

# Fundamentals of risk management

## Purpose

To explore the principles of risk management and the role of insurance within these principles

## Assumed knowledge

It is assumed that the candidate already has the knowledge gained from a study of the relevant sections of IF1 Insurance, legal and regulatory or equivalent examinations.

## Summary of learning outcomes

1. Understand the meaning of risk.
2. Understand the role and purpose of risk management.
3. Understand the core elements of the risk management process.
4. Understand the different categories of risk.
5. Understand current trends in risk management.
6. Understand the position of insurance within risk management.
7. Understand the key risk management lessons learnt from major loss events.

## Important notes

- **Method of assessment:** 14 compulsory short answer questions and two case study/essay questions from a choice of three. Three hours are allowed for this exam.
- The syllabus is examined on the basis of English law and practice unless otherwise stated.
- The general rule is that the exams are based on the English legislative position six months before the date of the exams.
- 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/qualifications](http://www.cii.co.uk/qualifications)
  - 2) Select the appropriate qualification
  - 3) Select your unit on the right hand side of the page

## **1. Understand the meaning of risk**

- 1.1 Explain the difference between risk and uncertainty
- 1.2 Explain the basics of probability theory
- 1.3 Discuss risk perception
- 1.4 Explain the difference between pure and speculative risk

## **2. Understand the role and purpose of risk management**

- 2.1 Explain the evolution of the discipline of risk management
- 2.2 Outline the benefits of risk management
- 2.3 Explain key roles and responsibilities for risk management (Board, Managers, Risk Function etc)
- 2.4 Explain the relationship between risk management, compliance, and the audit function

## **3. Understand the core elements of the risk management process**

- 3.1 Outline the risk management process
- 3.2 Explain the purpose and contents of a risk register
- 3.3 Explain the various risk management standards that exist
- 3.4 Explain the various risk management tools and techniques (identification, assessment, monitoring, control and financing)
- 3.5 Explain the regulatory and corporate governance context surrounding the risk management process

## **4. Understand the different categories of risk**

- 4.1 Define and categorise risk (e.g. various financial, operational, insurance risks, strategic and reputation)
- 4.2 Discuss difficult to categorise risks
- 4.3 Examine the link between cause, events and effects

## **5. Understand current trends in risk management**

- 5.1 Discuss the emergence of enterprise risk management (ERM)
- 5.2 Discuss the emergence of governance, risk and compliance (GRC)
- 5.3 Explain the role of the Chief Risk Officer and Risk Committee
- 5.4 Explain the concepts of risk aggregation and correlation

## **6. Understand the position of insurance within risk management**

- 6.1 Explain the role of insurance as a risk transfer mechanism
- 6.2 Explain the role of an insurance intermediary in supporting risk management
- 6.3 Discuss alternatives to insurance (captives, alternative risk transfer, self-insurance)

## **7. Understand the key risk management lessons learnt from major loss events**

- 7.1 Explain why risk management systems can fail
- 7.2 Explain the consequences of the failure of risk management systems
- 7.3 Discuss examples of relevant loss events

## Reading list

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

These will help candidates keep up-to-date with developments and will provide a wider coverage of syllabus topics.

**Note: The examination will test the syllabus alone. However, it is important to read additional sources as 10% of the exam mark is allocated for evidence of further reading and the use of relevant examples.**

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

CII/Personal Finance Society members can borrow most of the additional study materials below from Knowledge Services.

CII study texts can be consulted from within the library. For further information on the lending service, please go to [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge).

## CII study texts

Fundamentals of Risk management. London: CII. Study text P67

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

## Additional reading

Additional reading materials are available through the library or on the Knowledge Services website.

New materials are added frequently – for information about new books and articles in your area of interest, please visit [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) or email [knowledge@cii.co.uk](mailto:knowledge@cii.co.uk).

## Books (and ebooks)

Managing risk in projects. David Hillson. Farnham, Gower, 2009.

International risk management. Margaret Woods, Peter Kajuter and Philip Linsley (eds). Oxford: Elsevier, 2008.

Strategic project risk appraisal and management. Elaine Harris. Farnham, Gower, 2009.

Understanding and managing risk attitude. David Hillson, Ruth Murray-Webster. Farnham, Gower, 2007.

Tolley's practical risk assessment handbook. Mike Bateman. Oxford: Newnes, 2006.

Risk analysis: assessing uncertainties beyond expected values and probabilities. Terje Aven. Hoboken: Wiley, 2009.

Managing risk and resilience in the supply chain. David Kaye. London: BSI Business Information, 2008.

A short guide to facilitating risk management. Penny Pullan, Ruth Murray-Webster. Farnham, Gower, 2011.

Risk management: organisational and context. Steven Ward. London: Witherby, 2005.

'Risk management in banking'. Chapter – the Oxford handbook of banking, pp 90-111. Linda Allen and Anthony Saunders. Oxford: Oxford University Press, 2010.

'Risk-based regulatory capital and Basel II'. Chapter – the Oxford handbook of banking, pp 357-376. Michael Gordy. Oxford: Oxford University Press, 2010.

Exploiting future uncertainty: creating value from risk. David Hillson. Farnham, Gower, 2010.

Rethinking risk measurement and reporting. 2v. Klaus Bocker (ed). London: Inclusive, 2010.

Risk control. Shaun Wilkinson. London: Witherby, 2003.

Risk financing. Alan Gordon. London, Witherby, 2003.

Risk management and insurance: perspectives in a global economy. Harold Skipper and W Jean Kwon. Oxford: Blackwell, 2007.

Risk: an introduction. Bernardus Ale. Routledge, 2010. Also available as an ebook via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

Risk analysis in finance and insurance. Alexander Melnikov. Chapman and Hall/CRC, 2004. Also available as an ebook via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

Risk and the law. Edited by Gordon Woodman, Diethelm Klippel. Routledge-Cavendish, 2008. Also available as an ebook via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

A short guide to reputation risk. Garry Honey. Farnham, Surrey : Gower, 2009. Also available as an ebook via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

A short guide to fraud risk. By Martin Samociuk and Nigel Iyer. Edited by Helenne Doody. Aldershot: Gower Publishing, 2010. Also available as an ebook via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

A short guide to political risk. By Robert McKellar. Aldershot: Gower Publishing, 2010. Also available as an ebook via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

A short guide to procurement risk. Richard Russill. Farnham, Gower, 2010. Also available as an ebook via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

Corporate risk management: an organisational perspective. Tony Merna, Faisal F Al-Thani. 2<sup>nd</sup> ed. Chichester, West Sussex: John Wiley, 2008.

Corporate risk management and value creation: a guide to real-life applications. Thomas-Olivier Leautier. London: Risk Books, 2007.

A risk management approach to business continuity: aligning business continuity with corporate governance. Julia Graham, David Kaye. Brookfield, Connecticut: Rothstein Associates, 2006.

Tame, messy and wicked risk leadership. David Hancock. Farnham, Gower, 2010.

Approaches to enterprise risk management. London: Bloomsbury, 2010.

Risk management for insurers: risk control, economic capital, and Solvency II. Rene Doff. 2<sup>nd</sup> ed. London: Risk Books, 2011.

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

Liquidity risk measurement and management: a practitioner's guide to global best practices. Leonard Matz and Peter Neu. Singapore: Wiley, 2007.

Probability and statistical models: foundations for problems in reliability and financial mathematics. Arjun Gupta, Wei-Bin Zeng, Yanhong Wu. New York: Springer, 2010.

The econometrics of individual risk: credit, insurance and marketing. Christian Gourieroux & Joann Jasiak. Princeton: Princeton University Press, 2007.

Introduction to insurance mathematics: technical and financial features of risk transfers. Annamaria Olivieri, Ermanno Pitacco. Berlin: Springer, 2011.

Systemic risk assessment and oversight. J A Chan-Lau. London: Risk Books, 2013.

Quantitative operational risk models. Catalina Bologne et al. London: Chapman & Hall, 2012.

Innovative thinking in risk, crisis and disaster management. Simon Bennet. Farnham: Gower, 2012.

The handbook of integrated risk management in global supply chains. Panos Kouvelis. Wiley, 2012.

## Factfiles and other online resources

CII factfiles are written by subject matter experts within the insurance and financial services industry. They are updated annually, and interim update bulletins are included where necessary to take into account any major changes during the year. All are available online via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

- Alternative risk transfer. David Kaye; updated by Ian Searle.
- Risk control. Ian Searle.
- Risk identification. Ian Searle.
- Enterprise risk management. Ian Searle.
- Recent developments to Solvency II. Brad Baker.

EBSCO Risk Management Reference Centre: an online collection of thousands of articles, reports, books etc that pertain to all types of risk. Available online via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

Association of Insurance and Risk Managers  
[www.airmic.com](http://www.airmic.com)

Institute of Risk Management [www.theirm.org](http://www.theirm.org)

Further articles and technical bulletins are available at [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII and Personal Finance Society members only).

## Journals and magazines

The Journal. London: CII. Six issues a year. Also available via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

Post magazine. London: Incisive Financial Publishing. Weekly.

Continuity insurance & risk. London: Perspective. Six issues a year.

Risk management professional: the official magazine of the Institute of Risk Management. London: Institute of Risk Management. Quarterly.

Strategic risk. London: Newsquest Specialist Media. Eight issues a year.

## Reference materials

Dictionary of insurance. C Bennett. 2<sup>nd</sup> ed. London: Pearson Education, 2004. Also available as an ebook via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge) (CII/Personal Finance society members only).

## Examination guides

Guides are produced for each sitting of written answer examinations. These include the exam questions, examiners' comments on candidates' performance and key points for inclusion in answers.

You are strongly advised to study guides for the last two sittings. Please visit [www.cii.co.uk](http://www.cii.co.uk) to buy online or contact CII Customer Service for further information on +44 (0)20 8989 8464.

Older examination guides are available (for members only) via [www.cii.co.uk/knowledge](http://www.cii.co.uk/knowledge). Alternatively, if you have a current study text enrolment, the latest exam guides are available via [www.revisionmate.com](http://www.revisionmate.com).

## 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 [www.cii.co.uk/knowledge/iilrevision](http://www.cii.co.uk/knowledge/iilrevision) (CII/Personal Finance Society members only).