Federal Reserve Board

Course Description for Basel II: Operational Risk

Course Catalog Detail

BASEL II: OPERATIONAL RISK

TYPE OF PARTICIPANT TARGETED

This course is designed as a supplementary course for safety and soundness examiners and supervision staff who have an interest or anticipate having a responsibility for examining core or opt-in Basel II banks. The course is based on the requirements in the Basel II Final Rule.

PRECOURSE PREPARATION

Prior to attending the course, participants are expected to complete the precourse online study modules developed on FSI Connect. Access can be provided by contacting the learner's training department to obtain an FSI Connect account number. Participants are also expected to review the book Operational Risk with Excel and VBA by Nigel Da Costa Lewis which is also provided by the learner's training department.

COURSE OVERVIEW

This 3.5 day course is directed to examiners/supervisory staff who have been identified as Level 2 - Basel II Specialist for Quantification and Validation, or designated as needing this level of training. The purpose of the training is to increase examiners' understanding of operational risk and U.S. supervisory expectations for the Advanced Measurement Approach for Operational Risk (AMA). The U.S. Final Rule for Basel II will serve as the basis for the training. The course will also provide an update on the range of AMA practices, including specific examples of how banks are implementing their AMA processes. In addition, instructors will share their experiences and insights on the agencies' expectations for implementation of an AMA. Upon completion of this course, examiners will have intermediate knowledge of quantification.

COURSE OBJECTIVES

By the end of this 3.5 day course, participants will be able to:

- Define the three components of the AMA framework: governance, data elements, and quantification
- Explain the four AMA data elements (internal data, external data, scenario analysis, and business environment and internal control factors)

- Describe how the four data elements are used in an AMA framework for risk management and risk measurement
- Explain the Loss Distribution Approach (LDA) for measuring operational risk including key challenges and issues with an LDA
- Describe the current range of practice for the AMA

POST-COURSE INTERVENTION

After completing Basel II Operational Risk, the examiners with this level of knowledge will be able to compare the bank's current risk measurement practices against the AMA requirements for operational risk and report where those practices may fall short of supervisory expectations. It is expected that individuals with this level of knowledge would work closely with Level 3 specialists in model evaluation.

OVERVIEW OF CURRICULUM

BASEL II OPERATIONAL RISK AGENDA

Day One

Time	Module	Time Assigned
10:30 AM	Basel II Background	1. 5 hours
01:00 PM	Governance and Risk	1. 0 hours
02:00 PM	Internal Data	1.0 hours
03:30 PM	Quantitative Basics	1.5 hours

Day Two

Time	Module	Time Assigned
09:00 AM	Recap and External Data	1.5 hours
10:45 AM	Loss Distribution Approach	2.0 hours
02:00 PM	Scenario Analysis	1.0 hours
3:30 PM	Case Study	1.5 hours

Day Three

Time	Module	Time Assigned
09:00 AM	Loss Distribution (Cont.)	1.5 hours
11:00 AM	Business Environment and Internal Control (BEICF)	1.5 hours
01:15 PM	Offsets and Risk Mitigants	1.0 hours
03:00 PM	Loss Distribution Case Study	1.0 hours
04:30 PM	ReCap Day 3	2.0 hours

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Time	Module	Time Assigned
09:00 AM	Validation and Verification	1.5 hours
9:45 AM	Legal Entity	.50 hours
10:15 AM	Knowledge Assessment	.50 hours
11:00 AM	Pillar 2 and Pillar 3	1.0 hours

LEARNING OBJECTIVES

By the end of this course, learners should be able to:

Internal Data

- Discuss the requirements for the four AMA data elements
- Describe internal loss data characteristics
- Identify AMA requirements for internal data
- Explain the limitations of internal data

Quantitative Basics

- Define basic statistical concepts

- Explain how the concepts relate to operational risk

- Provide intuitive examples to illustrate how these concepts are used in operational risk quantification

Governance and Risk Management

- Describe the concept of how BEICFs can be used to adjust capital estimates

Operational Risk Mitigants and Eligible Offsets

- Explain why certain reductions to operational risk capital are permitted

- Identify which reductions to capital are permitted under the Final Rule

- Explain insurance as a risk mitigant

Data Maintenance

- Discuss the Basel II AMA requirements for data maintenance and management

- Identify data management concepts that are relevant to an AMA framework

Validation

- Explain the difference between verification and validation

- Describe the validation of an operational risk framework

- Describe the components of validation

- Identify the verification and validation responsibilities of the board, senior management, and internal audit

Legal Entity

- Discuss the historical "legal entity" treatment in performing regulatory capital calculations

- Explain how the Final Rule applies to individual insured depository institutions

- Describe various challenges and possible alternatives in determining appropriate capital on a legal entity basis

- Explain the rationale for potentially allowing an alternative approach to estimating operational risk exposure

Pillar II and III

- Explain the objectives of Pillar II
- Explain the difference between Pillar I and Pillar II
- Identify AMA requirements related to governance and operational structure
- Explain how the three components of an AMA governance structure work together
- Identify examination/review considerations for operational risk governance

External Data

- Discuss the AMA requirements for external data
- Explain why and how external data is used
- Identify the sources of external data
- Explain the limitations with external data

Loss Distribution Approach

- Explain the basics of the Loss Distribution Approach (LDA)
- Describe how to estimate frequency and severity distributions used in LDA
- Identify the limitations of using an LDA approach to quantify operational risk exposure
- Explain how to use Monte Carlo simulations to compute Minimum Regulatory Capital (MRC), Aggregate Loss Value
- Define Extreme Value Theory (EVT)
- Discuss dependence issues that arise from the aggregation of losses in an LDA

Scenario Analysis

- Explain why scenarios are needed
- Describe key steps in the scenario development process
- Identify the challenges with scenario analysis
- Discuss how scenarios are used

Business Environment and Internal Control Factors (BEICF)

- Identify BEICF tools most frequently utilized by our AMA institutions
- Describe how BEICF tools are utilized to monitor Operational Risk
- Apply Pillar II principles in an operational risk context

CLASS SIZE

Minimum class size is 10 with a maximum of 30.

INSTRUCTORS

There are usually 4-5 instructors for this course.