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: Part I 14 compulsory questions (140 marks). Part II 2 questions selected from 3 (60 marks). Total of 200 marks. 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 <u>www.cii.co.uk/qualifications</u>
 - 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 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 <u>www.cii.co.uk/knowledge</u> or email <u>knowledge@cii.co.uk</u>.

CII study texts

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

Insurance, legal and regulatory. London: CII. Study text $\ensuremath{\mathsf{IF1}}$

Books (and ebooks)

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

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

A short guide to contract risk. Helena Haapio, George J. Siegel. Farnham: Gower, 2013.

A short guide to reputation risk. Garry Honey. Farnham: Gower, 2009.*

A short guide to procurement risk. Richard Russill. Farnham: Gower, 2010.*

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

Corporate risk management: an organisational perspective. Tony Merna, Faisal F Al-Thani. 2nd 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.

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

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

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

Handbook of the economics of risk and uncertainty. Mark Machina, W. Kip Viscusi. North Hollans, 2014.*

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

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

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

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

Principles of risk management and insurance. 12th ed. George E. Rejda, Michael J. McNamara. Pearson Education, 2014.

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

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

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

Risk: an introduction. Bernardus Ale. Routledge, 2010. *

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

Risk analysis in finance and insurance. 2nd ed. Alexander Melnikov. Chapman and Hall/CRC, 2010. *

Risk culture and effective risk governance. Patricia Jackson, ed. London: Risk Books, 2014.

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

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

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

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

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

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

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

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

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

Ebooks

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

A short guide to operational risk. David Tattam. Gower, 2011.

A short guide to fraud risk. By Martin Samociuk and Nigel Iyer. Edited by Helenne Doody. Aldershot: Gower Publishing, 2010. Better banking: understanding and addressing the failures in risk management, governance and regulation. Adrian Docherty, Franck Viort. Chichester: Wiley, 2014.

Enterprise risk management: from incentives to controls. James Lam. 2nd ed. Hoboken: Wiley, 2013.

Fundamentals of enterprise risk management: how top companies assess risk, manage exposure and seize opportunity. John J. Hampton. New York: American Management Association, 2015.

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

Risk analysis in finance and insurance. 2nd ed. A V Melnikov. Boca Raton, Florida: CRC Press, 2011.

Risk and the law. Diethelm Klippel, Gordon R. Woodman. London: Routledge, 2009.

Risk management and financial institutions. John Hull. Wiley, 2015.

Risk management: concepts and guidance. Carl L. Pritchard. 5th ed. Boca Raton: CRC Press, 2015.

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).

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

AIRMIC. www.airmic.com.

Institute of Risk Management www.theirm.org.

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 <u>www.cii.co.uk/knowledge</u> (CII/PFS members only).

Post magazine. London: Incisive Financial Publishing. Weekly. Also available online at <u>www.postonline.co.uk</u>.

Continuity insurance & risk. London: Perspective. Six issues a year. Available online via <u>www.cirmagazine.com</u>

Risk management professional: the official magazine of the Institute of Risk Management. London: Institute of Risk Management. Quarterly. Available online via www.rmprofessional.com.

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

Further periodical publications are available at www.cii.co.uk/journalsmagazines (CII/PFS members only).

Reference materials

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

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

*Also available as an ebook through Discovery via www.cii.co.uk/discovery (CII/PFS 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 from the last two sittings. Please visit <u>www.cii.co.uk</u> to buy online or contact CII Customer Service for further information on +44 (0)20 8989 8464.

Alternatively, if you have a current study text enrolment, the latest exam guides are available via www.revisionmate.com.

Older guides are available via www.cii.co.uk/pastexamguides (CII/PFS members only).

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 (IIL) holds a lecture on revision techniques for CII written exams approximately three times a year. The slides from their most recent lectures can be found at

www.cii.co.uk/iilwrittenrevision (CII/PFS members only).