the **number of contracts** that lapse or that do not renew at the renewal date

- follow an **investment policy** that increases investment returns (subject to an acceptable level of risk)

- adopt an **effective tax management policy**.

3 Sources of and Levers on Surplus/Profit

Reducing the likelihood of claims

- **Good Underwriting of New Business**

Efficient and cost effective is important so as to minimise anti-selection and hence poor claims experience

Suggest ways in which an insurance company might ensure that new business is adequately underwritten.

- **Good Claims Underwriting**

This is significant in reducing excessive as well as fraudulent claims. A provider can put measures in place to prevent fraudulent claims. The requirement to see

- medical certificates
- death certificates
- pictures of damage
- reports by loss assessors
- pictures of stolen goods
- evidence of business continuity incidents

can all be implemented.

3 Sources of and Levers on Surplus/Profit

The extent to which these are used depends on the **size of the loss / claim** and the perceived risk of fraud. For example, a life insurance company in a developed country may require more evidence than just a death certificate in the case of a death on holiday in an undeveloped country for a young life with a high sum assured, where the policy was recently taken out.

For a **general insurer**, **loss by theft** is particularly **susceptible** to fraud, because by its nature the items stolen are not available to view after the theft. Policyholders should be advised to have photographs of any small, high value items, such as jewelry.

- **Customer Incentives**

A general insurer can control claims and expense costs by offering discounted premiums in future years to policyholders who do not make claims.

3 Sources of and Levers on Surplus/Profit

Reducing claims costs or benefit amounts

- **Reviewing Ongoing Claims**

When benefits are paid in brackets, it is important to review whether these benefits need to be paid further. For example, where payments are made under an income protection arrangement that provides benefits on incapacity, then costs can be controlled by requiring the beneficiary to provide ongoing proof of eligibility for the benefit. The provider may provide rehabilitation services to assist and support the beneficiary to recovery.

- **Use of Reinsurance**

Reinsurance helps in reducing claims volatility, the risk of extremely large claims. This helps in freeing any blocked capital which can be put to better use. Reinsurers also help in advising the insurer.

- **Reducing Future Benefit Payments**

The provider may reduce the benefits to be paid in future:
A government could reduce costs by taking a unilateral decision to raise the age at which the State pension becomes payable.

3 Sources of and Levers on Surplus/Profit

- **Minimising Guarantees**

When benefits are guaranteed, they prove to be way more onerous than the ones not guaranteed. Providers may always look for ways to reduce the level of guarantees:
A benefit scheme can control costs by not guaranteeing regular benefit increases but only giving discretionary increases as and when they can be afforded.

- **Use of Excesses**

A general insurer can reduce the number and amount of claims by introducing an excess into the product design. This will mean that the policyholder will pay the first part of any claim.
This results in lower number of claims as not as very few claims will exceed the level of excess as well as the claim amount since the first part is paid by the policyholder.

3 Sources of and Levers on Surplus/Profit

Controlling expenses

- **Renewing Expenses**

Regular reviewing of expenses ensure that costs arising from each product line are justified and allowed for in the pricing assumptions and in the provisions.

- **Flexible Charges / Premiums**

When premiums are open to change, the provider has the option of increasing them if experience turns out to be poor. If a provider can change any expense charge it makes to the customer within the product design, then costs can be passed on in this way.

- **Ensuring Claims Expenses are Commensurate with Claim Size**

Providers will always want to keep their cost of providing the product at its lowest, and they may apply several methods to reduce them. However, balance needs to be maintained that the cost of implementing these methods does not outweigh the benefits it provides.
A provider can manage the expenses associated with benefit payments, by ensuring that the costs of claims management are commensurate with the cost of the claim.

3 Sources of and Levers on Surplus/Profit

- **Example 1**
  - A motor insurer is likely to accept without question a single estimate from a garage for damage repairs of up to, say, £500.
  - For larger sums, up to perhaps £1,000, the insurer might require more than one estimate to be submitted, or alternatively the work to be carried out by the insurer's own approved repairer.
  - Insurers are likely to appoint professional loss adjusters to investigate large, complex or contentious claims. In some arrangements, loss adjusters can prepare and negotiate claim settlements on behalf of insurers. For motor insurance, loss adjusters are most likely to be appointed for personal injury claims and the largest claims such as where the vehicle is a write-off.

- **Example 2**

  With a permanent health insurance claim, the amount of medical evidence that an insurer will require before accepting a claim will depend on both the amount of weekly or monthly benefit, and the expected duration of the illness or condition.

  A potentially chronic condition can justify considerably more time and costs in claims assessment than an acute illness of limited duration.

3 Sources of and Levers on Surplus/Profit

- **Increasing Renewals / Reducing Lapses**

Some methods are:

- Issuing renewal notices
- Automatic renewals unless the policyholder specifies otherwise
- Loyalty discounts
- Good customer services and seamless claims handling process
- Competitive premiums
- Discount on renewal premiums

3 Sources of and Levers on Surplus/Profit

Increasing investment returns

- Investments should be chosen in a manner that **matches** with the **liabilities in terms of timing, amount, currency** etc as well as considers the provider's **risk appetite**

- Keeping the earlier point in reference, investments should also have the **capability of maximising returns** on assets.

Effective tax management

- Complete utilisation of tax allowance
- Tax-efficient vehicles being used
- Paying taxes on time

Table of contents

4 Distribution of any Surplus/Profits Arising

Insurance companies with with-profit policyholders

For with-profit life assurance business some or all of the **distributable surplus** is allocated to **policyholders in the form of bonuses**.

The structure of the bonus and the manner in which it is paid is determined by the **terms** of the policies and the **constitution** of the company. The constitution of the company may also determine the **maximum proportion** of the distributed surplus that can be paid to shareholders. In some jurisdictions this is determined by legislation.

A **mutual insurance company** has no shareholders and thus all the distributable surplus belongs to the policyholders.

4 Distribution of any Surplus/Profits Arising

Other companies or corporate institutions

For all other corporate institutions, the surplus belongs **entirely to the shareholders**, and the only decision the **directors** of the company have to make is the extent to which it is **retained** in the business or **distributed** as **dividends** to shareholders.

Benefit schemes

For benefit schemes any **surplus** is usually **retained** within the scheme, and may be used to:

- **enhance the benefits of members**, or
- **reduce future contributions** of members and/or the employer.

Because it is usually difficult to remove benefit enhancements once awarded, changes in contribution rate are normally the first choice. In some jurisdictions it is possible for surplus to be repaid to the scheme sponsor, and in others it is not.

Table of contents

5 Issues Surrounding the Amount of Surplus to Distribute

Life insurance companies

For a life insurance company, the **key factors** that will affect the **amount of surplus distributed** are:

- provision of capital
- margins for future adverse experience
- business objectives of the company
- policyholder expectations
- shareholder expectations
- other stakeholder (including staff) expectations.

5 Issues Surrounding the Amount of Surplus to Distribute

- **Provision of Capital and Margins for Future Adverse Experience**

Not all of the profits will be distributed amongst the policyholders and shareholders. If the distribution is deferred, the surplus increases the company's **available capital** during this deferment period.

There are several reasons why life insurance companies need capital. One of the main sources of working capital is simply to **defer profit distribution** and **retain the capital** within the business.

Where conventional with-profit policies are involved, there are various additional considerations. The premium rates for with-profit policies are greater than those for without-profit policies because the former contain **margins** designed to generate profit that will then be distributed to policyholders. The pace at which the profit arises and the pace at which it is distributed may or may not be the same. If part of the profit is deferred to some future date before being distributed, then it will augment the company's **free assets** in the meantime.

Where provisions need to be established for future expected bonus distributions, the free assets will not be augmented to their full capacity, because a liability has to be set up in relation to this expected future distributions. However, deferring the bonus will still result in an **increase in capital** because of lower guarantees building up due to lower regular bonus declarations.

5 Issues Surrounding the Amount of Surplus to Distribute

Where profit is not being distributed as and when it arises, there will be years when the amount distributed **exceeds the amount generated** and vice versa. However, over time it would be expected that there should be a balance between the two. Sustained **over-distribution** could lead to an excessive drain on the free assets. Sustained **under-distribution** is likely to be contrary to policyholders' expectations.

There are two factors to be considered while distributing bonuses – **timing** and **amounts**

- If the combination of product design and bonus distribution is such that profit is not distributed as it arises, the company needs to manage this mismatch over time.

- Bonuses need to be similar to what the policyholders have a right to. If bonus declared are high to attract more customers, then the company's capital situation suffers. On the other hand, too small bonuses may dissatisfy customers.

The extent to which it is possible to defer the distribution of profit depends on the form of the distribution.

5 Issues Surrounding the Amount of Surplus to Distribute

Bonuses may be given as a combination of:

- **Regular** – here the bonuses are added to the sum assured at frequent intervals during the life of the policy. However, once declared the bonus becomes a legal liability for the company and has to be paid.
- **Terminal** – here the bonuses are added only when the claim arises and are not always guaranteed.

- **Business Objectives of the Company and Retention of Margins**

A with-profit life insurance company is likely to have as one of its business objectives the **maximization** of the **profit distribution** to policyholders so as to improve its **competitive position** by demonstrating good returns for the premiums invested. However, an aggressive distribution policy will result in the company having very **limited free assets**, and thus limited ability to survive risk events.

The converse position is equally important. A company that **retains more surpluses** than necessary to protect against risk events, ensure solvency, finance business growth and allow appropriate investment freedom may find securing new business more difficult because of the lower bonuses it is awarding.

5 Issues Surrounding the Amount of Surplus to Distribute

- **Stakeholder Expectations**

Policyholders and shareholders may have expectations regarding the form of the **profit distribution** and the level of the **bonuses** or **dividends** given.

Failure to meet these expectations will lead to **policyholder dissatisfaction** and the risk of losing existing and/or new business. It may also in some countries, for example the UK, be grounds for intervention by the insurance supervisory authority in the affairs of the company.

5 Issues Surrounding the Amount of Surplus to Distribute

Benefit schemes

Benefit schemes can **reduce** or **remove** a surplus in the following manner:

- By **increasing** the value of their **benefits** and hence that of their liabilities
- **Reduce** the level of **future contributions** for a period of time, in a way that surplus decreases gradually as the additional liabilities accrue.
- **Transfer** all or a part of the excess assets from the scheme to the beneficiaries as a one-off benefit payment.

5 Issues Surrounding the Amount of Surplus to Distribute

Factors affecting the decision about the application of a surplus or deficit are:

- **Legislation**

For a benefit scheme, **legislation** is likely to be the major factor in determining the application of surplus or deficit.

If a benefit promise has been made, legislation may insist that the benefit is provided whether or not any funds set aside prove to be **sufficient**. There may be a legal obligation on a sponsor to make good any deficit, even if doing so results in the insolvency of that sponsor, and affects other interests of employees, such as their continued employment.

Benefit scheme deficits may also have a **prior ranking** in the event of the sponsor's insolvency.

Legislation may also require surplus to be used to increase the benefits being provided and may even dictate which categories of members should have priority for such increases.

Another disadvantage of legislative constraints is that it can deter sponsors from **funding prudently**.

5 Issues Surrounding the Amount of Surplus to Distribute

- **Tax Treatment**

Where the funds set aside are subject to a **beneficial tax treatment**, it is possible that surplus funds may be excluded from this beneficial treatment. It is also likely that the sponsor would be required to pay tax if receiving a return of surplus funds.

- **Scheme Rules**

Where legislation does not restrict the application of surplus or deficit, the sponsor can choose to place restrictions on the use of surplus, deficit, or both when setting up the scheme through which the benefits are provided.

This may have been done as a reassurance to the potential beneficiaries that the benefits will be provided even if the fund suffers from adverse experience, or it may have been done as an attempt to prevent disputes were deficits or surpluses to arise

5 Issues Surrounding the Amount of Surplus to Distribute

- **Discretion of the Sponsor / Managers**

If there are no detailed restrictions from the State or in the rules of the scheme, the sponsor or the managers of the fund may be able to choose how to apply any surplus or deficit.

- **Risk Exposures**

In making these decisions the **risk exposure** of the various parties may be considered.

For example, if the sponsor is exposed to the risk of making good any deficit, it may be felt that the sponsor should take the benefit of any surplus.

There may be situations where it is necessary to take legal advice before dealing with any surplus or deficit.

It is a dilemma for the scheme managers to decide where the surplus needs to be used for the benefit of the scheme members or the sponsors. Ideally the scheme members' interests are the manager's top-most priority, but they may also allow some flexibility to the sponsors in the financing of the benefits.

5 Issues Surrounding the Amount of Surplus to Distribute

For instance, if the surplus is a result of the sponsor's generous contributions, then the manager may agree for the sponsor to **reduce future contributions** or take a **refund** of surplus.

It is easier for a sponsor to claim a **right to benefit** from a surplus arising in a scheme in which meets the entire cost of the benefits, as in the case of a non-contributory scheme. However, the position is not crystal clear in a scheme where the members also contribute towards the cost of benefits and a surplus has arisen through exceptional investment performance of the assets

- **Source of Surplus**

The **source of the surplus** or **deficit** may also be taken into consideration, particularly when applying the surplus or deficit to a certain category of beneficiary.

For example, in a final salary pension scheme a surplus may arise as a result of pension increases being lower, in real terms, than was expected. In these circumstances it may be decided to use the surplus to increase pensions for pensioners, perhaps restoring their value in real terms.

5 Issues Surrounding the Amount of Surplus to Distribute

If the surplus or deficit is from a source that is liable to particularly **volatile experience**, the most appropriate application of the surplus or deficit may be to **retain** it as a balance for future volatility. This approach is perhaps more likely to be adopted in the event of surplus, rather than deficit where such an approach may not be prudent. It is also more likely when the surplus or deficit is small relative to the total value of the assets or liabilities.

In an ongoing scheme, small surpluses and deficits can come and go as actual experience is more or less favourable than the assumptions. The scheme managers may decide to retain an unallocated surplus to act as a **contingency reserve** against future experience being less favorable.

- **Industrial Relations**

Another factor that may affect a decision on the application of surplus or deficit may be the expected effect of that decision on **industrial relations**. A sponsor may therefore make a decision that is more generous to beneficiaries than may otherwise seem necessary.

5 Issues Surrounding the Amount of Surplus to Distribute

- **Speed of Corrective Action**

Where surplus is to be applied to the advantage of the sponsor, or deficit is to be made good by the sponsor, a further decision would be required relating to the pace at which this will happen. It is likely that the **speed of removal of deficit** would be required or expected to be faster than for the removal of surplus.

A common approach adopted for pension benefits may be for a deficit to be removed over a period of say five years and a surplus to be removed over a longer period, perhaps the remaining working lifetime of current employees with a benefit entitlement.

The appropriate speed of corrective measures is dependent on the level of deficit. For a large deficit, the sponsor may be required to reduce it significantly over a short span and the remaining deficit may then be removed over a longer period.

Topics covered

Introduction to surplus/profit

- Definitions
- Reasons for performing an analysis of surplus/profit

Carrying out an analysis of surplus

- Projecting expected results
- Modelling considerations
- Comparison of different models
- Comparison of expenses

Sources of and levers on surplus/profit

- Sources of surplus
- Levers on surplus
- Reducing the likelihood of claims
- Reducing claim costs or benefit amounts
- Controlling expenses
- Increasing investment returns
- Effective tax management

Distribution of any surplus/profit arising

- Insurance companies with with-profit policyholders
- Other companies or corporate institutions
- Benefit schemes

Issues surrounding the amount of surplus to distribute

- Life insurance companies and benefit schemes