CIMA

Introduction to managing risk

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About Topic Gateways

Topic Gateways are intended as a refresher or introduction to topics of interest to CIMA members. They include a basic definition, a brief overview and a fuller explanation of practical application. Finally they signpost some further resources for detailed understanding and research.

Topic Gateways are available electronically to CIMA members only in the CPD Centre on the CIMA website, along with a number of electronic resources.

About the Technical Information Service

CIMA supports its members and students with its Technical Information Service (TIS) for their work and CPD needs.

Our information specialists and accounting specialists work closely together to identify or create authoritative resources to help members resolve their work related information needs. Additionally, our accounting specialists can help CIMA members and students with the interpretation of guidance on financial reporting, financial management and performance management, as defined in the *CIMA Official Terminology* 2005 edition.

CIMA members and students should sign into My CIMA to access these services and resources.

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Introduction to managing risk

Definition and concept

What is risk?

'Risk is a condition in which there exists a quantifiable dispersion in the possible outcomes from any activity. It can be classified in a number of ways.'

CIMA Official Terminology, 2005

Risk has also been defined as:

'Uncertain future events which could influence the achievement of the organisation's strategic, operational and financial objectives.'

International Federation of Accountants,1999

Risk management is:

'A process of understanding and managing the risks that the entity is inevitably subject to in attempting to achieve its corporate objectives. For management purposes, risks are usually divided into categories such as operational, financial, legal compliance, information and personnel. One example of an integrated solution to risk management is enterprise risk management.'

CIMA Official Terminology,2005

Context

Risk management is core to the current syllabus for P3 management accounting risk and control strategy of the professional qualification. Students must understand risk management and may be examined on it.

In the CIMA Professional Development Framework, risk features in a number of areas including governance, enterprise risk management, strategic management, strategic risk and business skills, business acumen, manage risk.

Related concepts

Risk management; enterprise risk management

Overview

Risk is of paramount importance to organisations. Businesses must identify, evaluate, manage and report many types of risk for improved external decision making.

Risk can be classified in a number of ways. Here it is classified according to the *CIMA Official Terminology.*

Business or operational: relating to activities carried out within an entity, arising from structure, systems, people, products or processes.

Country: associated with undertaking transactions with, or holding assets in, a particular country. Risk might be political, economic or stem from regulatory instability. The latter might be caused by overseas taxation, repatriation of profits, nationalisation or currency instability.

Environmental: these risks may occur due to political, economic, socio-cultural, technological, environmental and legal changes.

Financial: relating to the financial operations of an entity and includes:

- credit risk: a loss may occur from the failure of another party to perform according to the terms of a contract
- currency risk: the value of a financial instrument could fluctuate due to changes in foreign exchange rates (IAS 32)
- interest rate risk: interest rate changes could affect the financial well being of an entity
- liquidity (or funding) risk: an entity may encounter difficulty in realising assets or otherwise raising funds to meet financial commitments.

Reputational: this is damage to an entity's reputation as a result of failure to manage other risks.

Strategic risk: these are risks stemming from the entity's strategy and pose the greatest threat to the achievement of the strategy.

Risk can be perceived in a number of ways. Collier and Agyei-Ampomah (2006) note the following.

- Risk as a hazard or threat (downside risk): this is what managers often mean when talking about risk. It is referred to as a negative event or threat to the organisation. Managing risk in this context means using management techniques to reduce the probability or impact of the negative event without undue cost.
- Risk as uncertainty: this is reflected in the *CIMA Official Terminology* definition where risk is the distribution of all possible outcomes, both positive and negative. Managing risk in this context means reducing the variance between anticipated and actual outcomes.
- Risk as opportunity (upside risk): risk can be seen as a source of opportunity to business.

Risk management in practice

Risks are not always seen in the same way. Collier and Agyei-Ampomah (2006) explain that risk appetite and risk culture are important in understanding the nature of risk management.

Risk appetite

This is the amount of risk an organisation is willing to accept in pursuit of value. It is directly related to an organisation's strategy and may be expressed as the acceptable balance between growth, risk and return.

Risk culture

This is the set of shared attitudes, values and practices that characterise how an entity considers risk in its daily activities. Risk culture is mainly derived from an analysis of organisational practices, namely rewards or sanctions for risk-taking or risk-avoiding behaviour.

Approaches to managing risk

Many approaches exist to managing risk. These include but are not limited to:

- the Committee of Sponsoring Organisation's (COSO) ERM Framework
- HM Treasury's Orange Book
- CIMA's risk management cycle
- the AIRMIC, ALARM, IRM Risk Management standard
- standards Australia AS/NZS Standard on Risk Management.

This topic gateway takes a generic approach that does not rely on any particular model. Managing risk involves risk assessment, risk management policy, risk response (also known as risk treatment), risk reporting and residual risk reporting.

Managing risk – a generic approach

1. Risk assessment

This comprises the analysis and evaluation of risk through processes of identification, description and estimation.

Identification: this aims to determine an organisation's exposure to uncertainty. It requires a thorough knowledge of the organisation's strategy, its products/services and markets, and the legal, social, political, economic and technological environment in which it exists.

Identification requires a methodical approach to ensure all significant activities within the organisation have been identified and all risks flowing from those activities are defined. Methods of identifying risks include:

- risk workshops
- stakeholder consultations
- benchmarking
- scenario or 'what if' analysis
- auditing and inspection
- research methods (interviews, surveys, etc.)
- cause and effect diagrams.

Description: identified risks need to be displayed in a structured format, using a table to facilitate risk description and assessment.

Estimation: risk estimation can be quantitative, semi-quantitative or qualitative in terms of likelihood of occurrence and possible consequences. Assessing the impact of each risk can be done using a variety of tools including: probability; scenario planning; simulations, including Monte Carlo spreadsheet simulation; decision trees; real option modelling; sensitivity analysis; risk mapping; statistical inference; SWOT or PEST analysis; root cause analysis; cost benefit/risk benefit analysis; and human reliability analysis.

Risk mapping is the most frequent example of how risks are assessed. Mapping involves a matrix of likelihood/probability and impact/consequences.

Risk register: it is recommended that organisations record their risks in a risk register. This can include the following information: a unique identifier number, risk category, description of risk, the date the risk is identified and by whom. Other possible data includes the likelihood of risk, consequences, interdependencies with other risks and a monetary estimation.

2. Risk management policy

Before responses are developed for each of the risks identified, it is necessary to determine the organisation's attitude to risk or risk appetite. The risk appetite will be influenced by the size and type of organisation, its culture and its capacity to withstand the impacts of adverse occurrences.

3. Risk response (treatment)

This is the process of selecting and implementing measures to manage the risk. The challenge for risk managers is to determine a portfolio of appropriate responses that form a coherent and integrated strategy such that the net remaining risk falls within the acceptable level of exposure.

It is important to note that there is no right response to risk. The choice of response will depend on issues such as the organisation's risk appetite, the impact and probability of the risk and the costs and benefits of the mitigation plans.

Responses to risk generally fall into the following categories:

Risk avoidance: action is taken to halt the activities giving rise to risk, such as a product line, a geographical market or a whole business unit.

Risk reduction: action is taken to mitigate the risk of likelihood or impact or both, generally via internal controls.

Risk sharing or transfer: action is taken to transfer a portion of the risk through insurance, outsourcing or hedging.

Risk acceptance: no action is taken to affect likelihood or impact.
Implementation of the chosen risk responses involves developing a risk plan outlining the management processes that will be used to manage the risk of opportunity to a level defined by the organisation's risk appetite and culture. An important part of the risk response in the ongoing monitoring to determine the effectiveness (or performance) of the risk response.

4. Risk reporting

There are two areas of risk reporting:

- Reporting to external audiences. External risk reporting has developed rapidly in the last five years. In the UK the Combined Code on Corporate Governance focuses attention on internal control. The proposal for a mandatory operating and financial review (OFR) that resulted in the Accounting Standards Board's Reporting Statement of best practice on the OFR recommends that a review of risks is included in the annual report.
- Reporting to internal audiences. The reporting of risks and risk management information is essential for internal decision makers to integrate risk evaluations into their operational and capital investment decisions, review of performance and compensation/reward decisions.

Fuller information on risk reporting is given in *The reporting of organizational risks for the internal and external decision makers* (Epstein and Rejc 2006).

5. Residual risk reporting

Residual risk reporting involves comparing gross risk (the assessment of risk before controls or risk responses are applied) and net risk (the assessment of risk, taking account of any controls or risk responses applied) to enable a review of risk response effectiveness and possible alternative management options.

Key developments in managing risk

The traditional view of risk management has been one of protecting the organisation from loss through conformance procedures and hedging techniques. This is about avoiding the downside. The new approach to risk management is about 'seeking the upside while managing the downside'.

Risk management can reconcile the two perspectives of conformance and performance:

1. Conformance: control threat/hazard (downside) – 'bad things do happen'.
2. Performance: return opportunity (upside) – 'good things might not happen'.

International Federation of Accountants (1999), Enhancing Shareholder Wealth by Better Managing Business Risk

World class risk management

Collier and Agyei-Ampomah (2006) suggest that world class risk management encompasses a framework of:

- risk management structure: to facilitate the identification and communication of risk
- resources: to support effective risk management
- risk culture: to strengthen decision making processes by management
- tools and techniques: to enable the efficient and consistent management of risks across the organisation.

Case studies

CIMA has worked with the American Institute of Certified Public Accountants (AICPA) and the Society of Management Accountants of Canada (CMA Canada) to publish a set of Management Accounting Guidelines (MAGs) on risk management. MAGs provide practical guidance for members and other accountants in business including examples and case studies. Available from: **www.cimaglobal.com/mags** [Accessed on 6 August 2007].

The ICFAI Center for Management Research has a large number of company case studies on enterprise risk management.

PricewaterhouseCoopers (PwC), Managing Risk has a number of case studies and white papers relating to risk management.

Bibliography

Collier, P.M. and Agyei-Ampomah, S. (2006). *Management accounting: risk and control strategy*. Oxford: Elsevier. (CIMA Official Study System)

CIMA Official Terminology (2005). Chartered Institute of Management Accountants. London: CIMA Publishing

COSO. (2004*). Enterprise risk management: integrated framework executive summary.*

Enhancing shareholder wealth by better managing business risk. (1999). New York: International Federation of Accountants.

Epstein, M.J. and Rejc, A. (2006). *The reporting of organisational risks for internal and external decision makers*, *Management Accounting Guideline*, Canada: The Society of Management Accountants of Canada (CMA-Canada)

Further information

CIMA publications

CIMA (2006). *Managing risk to enhance stakeholder value.* CIMA Technical Guide. London and New York: IFAC and CIMA. Available from: **www.cimaglobal.com/technicalguides** [Accessed 3 August 2007].

CIMA (2002) *Risk management: a guide to good practice.* London: CIMA

Collier, P.M. and Agyei-Ampomah, S. (2006). *Management accounting: risk and control strategy.* Oxford: Elsevier. (CIMA Official Study System)

Collier, P. et al. (2006). *Risk and management accounting: best practice guidelines for enterprise-wide internal control procedures.* CIMA Research Executive Summary Series, Vol. 2, No. 11. London: CIMA. Available from: **www.cimaglobal.com/researchexecsummaries** [Accessed 3 August 2007].

Fenn, P., Diacon, S. and Hodges, R. (2000). *Accounting for risk in the NHS*. London: CIMA

Helliar, C. et al. (2005). *Interest rate risk management: an investigation into the management of interest rate risk in UK companies.* Research Executive Summary Series, Vol. 2, No. 4. London: CIMA. Available from: **www.cimaglobal.com/researchexecsummaries** [Accessed 3 August 2007].

The following Management Accounting Guidelines are available free to CIMA members in the My CIMA section of the website:

Bekefi, T. and Epstein, M.J. (2006). *Integrating social and political risks into business decisions*. Canada: The Society of Management Accountants of Canada

Epstein, M.J. and Rejc, A. (2005). *Identifying, measuring, and managing organizational risks for improved performance*. Canada: The Society of Management Accountants of Canada

Epstein, M.J. and Rejc, A. (2006). *The reporting of organisational risks for internal and external decision makers*. Canada: The Society of Management Accountants of Canada

Krell, E. (2006). *Business Continuity Management.* Canada: The Society of Management Accountants of Canada

Infocasts

Listen to the following infocasts in MY CIMA area of the CIMA website.

Identifying, measuring, managing and reporting organisational risks for improved performance and decision making. Available from: **www.cimaglobal.com/mags** [Accessed 6 August 2007].

Business continuity management. Available from: **www.cimaglobal.com/mags** [Accessed 6 August 2007].

Integrating social and political risk into business decision making. Available from: **www.cimaglobal.com/mags** [Accessed 6 August 2007].

Articles

Full text is available to CIMA members from Business Source Corporate through My CIMA **www.cimaglobal.com/mycima**

Bodein, S., Pugliese, A. and Walker, P. *A road map to risk management.* Journal of Accountancy, December 2001, Volume 192, Issue 6, pp 65-70.

Pryde, A. *An instrumental standard*. Accounting, September 2004, Volume 134, Issue 1333, p. 96

Books

Deuchars, Robert. (2004). *The international political economy of risk: rationalism, calculation and power*. Aldershot: Ashgate

Miller, P., Kurunmaki, L. and O'Leary, T. (2006). *Accounting, hybrids and the management of risk*. London: Centre for the Analysis of Risk and Regulation. (Discussion Paper No. 40).

Other articles and publications

COSO. (2004). *Enterprise risk management: integrated framework executive summary:*
www.coso.org/Publications/ERM/COSO_ERM_ExecutiveSummary.pdf

The International Federation of Accountants. (1999). *Enhancing shareholder wealth by better managing business risk*. New York: IFAC

Websites

HM Treasury's Risk Portal **www.treasury.gov.uk/documents** section of their website provides a number of publications on risk management including the *Orange Book: Management of Risk.*

The Committee of Sponsoring Organizations (COSO) website offers a number of articles and publications on risk including COSO's Enterprise Risk Management (ERM) framework. **www.coso.org**

The Institute of Risk Management is the risk management's professional education body. Established as a not-for-profit organisation, the Institute is governed by practising risk professionals and has strong links to leading universities and business schools across the world.
www.theirm.org

Standards Australia – offers a range of publications on risk management.
www.riskmanagement.com/au

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