

# **Underwriting practice**

## **Purpose**

At the end of this unit, candidates should be able to understand the principles and practices of underwriting and the environment within which they operate.

## **Assumed knowledge**

It is assumed that the candidate already has knowledge of the fundamental principles of insurance as covered in IF1 Insurance, legal and regulatory or equivalent examinations.

Summary of learning outcomes		Number of questions in the examination*
1.	Understand key influences of the regulatory and commercial environment on underwriting.	10
2.	Understand key aspects of underwriting policy and practice.	9
3.	Understand how statistical data is used for underwriting.	11
4.	Understand the principles and practices of risk pricing.	12
5.	Understand risk exposure and control.	8

<sup>\*</sup>The test specification has an in-built element of flexibility. It is designed to be used as a guide for study and is not a statement of actual number of questions that will appear in every exam. However, the number of questions testing each learning outcome will generally be within the range plus or minus 2 of the number indicated.

## **Important notes**

. Method of assessment:

Mixed assessment consisting of two components, both of which must be passed. One component is a coursework assignment and one is a multiple choice examination. The details are:

- an online coursework assignment using RevisionMate consisting of 10 questions which sequentially follow the learning outcomes. This must be successfully completed within 6 months of enrolment; and
- a multiple-choice question (MCQ) exam at one of the CII's online centres (paper based MCQs are available in April and October for those sitting outside the UK). The MCQ exam consists of 50 MCQs. 1 hour is allowed for this examination. This exam must be successfully passed within 18 months of enrolment.
- This syllabus will be examined from 1 May 2017 until 30 April 2018.
- Candidates will be examined on the basis of English law and practice unless otherwise stated.
- Candidates should refer to the CII website for the latest information on changes to law and practice and when they will be examined:
  - 1. Visit www.cii.co.uk/updates
  - 2. Select the appropriate qualification
  - 3. Select your unit on the right hand side of the page

## Understand key influences of the regulatory and commercial environment on underwriting

- 1.1 Explain the implications of regulatory authorisation for the underwriting function.
- 1.2 Explain the relationship between underwriting and capital and solvency requirements.
- 1.3 Explain the principles and requirements of contract certainty.
- 1.4 Discuss the impact of legislation and litigation on underwriting.
- 1.5 Explain the operation of the traditional underwriting cycle.
- 1.6 Discuss the impact of major events and trends on underwriting.

# 2. Understand key aspects of underwriting policy and practice

- 2.1 Explain corporate underwriting strategy and its influences on underwriting policy.
- 2.2 Discuss the importance of moral and physical hazards in setting an underwriting policy.
- 2.3 Discuss typical criteria for policy cover, terms, conditions and restrictions.
- 2.4 Explain how risks are classified, categorised and improved.
- 2.5 Explain the interaction between underwriting and distribution channels.
- 2.6 Explain the use and implications of granting delegated authority.
- 2.7 Discuss the implications of writing international business.
- 2.8 Describe counter-fraud initiatives.

# 3. Understand how statistical data is used for underwriting

- 3.1 Explain the relationship between exposure and claims.
- 3.2 Explain the importance of averages.
- 3.3 Calculate commonly used measures of average.
- 3.4 Interpret the distribution of data around the average.
- 3.5 Explain the relationship between frequency and severity.
- 3.6 Explain the basic principles of probability including the difficulty of anticipating less-frequent events.
- 3.7 Calculate the expected value of claims.
- 3.8 Explain the importance of the law of large numbers in sample sizes.
- 3.9 Discuss the limitations of statistical data.

# 4. Understand the principles and practices of risk pricing

- 4.1 Explain the main elements of the premium.
- 4.2 Explain the burning cost and prospective risk analysis methods of rating.
- 4.3 Explain how claims data is interpreted and used in setting prices.
- 4.4 Explain the significance of IBNR (incurred but not reported) claims.
- 4.5 Explain the importance of liaison between underwriting and claims functions, especially reserving.
- 4.6 Explain the role and significance of the actuary in risk pricing.
- 4.7 Examine the importance of competitor analysis in pricing.
- 4.8 Discuss other risk data that can be used in pricing.

### 5. Understand risk exposure and control

- 5.1 Explain how exposure to single risks and single events can be measured and managed to balance the account.
- 5.2 Explain the aggregation of risks and the use of catastrophe modelling.
- 5.3 Explain the role of reinsurance in controlling exposure.
- 5.4 Explain the main types of reinsurance and their application.
- 5.5 Explain the importance of the interaction between insurer and reinsurer.
- 5.6 Outline methods other than reinsurance that can be used for limiting exposure.

# **Reading list**

The following list provides details of various publications which may assist you with your studies.

#### Note: The examination will test the syllabus alone.

The reading list is provided for guidance only and is not in itself the subject of the examination.

The publications will help you keep up-to-date with developments and will provide a wider coverage of syllabus topics.

CII/PFS members can borrow most of the additional study materials below from Knowledge Services. CII study texts can be consulted from within the library.

New materials are added frequently - for information about new releases and lending service, please go to <a href="https://www.cii.co.uk/knowledge">www.cii.co.uk/knowledge</a> or email <a href="mailto:knowledge@cii.co.uk">knowledge@cii.co.uk</a>.

### **CII study texts**

Underwriting practice. London: CII. Study text M8o

Insurance, legal and regulatory. London: CII. Study text IF1

### Books (and ebooks)

Actuarial practice of general insurance. D G Hart, R A Buchanan, B A Howe. 7th ed. Sydney: Institute of Actuaries of Australia, 2007.

Bank and insurance capital management. Frans De Weert. Chichester: Wiley, 2011.\*

Bowstead and Reynolds on agency. Peter Watts & FMB Reynolds. 20th ed. London: Thomson Reuters, 2014.

Capital requirements, disclosure, and supervision in the European insurance industry: new challenges towards Solvency II. Maria Grazia Starita, Irma Malafronte. Palgrave Macmillan, 2014.

Capital structure and corporate financing decisions: theory, evidence, and practice H. Kent Baker and Gerald S. Martin. Wiley, 2011.\*

Corporate finance law: principles and policy. Louise Gullifer, Jennifer Payne. Oxford: Hart Publishing, 2011.

Drafting insurance contracts: certainty, clarity, law and practice. Christopher Henley. London: Leadenhall press, 2010.

'Insurance intermediaries: underwriting agents' in Colinvaux's law of insurance. Robert Merkin. London: Sweet & Maxwell, 2014.

Insurance theory and practice. Rob Thoyts. Routledge, 2010.\*

The law of insurance contracts. Malcolm A Clarke. 6th ed. London: Informa, 2009.

Pricing in general insurance. Pietro Parodi. CRC Press, 2015.

'Reinsurance contracts, markets and participants' in Reinsurance practice and the law. Barlow Lyde & Gilbert LLP. London: Informa, 2009.

Reinsurance: the nuts and bolts. Keith Riley. London: Witherby, 2012.

Reinsurance underwriting. Robert Kiln, Stephen Kiln. 2nd ed. London: LLP, 1996.

Risk management for insurers: risk control, economic capital, and Solvency II. Rene Doff. 3rd ed. London: Risk Books, 2015.

Solvency II handbook: practical approaches to implementation. Rene Dorf. London: Risk Books, 2014.

The law of insolvency. Ian Fletcher and Letitia Crabb. 4th ed. London: Sweet & Maxwell, 2009.

The Financial Times guide to mastering operational risk. Tony Blunden & Jon Thirlwell. Harlow: FT/Prentice Hall, 2010.

The Financial Times guide to using the financial pages. 6th ed. Romesh Vaitilingam. Prentice Hall/Financial Times. 2011.

The role of agents in insurance business. Chapter – MacGillivray on insurance law: relating to all risks other than marine. 13th ed. Sweet & Maxwell, 2015.

#### **Ebooks**

The following ebooks are available through Discovery via www.cii.co.uk/discovery (CII/PFS members only):

Big data revolution: what farmers, doctors and insurance agents teach us about discovering big data patterns. Rob Thomas, Patrick McSharry. Wiley, 2015.

Fundamental aspects of operational risk and insurance analytics: a handbook of operational risk. Marcelo G. Cruz. Wiley, 2015.

Fundamentals of risk management: understanding, evaluating and implementing effective risk management. Paul Hopkin, Kogan Page, 2014.

Handbook in Monte Carlo simulation: applications in financial engineering, risk management and economics. Paolo Bradimarte. Hoboken: Wiley, 2014.

Risk modelling in general insurance: from principles to practice. Roger J. Gray, Susan M. Pitts. Cambridge: Cambridge University Press, 2012.

Treatises on Solvency II. Meinrad Dreher. Heidelberg: Springer, 2015.

#### **Factfiles and other online resources**

CII factfiles are concise, easy to digest but technically dense resources designed to enrich the knowledge of members. Covering general insurance, life and pensions and financial services sectors, the factfile collection includes key industry topics as well as less familiar or specialist areas with information drawn together in a way not readily available elsewhere. Available online via www.cii.co.uk/ciifactfiles (CII/PFS members only).

- Risk control. Ian Searle.
- Risk identification. Ian Searle.
- Recent developments in general insurance underwriting. Massimo Vascotto.
- Recent developments to Solvency II. Brad Baker.
- Insurance accounting (general business). Ian Hutchinson, updated by Alex Barnes.

AIRMIC. www.airmic.com.

Contract certainty: an Airmic guide for risk managers and insurance buyers. AIRMIC. 2009. Available via www.airmic.com (register your details to access).

Digital innovation in insurance. Big data and cloud computing. ©Timetric Insight Report. July 2015. Available online at <a href="www.cii.co.uk/insightreports">www.cii.co.uk/insightreports</a> (CII/PFS members only).

Institute of Risk Management www.theirm.org.

Insurers' engagement with Social Media. ©Timetric Insight Report. March, 2015. Available for members at www.cii.co.uk/insightreports (CII/PFS members only).

Further articles and technical bulletins are available at www.cii.co.uk/knowledge (CII/PFS members only).

### **Journals and magazines**

The Journal. London: CII. Six issues a year. Also available online via <a href="https://www.cii.co.uk/knowledge">www.cii.co.uk/knowledge</a> (CII/PFS members only).

Post magazine. London: Incisive Financial Publishing. Monthly. Also available online at www.postonline.co.uk.

The Economist. London: Economist Newspaper. Weekly.

Financial times. London: Financial Times. Daily. Also available online at www.ft.com.

Further periodical publications are available at <a href="https://www.cii.co.uk/journalsmagazines">www.cii.co.uk/journalsmagazines</a> (CII/PFS members only).

#### Reference materials

Dictionary of insurance. C Bennett. 2nd ed. London: Pearson Education, 2004.

Concise encyclopedia of insurance terms. Laurence S. Silver, et al. New York: Routledge, 2010.\*

International Financial Reporting Standards. IFRS Foundation. London: IFRS Foundation. Annual.

Lamont's glossary: the definitive plain English money and investment dictionary. Barclay W Lamont. 10th ed. London: Taxbriefs, 2009. Also available online via www.cii.co.uk/lamont (CII/PFS members only).

Manual of accounting. 4v. PriceWaterhouseCoopers. Haywards Heath: Bloomsbury Professional. Annual.

\*Also available as an ebook through Discovery via <a href="https://www.cii.co.uk/discovery">www.cii.co.uk/discovery</a> (CII/PFS members only).

# **Exemplars**

Exemplar papers are available for all mixed assessment units. Exemplars are available for both the coursework component and the multiple-choice component.

These are available on the CII website under the unit number before purchasing the unit. They are available under the following link <a href="https://www.cii.co.uk/qualifications/diploma-in-insurance-qualification">www.cii.co.uk/qualifications/diploma-in-insurance-qualification</a>.

These exemplar papers are also available on the RevisionMate website <a href="www.revisionmate.com">www.revisionmate.com</a> after you have purchased the unit.

# **Exam technique/study skills**

There are many modestly priced guides available in bookshops. You should choose one which suits your requirements.

The Insurance Institute of London holds a lecture on revision techniques for CII exams approximately three times a year. The slides from their most recent lectures can be found at <a href="www.cii.co.uk/iilrevision">www.cii.co.uk/iilrevision</a> (CII/PFS members only).