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Operational risk management frameworks and methodologies

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Agenda

- Background & Introduction to operational risk
- Challenges and issues of operational risk
- Components of an operational risk management framework
- Operational risk frameworks as a basis for quantitative measurement & assessment
- Broader benefits of robust operational risk management



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Background & Introduction to operational risk

Definition

- "The risk of loss resulting from inadequate or failed internal processes, people & systems, or from external events"

This definition includes legal risk but excludes strategic and reputational risk.

(The Basel Committee in its International Convergence of Capital Measurement and Capital Standards (ICCMCS) framework definition)

How does it fit with the other risk classes?

- Credit Risk
- Market Risk
- Insurance Risk
- Liquidity & Interest rate risk

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Challenges and issues of operational risk

Management sponsorship, business case & resources

- Securing & maintaining Board and senior management sponsorship & buy-in
- Building a robust business case for change
- Availability of appropriately skilled resource
- Integration with other existing initiatives e.g. process improvement projects

Designing operational risk approaches

- Understanding the range of options available & associated costs / benefits
- Determining the level of change, business requirements & sophistication of solutions required
- Absence of 'standard' industry practice & rapidly developing market
- Avoidance of gaps / overlaps in risk management approaches

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Challenges and issues of operational risk (cont'd)

Implementation of risk management approaches

- Diversity & availability of underlying data
- Automation of data collation, aggregation, transformation & reporting
- Embedding new / enhanced practices into wider business environment
- Consistent implementation of change across the entire organisation

Regulation

- Interpreting regulatory requirements
- Understanding the impact of regulatory requirements on existing business practices
- Keeping abreast of changes in the regulatory environment

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Components of an operational risk management framework

- Risk definition & language
 - Risk definition provides a high level description of a risk class for an organisation and the scope of risks and activities included within it.
 - Risk categorisation provides a more detailed breakdown of the risk definition and enables an organisation to understand and document the specific significant risks within its risk classes.
 - Risk language details standard risk terms, vocabulary and abbreviations used across an organisation.
- Risk appetite
 - Risk appetite describes the types & degree of operational risk an organisation is prepared to incur. As a result, risk appetite refers to an organisation's attitude towards risk taking and whether it is willing and able to tolerate either a high or a low level of exposure to operational risk.

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Components of an operational risk management framework (cont'd)

- Risk policy
 - Outline of an organisation's operational risk management strategy and objectives.
 - documents the roles, responsibilities, accountabilities and authorities that support the approach and processes adopted to achieve those objectives.
- Roles and responsibilities
 - Clearly defined accountabilities and expectations for all relevant parties, including the roles and responsibilities of the Board, management, and employees.

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Components of an operational risk management framework (cont'd)

- Risk & control self assessment
 - Self assessment is the process of identifying and assessing operational risk within an organisation and evaluating the effectiveness of the controls that are in place to manage these risks.
- Key risk indicators
 - A key risk indicator is a measure of the status of an identified operational risk within an organisation and the current effectiveness of its control.
 - The aim of key risk indicators is to evaluate potential exposure, by monitoring changes in operational risk between formal risk and control assessments.
 - They are designed to provide an early warning mechanism, highlighting potential operational risk issues before they crystallise and result in loss.

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Components of an operational risk management framework (cont'd)

- Internal loss events
 - The tracking of operational risk loss events enables an organisation to:
 - identify operational risk exposure accurately;
 - cost justify new or improved controls and compare the effectiveness of controls; and
 - Identify trends over time.
 - Loss events can be categorised as Actual, Potential and near Misses.

Components of an operational risk management framework (cont'd)

- External loss events
 - Loss experiences of other institutions. External loss data can provide an indication of the size, frequency and sources of losses experienced by others and thus can provide a wider frame of reference when assessing potential risk exposures
- Management information
 - Management information is the collection and communication of information to provide a summary of an organisation's exposure to operational risk.
- Stress and scenario testing
 - Stress testing and scenario analysis, being based on an analysis of the impact of unlikely, but not impossible events, enable an organisation to gain a better understanding of the risks that it faces under extreme conditions.

Operational risk frameworks as a basis for quantitative measurement & assessment

Internal Loss Data

Data Capture

- At a minimum an organisation must capture gross loss amount, date of event, any recoveries made and a description of the event drivers, or causes. This might necessitate a dedicated operational loss database rather than using the general ledger. Although reconciliations to the GL will help in validating the data set.

Data Threshold

- The exact threshold chosen above which to capture losses will depend on the number and size of losses expected and the application of any quantitative analysis preformed.

Boundary Losses

- Policy around the capture of losses associated with other risk classes should be put in place to avoid double counting such losses.

Operational risk frameworks as a basis for quantitative measurement & assessment (cont'd)

External Loss Data

- Internal loss data is sparse particularly in regard to low frequency high impact events. In the approach to measuring and assessing such events the industry has turned to external data sets to help augment internal data.
- Such externally available operational loss data may be sourced from either from vendors who capture events within the public sphere or from consortia where institutions subscribe and share (anonymous) records.
- Careful consideration should be given to appropriateness of an external loss event before its inclusion any quantitative measurement and assessment.

Operational risk frameworks as a basis for quantitative measurement & assessment (cont'd)

- Internal and external loss experience, are by definition, historic in nature. In some instances, a forward looking operational risk assessment is desirable. For example it can provide a method by which risk management can be more reactive to the changing risk environment allowing pre-emptive steps to be taken to minimise financial loss. Such an approach could benefit from the use of:
 - Key Risk Indicators (KRIs) - These variables relate to risk factors associated with people, process, systems, controls and environments. KRIs should provide a good indication of the level of underlying risk whilst being readily available, easily calculated and allow translation into a quantitative measure.
 - Self assessment – capturing the views of the business in regard to future events they might face. Answers to carefully considered questions can be used to provide an indication of possible future experience which can be related to measures identified in the analysis of historical data sets.

Broader benefits of robust operational risk management

- Regulatory compliance / preparation
- Reduced economic capital allocation
- Reduced losses attributable to operational risk events
- Ability to compete better amongst peer group
- Better risk management leading to increased underlying P&L via higher profitability
- Development of operational risk culture

Questions?
