

Basel II
Advanced Measurement
Approaches (AMA)
for Operational Risk

Supervisory Expectations

May 2003

What is Operational Risk?

- Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.
 - ◆ Internal fraud
 - ◆ External fraud
 - ◆ Employment practices & workplace safety
 - ◆ Clients, products & business practices
 - ◆ Damage to physical assets
 - ◆ Business disruption & system failures
 - ◆ Execution, delivery & process management
- Includes legal risk.
- Excludes reputational and business/strategic risk.

What is an AMA?



- Capital requirement is based on bank's internal operational risk measurement system.
- Focuses on both measurement and management of operational risk.
- Requires supervisory approval based on qualitative and quantitative standards.
- Consistent with sound and rapidly evolving industry practices.

Why the AMA?



- Provides sensitivity (in contrast to simple approaches for calculating risk-based capital).
- Promotes improved risk management.
- Encourages innovation.
- Attempts to balance need for flexibility (to foster continued innovation) with the need for consistency of application.

Required Elements of an AMA

- A bank's internal operational risk measurement system must take into account the following elements:
 - ◆ Internal data
 - ◆ External data
 - ◆ Scenario analysis
 - ◆ Internal control and business environment factors
- The measurement system may also factor in the following elements:
 - ◆ Risk mitigation (e.g., insurance)
 - ◆ Correlations
- These elements can be combined in different ways to quantify exposure to operational risk.

Qualifying Criteria



- Four broad areas will be assessed:
 - ◆ Operational risk corporate governance
 - ◆ Operational risk loss data
 - ◆ Risk quantification
 - ◆ Risk mitigation

Operational Risk

Corporate Governance



- Board and senior management oversight.
- Independent enterprise-wide operational risk framework and function.
- Policies and procedures for all aspects of the operational risk framework.
- Independent testing & verification (e.g., audit).
- Lines of business responsible for day-to-day risk management.
- Reporting of operational risk exposures, losses, risk indicators, etc., to board and senior management.
- Sound internal control environment.

Operational Risk Loss Data



- Collect internal operational loss data.
- Refer to relevant external loss data to understand industry experience with respect to large losses.
- Map to the seven event types (but not required to use the seven event types for internal purposes).
- Identify drivers of operational risk and how changes in the risk management and/or control environments affect risk profile.

Risk Quantification



- Data elements combined to quantify operational risk exposure at a designated confidence level.
- Assess likelihood and severity of “tail events”.
- Scenario analysis must be incorporated into quantification.
- Correlations must have sound underpinning.

Risk Mitigation



- May take into account the risk mitigating effect of insurance.
- Subject to criteria:
 - ◆ Ability/willingness of insurer to pay;
 - ◆ Third-party risk transfer;
 - ◆ Maps to actual operational risk loss events;
 - ◆ Minimum cancellation & non-renewal periods.
- Even where criteria are met, coverage should be discounted to reflect uncertainty of payment.

Supervisory Guidance for AMA

- Will be structured around qualifying criteria.
- Attempt to make clear supervisory objectives.
- Should allow non-Basel banks to better assess and understand the AMA framework in choosing whether or not to opt in.
- Prescriptive where appropriate, but generally allows for considerable flexibility.

Next Steps



- Issue supervisory guidance for AMA this summer (with ANPR)
- Likely visitations with some banks in late 2003 or early 2004 to benchmark industry practices.
- Supervisory guidance will evolve based on visitations and developments within the industry.
- To qualify for AMA at year-end 2006, banks need internal data starting January 1, 2004.