

10-Day Practical Training on Financial Contagion Risk and Network Analysis, Solvency and Liquidity Stress Testing





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#### Introduction:

The introductory section will provide an overview of the training program, its objectives, and the targeted audience. It will set the context for understanding financial contagion risk, network analysis, solvency stress testing, and liquidity stress testing.

### Course Objectives:

At the end of this course, the participants will be able to:

- Understand the concept of financial contagion risk and its implications for financial stability.
- Gain proficiency in network analysis techniques to assess systemic risk and interconnectedness in the financial system.
- Develop practical skills in conducting solvency and liquidity stress tests.
- Familiarize participants with the toolkits and metrics used in contagion risk analysis.
- Enable participants to generate key contagion/network indices and produce analyses similar to those found in financial stability reports.

#### **Targeted Audience:**

This training program is designed for professionals working in the financial industry, including risk managers, financial analysts, regulators, policymakers, and researchers. It is also beneficial for graduate students or individuals seeking to enhance their knowledge in the field of financial stability.

#### Course Outlines:

#### Unit 1: Introduction to Financial Contagion Risk and Network Analysis

- · Overview of financial contagion risk
- Introduction to network analysis in finance
- Types of financial networks
- · Network metrics and measures

### Unit 2: Introduction to Financial Contagion Risk and Network Analysis continued

- Contagion channels and mechanisms
- Case studies on historical financial contagion events
- · Practical exercises on network analysis using real-world data



## Unit 3: Contagion Indices and Metrics

- · Commonly used contagion indices
- · Calculation and interpretation of various contagion metrics
- Limitations of contagion indices
- · Practical exercises on calculating contagion indices

## Unit 4: Financial Stability Reports and Analysis

- Introduction to financial stability reports
- Key components of financial stability reports
- · Analysis of financial stability indicators
- · Case studies on the impact of financial stability reports

#### Unit 5: Financial Stability Reports and Analysis continued

- · Interpretation of systemic risk indicators
- Role of central banks and regulatory authorities in financial stability analysis
- · Practical exercises on analyzing financial stability reports

#### Unit 6: Solvency Stress Testing

- Introduction to solvency stress testing
- · Key concepts and methodologies
- Scenario design and implementation
- Analysis of stress test results

#### Unit 7: Solvency Stress Testing continued

- Assessing the resilience of financial institutions
- · Regulatory requirements and guidelines for solvency stress testing
- · Case studies on the impact of stress testing on financial stability



# Unit 8: Liquidity Stress Testing

- Introduction to liquidity stress testing
- Key components and challenges
- Liquidity risk measurement and management
- Practical exercises on liquidity stress testing

## Unit 9: Liquidity Stress Testing continued

- Regulatory frameworks and guidelines for liquidity stress testing
- · Role of central banks in liquidity risk management
- · Case studies on the importance of liquidity stress testing

## Unit 10: Review and Practical Applications

- Recap of key concepts from all units
- Practical applications of the learned concepts and techniques
- Group discussions and presentations on real-world financial contagion and stress testing scenarios
- Q&A session and final assessment