

CMP Upgrade 2019/20

Subject SP7

CMP Upgrade

This CMP Upgrade lists the changes to the Syllabus objectives, Core Reading and the ActEd material since last year that might realistically affect your chance of success in the exam. It is produced so that you can manually amend your 2019 CMP to make it suitable for study for the 2020 exams. It includes replacement pages and additional pages where appropriate.

Alternatively, you can buy a full set of up-to-date Course Notes / CMP at a significantly reduced price if you have previously bought the full-price Course Notes / CMP in this subject. Please see our *2020 Student Brochure* for more details.

This CMP Upgrade contains:

- all significant changes to the Syllabus objectives and Core Reading.
- additional changes to the ActEd Course Notes and Assignments that will make them suitable for study for the 2020 exams.

0 Changes to the Syllabus objectives

This section contains all the *non-trivial* changes to the Syllabus objectives.

1 Changes to the Core Reading

This section contains all the *non-trivial* changes to the Core Reading.

Chapter 2

Page 4

Delete the final sentence of the definition of 'uberrima fides'. This sentence reads: 'An alternative form is uberrimae fidei: 'of the utmost good faith'.'

Page 6

In the definition of 'discovery period', replace 'for example employers' liability or professional indemnity' with 'for example D&O insurance'.

Pages 29-34

Several changes have been made to Section 5. Please use replacement pages 29-34 provided at the end of this Upgrade.

Chapter 3

Page 3

Delete '\ **workers' compensation**' from the first bullet point.

In the sixth bullet point, replace '**and**' with '\

Page 5

Delete the paragraph that starts '**For example, the Employers' Liability (Compulsory Insurance) Act 1969 ...**' and the paragraph that follows it.

Change the second last paragraph of Core Reading on this page to read:

'For example, third-party liability cover is required for all motor vehicles in the UK, under the Road Traffic Act 1972. The cover must be unlimited in relation to third party personal injury claims. For third party property damage claims, a minimum level of cover is set out in law.'

Page 6

Delete the paragraph that reads:

'For example, statute requires public liability policies to be held by horse-riding establishments and nuclear installations in the UK. However, there is no general requirement in the UK for individuals or businesses to hold public liability insurance.'

Page 12

Under the heading 'Marine and aviation liability', delete the six paragraphs (including the ActEd text in these paragraphs) after the bullet points. Replace this with the following single sentence of Core Reading:

'Additionally, under marine insurance, sum insured, feet drilled and turnover are used where suitable.'

Chapter 5

Page 2

Replace the second paragraph with:

'Reinsurers, in turn, provide reinsurance to insurance companies. (Retrocession is a term used for reinsurance of another company's accepted reinsurance business.)'

Chapter 6

Page 26

Change the definition of 'hours clause' to read:

'A clause within a catastrophe reinsurance treaty that specifies the limited period during which claims can be aggregated for the purpose of being presented to the reinsurer as arising from a single event. Typical hours clauses used are 24 or 72 hours. For example all claims arising from a windstorm during a 24 hour period could be regarded as a single event in the reinsurance contract.'

Chapter 9

Page 34

In the first sentence of the first paragraph of Core Reading, change '**an easterly**' to '**a westerly**'.

Chapter 11

Page 3

The second bullet point (which relates to parameter error) is now Core Reading text.

Chapter 12

Page 13

Change the second last paragraph to read:

'Sections 4, 6 and 7 below describe the information that would be kept if a new system were to be set up from scratch. In practice, the only insurers that can achieve this level of data system are new companies and those that are prepared to invest significantly to upgrade their data systems. In general, the older the insurer is, the more its data system may differ from what is ideal.'

Chapter 19

Page 22

Change the second bullet point so that it reads:

- **Currency risk – the risk that the impact from changes in currency exchange rates on the value of the assets or the liabilities in the company’s reporting currency adversely impact the excess of assets over liabilities in that reporting currency. If the assets and liabilities are not matched by currency, movements in the assets and liabilities for a change in exchange rates will not exactly offset each other.**

In the second last bullet point (which relates to operational risk), insert the words ‘of investments’ after ‘mismanagement’.

Chapter 20

Page 18

Add the following sentence to the first paragraph of Core Reading:

‘We should do additional stress tests on assumptions that are uncertain.’

Page 24

Delete the word ‘natural’ from the third bullet point.

Chapter 26

Page 15

Delete the last sentence on the page, which reads:

‘The 2020 core reading for Subject SP7 will include additional content on these new standards.’

Glossary

Page 3

The definition of ‘actual total loss’ has been amended and is now:

‘In marine insurance, actual total loss is deemed to occur in one of three ways:

- **The insured item is totally destroyed.**
- **The item is so damaged that it can no longer be classed as the type of object originally insured.**
- **The insured is irretrievably deprived of the insured item.**

See also *constructive total loss*.

Page 4

The definition of 'anti-selection' has been amended and is now:

'Anti-selection arises from an asymmetry of information between policyholder and insurer where the former has more knowledge of the negative aspects of the risks presented than the latter. This allows a policyholder in a higher risk group to purchase insurance on the same terms as someone in a lower risk group. This will usually be because the underwriting requirements do not distinguish between these two groups.'

Page 9

The definition of 'claims handling expenses' has been amended and is now:

'The expenses incurred in handling and settling claims. An alternative term used is 'loss adjustment expenses'.

Loss adjustment expenses may be split into allocated loss adjustment expenses (ALAE) and unallocated loss adjustment expenses (ULAE) depending on whether the expenses can be allocated to specific claims. For example, ALAE may include legal fees for settling a claim, whereas ULAE may include the staffing costs of a claims department.'

Also on this page, a new definition has been added, as follows:

'Claims occurring policy

A policy that covers all claims that occur within the policy period irrespective of when the claim is made.'

Page 10

The definition of 'closed year' has been amended and is now:

'In the case of fund accounting a closed year is an underwriting year that has reached the stipulated period for closure. In the Lloyd's market, a closed year is one that has been closed by *reinsurance to close* (RITC). See related *open year*.'

In the definition of Combined ratio or Combined operating ratio, delete the second sentence. This sentence reads: **'Also called the operating ratio or underwriting ratio.'**

Page 11

The definition of 'constructive total loss' has been amended and is now:

'In marine insurance, constructive total loss is where the insured abandons the insured item because an 'actual total loss' is unavoidable or because the costs of preventing a total loss exceed the value saved.'

Page 12

In the definition of 'discovery period', replace **'employers' liability or professional indemnity'** with **'D&O insurance'**.

Page 13

The definition of 'Events not in data (ENIDs)' has been amended and is now:

'Events that have not occurred in the historical claims experience but should be allowed for in a best estimate that allows for all possible future outcomes. This could include, for example, extreme events such as meteor strikes and volcanic eruptions, and latent liabilities such as pollution and asbestos-related diseases.'

Page 15

Delete the definition of 'fidelity guarantee insurance'.

Page 17

Delete the definitions of 'grossing-up factor' and 'home foreign business'.

Page 21

Delete the definition of 'LMX spiral'.

Page 22

A new definition has been added, as follows:

'Loss adjustment expenses

See claims handling expenses.'

Page 23

Delete the definition of 'Motor Insurers Bureau (MIB)'.

Page 25

Delete the definition of 'operating ratio'.

The definition of 'parameter uncertainty' has been amended and is now:

'Uncertainty in a model deriving from the uncertainty in the values of the input parameters. This may be because the parameters are based on historic data and cannot be known exactly.'

Page 31

Change the heading 'Risk-attaching basis' to read 'Risk attaching policy or Risk Attaching During (RAD) policy'.

Page 32

Delete the definition of 'Road Traffic Act'.

At the end of the definition of 'short-tailed business', add the following sentence:

'Examples are property damage, motor insurance.'

Page 35

Delete the definition of 'Time and distance reinsurance'.

Delete the final sentence of the definition of 'uberrima fides'.

Delete the definition of 'UK Guarantee Fund'.

Page 36

Delete the definition of 'underwriting ratio'.

Page 37

At the end of the definition of 'verticalisation', add the following sentence:

'This is common within aviation insurance.'

Page 38

At the start of the list of abbreviations, add:

'These abbreviations are intended as an aid for understanding. Exam questions will not be set on the abbreviations that appear in only this list and are not covered elsewhere in the Core Reading.'

Pages 38-42

The following abbreviations have been removed from the appendix:

- **BHF** **Bornhuetter-Ferguson**
- **CUE** **Claims and underwriting exchange (in UK)**
- **MIB** **Motor Insurers Bureau**
- **ONS** **Office for National Statistics (UK)**
- **RMS** **Risk Management Solutions**

The following abbreviations have been added to the appendix:

- **IAN** **International Actuarial Note**
- **RAD** **Risks attaching during**

The text for the abbreviation 'MPL' has been amended and now reads:

MPL **Maximum probable (or possible) loss**

2 Changes to the ActEd material

This section contains all the *non-trivial* changes to the ActEd text.

Chapter 2

Page 6

Replace the ActEd sentence below the definition of 'discovery period' with 'Directors' & Officers' (D&O) insurance will be described in the next chapter.'

Chapter 3

Page 5

Delete the heading 'Compulsory cover' before the sentence that reads: 'In many countries, cover is compulsory.'

Replace the second last ActEd paragraph on the page with 'The minimum cover for third party property damage in the UK is now £1.2m'.

Page 6

Delete the heading 'Compulsory cover' and the ActEd sentence that follows it.

Just before the heading 'Product liability', add the following ActEd text:

'In some countries, public liability cover is compulsory for certain institutions or individuals. For example, in the UK it is compulsory for horse-riding establishments and nuclear installations.'

Page 55

Delete '/ workers' compensation' from the first bullet point.

In the sixth bullet point, replace 'and' with '\

Delete the paragraph that starts 'Workers' compensation is another ...'.

Chapter 6

Page 43

Delete the last bullet point in Section 7.1.

Pages 48

Delete Section 7.4.

Chapter 11

Page 31

Add 'parameter error' to the first list of bullet points.

Chapter 26

Page 15

Add the following sentence at the foot of the page:

'However, at the time of writing, this is expected to be deferred until 2022.'

3 Changes to the X Assignments

Overall

There have been minor changes throughout the X assignments, including changes to mark allocations.

More significant changes are listed below.

Assignment X1

Solution X1.2

Add the following new point immediately before the last point on page 2:

'... or it may lead to people smoking surreptitiously anyway, also offsetting the above. [½]'

Just before the last point in the section headed 'Usage of restaurants / cafés' on page 3, add the following new point:

'... and may lead to a change in the mix of business, *eg* towards eateries with beer gardens. [½]'

After the second point under the heading 'Other implications' on page 3, add the new point:

'... and there will be no need to use 'smoking allowed or not' as a rating factor. [½]'

Solution X1.3

Add the following new advantage:

'A maximum premium may make financial planning easier. [½]'

After the first disadvantage, add the following new disadvantage:

'Alternatively, a maximum premium might lead insurers to use lower-risk policies to cross-subsidise higher-risk ones, introducing unfairness into the rating structure. [½]'

Additionally, add the following three new disadvantages:

'Insurers would use up extra time and resources in complying. [½]'

A maximum premium may cause insurers to reduce cover levels to match the resulting lower premiums. [½]'

If a maximum is set too high or a minimum too low, then the move will be pointless. [½]'

Solution X1.8(iv)

Add the following four new disadvantages:

- the loss of business opportunities that may arise from any restriction on a free market [½]
- the inability to maximise investment returns that may arise from controls on investment decisions [½]
- the amount of regulatory bureaucracy deterring new entrants [½]
- the possible failure of insurance to reach certain sectors of the population due to the increased cost of and restrictions on methods of distribution. [½]

Assignment X2*Solution X2.6(ii)*

On page 7, under the heading 'Rating data', make the following changes in the 'Details on driver(s)' section:

- delete 'name'
- add 'postcode / location'
- add 'estimated annual mileage'.

Solution X2.7

Add the following new points:

- dealing with changes in
 - claims handling procedures
 - the harshness of underwriting
- time constraints.

Solution X2.9

Replace the final point with:

'Lapse rates may change. For example:

- customers are likely to initiate the sale themselves, which may lead to reduced lapse rates; [½]
- on the other hand, lapse rates may increase as it is easier for customers to compare prices on the internet. [½]

Solution X2.10

Add the following point under 'Internal factors':

- loose policy wording leading to more claims than expected [½]

Assignment X3

Solution X3.6(i)

Add the following advantage of the basic chain ladder method:

‘It can be used even when there is downward development. [½]’

Add the following advantage of the Bornhuetter-Ferguson method:

‘It is often useful for the most recent cohorts. [½]’

Assignment X4

Solution X4.7(ii)

Add the following point:

‘It may be difficult to action the manager’s proposal, eg if the available supply of medium-term or long-dated loan stock is insufficient. [½]’

Solution X4.10(i)

Add the following point:

- regulations may not allow this level of mis-matching. [½]

Assignment X5

Solution X5.3(ii)

In the seventh and twelfth bullet points, replace the word ‘changes’ with the word ‘differences’.

Solution X5.4(i)

In the bullet point list under the heading ‘Claims managers’, add the following extra bullet:

- changes in claims handling methodology. [½]

Solution X5.6(i)

Add the following point at the end of the section with heading ‘Opportunities’:

... or to make less use of reinsurance, thereby ceding less profit to reinsurers. [½]

Assignment X6

Solution X6.2(i)

Delete the heading 'Where car is driven' and the two points underneath it.

Add the following points:

'Gender of drivers

Men tend to be more likely to own classic cars than women. [½]

This will tend to make the risk higher than standard. [½]

Age of drivers

Classic car owners tend to be older than the average driver. [½]

This will tend to make the risk lower than standard. [½]

Solution X6.3

Delete the point 'Larger margin ⇒ stronger company'.

Solution X6.4

At the top of page 9, under the heading 'Asset / liability ratio', change the percentages given to:

Year X: 117.7%

Year X+1: 122.8%

Year X+2: 114.3%.

Solution X6.6(ii)

Add the following point to the bullet point list on page 14:

- stringency of claims handling

4 Other tuition services

In addition to the CMP you might find the following services helpful with your study.

4.1 Study material

We also offer the following study material in Subject SP7:

- Flashcards
- Revision Notes
- ASET (ActEd Solutions with Exam Technique) and Mini-ASET
- Mock Exam and AMP (Additional Mock Pack).

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5 Capital requirements and impact on solvency

General insurers require resources beyond those needed to cover their technical liabilities in respect of the business they have written. The excess of the value of the assets over the value of the liabilities is subject to minimum requirements if a company is to be allowed to continue to trade.

The methodology for calculating this minimum is laid down in legislation that varies from one country to another. General insurers regulated in the UK and the EU have the option to calculate the required minimum excess of assets over liabilities (known as a ‘Solvency Capital Requirement’ using a standard formula or (subject to regulatory approval) their own internal model. This requirement provides a safety margin against the uncertainty surrounding the ultimate future cost of liabilities and the value of the assets supporting them.

The excess of the value of an insurer’s assets over the value of its liabilities is known as the free reserves of the company. The free reserves are also referred to as the capital or solvency margin.

If the number or cost of claims is greater than the reserves held to meet the claims, then the solvency margin (free reserves) will be needed to pay the claims. Unexpected claims may result in the need to realise assets to pay those claims. Free reserves will guard against the danger of volatile asset values.



Question

Suggest other reasons why a general insurer needs to hold free reserves.

Solution

- it may have to by law
- to guard against catastrophes / accumulations / latent claims
- to guard against lower than expected investment return
- to give more investment freedom
- to guard against higher than expected expenses or expense inflation
- to guard against failure of a third party, for example a reinsurer or broker
- to reduce the need for reinsurance
- to attract new business
- to demonstrate financial strength, eg to regulators, shareholders, analysts

Determining the capital that a general insurer ought to hold to cater adequately for the risks associated with the business it transacts is a complex issue. The longer the tail of the business written, the greater the uncertainty and hence, other things being equal, the more capital will be required. In setting its capital requirements, beyond those specified by law, the general insurer will need to take into account the uncertainty and variability of the business it writes.



Question

Write down the following classes in decreasing order of uncertainty and variability of future claims experience:

- employers' liability
- household contents
- motor liability.

Solution

employers' liability, motor liability, household contents

Motor liability has a longer tail than household contents because of the occasional bodily injury claim.

For an individual class of business, in general the greater the uncertainty and variability in the future claims experience and run-off of reserves of a class, the larger the capital requirement for that class per unit of premium or reserves.

When considering its capital requirements, a general insurer will need to consider each class of business individually. However, its overall capital requirement will be more important.

An insurer that writes a variety of classes of business with a good spread of risks is likely to be exposed to less overall volatility than one that writes limited classes of business in a limited market.

You will probably already be familiar with the principle of diversification of investments. Holding equities, fixed interest bonds and property is usually considered less risky than just holding property. This principle can also be applied to the liabilities too. An insurer that writes lots of different classes of business is exposed to less risk compared with an insurer that concentrates on one class.

An insurer will often be allowed to take credit for this diversification when determining its capital requirements. However, the extent of this diversification benefit will be sensitive to the groupings used by the insurer in its capital model.

Diversification in the context of capital modelling is discussed in detail later in the course.

6 Glossary items

Having studied this chapter you should now read the following Glossary items:

- Anti-selection
- Average
- Claim amount distribution
- Claim cost inflation
- Claim frequency
- Claim frequency distribution
- Claim size distribution
- Claims made policy
- Claims reported
- Commercial lines
- Discovery period
- Excess
- Exclusion
- Expiry date
- Exposure
- Exposure unit / measure
- Inception date
- Liability insurance
- Moral hazard
- Nil claim
- No-claim discount (NCD)
- Peril
- Personal lines
- Rating factor
- Recoveries
- Retroactive date
- Risk factor
- Risk premium
- Salvage
- Subrogation
- Sunset clause
- Uberrima fides
- Underinsurance
- Underwriter
- Underwriting
- Underwriting factor
- Zero claim.

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The chapter summary starts on the next page so that you can keep all the chapter summaries together for revision purposes.