Intuition Know-How

Digital Learning for Financial Markets

Contents

Accounting – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of financial accounting information for internal and external stakeholders of a business
- List the key users of accounting information
- Identify the main financial statements used to measure a company's financial performance and position
- Recall how conflicts of interest arise and how earnings management may be used in financial accounting
- Recognize the importance of the double-entry system of accounting
- List the key accounting concepts and conventions used in the preparation of financial statements
- Recognize the role of accounting standard setters in developing high quality standards for financial reporting

Tutorial Overview
This tutorial introduces the subject of financial accounting to those new to the area. It starts off with a broad look at what exactly financial accounting involves, before discussing the different types of financial statements. It also describes the main accounting concepts and conventions, including a look at the important role of accounting standards and standard setters.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Accounting
- Overview of Accounting

Topic 2: Users of Financial Statements
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- Accounting Concepts
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Topic 7: Accounting Standards

- Overview of Accounting Standards
- FASB/IASB Convergence Project

Accounting Mechanics – Scenario

Description
Overview
Using the example of a small start-up company operating in the fast food sector, this scenario looks at the dual effect principle of accounting. The dual effect on the balance sheet and/or income statement of each of the company's transactions is explored in detail.

Prerequisite Knowledge
A basic knowledge of accounting is required.

Level: Introductory
Duration: 45 minutes

AIFM Directive

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the objective, scope, and key definitions associated with the Alternative Investment Fund Managers Directive (AIFMD)
- Recognize the main requirements that the AIFMD places on alternative investment fund managers

Tutorial Overview
The Alternative Investment Fund Managers Directive (AIFMD) was introduced in response to calls for greater regulation of hedge funds, private equity funds, and other alternative investment funds (AIFs). Driven by the events of the financial crisis and the Madoff investment fund scandal, the AIFMD represented the most radical reshaping of fund management regulation in Europe since the first UCITS directive in 1985.

This tutorial describes the main provisions of the AIFMD, including (among others) the requirements in relation to authorization, remuneration, risk management, liquidity management, securitization positions, valuation, delegation, and depositaries.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of the AIFM Directive
- Overview
- Key Definitions
- Scope
- Managing an AIF
- Marketing an AIF: The Passport Regime
- Marketing an AIF: Professional vs. Retail
- Marketing an AIF: Exemptions

Topic 2: Key Requirements
- Authorization
- Capital Requirements
- Operating Conditions
- General Principles
- Remuneration
- Conflicts of Interest
- Risk Management
- Liquidity Management
- Investment in Securitization Positions
- Organizational Requirements
- Valuation
- Valuation: External Valuation
- Valuation: Self-Valuation
- Delegation
- Delegation: Letter-Box Entities
- Depositaries
- Transparency

AI & Machine Learning (ML) – Primer

Tutorial Description
Overview
Computer scientists' efforts to create intelligent machines have led to the development of ever-more sophisticated artificial intelligence (AI) systems. Today, thanks to sophisticated machine learning (ML) techniques and technological advancements, these AI tools can perform a growing range of tasks. This primer offers an overview of AI and ML, explaining different types of AI, different approaches to the development of AI systems, how ML works, and exploring the types of tasks that AI systems are able to perform.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 7 minutes

AI Applications – Credit Risk

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the role artificial intelligence (AI) systems can play in credit decisions and credit risk analysis
- Identify regulatory and ethical concerns associated with the use of AI in credit decisions and credit risk analysis

Tutorial Overview
Making credit decisions relies on careful analysis of all relevant information. Artificial intelligence (AI) systems can help make the process of credit risk analysis more efficient, accurate, and effective. This tutorial provides a high-level overview of the role that AI can play in credit analysis and credit decisions.
Prerequisite Knowledge
A broad understanding of artificial intelligence and machine learning

Tutorial Level: Intermediate
Tutorial Duration: 20 minutes

Tutorial Outline
Topic 1: Credit Risk & AI Systems
- Credit Risk & AI

Topic 2: AI Uses & Limitations
- Credit Decisions
- Computers & Credit Decisions
- AI & Credit Decisions
- AI for Commercial Credit
- Bias & Regulatory Concerns

AI Applications – Fraud & Compliance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the role that artificial intelligence (AI) and machine learning (ML) can play in fraud detection
- Define how AI and ML can support compliance processes
- List the limitations of fraud detection and compliance AI systems

Tutorial Overview
For financial companies, identifying fraud and managing compliance processes are key tasks that must be performed efficiently and effectively. Fortunately, AI systems have the potential to make these tasks easier, cheaper, and better. This tutorial provides a high-level overview of the role that AI can play in fraud detection and compliance.

Prerequisite Knowledge
A broad understanding of artificial intelligence and machine learning.

Tutorial Level: Intermediate
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: AI & Fraud Detection
- Expert Systems
- Expert Systems Limitations
- Fraud Detection AI
- Case Study: Retail (Card) Transactions
- Case Study: Systemic Fraud

Topic 2: AI & Compliance
- What Do You Think?
- Anti-Money Laundering (AML)

Topic 3: AI Limitations
- Strengths & Weaknesses
- AI in Financial Modeling

AI Applications – Chatbots

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define chatbots and identify their key characteristics and advantages
- List the applications of chatbots in finance and identify their limitations

Tutorial Overview
Chatbots are an increasingly important customer experience management tool that can help lower costs and improve service. However, they are not appropriate for all use cases and are best suited to specific roles in finance. This tutorial provides a high-level overview of chatbots and the role that they can play in the customer experience.

Prerequisite Knowledge
A broad understanding of artificial intelligence and machine learning.

Tutorial Level: Intermediate
Tutorial Duration: 25 minutes

Tutorial Outline
Topic 1: Chatbots Overview
- What is a Chatbot?
- Chatbot Design
- Interfaces
- Chatbot Advantages

Topic 2: Chatbots in Finance
- Core banking
- Other areas
- Additional Functionality
- Chatbots limitations

AI Applications – Internet of Things (IoT)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the Internet of Things (IoT) and identify its uses and implications for business

Tutorial Overview
As smart, connected devices proliferate, the Internet of Things (IoT) is growing rapidly, transforming businesses across industries. Increasingly, it is having a direct impact on financial services. This tutorial provides a high-level overview of the IoT and its uses and limitations.

Prerequisite Knowledge
A broad understanding of artificial intelligence and machine learning.

Tutorial Level: Intermediate
Tutorial Duration: 20 minutes

Tutorial Outline
Topic 1: IoT Overview
- What is IoT?
- Growth of IoT

Topic 2: IoT in Action
- IoT Applications
- Key Challenges
- IoT for Financial Institutions

AI Applications – Robo-Advice

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define robo-advice and list its advantages and uses in wealth management
- Identify the primary approach to regulating robo-advice

Tutorial Overview
The provision of investment advice by artificial intelligence (AI) systems, known as robo-advice, has become an increasingly important tool for wealth management firms. Integrating robo-advice systems can increase efficiencies, lower costs, and open up new markets for wealth management services. This tutorial provides an overview of robo-advice, including its definition, advantages, and regulation.

Prerequisite Knowledge
A broad understanding of artificial intelligence and machine learning.

Tutorial Level: Intermediate
Tutorial Duration: 20 minutes

Tutorial Outline
Topic 1: Robo-Advice Overview
- What is Robo-Advice?
- How Does Robo-Advice Work?
- Robo-Advice History
- Robo-Advice Today

Topic 2: Robo-Advice in Action
- Robo-Advice Advantages
- Apply Your Knowledge
- Robo-Advice & Regulation

AI Applications – RPA in Trade Processing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define robotic process automation (RPA) and identify how it can support trade processing

Tutorial Overview
Trade processing includes operations such as settlements, lifecycle management, trade reconciliation, and reporting. These activities can be a significant cost center and businesses have made a major effort to streamline and simplify them. Robotic process automation (RPA) is a key tool for reducing errors, minimizing headcount, and increasing efficiency in trade processing. This tutorial provides an overview of RPA and how it can help improve trade processing operations.

Prerequisite Knowledge
A broad understanding of artificial intelligence and machine learning.

Tutorial Level: Intermediate
Tutorial Duration: 20 minutes

Tutorial Outline
Topic 1: Trade Processing Overview
- Risk-Taking
- Post-Trade Operations
- Operational Pain Points

Topic 2: Robotic Process Automation
- RPA vs. Automation
- Apply Your Knowledge
- RPA In Trade Processing

AI Applications – Transaction Cost Analysis (TCA)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define transaction cost analysis (TCA)
- Identify how artificial intelligence (AI) systems can be used to perform TCA

Tutorial Overview
Transaction costs can have a significant impact on the returns generated from invested capital. To manage these costs effectively, it is necessary to measure and understand them by performing regular transaction cost analysis (TCA). This tutorial provides a high-level overview of TCA and the role that AI systems can play in performing it.

Prerequisite Knowledge
A broad understanding of artificial intelligence and machine learning.

Tutorial Level: Intermediate
Tutorial Duration: 20 minutes

Tutorial Outline
Topic 1: TCA Overview
- Trade Execution
- Transaction Cost Analysis (TCA)

Topic 2: TCA in Action
- Cost Components
- Minimizing Variable Costs
- Building a Model
- AI for TCA & Cost Management

AI Applications – Wealth & Asset Management

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the role of artificial intelligence (AI) and machine learning (ML) in wealth management
- Define how AI and ML can support asset management operations, including asset selection and portfolio optimization

Tutorial Overview

Wealth and asset management firms increasingly rely on AI and ML systems to support their operations and make their services more efficient and effective. Technological tools can help wealth managers lower their client acquisition and servicing costs and improve their ability to provide personalized portfolios. They can also help asset managers with asset selection, portfolio optimization, and other core functions. This tutorial provides a high-level overview of the role that AI can play in wealth and asset management.

Prerequisite Knowledge

A broad understanding of artificial intelligence and machine learning.

Tutorial Level: Intermediate

Tutorial Duration: 30 minutes

Tutorial Outline

Topic 1: Wealth & Asset Management Overview

- Wealth & Asset Management

Topic 2: Wealth Management

- Wealth Management Services & Technology
- Wealth Management & AI

Topic 3: Asset Management

- Asset Management & AI
- Pattern Matching
- Natural Language Processing (NLP)
- Portfolio Optimization

AI Ethics – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify how ethics differs to laws and why we need ethics
- Recognize the approaches to practicing ethical behavior
- Recognize the differences between narrow and general AI, the different approaches to symbolic and neural networks, and the prevalence of AI

Tutorial Overview
Developments in data analysis and machine learning have led to a dramatic increase in the use of artificial intelligence by both private and public institutions. AI is involved in many industries and activities – banking and finance, industrial manufacturing, agriculture, marketing, social media, urban planning, healthcare, policing, and more. Unfortunately, these technologies have sometimes been introduced without the necessary ethical considerations, which has led to unnecessary scandals and harm to individuals. One of the most important challenges the AI community faces is to develop algorithms that can contribute to individual and social wellbeing. This tutorial provides a high-level overview of ethics, and in particular, AI ethics.

Prerequisite Knowledge
AI & Machine Learning (ML) – Primer

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Ethics Basics
- Ethics & Practical Ethics
- Ethics vs. Law
- Why Do We Need Ethics?
- Is Ethics Just a Matter of Opinion?

Topic 2: Ethics in Practice
- Toolkit for Practical Ethics
- Complementary Approaches

Topic 3: AI Ethics
- AI & AI Ethics
- General vs. Narrow AI
- Symbolic AI vs. Neural Networks
- Prevalence of AI

AI Ethics – Bias & Discrimination

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main sources of bias in AI and recognize when bias can become discrimination
- Identify some possible solutions to the problem of bias in AI
- Recognize through a case study how AI biases have created issues in the world of banking

Tutorial Overview
For AI algorithms to be well designed, they should perform as the designer/programmer wishes them to. But algorithms are complex tools, and it is easy to inadvertently insert ethically problematic biases in them. These biases skew algorithms away from what they should be. This tutorial looks in detail at the issue of biases in algorithms and when such biases amount to discrimination. It also examines the potential solutions to avoiding these biases.

Prerequisite Knowledge
AI Ethics – Key Issues

Tutorial Level: Introductory
Tutorial Duration: 35 minutes

Tutorial Outline
Topic 1: Bias & Discrimination in AI Algorithms
- Bias in AI
- Sources of Bias
- Biases in Problem Specification
- Biases in Data
- Biases in Deployment
- When Does Bias Amount to Discrimination?

Topic 2: Solutions to AI Bias Problems
- Fairness
- Transparency
- Accountability
- Avoiding Bias

Topic 3: Case Study
- Discrimination in the Mortgage Market
- What Do You Think?

AI Ethics – Data Privacy & Security

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the reasons why data privacy and security is a concern from an ethical perspective
- Identify some solutions for ensuring that personal data is kept private and secure
- Recognize through a case study how data breaches can have very serious consequences

Tutorial Overview
Data privacy and security is an ethical issue because the lack of it leads to wrongs, harms, and risks for individuals, institutions, and society at large. These issues can occur as a result of a hack, a leak, or a data transfer, among other ways. This tutorial looks the importance of ensuring that data is kept private and secure from an ethical viewpoint.

Prerequisite Knowledge
AI Ethics – Key Issues

Tutorial Level: Introductory
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: Data Privacy & Security in an Ethical Context
- Importance of Data Privacy & Security
- Why is Data Privacy & Security an Ethical Issue?
- Profiting From Personal Data
- Why is Profiting From Personal Data Ethically Problematic?

Topic 2: Ensuring Data Privacy & Security
- Principles & Good Practices
- Regulation

Topic 3: Case Study
- Equifax Data Breach

AI Ethics – Key Issues

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the key areas of concern in relation to AI ethics, namely bias and discrimination and data privacy and security
- Recognize how regulators are responding to these concerns in terms of both technology-independent regulations and AI-specific regulations
- Identify the benefits and limitations of AI ethics codes

Tutorial Overview

The field of AI has developed largely disconnected from ethical concerns. As AI has advanced and its applications have proliferated, the need for ethics has become palpable. Time and again, AI has resulted in unnecessary harms that could have been prevented if the technology had been designed and deployed with ethics in mind. This tutorial focuses on the key ethical issues surrounding the use of AI algorithms, such as bias/discrimination and data privacy and security, and the regulatory and industry response in that regard.

Prerequisite Knowledge

AI Ethics – Key Principles

Tutorial Level: Introductory

Tutorial Duration: 30 minutes

Tutorial Outline

Topic 1: Areas of Concern

- Bias & Discrimination
- Discrimination by Proxy
- Data Privacy & Security

Topic 2: Regulatory Response

- Technology-Independent Rules
- AI-Specific Rules

Topic 3: AI Ethics Codes

- Benefits & Limitations of AI Ethics Codes

AI Ethics – Key Principles

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the need for AI ethics to have a different framework to that of other areas of practical ethics
- Identify the classic principles of practical ethics and their application to AI ethics
- Recognize the key ethical principles that are specific to AI ethics

Tutorial Overview

AI ethics is a very new field, so there is no common framework similar to that for other areas of practical ethics. However, a number of AI ethics "codes" have been developed, along with some attempts to find commonalities among them. Starting with the classic principles of medical ethics (which have become classic principles of practical ethics), this tutorial describes in detail the most important principles for AI ethics.

Prerequisite Knowledge

AI Ethics – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Practical Ethics

- Practical Ethics
- Key Principles of Bioethics
- AI Ethics Frameworks/Codes

Topic 2: Classic Principles of Practical Ethics

- Beneficence
- Nonmaleficence (Do No Harm)
- Autonomy
- Justice (Fairness)

Topic 3: Ethical Principles Specific to AI Ethics

- Principles Specific to AI Ethics

ALM & Treasury Management – An Introduction

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the roles of ALM and treasury management in managing risk, profit optimization, and ensuring regulatory compliance
- Identify the risk management framework for ALM and treasury management
- Recognize the need to understand and manage the impact of decisions with regard to balance sheet items on capital adequacy, liquidity risk, leverage, and interest rate risk

Tutorial Overview

This tutorial provides an introduction to asset-liability management (ALM) and treasury management. It also looks at some of the treasury operations performed by ALM and treasury management.

Prerequisite Knowledge

Bank Balance Sheets

Tutorial Level: Intermediate

Tutorial Duration: 75 minutes

Tutorial Outline

Topic 1: Overview Of ALM & Treasury Management
- Overview Of ALM & Treasury Management
- Features Of ALM
- ALM & Risk Management
- ALM Vs. Treasury Management
- Parties Involved In ALM
- Factors Impacting ALM
- ALM & Cross-Border Operations
- ALM & Organizational Structure

Topic 2: ALM Governance & Compliance
- Overview Of ALM Governance & Compliance
- Regulatory Viewpoint
- Management Response

Topic 3: ALM & Risk Management Frameworks
- ALM & Setting Strategy
- RMF For ALM & Treasury Management

Topic 4: Managing Capital Adequacy
- Capital Adequacy
- Managing Capital Adequacy

Topic 5: Liquidity Risk Management
- Liquidity Risk Management Ratios
- Liquidity Risk Management: Other Measures

Topic 6: Leverage & Interest Rate Risk Management
- Leverage
- Interest Rate Risk Management
- Treasury Operations

ALM – Strategic ALM

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify strategic ALM and understand the issues and challenges in strategic ALM decisions
- Recognize how balance sheet management forms part of strategic ALM
- Illustrate how strategic ALM may be implemented in practice

Tutorial Overview
ALM is the process of controlling some of the many risks faced by financial institutions, particularly commercial banks. As such, the performance of the ALM function is fundamental to a bank's ability to thrive in different economic environments. This tutorial looks at how a bank can use its balance sheet as part of strategic ALM.

Prerequisite Knowledge
ALM & Treasury Management – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Strategic ALM: An Overview
- The Scope of Strategic ALM
- Strategic ALM Decisions: Knock-On Effects
- Whose Balance Sheet?
- Change Drivers for Balance Sheet Management
- Issues & Challenges
- Accounting & Taxation Matters
- Regulatory Considerations

Topic 2: Balance Sheet Management
- Importance of Balance Sheet Management
- Assets: Liquid Assets
- Assets: Liquid Assets & Returns
- Assets: Loans
- Assets: Loans & Financial Crisis
- Liabilities: Shareholders' Equity & Retained Earnings
- Liabilities: Shareholders' Equity & Retained Earnings – Trade-Offs
- Liabilities: Shareholders' Equity & Retained Earnings – Other Considerations
- Liabilities: Debt
- Eligible Criteria (Tier 1)
- Eligible Criteria & Hybrid Debt
- Risk-Weighted Assets
- Liabilities: Deposits
- Liabilities: Deposits (Other Considerations)
- Deposits & Liquidity Ratios
- Off-Balance Sheet Items

Topic 3: Strategic Asset Liability Management in Practice
- Considerations for Management
- Debt Management: Example

ALM – Tools & Techniques

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the tools and techniques used to assess liquidity risk
- Identify the tools and techniques used to assess interest rate risk
- Recognize how both liquidity and interest rate risk can be managed

Tutorial Overview
This tutorial provides an introduction to some of the tools and techniques used to manage liquidity and interest rate risk. We start by identifying the tools and techniques for assessing liquidity risk, including liquidity gap analysis, liquid asset concentrations, contingency funding plans, stress testing, and liquidity ratios. We then move on to looking at the tools and techniques used to report and manage interest rate risk, including gap analysis, gap limits, duration, earnings at risk, matching, and hedging. Finally, we look at aspects that affect both liquidity and interest rate risk management, including the use of intragroup funding and funds transfer pricing.

Prerequisite Knowledge
ALM – Strategic ALM

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Tools & Techniques for Managing Liquidity Risk
- Liquidity Risk Management
- Liquidity Risk Ratios
- Liquidity Gap Analysis
- Managing Liquidity Gaps
- Limitations of Liquidity Gap Analysis
- Liquid Assets Management
- Liquid Assets Concentrations
- Contingency Funding Plans
- Stress Testing Liquidity
- Liquidity Ratios

Topic 2: Tools & Techniques for Managing Interest Rate Risk
- Interest Rate Risk Management
- Factors Impacting Interest Rate Risk
- Gap Analysis
- Gap Reports
- Gap Reports: Limitations
- Gap Reports: Uses
- Duration
- Net Interest Income & Margin
- Matching
- Hedging

Topic 3: Other Considerations in Managing Liquidity & Interest Rate Risk
- Liquidity & Interest Rate Risk Considerations
- Intragroup Funding & Funds Transfer Pricing
- Managing Liquidity & Interest Rate Risks

ALM & Treasury Operations

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the role of treasury operations and the most appropriate organizational structure for those operations
- Recognize some of the treasury activities undertaken on a daily basis

Tutorial Overview
This tutorial focuses on Treasury operations, the exact nature of which varies from bank to bank but generally includes managing short-term balance sheet risks, liquidity, and risks arising from trading and banking book positions. The tutorial covers the role of treasury operations and how the most appropriate organizational structure for those operations is chosen. Also covered are intragroup funding, funds transfer pricing, and the roles and responsibilities of front, middle, and back office. Finally, the tutorial looks at some of the treasury activities including cash, FX, debt, portfolio, collateral and settlement risk management, securitizations and risk reporting, monitoring, and control.

Prerequisite Knowledge
ALM – Tools & Techniques

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Organization of Treasury Operations
- Treasury Operations: Origins
- Treasury Operations: Main Factors to Consider in Organizational Structures
- Treasury Operations: Other Factors to Consider in Organizational Structures
- Treasury Operations: Centralization
- Treasury Operations: Two-Tier Centralization
- Treasury Operations: Three-Tier Centralization
- Funds Transfer Pricing: Intragroup Funding
- Funds Transfer Pricing: Advantages
- Funds Transfer Pricing: Disadvantages
- Funds Transfer Pricing: Factors to Consider in Setting Interest Rates
- Funds Transfer Pricing: A Fair Price
- Organizational Structure & Risk Management

Topic 2: Treasury Activities
- Scope of Treasury Activities
- Cash Management
- Managing Intraday Liquidity
- Addressing Cash Shortfalls
- Portfolio Management
- Debt Management: Issues
- Debt Management: Activities
- Matching & Hedging Payments
- FX Risk Management
- Collateral Management
- Collateral Agreements: Example
- Collateral Management: Activities
- Collateral Management: Eligible Capital
- Managing Settlement Risk
- Securitizations
- Reporting, Monitoring, & Control

Alternative Assets – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define alternative assets in the context of broader markets and investing
- Recognize different types of alternative assets and the key features of each
- Identify some of the alternative investment structures and strategies that populate the alternative investment universe

Tutorial Overview
Alternative assets are a broad range of disparate asset classes and investment vehicles that fall outside of the mainstream. This tutorial provides an overview of this ever-expanding universe, breaking it down into categories, and examining some of the key features, benefits, and drawbacks of each category.

Prerequisite Knowledge
Asset Classes – Investing

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Overview of Alternatives
- Alternative Asset Classification
- What Are Alternative Assets?
- Investor Base

Topic 2: Alternative Assets
- Real Assets
- Commodities
- Collectibles
- Newer Alternatives
- Crypto Assets
- Alternative Financing
- Alternative Instruments

Topic 3: Alternative Investment Vehicles
- Alternative Structures
- Private Capital
- Hedge Funds Vs. Private Capital
- Alternative Styles & Strategies

Annuities & Perpetuities

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of annuities in finance and how they are valued
- Calculate the present value of a perpetuity

Tutorial Overview
Annuities and perpetuities are streams of future equal cash flows, with perpetuities having no end date. The valuation of such cash flows is relevant to the valuation of various financial instruments and obligations, including perpetual securities.

Prerequisite Knowledge
Interest Calculations

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Annuities
- What is an Annuity?
- Annuity: Formula
- PV of an Ordinary Annuity: Example
- PV of an Annuity Due: Example
- Annuities: Calculating Future Value
- Annuities in Excel
- Scenario: Future and Present Value of an Annuity
- Annuities & Mortgages

Topic 2: Perpetuities
- What is a Perpetuity?
- PV of a Perpetuity
- PV of a Delayed Perpetuity

Anti-Bribery & Corruption (ABC) (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define corruption and recognize the threat it poses to the economy and wider society
- List the most common forms of corruption
- Compare international efforts to tackle the problem
- Describe what an organization can do to limit its exposure to corruption

Tutorial Overview
Corruption takes many forms – bribery, graft, trading in influence, and so on – but always involves the abuse of entrusted power for private gain. Whether it occurs in the public sector or the private sector, corruption creates new inequalities in society and perpetuates existing ones. This tutorial provides a high overview of corruption and discusses ways in which organizations can limit their exposure to it.

Prerequisite Knowledge:
None

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Corruption & Its Effects
- What is Corruption?
- Corruption Worldwide
- Case Study: Otto Pérez Molina
- Corruption in the Private Sector
- Effects of Private-Sector Corruption
- Forms of Corruption
- Case Study: Bribery
- Corporate Culture

Topic 2: International Legislation
- Corruption: The Penalties
- International Organizations
- Transnational Legislation
- Case Study: Bribing Foreign Officials
- Scenario: Soccer Tickets

Topic 3: Tackling Corruption
- Ethical Culture
- Anti-Corruption Policy
- Gifts & Hospitality
- Anti-Corruption Procedures
- Case Study: Bribing Government Officials

Anti-Bribery & Corruption (ABC) in Asia

Tutorial Description
On completion of this tutorial, you will be able to:

- Identify the different types of corrupt behaviour and the need to legislate against such behaviour
- Identify the types of offence under two prominent transnational anti-corruption laws (the US Foreign Corrupt Practices Act and the UK Bribery Act) – bribing another person, being bribed, bribing a foreign public official and the corporate offence of failing to prevent bribery – and the consequences of being found guilty of an offence under the relevant legislation
- Recognize the importance of a firm's systems and controls in relation to managing bribery and corruption risks

Tutorial Overview
This tutorial is a guide for financial services staff at all levels to help them avoid the risks of bribery and corruption in the Asia-Pacific. The tutorial details the relevant laws and regulations that firms and individuals need to follow, as well as the systems and controls that are used to manage the risks associated with bribery and corruption. The information is pitched so that the tutorial is relevant to those with no experience of the key transnational anti-bribery regimes (the US FCPA and the UK Bribery Act), although there is sufficient detail to make the tutorial useful to more senior managers as well. This tutorial refers to but does not cover the national anti-bribery legislation of Asia-Pacific countries.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Bribery & Corruption
- Overview of Bribery & Corruption
- A Perspective on Corruption
- Definition & Types of Bribery & Corruption
- Costs of Corruption
- Focus of Corruption Legislation
- Your Obligations

Topic 2: Statutory Framework
- Statutory Framework
- Transnational Legislation
- The US Foreign Corrupt Practices Act (FCPA) & the UK Bribery Act
- Key Provisions of the US FCPA
- The Anti-Bribery Provisions of the US FCPA
- Defences & Exceptions to the Anti-Bribery Provisions of the US FCPA
- Accounting Provisions of the US FCPA
- US FCPA Violation – Case Study
- Key Provisions of the UK Bribery Act
- Active Bribery Offences
- Passive Bribery Offences
- Bribery of Foreign Public Officials
- Failure of Commercial Organisations to Prevent Bribery (Section 7)
- Liability of Senior Officers of a Company
- Further Points to Note on the UK Bribery Act 2010 & US FCPA
- Definition of Foreign Public Official
- Gifts & Hospitality
- Penalties for Bribery
- Summary of Anti-Bribery Legislation in the Asia Pacific
- Role of Guidance

- Scenario: Tickets to the Football
-

Topic 3: Systems & Controls

- Systems & Controls
- Managing Bribery & Corruption Risks
- Proportionate Procedures
- Top-Level Commitment
- Risk Assessment
- Due Diligence
- Gifts & Hospitality Controls
- Scenario: Hospitality in Thailand
- Communication & Training
- Reporting
- Monitoring & Review
- Whistleblowing
- The Benefits of Effective Reporting & Compliance: Case Study

Anti-Money Laundering (AML) (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define money laundering and list its stages
- Define terrorist financing
- Recognize the laws and regulations in relation to money laundering and terrorist financing
- Identify your responsibilities as well as those of key personnel in your organization
- List the systems and controls a firm should employ in relation to managing financial crime risks

Tutorial Overview
The growth in international crime and terrorism has seen greater efforts by criminals to unearth new ways of integrating their illicit funds into financial markets. Identifying and bringing to justice those who help launder illicit funds is a priority for both governments and financial markets regulators.

You have an important part to play in this work – ignorance is no longer a valid form of defense. The penalties for noncompliance are severe and can include a fine and/or a custodial sentence, so understanding your obligations in relation to anti-money laundering (AML) and counter terrorist financing (CTF) is vital.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Money Laundering
- Need for Money Laundering Regulations
- What is Money Laundering?
- Legislative Treatment of ML Stages
- Case Study: Money Laundering
- Trade-Based Money Laundering (TBML)
- TBML: Moving Funds
- Scenario: Opening an Account

Topic 2: Terrorist Financing
- Need to Counter Terrorist Financing
- What is Terrorist Financing?
- Case Study: Terrorist Financing
- Innovation in Terrorist Financing
- Scenario: Charitable Organization

Topic 3: Global Frameworks
- Global Nature of AML & CFT
- Case Study: Smuggling Dirty Cash
- Global Response
- Financial Action Task Force (FATF)
- International Monetary Fund (IMF)
- AML & CFT Frameworks
- Laws & Regulations
- Transnational Application
- Case Study: Transnational Application

Topic 4: Detecting & Preventing ML
- Primary & Secondary Offenses

- Secondary Offenses: Failing to Report
- Case Study: Failing to Report
- Secondary Offenses: Tipping Off
- Case Study: Tipping Off
- Secondary Offenses: Impeding an Investigation
- Case Study: Impeding an Investigation
- Suspicious Activity Reports (SARs)
- Whistleblowing
- Case Study: Money Laundering in Singapore
- Scenario: Suspicious Activity

Topic 5: AML Responsibilities

- Who is Responsible?
- Senior Management Responsibilities
- MLRO Responsibilities
- Individual Responsibilities
- Case Study: Senior Manager Accountability

Topic 6: Systems & Controls

- Fighting Financial Crime
- AML Regime Elements
- Customer Due Diligence
- Customer Risk
- Know Your Customer (KYC)
- Case Study: Know Your Customer (KYC)
- Due Diligence Procedures
- High-Risk Customers
- Case Study: PEPs
- Record-Keeping Procedures
- Staff Training
- Case Study: Inadequate Systems & Controls

APIs

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain what an API is
- List the four main types of API:
    - Public
    - Private
    - Partner
    - Composite
- Recognize how APIs are extending the range of companies that can provide financial services
- Describe embedded payments and Banking-as-a-Service (BaaS)

Tutorial Overview
An API is a set of rules that lets software applications communicate with each other. APIs enable a secure and streamlined exchange of data and play a huge role in the digital economy and in our daily lives. This tutorial provides a high-level overview of APIs and the ways in which they are changing the face of traditional banking.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 25 minutes

APT & Factor Models

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Compare the assumptions of the APT model with those of CAPM
- Describe how the arbitrage process works to ensure an equilibrium along the arbitrage pricing line
- Evaluate the merits of APT as a capital asset pricing model

Tutorial Overview
This tutorial examines in detail the arbitrage pricing theory (APT) model, introduced by Stephen Ross in 1976 as a different equilibrium model that relaxes many of the assumptions of CAPM. The APT model does not depend on the need for an underlying market portfolio, instead operating on the key assumption that the returns on a security are generated by an identical process to that used by single- and multi-index models. Beginning by comparing the assumptions of the APT model with those of CAPM, this tutorial describes how the arbitrage process works and examines the merits of APT as a capital asset pricing model.

Prerequisite Knowledge
Capital Asset Pricing Model (CAPM)

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Arbitrage Pricing Model

- Arbitrage Pricing Model
- Origins of the APT
- Assumptions of the APT & CAPM
- Assumptions of the CAPM Only
- Factor Model
- The Arbitrage Pricing Line
- Calculating the Expected Return Using APT
- Choosing Factor Portfolios
- Arbitrage Pricing Line Meets the Security Market Line
- Scenario: Mispriced Securities
- APT: Empirical Research
- Is APT Testable?

Topic 2: Other Factor Models

- Other Factor Models
- Multifactor Models
- Macroeconomic Factor Models
- Surprises in Macroeconomic Factors
- Fundamental Factor Models
- Beta of a Fundamental Factor
- Statistical Factor Models

Asset Allocation – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the basic principles of asset allocation and some of the key factors that shape asset allocation decisions
- Recognize the importance of diversification in the asset allocation process and how it can be used to construct efficient portfolios
- Name the different approaches to asset allocation and recognize the distinguishing features of each

Tutorial Overview
Asset allocation is the process of dividing an investment portfolio among different asset classes, such as stocks, bonds, cash, real estate, and alternatives. This tutorial provides an overview of asset allocation, looking at the importance of diversification in achieving the optimal tradeoff between investors' risk tolerance and return objectives. The tutorial also explores different approaches to asset allocation.

Prerequisite Knowledge:
Asset Classes – Investing

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Asset Allocation Basics
- Asset Allocation Overview
- Why is Asset Allocation Important?
- Asset Classes
- Asset Subclasses
- Investor Preferences

Topic 2: Portfolio Diversification
- The Diversification Effect
- Portfolio Variance & Standard Deviation
- Covariance & Correlation
- Diversification & Risk/Return Tradeoff
- Risk Acceptance
- Constructing the Optimal Portfolio

Topic 3: Asset Allocation Strategies
- Types of Asset Allocation
- Strategic Asset Allocation (SAA)
- Different SAA Approaches
- Dynamic Asset Allocation (DAA)
- Tactical Asset Allocation (TAA)

Asset Allocation – Scenario

Description

Overview
This scenario explores the use of various asset allocation concepts in practice. You will observe a situation where a portfolio manager in New York rebalances his portfolio on the back of market volatility that causes the portfolio's strategic asset allocations to drift away from their target.

Prerequisite Knowledge
A solid understanding of asset allocation – particularly strategic asset allocation – is required.

Level: Intermediate
Duration: 20 minutes

Asset Classes – Primer

Overview
Assets refer to the entire universe of investable items or resources with perceived economic value that are owned by some individual or entity. Asset classes are a way to break this universe down in terms of certain unique features, such as risk profiles and how different asset classes generate returns for their owners. Most investment professionals recognize four mainstream asset classes – equities, bonds, cash, and real estate – and a fifth category, known as alternative assets. Although not all investment professionals agree with this categorization (for example, some treat real estate and currencies as alternative assets), there's little disagreement about the importance of asset classes. It's all about asset allocation and portfolio construction – specifically, the diversification benefits different asset classes bring to a portfolio.

Prerequisite Knowledge
Investment – An Introduction

Level: Introductory
Duration: 11 minutes

Asset Classes – Investing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key factors that determine asset allocation and recognize the importance and pitfalls of diversification and correlation
- Recognize some of the basic valuation techniques for assessing different asset classes as well as different types of risk premium
- List some of the investment vehicles and financial instruments through which investors can gain exposure to different asset classes

Tutorial Overview
In the context of investing, the significance of asset classes relates to how they are put together in a portfolio, also known as asset allocation. This tutorial provides an overview of the key considerations that drive asset allocation, including diversification, correlation, valuation, and risk premia, as well as some of the numerous vehicles and instruments investors can use to gain exposure to different asset classes with a view to building a portfolio.

Prerequisite Knowledge
Asset Classes – Types

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Asset Allocation
- Investor Preferences
- Strategic Vs. Tactical Asset Allocation
- Diversification
- Correlation
- Pitfalls of Correlation

Topic 2: Essential Tools
- Valuation
- Valuation Outliers
- Equity Risk Premium (ERP)
- Bond Risk Premium
- Other Risk Premiums

Topic 3: Gaining Exposure
- Gaining Exposure to Different Asset Classes
- Benefits of Core Equities & Bonds Allocation
- Real Estate
- Cash
- Alternative Assets

Asset Classes – Types

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define equity and equities, recognize the variety within this universe, and list some of the different ways equities can be grouped
- Identify the main players and some of the key concepts in fixed income investing
- List examples of cash equivalents and recognize the importance of the role of cash in a portfolio
- Identify real estate's unique features as an asset class, and name the vehicles used to gain exposure
- List the assets commonly grouped under alternative assets

Tutorial Overview
While a rudimentary understanding of the various assets in their portfolios is crucial for investors, some broad knowledge about the classes to which the assets belong is equally – if not more – important. This tutorial provides a broad overview of five major types of investable asset class – equities, fixed income, cash & cash equivalents, real estate, and alternative assets.

Prerequisite Knowledge
Asset Classes – Primer

Tutorial Level: Introductory
Tutorial Duration: 80 minutes

Tutorial Outline
Topic 1: Equities
- What is Equity?
- Types of Equity Security
- Capital Returns
- Equity Categories
- Major Global Equity Indices
- Equity Funds
- Equity Risk

Topic 2: Fixed Income
- What is Fixed Income?
- Bond Issuers & Investors
- Secondary Market
- Key Concept & Risks
- Asset-Backed Securities (ABS)

Topic 3: Cash & Cash-Equivalents
- Key Features of Cash
- Types of Cash Investment

Topic 4: Real Estate
- What is Fixed Income?
- Real Estate: Key Features
- Real Estate as a Capital Asset

Topic 5: Alternative Assets
- Overview of Alternative Assets
- Real Assets
- Commodities as Investable Assets
- Other Alternative Assets
- Alternative Investment Vehicles

Asset Management – Credit Risk & Counterparty Credit Risk (CCR)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define credit risk and counterparty credit risk (CCR)
- List and define major sources of credit risk and CCR
- Identify common strategies for measuring and mitigating credit risk and CCR
- Recognize the impact of credit risk and CCR on the stability of the broader financial system

Tutorial Overview
Asset managers are increasingly exposed to credit risk and, to a greater extent, counterparty credit risk. Asset management firms frequently act as counterparties to derivatives transactions and securities financing transactions and are therefore routinely exposed to CCR. Over recent years, regulators have paid greater attention to how asset management firms measure, manage, and mitigate this risk. This tutorial provides a high-level overview of credit risk and CCR from an asset management perspective.

Prerequisite Knowledge
Risk Management for Asset Managers – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Credit Risk & CCR Overview
- Credit Risk vs CCR
- Credit Risk Exposure
- Concentration Risk
- Role of Credit Rating Agencies
- Sources of CCR
- Factors Driving The Growth of CCR
- CCR & Multiple Risk Factors

Topic 2: CCR Management
- CCR Measurement
- Current Exposure & Potential Future Exposure (PFE)
- Correlation
- CCR Mitigation Methods

Topic 3: Securities Lending & Collateral Management
- Collateral Management
- Securities Lending
- Impact of the Financial Crisis
- Securities Lending Agents
- Financial Stability Risks
- Structural Vulnerabilities

Asset Management – Liquidity Risk

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define liquidity risk and explain how it may affect asset managers
- Recognize the principles of liquidity risk management
- List the elements of liquidity risk management from a product perspective
- List the tools available to asset managers to manage the risk of a liquidity crisis

Tutorial Overview
Like all institutions that manage capital on behalf of clients, asset managers face liquidity risk. For asset managers, liquidity risk arises from the mismatch between the liquidity of fund investments and the daily redemption of fund units. To help support the stability of the financial system, asset managers must manage liquidity risk using the tools available to them. This tutorial provides a high-level overview of liquidity risk and discusses the liquidity risk management process from an asset management perspective.

Prerequisite Knowledge
Risk Management for Asset Managers – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Liquidity Risk Overview
- What is Liquidity Risk?
- Liquidity Risk & Asset Managers
- Liquidity Risk Management

Topic 2: Liquidity Risk Management Process
- Product Design: Fund Features
- Product Design: Considerations
- Distribution & Disclosure
- Liquidity Risk Management: Best Practices
- Stress Testing: Overview
- Stress Testing: Techniques

Topic 3: Liquidity Risk Management Tools
- Consequences of Capital Outflows
- Swing Pricing
- Types of Swing Pricing
- Redemption Gates
- Side Pockets
- Suspension of Redemptions
- Other Liquidity Risk Management Tools

Asset Management – Operational Risk

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define operational risk and list the key categories of operational risk
- Recall the process for identifying, measuring, and monitoring operational risk
- Identify the key sources of operational risk for asset managers
- Recommend policies and procedures for managing and mitigating operation risk

Tutorial Overview
Operational risk is increasingly recognized as a key source of risk for asset managers. Regulators expect asset managers to identify operational risk exposures and to implement appropriate risk management policies. Key sources of operational risk for asset managers include trade execution, outsourcing, and technology. This tutorial provides a high-level overview of operational risk from an asset management perspective.

Prerequisite Knowledge
Risk Management for Asset Managers – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Operational Risk Overview
- Principles of Operational Risk
- Operational Risk Categories

Topic 2: Operational Risk Management
- Identifying & Assessing Exposure
- Three Lines of Defense (3LoD)
- Monitoring & Reporting Operational Risk
- Collecting Loss Data

Topic 3: Operational Risk & Asset Management
- Key Operational Risk Types
- Trade Order Execution Risk
- Best Execution
- Market Abuse Policy
- Outsourcing Risk
- IT Risk & Business Continuity Planning (BCP)
- Operational Risk & Financial Stability
- Transfer of Client Accounts

Asset Management – Other Risks

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define business strategy risk and list its key components
- Define alpha generation risk and name its key drivers
- Define fee compression risk and identify its growing importance for asset managers
- Define conduct risk and recommend strategies for managing it

Tutorial Overview
Asset managers do not face the same level of market, credit, and liquidity risk as other financial institutions, such as banks. However, there are other risks that pose a threat to the continued success and survival of asset management firms, including business strategy risk, conduct risk, and fee compression risk. This tutorial provides an overview of high-level overview of such strategic risks from an asset management perspective.

Prerequisite Knowledge
Risk Management for Asset Managers – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Business Strategy Risk
- Strategic Risk in Asset Management
- Alpha Generation Risk
- Investment Objectives and Performance
- Performance Monitoring
- Performance Benchmarks
- Fee Compression Risk
- Management & Transaction-Based Fees
- Performance Fees
- Asset Management Business Models
- Delegating Investment Management
- Manager Selection

Topic 2: Distributor Oversight & Conduct Risk
- Distributor Oversight
- Conduct Risk
- Inherent Drivers
- Client Biases
- Structures & Behaviors
- Environmental Drivers
- Product Governance

Asset Management – Market Risk

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define market risk and list the types of market risk that asset managers may face
- List and define widely used market risk measures
- Identify the limitations of widely used market risk measures
- Identify the process of managing market risk and name strategies for market risk management

Tutorial Overview
One of the key risks facing asset managers is market risk, which is the risk of loss due to changes in market prices or rates. Asset portfolios are exposed to different types of market risk, including interest rate risk, equity risk, currency risk, and commodity risk. Asset managers must develop processes to measure and manage market risk while maintaining desired portfolio returns. This tutorial provides a high-level overview of market risk from an asset management perspective.

Prerequisite Knowledge
Risk Management for Asset Managers – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Market Risk Overview
- What Is Market Risk?
- Market Risk Types
- Risk Tolerance
- Benchmarking

Topic 2: Measuring Market Risk
- Early Market Risk Measures
- Limitations of Early Market Risk Measures
- Types of Market Risk Measures
- Value At Risk (VaR)
- Advantages of VaR
- Limitations of VaR
- VaR Breaks & Backtesting
- Tail Risks & Expected Shortfall
- Stress Testing/Sensitivity Analysis
- Ex-Post Risk Measures
- Obtaining Current Market Prices

Topic 3: Market Risk Management
- Managing Market Risk
- Risk Management Strategies

Australian Bond Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the Australian bond market and its core functions and list its key participants
- Recognize the role of the bond market in the Australian economy
- Identify key participants in the Australian government bond market and list and define the most common government debt securities
- Identify key participants in Australia's corporate bond market and list and define common corporate debt securities

Tutorial Overview
The Australian bond market is the market in which debt instruments issued by Australian borrowers and those purchased by Australian investors are issued and traded. The market includes debt instruments issued by the federal and state government, Australian banks and authorized deposit-taking institutions, and non-financial corporations. The bond market plays a critical role in the economy and helps to establish prevailing interest rates. This tutorial provides a high-level overview of the Australian bond market and defines and explains each of its key sectors.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Australian Bond Market Overview
- What Is the Australian Bond Market?
- Federal Government
- State Governments
- Corporates
- Other Bond Market Participants

Topic 2: Government Bonds
- Federal Government Securities
- Buying CGS
- Yield Curve
- State Governments

Topic 3: Corporate & Other Bonds
- Banks
- Nonfinancial Corporations
- Asset-Backed Securities (ABS) & Covered Bonds
- Australian Dollar Eurobonds & Kangaroo Bonds

BaaS & BaaP

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize Banking-as-a-Service (BaaS) and explain how it works
- Identify the risks associated with Baas and the regulatory considerations
- Compare the characteristics of BaaS against those of embedded finance
- Recognize Banking-as-a-Platform (BaaP), explain how it works, and list the benefits for the different participants

Tutorial Overview
The provision of financial services has traditionally been the exclusive domain of banks. However, the arrival of open banking and the general availability of customer data opened the door for new business models.

Banks saddled with cumbersome legacy systems but possessing years of banking experience are collaborating with FinTech companies that lack regulatory approval but possess the innovative financial technology to offer products and services that customers desire.

These collaborations take the form of Banking-as-a-Service (BaaS) or Banking-as-a-Platform (BaaP). This tutorial delineates the characteristics of BaaS and BaaP and the relationship of both with embedded finance, as well as the roles and responsibilities of all parties in the value chain. It identifies the many benefits of these models and the regulatory and compliance challenges they create.

Prerequisite Knowledge
Open Banking & Open Finance

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of BaaS
- New Models in Banking
- Banking-as-a-Service (BaaS)
- BaaS Participants
  - Providers
  - Enablers
  - Distributors
  - End-Users
- BaaS in Action
- BaaS Benefits

Topic 2: Risk & Regulation
- BaaS Risks
  - Due Diligence
  - Monitoring
  - Offboarding
- Regulatory Considerations

Topic 3: BaaS & Embedded Finance
- Relationship Between BaaS & Embedded Finance

Topic 4: Overview of BaaP
- What is BaaP?
- BaaP Perspectives

Balance Sheet – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of balance sheet assets and liabilities and the components of shareholders' equity
- Recognize how the order of presentation and the terminology associated with certain balance sheet items can differ between IFRS and US GAAP accounting standards
- Identify the key balance accounting policies related to depreciation and amortization

Tutorial Overview
Using examples of both IFRS and US GAAP balance sheets, this tutorial describes the various elements (assets, liabilities, and equity) that make up the balance sheet. The tutorial also examines how the presentation and terminology of certain balance sheet items can differ under IFRS and US GAAP standards. Finally, the tutorial looks at key balance sheet accounting policies in relation to depreciation, amortization, and the impairment of assets.

Prerequisite Knowledge
Accounting – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of the Balance Sheet
- Overview of the Balance Sheet
- Elements of the Balance Sheet
- IFRS vs. US GAAP

Topic 2: IFRS Balance Sheet
- IFRS Balance Sheet: Example
- Noncurrent Assets: Intangible Assets
- Tangible Noncurrent Assets: Property, Plant, & Equipment (PP&E)
- PP&E & Leases
- Current Assets
- Current Liabilities
- Noncurrent Liabilities
- Equity

Topic 3: US GAAP Balance Sheet
- US GAAP Balance Sheet: Example
- Noncurrent Assets
- Liabilities
- Equity

Topic 4: Balance Sheet Accounting Policies
- Depreciation
- Intangibles & Amortization
- Definite-Lived Intangible Assets
- Indefinite-Lived Intangible Assets

Balance Sheet – Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of balance sheet analysis when making lending decisions in relation to a company
- Perform a balance sheet common size analysis
- Calculate and analyze key ratios related to liquidity, solvency, and working capital management

Tutorial Overview
This tutorial outlines the importance of balance sheet analysis, particularly from the point of view of credit analysts. It demonstrates how to perform an analysis using common size balance sheets and describes the key ratios and other measures – such as the debt/equity ratio and various liquidity ratios – that can be derived from balance sheet values.

Prerequisite Knowledge
Balance Sheet – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Analysis of the Balance Sheet
- Overview of Balance Sheet Analysis

Topic 2: Common Size Analysis
- Common Size Analysis
- Performing a Common Size Analysis

Topic 3: Ratio Analysis
- Overview of Ratio Analysis

Topic 4: Liquidity Ratios
- Liquidity Ratios
- Liquidity Ratios: Example

Topic 5: Solvency Ratios
- Solvency Ratios
- Solvency Ratios: Example

Topic 6: Efficiency Ratios
- Efficiency Ratios
- Receivables Days
- Inventory Days
- Payables Days

Bank Balance Sheets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the basic structure of bank balance sheets and income statements
- Recognize some of the key ratios and measures used to assess risk, regulatory compliance, and bank performance
- Identify some of the changes to balance sheet management since the financial crisis

Tutorial Overview
This tutorial provides an outline of the structure of both bank balance sheets and income statements and how they are affected by regulatory capital requirements.

Prerequisite Knowledge
Balance Sheet – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview Of Bank Balance Sheets
- Bank Balance Sheet Structures
- Bank Balance Sheet Structures: Example

Topic 2: Elements Of Bank Balance Sheets
- Shareholders' Equity & Retained Earnings
- Loans
- Growing/Shrinking A Loan Portfolio
- Deposits
- Other Liabilities
- Other Assets
- Assets & Liabilities
- Contingent Liabilities

Topic 3: Income Statements
- Income Statements

Topic 4: Accounting & Reporting Issues
- Accounting & Reporting Issues

Topic 5: Key Ratios
- Key Ratios
- Capital Adequacy Ratio (Car)
- Leverage Ratio
- Loan/Deposit Ratio
- Liquidity Ratios
- Performance & Other Measures

Topic 6: Balance Sheet Mismanagement
- Balance Sheet Mismanagement
- Balance Sheet Size
- Capital Adequacy & Balance Sheet Management
- Liquidity Risk Management
- Liquidity Risk Management: Case Study
- Liquidity & Interest Rate Risk
- Managing Stakeholder Expectations

- Regulations & Accounting Standards
- Regulations & Accounting Standards: Issues

Bank Funding & Position Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how a bank funds its assets through its liabilities and equity
- Identify the different money market positions that bank must manage on a daily basis
- Measure the gap exposure that a bank can be exposed to as a result of its business and trading operations

Tutorial Overview
Banks earn income on the assets shown on their balance sheets. These assets include cash, loans to customers/clients, trading positions, and other investments – all of which must be funded by the bank on the liabilities and equity side of the balance sheet. This tutorial explores the various funding methods used by banks as well as the risks involved. These risks were exposed by the global financial crisis, with the result that regulators imposed strict requirements concerning bank funding and introduced a number of liquidity ratios in this regard. These are also described in this tutorial. In addition, the tutorial focuses on how various money market positions are created and covered, together with an explanation of the management of interest rate gap exposures on mismatched future cash flows.

Prerequisite Knowledge
Money Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Bank Funding
- Bank Balance Sheet Structure
- Balance Sheet Funding
    - Liabilities
    - Equity
- Assets to be Funded
- Managing Liquidity Risk
    - Liquidity Coverage Ratio (LCR)
    - Net Stable Funding Ratio (NSFR)

Topic 2: Managing Money Market Positions
- How Money Market Positions Are Created
- Transactions Influencing a Bank's Cash Position
- Overnight & Tom/Next Positions
    - Covering Overnight & Tom/Next Exposures
- Spot Positions
- Other Positions
- Financing Strategic Trading & Investment Positions
- Covering Longer-Term Exposures

Topic 3: Managing Gap Exposures
- Timing Mismatches of Cash Positions
- Gap Risk
- Gap Reports
- Analyzing Gap Reports
- Calculating the Interest Rate Gap Exposure
- Gap Risk Management
- Covering Gap Exposures
    - Make Balance Sheet or Product Adjustments
    - Keep Rate-Sensitive Assets & Liabilities within Specific Ratio Ranges
    - Place Limits on Gap Exposure as a Percentage of Earning Assets

- Use Interest Rate Derivatives to Hedge Gap Exposure

Banking – Primer

Overview
Banks play a vital role in the smooth running of a modern economy. Their pivotal position revolves around their role as an intermediary – or "go-between" – in the financial system. This video provides a high-level overview of banking, beginning with the role of banks in the provision in credit and capital as well as payments services. The video also describes fractional reserve banking, the difference between commercial and investment banking, the different types of bank ownership model, the growth of shadow banking, and the key banking industry stakeholders.

Prerequisite Knowledge
Financial Markets – An Introduction

Level: Introductory
Duration: 10 minutes

Banking Regulation – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the broad structure of the current global regulatory framework for banks
- Identify different types of banking supervision and the bodies responsible
- Identify Basel III rules and requirements on key areas such as capital adequacy, liquidity, leverage, and disclosure

Tutorial Overview
Effective regulation of banks globally is essential to the health of the global economy and financial system. This tutorial provides an overview of the regulatory framework for banks, looking at some of the specific rules relating to capital adequacy, liquidity, and leverage, other regulatory tools such as stress tests, and key challenges that regulators face.

Prerequisite Knowledge
Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Regulatory Framework
- Banking Regulation: GFC's Lasting Impact
- BCBS & Other Key Players
- Basel III
  - Pillar 1 – Minimal Capital Requirements
  - Pillar 2 – Supervisory Review
  - Pillar 3 – Market Discipline
- Regulatory Toolkit

Topic 2: Supervision
- Importance of Supervision
- Macroprudential vs. Microprudential
- G-SIBs

Topic 3: Capital Adequacy
- Capital Adequacy Simplified
- Minimum Requirements
  - Capital Adequacy Ratio (CAR)
  - Regulatory Capital
  - Risk-Weighted Assets (RWAs)
- Additional Rules/Buffers
  - Capital Conservation Buffer (CCB)
  - Countercyclical Buffer

Topic 4: Liquidity & Leverage
- Liquidity Requirements
  - Liquidity Coverage Ratio (LCR)
  - Net Stable Funding Ratio (NSFR)
- Leverage Restrictions
  - Capital Measure
  - Exposure Measure

Topic 5: Other Tools & Requirements
- Disclosure Requirements
  - Anti-Money Laundering (AML)

    - Know Your Customer (KYC)
    - Complex Product Transparency
- Stress-Testing
- Containment Measures
    - Dedicated Bodies
    - Role of Central Banks
- Containment vs. Moral Hazard

Basel III – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the main reasons why major changes to the Basel framework were necessary following the global financial crisis
- Identify the key requirements related to capital adequacy (Pillar 1), supervisory review (Pillar 2), and market discipline (Pillar 3)
- Recognize the requirements introduced by Basel III in relation to leverage and liquidity
- Recall the timeline to the Basel III changes and the key challenges that lie ahead

Tutorial Overview
While now a long time ago, the global financial crisis (GFC) and its aftermath played a major role in shaping the financial industry and how it is regulated today. The GFC highlighted many issues and concerns, perhaps most notably that the quantity and quality of bank capital was inadequate to cover events such as those of the crisis. But it also underlined the need for regulators to address not just capital adequacy, but topics such as liquidity, leverage, and risk reporting as well.

This tutorial provides an overview of the Basel III Framework, which was a key element of the regulatory response to the crisis. It provides details of the Basel III requirements that have already been implemented and the "final changes" that are in transition.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Basel Framework
- Overview of Basel Regulations
- BCBS Publications
- Three Pillars Framework
- Applying Basel Requirements
- Implementing Basel Requirements in Different Jurisdictions

Topic 2: Pillar 1: Minimum Capital Requirements
- Capital Adequacy Ratio (CAR)
- Regulatory Capital (RC)
- Regulatory-Approved Approaches
- Minimum Capital Ratios

Topic 3 Pillar 2: Supervisory Review
- Pillar 2: Supervisory Review
- Pillar 2: The Four Principles

Topic 4: Pillar 3: Market Discipline
- Pillar 3: Transparency & Disclosure

Topic 5: Other Basel Requirements
- Leverage Ratio
- Liquidity Ratios
- Global Systemically Important Banks (G-SIBs)
- Resolution Planning
- Large Exposures

Topic 6: Implementation Timelines & Challenges

- Implementation Timelines & Challenges
- Implementation Timelines

Basel III – Pillar 1 & Capital Adequacy

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define capital adequacy and the minimum capital ratio
- Identify the components of regulatory capital and their qualifying criteria
- Recognize the concept of risk-weighted assets (RWAs)
- List the approaches that banks are permitted to use when calculating regulatory capital requirements
- Identify the minimum capital adequacy ratios that banks must meet, including capital buffers
- Recognize the additional requirements that globally systemically important banks (G-SIBs) must meet

Tutorial Overview
Since the late 1980s, the Basel Committee on Banking Supervision (BCBS) has sought to strengthen the capital resources of banks. But the global financial crisis demonstrated that the quantity and quality of bank capital required by the Basel II regime was insufficient to absorb the level of losses to which banks were exposed. This tutorial looks in detail at the changes brought about by the Basel III framework in relation to capital adequacy.

Prerequisite Knowledge
Basel III – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Pillar 1 & Capital Adequacy
- Pillar 1 & Capital Adequacy
- Capital Adequacy Ratio
- Regulatory Capital
- Eligibility Criteria
- Eligibility Criteria: CoCos/AT1 Bonds
- Deductions
- Determination of Regulatory Capital
- Risk-Weighted Assets (RWAs)
-

Topic 2: Capital Calculations
- Permitted Approaches

Topic 3: Minimum Capital Requirements
- Minimum Capital Requirements
- Total Loss-Absorbing Capacity (TLAC)
- Reporting Capital Adequacy

Basel III – Measurement Approaches

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the components of the capital adequacy ratio (CAR) and how their values are determined
- Identify the permitted approaches for regulatory capital calculations for Pillar 1 risks
- Recognize the purpose of the input and output floor
- Recall the treatment of crypto asset exposures

Tutorial Overview
Capital adequacy measures the ability of a bank to survive losses under both normal and stress conditions. Regulators offer a number of approaches to banks in order to measure exposure to the different types of risk. At a high level, these are broken down into standardized approaches and internal model approaches. This tutorial details those approaches.

Prerequisite Knowledge
Basel III – Pillar 1 & Capital Adequacy

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Risk Measurement & Capital Calculations
- Basel III Measurement Approaches: Overview
- Risk Measurement & Capital Calculations
- Measurement Issues
- Model Risk
- Basel III: Model Approval & Minimum Requirements

Topic 2: Standardized Approach (SA)
- Standardized Approach (SA)
- Asset Classes
- Supervisory Risk Weights
- Credit Risk Mitigation

Topic 3: Model-Based Approaches
- Credit Risk Measures
- Internal Ratings Based (IRB) Approaches
- Input Floors
- Capital Charges for Specialized Activities
- Defaulted Exposures

Topic 4: Capital Calculations for Market Risk
- Factors Impacting Capital Calculations
- Calculating Market Risk Capital Requirements

Topic 5: Capital Calculations for Operational Risk
- SA For Operational Risk Capital Calculations

Topic 6: Output Floor
- Overview of the Output Floor

Topic 7: Crypto Asset Exposures
- Treatment of Crypto Asset Exposures

Basel III – Liquidity & Leverage

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the relationship between liquidity risk and leverage and the need for Basel III framework to include requirements related to liquidity and leverage
- Define high quality liquidity assets (HQLAs) and the tiered approach to the inclusion/exclusion of assets from the HQLA standard
- Calculate a bank's net stable funding ratio (NSFR) and leverage ratio
- Recognize the importance of a robust liquidity risk management framework (LRMF)

Tutorial Overview
The global financial crisis underlined the need for regulators to address not only capital adequacy but also liquidity and leverage. This tutorial describes the liquidity and leverage framework introduced by the Basel Committee on Banking Supervision (BCBS) as part of Basel III. Building on the lessons learned from the financial crisis, the tutorial details the components and methodology of the three ratios introduced by the BCBS – namely the LCR, the NSFR, and the Basel III leverage ratio.

Prerequisite Knowledge
Basel III – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Overview of Liquidity Risk & Leverage
- Liquidity Risk & Leverage in Banking
- Scenario: Leverage & Liquidity Risk
- Basel Requirements
- Liquidity Coverage Ratio (LCR)
- Leverage Ratio
- Impact of Leverage & Liquidity Ratios

Topic 2: High Quality Liquid Assets (HQLAs)
- HQLAs: Tiered Approach & Capping
- HQLAs: Tiered Approach
- HQLAs: Alternative Liquidity Approaches (ALAs)
- HQLAs & Net Cash Flow Measurement

Topic 3: Net Stable Funding Ratio (NSFR)
- Net Stable Funding Ratio (NSFR)

Topic 4: Liquidity Risk Management
- Liquidity Risk Management & Supervisory Actions

Basel III – Pillar 2 & ICAAP

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the purpose of the Pillar 2 framework and the four key principles outlined by the Basel Committee on Banking Supervision (BCBS)
- Identify the steps involved in the ICAAP process
- Recognize the need for supervisors to undertake a SREP and the various elements in the assessment process
- Recall the importance for banks to monitor performance, risk exposures, and capital adequacy, and perform a regular review of risk metrics and indicators

Tutorial Overview
Pillar 2 is the second element of the "three pillars" framework that was originally introduced by Basel II and subsequently retained and enhanced by Basel III. The focus of Pillar 2 is on ensuring that banks have adequate capital to cover the material risks to which they are exposed. This tutorial describes the Pillar 2 regime in detail.

Prerequisite Knowledge
Basel III – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview Of Pillar 2
- Basel Framework: Pillar 2
- Meeting Pillar 2 Requirements
- Basel Framework: Key Principles of Pillar 2

Topic 2: ICAAP
- Overview of ICAAP
- Risk Identification
- Initial Capital Assessment
- Capital Planning
- Stress Testing
- Capital Adequacy: CAS
- Capital Adequacy: Addressing Shortfalls
- Risk Management & Governance
- EU Requirements on ICAAP/ILAAP

Topic 3: SREP
- What Is SREP?
- Risk Assessment Process
- Sources of Information
- Assessing Capital Adequacy
- Capital Planning
- Assessing Other Forms of Risk Mitigation
- Final Assessment
- Supervisory Actions: Capital Adequacy
- Other Supervisory Actions

Topic 4: Ongoing Monitoring
- Ongoing Monitoring

Basel III – Pillar 3 & Risk Reporting

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize Pillar 3 requirements and the principles for risk disclosure, as well as the challenges that banks face when reporting
- List the disclosures required by Pillar 3 and details of the formats required to be used when making disclosures
- Recognize the importance of data quality and regulatory reporting requirements

Tutorial Overview
Pillar 3 is the third element of the "three pillars" framework that was originally introduced by Basel II and subsequently retained and enhanced by Basel III. It deals with requirements related to market discipline, which it seeks to achieve by specifying minimum levels of public disclosure as well as standards applied to those disclosures. This tutorial describes the Pillar 3 regime in detail.

Prerequisite Knowledge
Basel III – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Pillar 3
- Basel III: Pillar 3 & Risk Reporting
- Basel III: Pillar 3 Guiding Principles
- Standardized Reporting
- Reporting Challenges
- Interpretation Challenges
- Pillar 3 & Other Disclosure Requirements

Topic 2: Pillar 3 Reporting Requirements
- Reporting Requirements
- Summary of Pillar 3 Disclosures
- Examples of Pillar 3 Disclosure Reports
- Transition Reporting

Topic 3: Data Quality & Regulatory Reporting
- Basel III Pillar 3 – Data Quality
- Regulatory Reporting
- Ongoing Updates & Potential Developments

Basic Operators – Excel Interactive

Description
Overview
This tutorial is one of a series that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and show how they can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on basic operations.

Prerequisite Knowledge
Menus & Shortcut Basics – Excel Interactive

Level: Introductory
Duration: 15 minutes

BBSW & Other Australian Benchmarks

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the bank bill swap rate (BBSW) and how it is calculated
- Describe the history of the BBSW and how it has evolved
- Define the cash rate and how it is calculated
- List the uses of the BBSW and the cash rate in Australian financial markets
- Identify other important Australian interest rate benchmarks

Tutorial Overview
Interest rate benchmarks play a vital role in financial markets, serving as reference rates for financial contracts and offering performance benchmarks for investors. In Australia, the two primary interest rate benchmarks are the bank bill swap rate (BBSW) and the cash rate. This tutorial provides a high-level overview of Australian interest rate benchmarks, with a focus on the BBSW and the cash rate.

Prerequisite Knowledge
Interest Rates & Benchmarks

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Australian Interest Rate Benchmarks – Overview
- Overview
- BBSW
- Cash Rate
- Use of BBSW
- Use of the Cash Rate
- Cash Rate vs. BBSW

Topic 2: BBSW
- BBSW History
- Reform of the BBSW Methodology
- BBSW Rate-Fixing Scandal
- Falling Trading Volumes
- Benchmark Reform
- Calculation Waterfall
- VWAP Methodology
- Impact of the VWAP Methodology
- Role of BBSW

Topic 3: Other Interest Rate Indicators
- Overview
- BBSY
- OIS
- Bank Bill Futures
- Government Bond Futures

Big Data

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define Big Data and identify its advantages and disadvantages
- Define small data and list its limitations and uses<li>Define expert systems and recall their applications

Tutorial Overview
Developments in computing technology and networking capacity have led to a dramatic increase in the amount of data collected about people, processes, events, and objects. Increasingly, this “Big Data” is being used to fuel artificial intelligence (AI) systems and inform business decisions. At the same time, other types of data also play an important role in organizations, and many management systems rely on small data and human expertise. This tutorial provides a high-level overview of different types of data and their uses, benefits, and limitations.

Prerequisite Knowledge
Data Science – Mathematical Methods

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Data Overview
- Introduction

Topic 2: Big Data
- Big Data Definition
- How to Use Big Data
- False Patterns
- AI & Big Data
- Databases, Data Warehouses, & Data Lakes
- Big Data Business Uses
- Data Availability
- Drawbacks Of Big Data

Topic 3: Other Data
- Small Data
- Expert Systems Data
- Comparing Data Types

Biodiversity & Financial Institutions

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the drivers of biodiversity loss
- Identify the likely impacts on natural ecosystems, the economy, and society
- Identify the regulatory responses, initiatives, and tools to mitigate the impacts

Overview
In recent years, biodiversity loss has been recognized as critical as climate change to the sustainability of the planet's ecosystem and to the companies and communities that depend on it. Biodiversity loss carries huge implications for the financial sector, both in terms of the potential financial impact, and for banks' operational models and risk management strategies. Banks will be assessed on their role in preventing biodiversity loss, requiring them to effectively manage the risks to ensure their activities are aligned with their sustainability goals.

In this tutorial, we explore the impacts of biodiversity loss and how financial institutions can play their part in its mitigation.

Prerequisite Knowledge
ESG – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Biodiversity: Overview
- What is Biodiversity?
- Impact of Biodiversity Loss on Ecosystems
- Categories of Regulation
- Impact of Biodiversity Loss on Society
- Factors Driving Biodiversity Loss

Topic 2: Response of Governments & Regulators
- Convention on Biological Diversity (CBD)
- Global Biodiversity Framework
- Network for Greening the Financial System (NGFS)
- Commitments at Regional & National Levels

Topic 3: Response of Financial Sector
- Biodiversity & Finance

Topic 4: Tools to Manage Biodiversity Risks
- Managing Biodiversity Risks
- Greenwashing
- Business Opportunities
- Conclusion

Blockchain

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain how a blockchain works
- Describe the contents of a block
- Outline the four types of blockchain:
    - Public
    - Private
    - Hybrid
    - Consortium
- List the applications of blockchain technology

Tutorial Overview
A blockchain is a digital ledger that records transactions on a public or private peer-to-peer network. Blockchain technology is best known for facilitating cryptocurrency transactions, but it has many applications that go beyond financial circles. This tutorial provides a high-level overview of blockchain technology.

Prerequisite Knowledge
Cryptography

Tutorial Level: Intermediate
Tutorial Duration: 10 minutes

Blue Economy

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Outline the factors that are damaging our oceans
- Identify the benefits of a sustainable blue economy
- Describe how the financial sector can support the blue economy

Tutorial Overview
A sustainable blue economy will allow us to derive value from oceans and coastal regions while facilitating the regeneration and restoration of marine ecosystems to help tackle climate change. This tutorial gives a high-level overview of the benefits of the blue economy and the role the financial sector can play in supporting it.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 11 minutes

Bond Futures

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key features of government bond futures, including notional amounts and coupons, conversion factors, deliverable bonds, and the cheapest to deliver (CTD)
- Recognize the main pricing concepts with bond futures, including basis, cash and carry trades, the implied repo rate, and invoice prices
- Recall the importance of modified duration and its relationship with the CTD
- Identify the key hedging and asset allocation strategies with bond futures

Tutorial Overview
This tutorial looks at the main features of government bond futures, how they are priced and settled, and the key hedging and asset allocation strategies used with these instruments.

Prerequisite Knowledge
Forwards & Futures – Trading

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Key Features of Bond Futures
- What Are Bond Futures?
- Deliverable Bonds & Settlement
- Bond Forwards
- Ultra Bond Futures Contracts
- Acceptable Deliverable Maturities

Topic 2: Pricing
- Basis & the Implied Repo Rate
- Cash & Carry Trades & the Implied Repo Rate
- Invoice Prices

Topic 3: Duration
- Duration of Bond Futures & Deliverables
- Modified Duration & the CTD
- Delivery Calculations for a Government Bond Futures Contract

Topic 4: Hedging & Asset Allocation
- Hedging with Bond Futures
- DV01 Hedging & Yield Curve Shifts
- Hedging & the Futures Roll
- Asset Allocation Using Bond Futures

Bond Markets – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define what a bond is
- List the key features associated with bonds such as coupon, principal, maturity, price, and yield
- Recognize the importance of secondary market liquidity in the bond markets
- Recall the development of bond formats from bearer issues to paperless book-entry records Identify the key stages in the settlement of a bond transaction
- List the main issuers and investors in the global bond markets

Tutorial Overview
While stock markets are more familiar to the general public, far more capital is raised by issuing debt rather than equity. Bond markets are a critical source of finance for governments, banks, corporations, and other borrowers. This tutorial will introduce you to the fundamentals of bonds as a fixed income instrument, covering the key features and terminology associated with these securities in addition to outlining the role of the major players in the market.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview
- What is a Bond?
- Concept of Fixed Income

Topic 2: Key Features of Bonds
- Coupon
- Principal
- Maturity
- Price
- Notes vs. Bonds & Bills

Topic 3: Yield
- What is Bond Yield?
- Price vs. Yield
- Bond Math: Example

Topic 4: Liquidity
- Importance of Liquidity
- Optimizing Liquidity

Topic 5: Bond Formats
- Bearer Bonds vs. Book-Entry Bonds
- Advantage of Book Entry

Topic 6: Settlement
- Bond Settlement

Topic 7: Issuers & Investors
- Issuers
- Investors

Bond Markets – Issuing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the difference between the primary and secondary markets for bonds
- Identify the process by which corporate bonds are underwritten and distributed to investors Recall how the private placement market is used by issuers to tap nontraditional sources of finance
- Recognize the importance of bond auctions for government security issuance

Tutorial Overview
The primary market for bonds is where the distribution and trading of newly-issued bonds takes place. This tutorial looks at the different participants and processes in government and nongovernment bond primary markets.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Primary Markets
- Primary Markets for Bonds

Topic 2: Corporate Bond Primary Market
- Public Corporate Bond Deals
- Pricing of Fixed & Floating Rate Bonds
- Stock Exchange Listing

Topic 3: Private Placements
- What is a Private Placement?

Topic 4: Government Bond Auctions
- Types of Auction
- Bidding
- Finding a Par Rate in the Context of Auction Bids
- Finding a Par Rate in the Context of Auction Bids: Excel
- US Treasury Note Auctions

Bond Markets – Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of the secondary market for bonds
- Define the role played by market makers in providing liquidity to bond markets
- Recognize the difference between market maker-driven and order-driven markets for bonds
- Identify the role played by primary dealers in government securities
- Calculate accrued interest for nonwhole periods using the Actual/Actual convention
- Recall the difference between clean and dirty prices for bonds

Tutorial Overview
Trading in bond markets is largely over-the-counter (OTC) rather than exchange-based, with electronic marketplaces becoming increasingly more important in recent times. This tutorial looks at the key role played by market makers in providing liquidity to the bond market. It also examines crucial bond market conventions such as clean versus dirty prices and nonwhole periods.

Prerequisite Knowledge
Bond Markets – Issuing

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Secondary Markets for Bonds
- Why Trade Bonds in Secondary Markets?
- Risk-Taking in Bond Markets

Topic 2: Market Making
- What is Market Making?
- Benefits of Market Making
- De Facto Market Makers from the Buy-Side

Topic 3: Market Making vs. Order-Driven Markets
- Differences Between Market Makers vs. Order-Driven Markets

Topic 4: Primary Dealers
- Overview of Primary Dealers
- Gemms: UK Example

Topic 5: Price & Yield Calculations
- Nonwhole Periods
- Bond Price/Yield Calculation With Broken Periods & Actual/Actual Day Count

Topic 6: Clean & Dirty Bond Prices
- Clean vs. Dirty Prices
- Clean & Dirty Bond Prices: Calculation

Bond Prices & Yields – Excel Interactive

Description

Overview
Microsoft Excel has a number of functions simplifying bond price/yield calculations. These range from simple time value of money (TVM) functions through to more complicated calculations that value bonds between coupon periods. This tutorial demonstrates how to use Excel to calculate a bond's price/yield, both on a coupon date and between coupon dates. It also outlines how the process can be made easier using some of Excel's built-in functions.

Prerequisite Knowledge
Fixed Income Analysis – An Introduction

Level: Intermediate
Duration: 20 minutes

Bonds & Guarantees

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize why bonds/guarantees are commonly used in relation to contracts for the delivery of goods or construction projects
- Identify the different types of bond/guarantee provided by banks and other guarantors to their customers

Tutorial Overview
Trade transactions, both domestic and cross-border, can give rise to significant risks and complexities, including nonpayment risk, nonperformance risk, and cash flow uncertainties. In large-scale projects, these risks are often magnified. This makes it necessary for trading parties to consider instruments such as bonds/guarantees that can compensate for nonpayment/nonperformance and/or contribute to cash flow management.

Prerequisite Knowledge
Trade Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 65 minutes

Tutorial Outline
Topic 1: Introduction to Bonds & Guarantees
- Bonds & Guarantees – An Overview
- What are Bonds & Guarantees?
- Purpose of a Guarantee
- Parties to a Guarantee
    - Applicant
    - Beneficiary
    - Guarantor
- Benefits & Drawbacks of Guarantees
- Fees & Charges
    - Competition
    - Loss-Leaders
    - Relationship Pricing
- Guarantee Formats

Topic 2: Risk Exposure to Guarantees
- Risks & Risk Management
- Risks & Capital Requirements
    - Credit Substitutes
    - Contingents
- Risk-Adjusted Returns
- Risk-Sharing Guarantees
    - Syndications
    - Club Deals
    - Risk-Sharing Agreements
- Risk-Sharing Guarantees: Considerations
    - Indemnities
    - Obtaining Agreement
    - Claims & Reimbursement
    - Capital Requirements

Topic 3: Processing Guarantees
- Guarantee Lifecycle
- Processing Guarantees

    - Application
    - Risk Assessment
    - Issuance
    - Monitoring
    - Cancelation
- Processing Guarantees: Complications
    - Indirect Guarantees
    - Nonstandard Formats
    - Processing Claims

Topic 4: Categories & Types of Guarantee

- Sureties vs. Demand Guarantees
- Direct Guarantees
- Indirect Guarantees
- Types of Guarantee
    - Bid/Tender Guarantees
    - Performance Guarantees
    - Advance Payment Guarantees
    - Maintenance Guarantees
    - Retention Money Guarantees
    - Customs Guarantees
    - Shipping Guarantees
    - Payment Guarantees
- Guarantees Over a Project Lifecycle
- Standby Letters of Credit
- Guarantees vs. Documentary L/Cs
- Guarantees vs. Export Credit Insurance

Budgeting

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the role of budgeting in financial planning
- Recall the budgeting process
- List and define the different types of budget
- List the potential benefits and disadvantages of budgeting
- Identify different approaches to setting budgets

Tutorial Overview
Budgeting is a central component of effective financial management. A successful budgeting process can help management to achieve long-term financial and operational goals. There are a number of different approaches to budgeting that offer various potential benefits and disadvantages. This tutorial provides a high-level overview of budgeting and the role it plays in financial management.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Budgeting Overview
- What Is Budgeting?
- The Budgeting Process

Topic 2: Benefits & Disadvantages of Budgeting
- Budgeting: Benefits
- Budgeting: Disadvantages

Topic 3: Types of Budget
- Master Budget
- Cash Budget
- Capital Budget
- Operating Budget

Topic 4: Approaches to Budgeting
- Top-Down Budgeting
- Top-Down Budgeting Example: Master Budget
- Top-Down Budgeting Example: Operational Budget
- Top-Down Budgeting Example: Response
- Top-Down Budgeting Example: Implementation
- Top-Down Budgeting Example: Benefits & Disadvantages
- Bottom-Up Budgeting
- Bottom-Up Budgeting Example: Top Management
- Bottom-Up Budgeting Example: Middle Management
- Bottom-Up Budgeting Example: Process
- Parallel Budgeting
- Parallel Budgeting Example

Business Cycles – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the business cycle and list its phases
- Define recessions and recognize their potential causes
- List the policies governments may pursue during recessions
- Determine the impact of the business cycle on financial markets, including equities, fixed-income, currencies and commodities

Tutorial Overview
Business cycles have a significant impact on households, companies, and markets. The phases of the business cycle, particularly recessions, are associated with government policies and household and corporate behaviors that affect asset prices. This tutorial provides a high-level overview of business cycles and highlights the impact they may have on governments, households, companies, and financial markets.

Prerequisite Knowledge
GDP – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Business Cycles
- What Is a Business Cycle?
- Phases of the Business Cycle

Topic 2: Recessions
- Defining Recessions
- Impact of Recessions
- What Causes Recessions?
- Recessions and Government Policy

Topic 3: Business Cycles & Markets
- Equities
- Currencies
- Fixed Income
- Commodities

Topic 4: Case Study: The Great Recession
- The Great Recession
- What Caused the Great Recession?
- Government Response
- Impact on Equities
- Impact on Currencies
- Impact on Fixed Income
- Impact on Commodities
- Scenario: Market Impact of GDP Growth Estimates

Business Cycle Indicators

Tutorial Description
Objectives

On completion of this tutorial, you will be able to:

- Identify the impact of the business cycle on financial markets
- Determine the role of economic indicators in predicting business cycles
- Define leading indicators and recognize their role in predicting business cycles
- Define coincident indicators and recognize their role in predicting business cycles
- Define lagging indicators and recognize their role in predicting business cycles

Tutorial Overview
The business cycle has a significant effect on financial markets. Predicting the timing and direction of changes to the business cycle can enable better management of assets and portfolios. This tutorial provides a high-level overview of the role of leading, coincident, and lagging economic indicators in predicting the business cycle.

Prerequisite Knowledge
Business Cycles – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Predicting Business Cycles
- Predicting Business Cycles With Economic Indicators
- Types of Economic Indicators

Topic 2: Leading Indicators
- Overview
- Types of Leading Indicators
- Examples of Leading Indicators
- Market Reactions to Leading Indicators
- Scenario: Market Impact of Leading Indicators

Topic 3: Coincident Indicators
- Overview
- Examples of Coincident Indicators
- Market Reactions to Coincident Indicators
- Scenario: Market Impact of Coincident Indicators

Topic 4: Lagging Indicators
- Overview
- Examples of Lagging Indicators

Business of Asset Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key benefits of asset management
- List the key sectors of the asset management industry including institutional and retail asset management, and wealth management
- Recognize the asset allocation process and key types of asset allocation strategy
- Compare active and passive asset management
- Identify the main types of investment fund used in the asset management industry, including mutual funds and ETFs
- Recognize the asset management industry's structure and its key challenges

Tutorial Overview
Asset management is the management of portfolios of assets by professional firms serving institutional, high net worth (HNW), and retail clients. This tutorial provides an overview of the structure and activities of a typical asset management firm, including its clients, products, and services. The current state of the global asset management industry is also discussed.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Asset Management
- Overview of Asset Management
- What is Asset Management?

Topic 2: Asset Management Sectors
- Asset Management Sectors
- Key Asset Management Sectors
- Institutional Asset Management
- Wealth Management/Private Client
- Wealth Management Mandates
- Retail Asset Management

Topic 3: Asset Allocation
- Asset Allocation
- Asset Allocation
- Types of Asset Allocation
- Asset Allocation Strategies

Topic 4: Passive & Active Management
- Passive & Active Management

Topic 5: Investment Funds
- Investment Funds
- Public vs. Private Funds
- Public Investment Funds
- Mutual Funds & ETFs
- Private Investment Funds

Topic 6: Asset Management Industry
- Asset Management Industry

- Market Development
- Competitive Pressures
- M&A Activity
- Asset Management Industry
- Industry Outlook

Business of Consumer (Retail) Banking

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify aspects of the main retail distribution channels
- Name the product and services offered by retail banks, including savings products, money transmission and payment systems, and credit extension
- Identify the sources of profitability for a retail bank
- Recognize typical retail banking forms of organization and how they have evolved
- Recall the key aspects of regulation relating to retail banking

Tutorial Overview
The consumer (or retail) banking sector is perhaps the least glamorous part of the banking world. However, consumer lending can often be more important to a bank than the corporate equivalent.

This tutorial looks at the role of modern consumer banking institutions. The key issues addressed include the structure of the sector, the product offerings, the drivers of profitability, and the role of regulation.

Prerequisite Knowledge
Primer – Banking

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Overview of Retail Banking
- What is Consumer Banking?
- The Bank Branch
- ATM & Self-Service
- Telephone Banking & the Contact Center

Topic 2: Digital Banking
- Overview of Digital banking
- Digital Banking: Mobile
- Managing the Channel Mix

Topic 3: Asset & Liability-Side Products
- Asset-Side Products
- Asset-Side Products: Loan Underwriting
- Liability-Side Products

Topic 4: Payments Services
- Payments & Transfers
- Payment Cards: Types
- Payment Cards: Benefits

Topic 5: Other Products
- Other Retail Banking Products
- Islamic Banking

Topic 6: Profitability of Retail Banks
- Profitability & Performance
- Products, Channels, & Profitability

Topic 7: Ownership

- Forms of Ownership

Topic 8: Regulation
- Consumer Protection
- Ringfencing Retail Banking
- Europe’s PSD2 & e-Money

Business of Corporate Banking

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the factors that differentiate corporate banking from retail (consumer) banking and investment banking, and the boundary issues that can occur in that regard
- Recognize the need for the categorization of corporate banking customers into medium, large, and multinational segments
- Identify the key business and strategic issues facing corporate banking businesses, including sources of income, absolute and risk-adjusted returns, risk appetite, and the process for setting business strategy

Tutorial Overview
This tutorial describes the differences between individuals and corporates and the impact of this on customer needs, a bank's product offerings, and a bank's operating model for servicing corporates. Details are provided on customer types and segmentation and how this affects a bank's organizational structure. The tutorial also addresses business strategy, the key drivers of customer profitability, and the role of risk appetite.

Prerequisite Knowledge
Banking – Primer

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Corporate Banking Industry
- Overview of Corporate Banking
- Corporate Banking vs. Small Business Banking
- Corporate Banking Business Boundaries

Topic 2: Corporate Banking vs. Investment Banking
- Investment Banking
- Corporate Banking vs. Investment Banking
- Corporate Banking Organizational Structure

Topic 3: Customer Segmentation
- Need for Segmentation
- Factors Affecting Customer Type

Topic 4: Business Structure
- Types of Business Structure
- Business Structure & Corporate Banking
- Corporate Groups
- Business Customer Segmentation
- Corporate Banking Organizational Structure
- Product Delivery
- Corporate Banking with Full-Service Banks

Topic 5: Target Market Identification
- Target Market Identification

Topic 6: Revenue & Costs
- Revenue
- Costs

Topic 7: Risks & Profitability
- Profitability & Loan Provisioning
- Risk-Adjusted Profitability
- Risk-Adjusted Profitability: Example
- Risk Appetite

Topic 8: Strategy Execution
- Executing Strategy

Business of Insurance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the principles of insurance contracts and the organizational structures of insurance companies
- Recognize the major business lines of insurance companies and the challenges facing those companies
- Identify the key insurance company performance metrics

Tutorial Overview
Many people by their nature are risk averse. They would prefer to pay a premium for someone to absorb the risk for them. The insurance industry in return for a fee offer protection to individuals and businesses against potentially ruinous risk.

This tutorial looks at the different risks that insurance companies cover and the challenges they face in insuring these risks on behalf of individuals and businesses.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 80 minutes

Tutorial Outline
Topic 1: Principles of Insurance
- Principles of Insurance
- Overview of Insurance
- Principles of Insurance
- Moral Hazard
- Adverse Selection

Topic 2: Organization & Distribution
- Organization & Distribution
- Forms of Organization
- Distribution
- Agents
- Impact of Digitalization

Topic 3: Underwriting & Pricing
- Underwriting & Pricing
- Underwriting
- Pricing

Topic 4: Claims & Reinsurance
- Claims & Reinsurance
- Claims
- Reinsurance

Topic 5: Regulation & Conduct of Business
- Regulation
- Regulation: US
- Regulation: Europe & Beyond
- Conduct of Business
- Conduct Risk

Topic 6: Life Insurance

- Life Insurance
- Life vs. Nonlife Insurance
- Life Insurance
- Hybrid Life Policies
- Life Insurance Underwriting
- Annuity Contracts
- Health Insurance

Topic 7: Nonlife Insurance

- Nonlife Insurance
- What is Nonlife Insurance?
- Property Insurance
- Liability Insurance

Topic 8: Risk Management & Performance

- Risk Management & Performance
- Insurance Company Stakeholders
- Reporting & Performance Metrics
- Performance Ratios
- Asset-Liability Management (ALM)

Business of Investment Banking

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the key organizational structures used in investment banking
- Identify the main activities and sources of revenue of investment banks

Tutorial Overview
Investment banking is the business of raising capital for companies and providing advisory services on financing and merger activities. This tutorial looks at the typical structures associated with investment banks and their key activities and sources of revenue, namely M&A advice, underwriting, sales and trading, asset management, and prime brokerage.

Prerequisite Knowledge
Banking – Primer

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Investment Banking
- Overview of Investment Banking
- Revenue Streams in Investment Banking
- Buy-Side/Sell-Side
- Industry Development
- Shadow Banking
- Boutiques & Universal Banks
- Scope & Scale
- Organizational Structure
- Front Office Hierarchy
- Conflicts of Interest

Topic 2: Investment Banking Business Lines
- Investment Banking Business Lines
- Mergers & Acquisitions (M&A)
- M&A: Structures
- M&A: Types of Transaction
- M&A: Adding Value
- M&A: Target Identification & Financing
- M&A: Buyouts
- M&A Fees
- Underwriting
- Underwriting: Issues
- Underwriting: Price Setting
- Underwriting: Syndication
- Underwriting Fees
- Sales & Trading
- Asset Management
- Prime Brokerage

Business of Pensions & Retirement

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define retirement funds and identify their core functions
- List different types of retirement funds
- Identify common retirement fund benefit and funding structures
- Name the typical features of retirement funds
- Identify the challenges facing retirement funding systems and list strategies for addressing them

Tutorial Overview
Around the world, aging populations are staining retirement systems. Both government and private retirement funds face significant challenges in providing individuals with a comfortable old age. Retirement industry participants are turning to new models, funding structures, and regulatory regimes to address these challenges. This tutorial provides a high-level overview of the retirement industry and highlights the key challenges participants face, as well as strategies to address them.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Retirement Funds
- Overview of Retirement Funds
- What is a Retirement Fund?
- Retirement Fund Types
- Pension Benefits
- Pension Funding

Topic 2: Retirement Fund Features
- Retirement Fund Features
- Typical Retirement Fund Features

Topic 3: Private Retirement Fund Industry
- Private Retirement Fund industry
- Overview of the Private Retirement Fund Industry

Topic 4: Industry Challenges
- Industry Challenges
- Robust Retirement System
- Aging Population
- Case Study: Baby Boomers
- Low-Return Environment
- Regulatory, Technological, & Workplace Changes
- Insufficient Financial System Development
- Case Study: China

Topic 5: Industry Responses
- Industry Responses
- Extending Working Lives
- Changing Benefits
- Changing Contributions
- Changing Funding Strategies
- Changing Investment Strategies

- De-Risking DB Plans

Topic 6: Opportunities & Strategies
- Opportunities & Strategies
- Retirement Opportunities
- Strategies for Future Success

Business of Wealth Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Distinguish private banking activities from wealth management activities
- Recognize how the private wealth management industry has evolved over the years
- Identify the different types of private client service propositions and the various sources of revenue for private wealth management firms

Tutorial Overview
This tutorial introduces and defines the concepts of private banking and wealth management. It identifies the general activities of private banking and wealth management businesses, the different types of business and their value proposition, and the various fee structures and revenue models. The tutorial also outlines the evolved history and current trends in the industry.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Private Banking & Wealth Management
- Overview of Private Banking
- Private Banking vs. Retail & Premium Banking

Topic 2: Wealth Management
- Definition of Wealth Management
- Wealth Managers

Topic 3: Industry Development
- History of Wealth Management
- Top Private Bank Centers

Topic 4: Wealth Management Firms
- Service Providers
- Leading Market Players
- Types of Wealth Management Firm

Topic 5: Private Client Service Propositions
- Value Propositions & Client Service Models

Topic 6: Sources of Revenue
- Key Sources of Income & Revenue
- Revenue Fee Models

Topic 7: Industry Challenges
- Key Challenges for the Wealth Management Industry

Calculus – Differentiation

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Classify linear and nonlinear functions
- Calculate derivatives
- Recognize the different rules of differentiation
- List the economic applications of differentiation

Tutorial Overview
Differential calculus is a subtype of calculus which deals with the rates of change of given quantities. It has many applications in the world of finance and economics, including the measurement of changes in GDP, unemployment, and investment over time.

Prerequisite Knowledge
A reasonable level of mathematical and statistical knowledge is assumed.

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Linear & Nonlinear Functions
- Linear Functions
- Derivatives of Linear Functions
- Nonlinear Functions
- Newton's Gradient
- Differentiation
- Increasing & Decreasing Slopes
- Minimum & Maximum Points
- Minimum & Maximum Points of Functions: Example

Topic 2: Rules of Differentiation
- Basic Rules of Differentiation
- Composite Functions: The Chain Rule
- Exponential Functions
- Logarithmic Functions

Topic 3: Uses of Differentiation
- Economic Applications of Differentiation
- Revenue Functions
- Cost Functions
- Profit Maximization
- Profit Maximization – Scenario

Calculus – Integration

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the rules of integration
- Complete integration calculations
- List the practical applications of integration

Tutorial Overview
Integral calculus is a subtype of calculus which deals with the rates of change of given quantities. It has many applications in the world of finance and economics, including the measurement of changes in GDP, unemployment, and investment over time.

Prerequisite Knowledge
Calculus – Differentiation

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Indefinite Integrals

- Indefinite Integration: Overview
- Rules of Integration
- Integration of Composite Functions
- Integration of Composite Functions – Integration by Parts
- Integration of Composite Functions – Integration by Parts: Example
- Integration of Composite Functions – Integration by Substitution

Topic 2: Definite Integration

- Definite Integration: Overview
- Definite Integrals: Applications
- Summation of a Series of Cash Flows
- Discounting a Series of Cash Flows
- Properties of Definite Integrals
- Properties of Definite Integrals – Example

Topic 3: Improper Integrals

- Improper Integrals

Canadian Bond Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the Canadian bond market and list key Canadian bond issuers
- Name and define the different types of federal debt securities
- Define the Canadian corporate bond market
- Name and define key Canadian mortgage-backed securities, including Canada Mortgage Bonds

Tutorial Overview
The Canadian bond market is one of the ten largest bond markets in the world. It serves as an important source of capital for Canada's federal, provincial, and municipal governments, and for Canadian corporations. This tutorial provides a high-level overview of the Canadian bond market and highlights key issuers, key types of securities, and key regulatory institutions.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Market Overview
- Market Development
- Major Issuers
- Regulation

Topic 2: Government Bonds
- Federal Bond Market Overview
- GOC Securities Types
- GOC Securities Primary Market
- GOC Securities Auction Process
- GOC Securities Investors
- GOC Securities Secondary Market
- Yield Curve
- Provincial & Territorial Bond Market Overview
- Provincial Debt Management
- Municipal Bonds
- Crown Corporation Bonds

Topic 3: Corporate Bonds
- Overview
- Primary Market
- Secondary Market

Topic 4: Asset-Backed Securities (ABS)
- Overview
- National Housing Act MBS (NHA MBS)
- Canada Mortgage Bonds (CMBs)

Canadian Equity Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the stock exchanges, market regulators, stock indexes and types of security in the Canadian market
- State the issuing procedures and listing requirements for equities in Canada
- Describe trading operations and market conventions for Canadian equities
- Explain how clearing and settlement procedures are organized in Canada

Tutorial Overview
This tutorial provides an introduction to Canadian equity markets. It primarily focuses on the workings of the Toronto Stock Exchange. It examines the regulators, indexes, and types of securities in the market and also general trading practices, market conventions and clearing and settlement procedures.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: History of the Toronto Stock Exchange

- Early Days
- Middle & Late 20th Century
- 21st Century Developments
- Provinces & Territories

Topic 2: Listing & Issuing

- Issuing Procedures
- Stock Exchanges
- TSX: Listing Requirements
- TSX Venture Exchange: Listing Requirements
- Listing Application Procedure

Topic 3: Trading & Regulation

- Security Types
- Market Regulation – CSA & IIROC
- Stock Market Indices
- Market Makers
- Market Conventions
- Taxation
- Clearing & Settlement

Capital Asset Pricing Model (CAPM)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Understand the derivation of the market portfolio
- Recognize how the security market line differs to the capital market line
- List the assumptions and some of the criticism leveled against them
- Discuss some of the empirical evidence supporting the CAPM

Tutorial Overview
The principles of the capital asset pricing model (CAPM) are central to portfolio building. Although more sophisticated models of risk and return have been proposed since its arrival in the mid-1960s, few more influential or intuitively appealing financial models have ever been developed. This tutorial describes in detail the theory of CAPM and looks at some of the empirical evidence of the validity of the model.

Prerequisite Knowledge
Risk & Return – Efficient & Optimal Portfolios

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Security Market Line
- Security Market Line
- Systematic Risk
- Beta
- Why Use Beta?
- Alpha
- Positive & Negative Alpha

Topic 2: Assumptions & Criticisms of the CAPM
- Assumptions & Criticisms of CAPM
- Assumptions of the Capital Asset Pricing Model
- Criticisms of the CAPM Assumptions
- Market Portfolio
- Constructing & Managing a Value-Weighted Market Portfolio
- Estimating Beta
- Adjusted Beta

Topic 3: Empirical Evidence for the CAPM
- Empirical Evidence for the CAPM
- Real World Issues with the CAPM & Market Portfolio
- The Size Effect
- Weekend Effect
- Positive Alpha
- Market Portfolio Error
- Nontraditional Wealth
- Empirical Evidence

Cards & Payments Programs

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the attraction of card schemes
- List the basics of a cards and payments program
- Identify some methods used to promote the use of cards
- Recognize the operational work behind the cards and payments programs

Tutorial Overview
Increased recognition of the value of payments data and the availability of technologies for its effective harnessing, banks and other actors have come to recognize the value of the data element of payments. This and the parallel deregulation and the relaxation of the membership rules of major card schemes have attracted FinTech/PayTech entrants into financial services.

This tutorial describes the technical and practical aspects of getting a cards and payments program off the ground from the perspective of businesses wishing to break into the industry.

Prerequisite Knowledge
Payments Cards

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Appeal of a Payments Program
- Importance of Payments

Topic 2: Basics of a Cards Program
- Joining a Card Scheme
- Use Cases
- Payments Services
- Partnership & Program Managers
- Pricing & Revenue Models

Topic 3: Marketing
- Customer Segmentation
- Payments Chain Information Flows
- Plugging the Information Gap
- Product Design
- Card Identification
- Marketing Channels
- Benefits Programs
- Types of Programs
- Measuring Returns

Topic 4: Operations
- Tracking Card Applications
- Processing Applications
- Card Manufacture & Activation
- Countering Fraud
- Operational Risk

Cash Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define cash management
- Identify the role of cash budgets in the cash management process
- Identify policies and procedures to improve cash management
- List the short-term financing instruments available the help companies manage their cash

Tutorial Overview
Cash management is the process of collecting, disbursing, and investing a company's cash. It focuses on three areas: collecting revenues, paying expenses and debts, and balancing the need to keep cash on hand with the need to invest in projects. Without sufficient liquid cash, a business may find itself unable to pay its bills and may be forced into insolvency. Effective cash management is therefore vital to a company's long-term health. This tutorial provides a high-level overview of cash management and highlights key aspects of the cash management process that must be considered.

Prerequisite Knowledge
Accounting – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Cash Management Overview
- What Is Cash Management?
- Holding Cash
- Cost of Holding Cash

Topic 2: Cash Budgets
- Departmental Budgets
- Cash Budgets
- Scenario: Cash Budgets

Topic 3: Managing Cash Flows
- Improving Cash Inflows
- Sources of Funding
- Investing Cash
- Short-Term Investment Options

Chinese Bond Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the features of the Chinese bond market
- Describe the different segments of the Government bond market
- Recognize the significance of credit bonds
- Identify the other debt instruments that play a part in the Chinese bond market

Tutorial Overview
While initially slow to open its debt market to foreign investors, the Chinese bond market has become one of the largest debt markets in the world. Its bond markets, both governmental and corporate, are highly active, and have expanded considerably due to the growing investor interest in offshore renminbi financing. This tutorial provides an introduction to the features of the Chinese bond market, and in particular the different issuers in the market.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview
- Background
- Pricing Chinese Bonds
- Access to the Chinese Bond Market
- Internationalization of the Renminbi
- Benefits of Internationalizing the Renminbi
- Composition of Chinese Bond Market

Topic 2: Government Bonds
- Overview of the Government Bonds Sector
- Treasury Bonds & Bills
- Treasury Bonds & Bills: Features
- Policy Bank Bonds
- Local Government Bonds

Topic 3: Credit Bonds
- Overview of Credit Bonds
- Composition of Credit Bonds
- Features of Credit Bonds

Topic 4: Other Bonds
- Assets-Backed Securities (ABS)
- Dim Sum Bonds
- Development of the Dim Sum Market
- International Bonds
- Panda Bonds
- KungFu Bonds
- Summary of the Chinese Bond Market

Chinese Equity Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the key developments in the growth and development of equity trading in China, discuss its structure, and list its regulators
- List the key stock exchanges in China
- Illustrate how China's qualified foreign institutional investors and connect schemes provide access for foreign investors
- List the key market indices in China

Tutorial Overview
This tutorial explores the history of the Chinese equity market, and why it is playing catch-up with its international peers. The structure of the Chinese stock market is detailed as are the different schemes that facilitate access to international investors, and the various key market indices.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Market Overview
- Market Development
- Market Structure
- Main Board
- Second Board
- Third Board
- ChiNext Market
- Star Market
- Types of Share
- China Securities Depository & Clearing Corporation Limited (CSDC)

Topic 2: Market Regulation
- China Securities Regulatory Commission (CSRC)
- Key Regulations
- Regulatory & Market Challenges

Topic 3: Investor Base
- Types of Investor
- Foreign Investors in China
- Qualified Foreign Institutional Investors (QFIIs)
- RMB Qualified Foreign Institutional Investors (RQFIIs)
- Stock Connect Systems
- Shanghai-Hong Kong Stock Connect (SHSC)
- Shenzhen-Hong Kong Stock Connect (SZHSC)
- Shanghai-London Stock Connect (SLSC)
- Shanghai-London Stock Connect (SLSC) vs. Shenzhen-Hong Kong Stock Connect (SZHSC)
- QFII Programs vs. Stock Connect Schemes

Topic 4: Key Market Indices
- Stock Indices
- SSE Indices

- SZSE Indices
- China Securities Index (CSI) 300 Index

Circular Economy

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain why the linear model of production and consumption is unsustainable
- Describe how the circular economy provides an alternative to this linear model
- Recognize the key principles that underpin the circular economy

Tutorial Overview
The current global economy is based on a linear model of production and consumption that is unsustainable. The circular economy, which addresses challenges such as waste, pollution, and biodiversity loss, provides a radical shift from this model. This tutorial provides a high-level overview of the circular economy, and how it promotes sustainable resource management and waste reduction.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 12 minutes

Clean Energy

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the most common types of clean energy
- Explain the difference between clean energy and renewable energy
- Outline the benefits of clean energy
- Describe how the financial sector can support the transition to a low-carbon economy

Tutorial Overview
The global economy's reliance on fossil fuels cannot continue. Existing forms of clean energy must be rolled out on a much wider scale and new technologies must be brought to the market. This tutorial gives a high-level overview of the most common forms of clean energy and discusses how the financial sector can support the transition to a low-carbon economy.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 18 minutes

Climate Change – Physical Risks

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of physical climate risk
- Describe how the physical impacts of climate-related risks affect the economy and wider society
- Outline how physical climate risks can be managed

Tutorial Overview
There are two types of physical climate risk: acute and chronic. Acute physical risks are associated with sudden, extreme events and typically occur over a relatively short timeframe with immediate and severe consequences. Chronic physical risks are the result of longer-term, gradual shifts in climate patterns. This tutorial provides a high-level overview of both types of risk and how businesses can manage them

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 12 minutes

Climate Change – Transition Risks

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different categories of transition risk
- Describe how the transition to a more sustainable future will impact businesses and the wider economy
- Outline how the financial sector can facilitate the transition to a greener future

Tutorial Overview
The transition to a greener, more sustainable future brings significant risks for businesses and the economy in general. This tutorial provides a high-level overview of these transition risks and the crucial role the financial sector plays in facilitating the transition.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 15 minutes

Climate Risk – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define climate risk and identify its implications for financial institutions
- Name various climate risk metrics and recall their uses and limitations
- Identify key regulations and guidelines addressing the measurement and management of climate risk

Tutorial Overview
There is a growing recognition that climate change and society's reactions to it may have significant consequences for the economy and the financial sector. In response to the expectations of civil society and governments, as well as increased awareness of these risks by the financial sector, financial institutions have started analyzing climate-related risks and impacts and incorporating them in their decision-making and product offerings. This tutorial provides an overview of climate risk and explores how financial institutions are assessing and managing it.

Prerequisite Knowledge
Risk – Primer

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Climate Change & Climate Risk
- Climate Change
- Paris Agreement
- Climate Risks
- Systemic Climate Risk

Topic 2: Measurement & Management
- Climate Metrics & Analysis Tools
- Portfolio Carbon Footprint
- Assessing emissions
- Carbon Footprint Limitations
- Green-Brown Activity Assessments
- Climate Scores
- Scenario Analysis
- Decarbonization Pathways Alignment
- Climate Risk Management Strategies

Topic 3: Regulations & Guidelines
- Regulations & Guidelines Overview
- Task Force on Climate-Related Disclosures (TCFD)
- European Action Plan on Sustainable Finance

Climate Risk Measurement – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the main building blocks of climate-related risk analysis
- Identify the main data sources for performing climate-related risk assessments
- List the main trends in the area of climate-related risk assessment

Tutorial Overview
If we are to successfully identify, manage, and mitigate the impacts of climate change, we must first be able to measure them. This tutorial provides an introduction to the field of climate-related risk analysis and assessment, focusing primarily on the high-level process for undertaking such assessments.

Prerequisite Knowledge
Climate Risk – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 25 minutes

Tutorial Outline
Topic 1: Process for Assessing Climate-Related Risk
- High-Level Process
- Set the Objective
- Select the Approach
- From Carbon Footprinting to More Sophisticated Approaches
- Use Cases of Different Approaches
- Decide How to Perform the Analysis

Topic 2: Data Availability & Sources
- Data Availability
- Data Sources

Topic 3: Trends in Climate-Related Risk Assessment
- Trends

Climate Risk Measurement – Approaches

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the high-level process for implementing the main approaches to climate-related risk assessment – portfolio carbon footprinting, green-brown exposure, scenario analysis, and temperature alignment analysis
- Identify the main methodological questions associated with each approach and their implications when implementing them

Tutorial Overview
Climate-related risk assessments have different levels of sophistication and often build upon one another through successive innovation waves. Like any tools, there are pros and cons to their use and it is essential that – to use them appropriately – financial institutions understand how they are calculated and constructed. This tutorial provides technical insights on the main assessment tools used.

Prerequisite Knowledge
Climate Risk Measurement – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Portfolio Carbon Footprinting
- Bottom-up Methodologies
- What "Scopes" Should be Included?
- How Should Data Gaps be Filled?
- How Should Data be Aggregated at the Portfolio Level?
- Top-Down Methodologies

Topic 2: Green-Brown Exposure Assessments
- A Complementary Metric to Carbon Footprinting
- Choosing a Taxonomy
- EU Taxonomy Regulation for Sustainable Activities
- Analyzing an Asset's Exposure
- Avoided Emissions

Topic 3: Scenario Analysis
- Process for Conducting a Scenario Analysis
- Key Methodological Questions
- Setting the Perimeter
- Choosing the Scenarios
- Expressing the Results

Topic 4: Alignment Analysis
- High-Level Process
- Key Methodological Questions
- Forecasting Future Climate Performance
- Assessing the Climate Performance of an Asset/Portfolio
- Expressing the Results

Climate Risk – Banking & Decarbonization

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the impact of carbon on climate change and climate-related risks, with particular emphasis on the banking sector
- List the key drivers of the decarbonization of banks
- Identify the main challenges that banks face on their decarbonization journey
- Recognize some of the key strategies that banks are implementing in their attempts to decarbonize

Tutorial Overview
It is generally accepted that climate change is one of the biggest challenges the world faces this century. It is not surprising, therefore, that financial regulators have concluded that climate change poses significant risks to the stability of the banking and financial system. To manage these risks, banks (and therefore their clients) need trackable carbon transition plans. This tutorial looks in detail at the issue of decarbonization from the banking industry's perspective.

Prerequisite Knowledge
Climate Risk – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Decarbonization
- Climate Change Risks
- Transitioning to a Low-Carbon Economy
- Impact on Banks
- Decarbonization of Banks

Topic 2: Bank Decarbonization Drivers
- Key Drivers
- Policy & Regulation
- International Initiatives
- European Initiatives
- Asian Initiatives
- Development Banks Supporting Decarbonization
- Investor Pressure
- Increased Risk/Opportunity Awareness

Topic 3: Bank Decarbonization Challenges
- Key Challenges
- Dependency on High-Carbon Sectors & Activities
- Availability of Relevant Carbon Data
- Power of Habit ("Banking-as-Usual")

Topic 4: Bank Decarbonization Strategies
- Variety of Strategies
- Engaging with Clients on Decarbonization

Climate Risk – Stress Testing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the need for climate stress testing and the linkages/differences between scenario analysis and stress testing
- Identify the key components of a climate stress test
- Recognize why the incorporation of climate-related risks into stress testing poses particular challenges
- List the reasons why central banks/regulators conduct climate stress tests and the conclusions from some of these tests

Tutorial Overview
Climate change is one of the greatest challenges facing the world today. Climate risks, however, are particularly difficult to assess because of their unpredictability and interconnectedness with other systems. It is unclear how, and to what degree, climate-related changes impact other socioeconomic systems and financial markets. Stress tests are a tool used to help understand and quantify the financial impact of climate risk under various scenarios. This tutorial describes the concept of climate stress testing in detail.

Prerequisite Knowledge
Climate Risk – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Overview of Climate Stress Testing
- What are Climate Stress Tests?
- Climate Change & the Financial Industry
- Stress Testing or Scenario Analysis?

Topic 2: Components of Climate Stress Tests
- Climate vs. Traditional Stress Tests
- Portfolio Analysis
- Scenario Design
- Shared Socioeconomic Pathways (SSPs) Scenarios
- Network for Greening the Financial System (NGFS) Scenarios
- Modeling Blocks & Linkages
- Assessment of Impact & Calibration

Topic 3: Stress Testing Challenges
- Challenges

Topic 4: Case Studies
- Regulators
- Financial Institutions

Closed-End Funds (US)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the basic characteristics of closed-end funds
- Draw distinctions between mutual funds and closed-end funds
- Understand the practical considerations of closed-end fund investment

Tutorial Overview
A closed-end fund (CEF) is an investment company that (usually) issues a fixed number of shares through a one-off public offering. This tutorial provides an overview of CEFs, describing some of the key features of the CEF structure, examining where CEFs fit within the broader US investment company context and how they differ from their larger open-end cousins – mutual funds.

Prerequisite Knowledge
Mutual Funds – Investing

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Closed-End Funds Overview
- What is a Closed-End Fund?
- Closed-End Funds in Context
- Suitability

Topic 2: Closed-End Fund Types
- Key Types of Closed-End Fund
- Bond CEFs
    - Global/International Bond Funds
    - Domestic Taxable
    - Municipal (Tax-Exempt) Bond Funds
- Stock CEFs
    - Size
    - Region
    - Sector
    - Style
    - Theme
- Interval Funds
    - Repurchase Process

Topic 3: Closed-End Fund Key Features
- NAV Premiums & Discounts
- Exploiting NAV Premiums & Discounts
    - Liquidity
    - Transparency
- Identifying NAV/Price Opportunities
    - Historical Comparisons
    - Cross-Universe Comparisons
- Discount Reduction Measures
- Distributions
    - Return of Capital
    - Dividend Income
    - Capital Gains
- Managed Distribution Policies
- Leverage
    - Debt Securities

    - Preferred Stock
    - Bank Borrowing
- Liquidity
- Fees & Expenses
    - Shareholder Transaction Fees
    - Operating Expenses
    - 12b-1 Fees
    - Expense Ratio
- Taxation
- Regulation

Topic 4: Hybrid Funds
- What is a Hybrid Fund?
    - Balanced
    - Asset Allocation
    - Income Mixed
    - Target Date
    - Lifestyle
    - Flexible Portfolio
    - Alternative

Collective Investment Schemes (UK)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define a collective investment scheme (CIS) and understand its different structures
- Distinguish between the different types of CIS
- Identify the advantages and disadvantages of a CIS for an investor

Tutorial Overview
CIS are funds that pool together money from different investors. By investing the funds in many different companies, the funds can be well-diversified. This tutorial explains the features of CIS and introduces the different categories of CIS; authorized, recognized and unregulated CIS. You will also learn about the attractions and drawbacks of investing in a CIS.

Prerequisite Knowledge
Investment – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Features of Collective Investment Schemes (CIS)
- Collective Investment Schemes: An Overview
- What Does Not Qualify as a CIS?
- Structure of a CIS
- Risk Reduction & Returns
- Investment Options of a CIS

Topic 2: Types of CIS
- Structuring an Authorized CIS
- Promoting an Authorized CIS
- Regulating an Authorized CIS
- Supervising an Authorized CIS
- Structuring a Recognized CIS
- Promoting a Recognized CIS
- Structuring an Unregulated CIS (UCIS)
- Promotion of NMPIs: Investor Exemptions
- Promotion of NMPIs: Firm Exemptions

Topic 3: Benefits & Drawbacks of CIS for Investors
- Benefits of CIS for Investors
- Drawbacks of CIS for Investors

Combo Box Control for Dashboards – Excel Interactive

Tutorial Description
Overview
This tutorial is one of a series that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and show how they can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on combo box controls for dashboards.

Prerequisite Knowledge
Conditional Statements – Excel Interactive

Tutorial Level: Introductory
Tutorial Duration: 25 minutes

Commodities – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define a commodity and how it differs from a "material"
- Identify the commodities traded in the various groups (agricultural, metals, energy, biofuels, petrochemicals and plastics, paper and packaging, freight, and carbon and emissions), where these commodities are produced and sold, and the factors that may affect their price

Tutorial Overview
Commodities, and the markets where they are traded, are vital to the proper functioning of a modern economy. This tutorial describes the different commodity groups that are bought and sold globally and those that act as feedstocks ("raw materials") to make other goods. Coverage includes the supply and demand dynamics that impact commodity pricing, as well as the effects that environmental and sustainability changes are having on commodities today.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Commodities
- Background to Commodities
- Commodities vs. Materials
- Types of Commodity

Topic 2: Agricultural Commodities
- Types of Agricultural commodity
- Grains
- Oilseeds
- Softs
- Livestock
- Dairy

Topic 3: Metal Commodities
- Types of Metal Commodity
- Precious Metals
- Nonferrous Metals
- Ferrous Metals

Topic 4: Energy Commodities
- Types of Energy Commodity
- Crude Oil
- Oil Products
- Natural Gas
- Coal
- Electricity

Topic 5: Other Commodity Groups
- Biofuels
- Petrochemicals & Plastics
- Paper & Packaging
- Freight

- Carbon & Emissions Trading

Commodities – Coal

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the characteristics of coal and its popular varieties
- Recognize the key factors affecting the demand and supply of coal
- Identify the key markets and price indices for coal
- Recognize the most common derivatives used to hedge coal prices

Tutorial Overview
Coal produces almost 30% of the world's primary energy and accounts for nearly 40% of global electricity production and for all of the coke used in steel manufacturing. It is abundant and cheaper than other fossil fuels but generates high levels of pollution. Because of this, the appetite for coal has declined in most Western nations, but overall demand remains strong due to high levels of demand growth elsewhere (particularly in China and India).

This tutorial aims to outline the key features of global supply and demand for the different types of coal, how it is physically traded and what risk management tools are used. The tutorial will also outline the future challenges for coal demand and its potential environmental impacts.

Prerequisite Knowledge
Commodities – Physical Trading

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Coal
- What is Coal?
- Types of Coal
- Coal's Environmental Impact

Topic 2: Coal Demand & Supply
- Sectoral Demand for Coal
- Regional Demand for Coal
- Implications of Climate Agreement Targets
- Supply & Production of Coal
- Coal Producers

Topic 3: Coal Trading & Pricing
- Coal Trading
- Coal Pricing

Topic 4: Coal Risk Management
- Coal Derivatives
- Dark Spread
- Calculating the Dark Spread
- Clean Dark Spread

Commodities – Crude Oil

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key characteristics of crude oil and why these are important in terms of crude oil as a traded commodity
- Outline the exploration and production activities that take place in the upstream segment of the oil industry
- Identify the key locations of supply and demand for crude oil, and the role of OPEC in influencing supply dynamics
- Recognize the impact of the growth in the supply of US tight (shale) oil in recent times
- List the leading price benchmarks in crude oil markets
- Identify the different types of crude oil derivatives contracts traded in the market

Tutorial Overview
Despite the growth in sustainability concerns and the emergence of renewable energy and other green initiatives, crude oil remains central to the functioning of modern economies. It continues to hold the largest share of the world's energy mix and powers most forms of transport through its refined products. It is also the principal input for many chemical processes and is used in the manufacture of numerous everyday products. This tutorial examines crude oil in detail, from its key features and characteristics to how it is traded it in the market.

Prerequisite Knowledge
Commodities – Physical Trading

Tutorial Level: Intermediate
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Crude Oil Basics
- What is Crude Oil?
- Characteristics of Crude Oil
- Gross Product Worth (GPW)

Topic 2: Exploration & Production
- Exploration
- Production
- Peak Oil

Topic 3: Supply & Demand
- Supply
- Demand
- OPEC

Topic 4: Tight Oil (Shale Oil)
- What is Tight Oil?
- Fracking
- Logistics

Topic 5: Crude Oil Benchmarks
- Leading Benchmarks

Topic 6: Derivatives Trading
- Oil Derivatives

Commodities – Dairy

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different dairy commodities
- Identify how milk is produced and the factors that affect its supply
- Recognize the different variants of butter and its largest producers
- Identify the fragmented nature of the cheese market
- Recall how cream and yogurt is manufactured from milk
- Recognize the factors affecting the pricing of dairy products

Overview
Dairy commodities are products all emanating from milk as the basic feedstock. While milk may have once been the primary product, over the years, mankind has learned how to derive additional products from milk. Products such as cheese may have been sought as a means to reduce the perishability of milk but also because there was a demand for these new products such as yogurt.

In this tutorial, we look at the different dairy products and how the nascent commodity markets for the different products.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: What are Dairy Commodities?
- Overview of Dairy Products

Topic 2: Milk
- Supply of Milk
- Factors Affecting Milk Supply
- Marketing of Milk
- US Milk Classification System
- Powdered Milk

Topic 3: Butter
- Supply of Butter
- Butter Producers

Topic 4: Cheese
- Supply of Cheese
- Producers of Cheese
- Whey Protein

Topic 5: Creams & Yogurts
- Cream
- Yogurt

Topic 6: Dairy Demand & Pricing
- Seasonal Factors Affecting Demand
- Dairy Benchmarks
- Minimum Prices
- Dairy Trading
- Milk Pricing
- Global Dairy Trade (GDT)

Commodities – Derivatives Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the crucial role that derivatives markets play in facilitating the management of risk for commodity market participants
- Identify the key concepts that are relevant to the execution of exchange-traded commodity futures contracts
- Differentiate exchange-traded contracts from OTC contracts such as forwards and swaps
- List some of the strategies that are used for speculative trading purposes

Tutorial Overview
Commodity derivatives play a vital role in commodity markets, allowing producers and consumers to manage (hedge) their physical commodity exposures and traders/investors to speculate on commodity prices. This tutorial examines commodity derivatives, including both exchange-traded and over-the-counter (OTC) contracts.

Prerequisite Knowledge
Commodities – Physical Trading

Tutorial Level: Intermediate
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Overview of Derivatives Trading
- Commodity Derivatives Trading
- Risk Management
- Risk Management Strategy
- Hedging
- Hedging a Physical Diesel Cargo
- Basis Risk
- Forward Curves, Contango, & Backwardation

Topic 2: Exchange Trading
- Futures
- Commodity Exchanges
- Clearinghouses
- Margining

Topic 3: OTC Trading
- OTC Derivatives
- Forwards
- Swaps
- Options
- Comparison of Derivatives

Topic 4: Speculative Trading
- Trading Strategies

Commodities – Electricity

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the basics of electricity, including its unit of measurement and why it is supplied via direct and alternating currents
- Identify the generation, transmission, and distribution sectors
- Recognize the primary energy sources of electricity
- Identify the factors driving the demand for electricity
- Recognize the wholesale and retail markets
- Identify the factors impacting electricity prices

Tutorial Overview
It is hard to imagine life without electricity. It provides lighting and heating, and powers countless appliances and industrial machinery. While in most countries the industry was traditionally dominated by a single national utility (vertically-integrated monopolies), a process of liberalization has introduced competition across sectors, such as generation and distribution.

Electricity is now traded as a commodity, and there is even some international trade of electricity. This tutorial focuses on the electricity industry as a whole and its major trading characteristics.

Prerequisite Knowledge
Commodities – Physical Trading

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Electricity
- Electricity & Electricity Generation
- Units of Electricity Generation
- Direct & Alternating Currents

Topic 2: The Electricity Industry
- Sectors
- Electricity Generation
    - Fossil Fuels
    - Nuclear
    - Renewables
- The Generation Mix
- Electricity Transmission & Distribution
- Interconnectors
- Off-grid Generation
- Storage

Topic 3: Electricity Markets
- Electricity Demand
- Baseload vs. Peak Load Electricity
- Market Equilibrium
- Buying & Selling
- Factors Impacting Prices
- Traded Contracts

Commodities – Emissions

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main sources of emissions
- Recognize the significance of the Kyoto Protocol and the Paris Agreement in terms reducing emissions
- Compare the main types of emissions trading mechanism
- Identify the major global emissions trading schemes (ETS)
- The use of verified emission reduction (VER) credits

Tutorial Overview
Emissions are gases or energy that are discharged into the air from fossil fuel combustion, agriculture, industry/manufacturing, and deforestation. Some gases are grouped into what are known as greenhouse gases (GHGs) which trap the sun's heat within the earth's atmosphere and lead to climate change through global warming.

This tutorial looks at climate change or emissions mitigation techniques currently being used to limit the effect of climate change. It reviews the latest political agreements and the tools currently being used to set the price of "carbon" and how they interact with each other, and the current regional mechanisms being pursued.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Emissions: Overview
- Overview of Emissions

Topic 2: Kyoto Protocol & Paris Agreement
- Kyoto Protocol
- Paris Agreement
- Paris Agreement vs. Previous Climate Treaties

Topic 3: Evolution of Emissions Trading
- Background to Trading Schemes
- Leading Trading Schemes
- Clean Development Mechanism (CDM)
- Emissions Trading Schemes (ETS)

Topic 4: Major Global ETS
- Popularity of ETS
- ETS in Europe
- ETS in the Americas
- ETS in Asia

Topic 5: Carbon Offsetting & Voluntary Carbon Market
- Verified Emission Reduction (VER) Credits

Commodities – Ferrous Metals

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize ferrous metals and their importance
- Recall how iron – the key distinguishing feature of ferrous metals – is made
- List the types and alloys of ferrous metals
- Identify the demand and supply of ferrous metals
- Recognize the sustainability of ferrous metals

Tutorial Overview
Ferrous metals are metals that contain iron. This tutorial takes a look at the origination of iron and the various derivatives of iron. We cover ferrous metals' demand and supply fundamentals, their derivatives, and their sustainability.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: What are Ferrous Metals?
- Overview of Ferrous Metals

Topic 2: Composition of Ferrous Metals
- What is Iron Ore?
- Iron Ore Supply
- Iron Ore Benchmark Prices
- How is Iron Created?

Topic 3: Key Ferrous Metals
- Types of Iron
- Steel
- Other Alloys of Iron

Topic 4: Supply & Demand of Ferrous Metals
- Demand for Steel
- Factors Determining Steel Prices
- Steel Benchmarks
- Other Ferrous Metals Traded
- Steel Spreads

Topic 5: Sustainability
- Sustainability of Steel

Commodities – Grains

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the characteristics of corn, its key producers, uses, and lifecycle
- Identify the major coarse grains such as barley, sorghum, and oat
- Identify the main cereal grains of wheat and rice
- Recognize the main factors affecting grain prices
- List the key markets for trading grains

Tutorial Overview
This tutorial describes the basics of the main grains (namely corn, wheat, and rice) traded on global markets, as well as some popular hedging and trading applications for these commodities. As with most agricultural commodities, grains are characterized by strong supply and demand fundamentals. These fundamentals are examined throughout this tutorial.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Introduction to Grains
- Grains: An Overview
- Types of Grain

Topic 2: Corn
- Basics of Corn
- Primary Uses
- Use as a Biofuel
- Life Cycle

Topic 3: Other Major Coarse Grains
- Barley
- Sorghum
- Oat

Topic 4: Cereal Grains
- Wheat
- Producers
- Life Cycle
- Rice
- Producers

Topic 5: Factors Affecting Prices
- Supply & Demand
- Supply & Demand: Carryout
- Crop Rotation
- Weather
- Other Influences

Topic 6: Grains Trading
- Trading
- Seasonality in Grain Futures

Commodities – Livestock

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the animals commonly categorized as livestock
- Recognize the fundamentals of the cattle market
- Recognize the fundamentals of the lean hogs market

Tutorial Overview
This tutorial describes the basics of cattle and lean hogs, the two main types of livestock traded on global commodity markets. As with most agricultural commodities, cattle and lean hogs are characterized by strong supply and demand fundamentals. These fundamentals are examined in detail throughout this tutorial.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Livestock
- What is Livestock?

Topic 2: Cattle
- Supply & Demand
- Cattle Production Process
- Cost of Feedstocks
- Factors Affecting Cattle Prices
- Cattle Reports
- Cattle Derivative Trading

Topic 3: Lean Hogs Market
- Supply & Demand
- Environmental Issues
- Lean Hogs Production Stages
- Lean Hogs Cycle & Pricing
- Cost of Feedstock
- Factors Affecting Hog Prices
- Hog Derivative Trading

Commodities – LNG

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the processes undertaken to convert raw natural gas to LNG
- Recognize the key factors behind LNG supply and demand
- Outline the role of pricing hubs in terms of natural gas as a traded commodity and the movement to long-term contract

Tutorial Overview
The convenience of liquefied natural gas has led to its popularity as a competitive energy source and this has had a massive impact on the global gas markets. In this tutorial, we examine the process of converting natural gas to LNG, how the industry is evolving, and the challenges and opportunities that face it in the future.

Prerequisite Knowledge
Commodities – Natural Gas

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of LNG
- What is Liquefied Natural Gas (LNG)?
- History of LNG
- LNG Liquefaction Plant
- Process of Liquefaction
- LNG Import Terminals & Regasification
- LNG Shipping

Topic 2: Supply & Demand
- Supply
- Demand

Topic 3: LNG Contracts & Pricing
- LNG Contracts
- LNG Pricing

Commodities – Natural Gas

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key characteristics of natural gas and why these are important in terms of gas as a traded commodity
- Identify the key locations of supply and demand for natural gas, and the importance of gas storage
- Outline the role of pricing hubs in terms of natural gas as a traded commodity and list the main types of gas contract available in the market
- Recognize the role that natural gas can play in the transition to a more sustainable world

Tutorial Overview
Natural gas is a crucial and widely-used energy source and is more environmentally friendly than other hydrocarbons such as oil and coal. This tutorial examines natural gas as a commodity, including its chemistry make-up, supply and demand dynamics, and the role of pricing hubs in gas commodity trading.

Prerequisite Knowledge
Commodities – Derivatives Trading

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Natural Gas
- What is Natural Gas?
- Chemistry of Natural Gas
- Geology of Natural Gas Resources

Topic 2: Supply & Demand
- Global Supply
- Storage
- Global Demand & Pipeline Trade Flows

Topic 3: Gas Trading
- Pricing Hubs
- Physical & Derivatives Trading
- Relationship to Other Energy Commodities

Topic 4: Decarbonization
- Role of Natural Gas in the Decarbonization Agenda

Commodities – Nonferrous Metals

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the key features of nonferrous metals
- Recognize how market participants can trade nonferrous metals in the spot and forwards markets
- The factors that determine the prices of nonferrous metals

Tutorial Overview
Nonferrous metals are so-called because they don't contain iron. Their numerous uses make them some of the most sought-after traded commodities.

This tutorial takes a detailed look at the different types of nonferrous metal, their fundamentals, where they may be traded, and the factors determining their prices.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: An Overview
- Overview Of Nonferrous Metals

Topic 2: Key Nonferrous Metals
- Aluminum
- Copper
- Nickel
- Lead
- Tin
- Zinc

Topic 3: Nonferrous Metals for EVs
- EV Metals

Topic 4: Trading Nonferrous Metals
- Trading on the LME
- Other Nonferrous Metal Exchanges

Topic 5: Nonferrous Metals Pricing
- Factors Affecting Nonferrous Metals Prices

Commodities – Oil Products

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the link between oil refining and petroleum products and the key processing units associated with refineries
- List the main refined products and their key specifications from each of the fractions (light ends, middle distillates, and heavy fractions) associated with the refining process
- Define the crack spread and its importance to refiners and other hedgers as well as speculative traders

Tutorial Overview
Crude oil is of little use in its natural state but can be converted into valuable sub-components or fractions. After oil has been extracted, it is sent to refineries where different parts of the oil are separated into transport fuels and other useable petroleum products. This tutorial describes the process of oil refining and how it used to make these products, as well as the different features and characteristics of the different product groups.

Prerequisite Knowledge
Commodities – Crude Oil

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Oil Refining
- Oil Refining & Oil Products
- Economics of Refining
- Oil Refining Processes
- Processing Units
- Distillation
- Reforming
- Cracking
- Desulfurization
- Geography & Complexity

Topic 2: Light Ends
- Yield of Products
- Liquified Petroleum Gas (LPG)
- Naphtha
- Gasoline

Topic 3: Middle Distillates
- Yield of Products
- Jet Fuel/Kerosene
- Diesel

Topic 4: Heavy Fractions
- Yield of Products
- Fuel Oil

Topic 5: Crack Spreads
- What is a Crack Spread?
- Trading a Crack Spread

Commodities – Oilseeds

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the key types of oilseed
- Identify the main uses, producers, and growth characteristics of the key oilseeds
- Recognize the importance of oilseeds in biodiesel production
- List the means by which oilseeds are traded

Overview
Oilseeds are agricultural products grown for the production of vegetable oils and increasingly for the production of biodiesel and renewable diesels. Consequently, there are now major global markets for oilseeds in their unprocessed form and for their two byproducts, vegetable oil and meal.

While there are many different oilseeds, international trade is dominated by five in particular: soybeans, palm, rapeseed, sunflower seeds, and coconut. In this tutorial, we examine each of these and then look at how oilseeds may be traded.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Oilseeds
- Oilseeds – An Overview
- Types of Oilseed

Topic 2: Edible Oils
- Types of Edible Oil
- Soybeans
- Uses & Producers of Soybeans
- Soybean meal & oil
- Rapeseed
- Uses & producers of Rapeseed
- Sunflower Seeds
- Uses & Producers of Sunflower Seeds

Topic 3: Topical Oils
- Types of Tropical Oil
- Palm
- Uses & Producers of Palm
- Coconut
- Uses & Producers of Coconut

Topic 4: Biodiesel
- Biodiesel
- Renewable Diesel

Topic 5: Oilseeds Trading
- Trading of Oilseeds
- Exchange of Futures for Physical (EFP)

Commodities – Petrochemicals

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of understanding the chemistry associated with petrochemicals and the olefin manufacturing process
- Identify the different petrochemical groups, including their feedstocks and main products
- Outline how petrochemicals are priced in the market

Tutorial Overview
Petrochemicals – sometimes abbreviated as “petchems” – are a set of chemical compounds that fuel a wide array of products that are integral to modern economies and societies. This tutorial describes the major groups of petrochemicals, including the chemistry behind the groups, how they are made and used, and how they have become a tradable commodity class in their own right.

Prerequisite Knowledge
Commodities – Oil Products

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Petrochemicals
- What are Petrochemicals?
- Chemistry of Petrochemicals
- Olefin Manufacturing

Topic 2: Ethylene & Polyethylene
- Ethylene
- Polyethylene

Topic 3: Propylene & Polypropylene
- Propylene
- Polypropylene

Topic 4: Polyethylene Terephthalate
- Polyethylene Terephthalate (PET)
- Plastic Recycling

Topic 5: Other Petrochemicals
- BTX Aromatics
- Polyvinyl Chloride (PVC)
- Butadiene

Topic 6: Petrochemical Pricing
- How are Petrochemicals Priced?

Commodities – Physical Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify how physical commodities are bought and sold, including the key contractual terms between buyers and sellers
- Recognize how a contract price may be fixed for the duration of the contract or based on a formula
- Identify the main participants in physical commodity markets and how key market locations emerge
- Define the concept of geographical arbitrage and the importance of logistics and trade flows in this regard
- Define the concept of timing arbitrage and the importance of storage facilities and pricing in this regard

Tutorial Overview
In simple terms, physical commodity trading involves moving commodities from one location to another. However, moving heavy and cumbersome materials across seas and other transportation nodes is, unsurprisingly, not easy in practice. This tutorial examines the market for physical commodities, including key concepts such as basic contract terminology, pricing, logistics, trade flows, and storage.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Physical Trading
- Physical Commodity Trading
- Basic Contract Terms
- What Do You Think?

Topic 2: Pricing
- Fixed vs. Formula-Based Pricing
- Commodity Price Indices

Topic 3: Market Participants & Locations
- Market Participants
- Market Locations

Topic 4: Geographical Arbitrage
- What is Geographical Arbitrage?
- Logistics
- Trade Flows

Topic 5: Timing Arbitrage
- What is Timing Arbitrage?
- Storage

Commodities – Precious Metals

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the characteristics of a precious metal
- List the most common types and uses of precious metals
- Identify the different markets for precious metals
- Recall how they are traded

Tutorial Overview
This tutorial discusses the most popular precious metals and their use as both industrial goods and investment assets. We learn about how they are traded and the different methods by which they can be traded.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Definition of Precious Metals
- Precious metals

Topic 2: Types of Precious Metal
- Types of Precious Metal Traded
  - Gold
    - Supply of Gold
    - Demand for Gold
    - Factors Affecting the Price of Gold
  - Silver
    - Supply of Silver
    - Demand for Silver
    - Factors Affecting the Price of Silver
  - Platinum
    - Supply of Platinum
    - Demand for Platinum
    - Factors Affecting the Price of Platinum
  - Palladium
    - Supply of Palladium
    - Demand for Palladium
    - Factors Affecting the Price of Palladium

Topic 3: Trading Precious Metals
- Types of Precious Metals Markets
- Physical Market
  - Features of Physical Trading
  - Allocated vs. Unallocated Precious Metals
  - Trading Precious Metals on Stock Markets
- Lease Market
- Trading Derivatives in Precious Metals
  - OTC Derivatives
  - Exchange-Traded Derivatives

Commodities – Pulp & Packaging

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall what is meant by pulp and packaging
- Name pulp's raw materials, recall how it's produced, and list the different types
- Identify the main types of packaging boards
- Recognize the favorable recycling characteristics of pulp and packaging
- List the key benchmarks and the relevant derivatives for risk management

Tutorial Overview
Paper has been one of the most important means of communicating and recording data over thousands of years. While its use is on the wane since the arrival of the digital age, it still plays a significant role in everyday life. Further, paper-based packaging boards are also becoming ever more popular relative to plastic packaging as society adopts a more sustainable lifestyle.

In this tutorial, we explore pulp and its various types, packaging boards and the main types, and how risk can be managed in the pulp and packaging markets.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Pulp & Packaging: Overview
- Pulp & Packaging: Overview

Topic 2: Pulp
- Source of Pulp
- Producing Pulp
- Kraft (Sulphate) Pulp
- Eucalyptus Pulp
- Tropical Hardwood Pulp
- Pulp Supply & Demand

Topic 3: Packaging Boards
- Types of Packaging Board
- Containerboard
- Containerboard Pricing
- Containerboard Supply & Demand
- Containerboard Trade Flows
- Cartonboard
- Cartonboard Supply & Demand
- Cartonboard Trade Flows

Topic 4: Recycling & Energy Usage
- Recycling
- Energy Intensity

Topic 5: Price Benchmarks & Risk Management
- Price Benchmarks
- Risk Management

Commodities – Renewables

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how a renewable transportation fuel differs from a fossil fuel
- Identify bioethanol and biodiesel and their feedstocks
- Recognize how renewable diesel differs from biodiesel
- Identify the main mandates and their effect on the biofuel market
- Recognize the opportunity cost of biofuels to the food market
- Identify the future key market developments for the biofuel market

Tutorial Overview
With so many oil-dependent applications for which there are few or no substitutes, crude oil is one of the world's most important commodities. Unlike water or air which are plentiful, crude oil is a finite resource. Given its constrained supply, it's often referred to as black gold. However, what if a substitute for crude oil could be found, one which was renewable, it could it help solve the scarcity of crude oil and reduce greenhouse gases. This is the aim of renewable transportation fuels, to reduce the dependence on petroleum gasoline and diesel.

In this tutorial, we look at the most common renewable fuels, the mandates that governments apply to encourage their adoption, and the future developments in that market.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Renewable Fuels
- Overview of Renewable Fuels

Topic 2: Bioethanol & Biodiesel
- Bioethanol
- Biodiesel
    - Biodiesel Feedstocks

Topic 3: Renewable Diesel & Jet Fuel
- Renewable Diesel
- Sustainable Aviation Fuel (SAF)

Topic 4: Biofuel Mandates & RINs
Biofuel Mandates
- US – Renewable Fuels Standard (RFS)
    - Renewable Identification Numbers (RINs)
- EU – Renewable Energy Directive (RED II)

Topic 5: Food vs Fuel Debate
- Food Security

Topic 6: Biofuels Markets & Future Developments
- Biofuel Markets
- Regional Objectives
- Electric Vehicles (EV)
- Hydrogen Fuels

Commodities – Risk Management & Hedging

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall price risk
- Discuss how a risk management strategy is formed
- Recognize the methods for managing price risk
- Identify the different financial derivatives used for hedging
- Recognize how companies must comply with regulations on hedging with financial derivatives

Tutorial Overview
Price risk is a serious concern for commodities buyers and producers alike. We therefore look at how commodity buyers or sellers can use price risk management to reduce their exposure.

We discuss how price risk can be identified, the different risk management strategies, and how counterparties and/or banks and other hedge providers can play a role in hedging their risks.

Finally, we review the different financial derivatives for price risk management and how they should be set to comply with regulations on commodity hedging.

Prerequisite Knowledge
Commodities – Derivatives Trading

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Price Risk
- Price Risk

Topic 2: Risk Management
- Forming A Risk Management Strategy
- Managing Price Risk
- Price Fixing & Price Locking
- Price Reporting Agencies & Price Indices

Topic 3: Hedging Instruments
- Buy/Sell Financial Derivatives
- Derivative Types
    - Futures
    - Forwards
    - Options
    - Swaps

Topic 4: Regulations on Hedging
- Hedge Accounting & Regulation
- Hedge Effectiveness
- Regulatory Compliance
- How do Companies Hedge?

Commodities – Softs

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the supply and demand characteristics of the key soft commodities, namely sugar, orange juice, coffee, cotton, and cocoa
- List the main producing countries of the key soft commodities
- Identify the factors determining the prices of the key soft commodities, namely sugar, orange juice, coffee, cotton, and cocoa
- List the countries mostly responsible for producing the key soft commodities

Overview
"Softs" are a coterie of agricultural goods that are traded in international commodity markets. The key softs include sugar, orange juice, coffee, cotton, orange juice, and cocoa. Other groupings of agricultural goods traded in international commodity markets include grains, oilseeds, dairy, and livestock and are covered elsewhere in their own respective tutorials.

This tutorial describes the basics of softs and their key supply and demand fundamentals.

Prerequisite Knowledge
Commodities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: What are Soft Commodities?
- Soft Commodities

Topic 2: Sugar
- Overview of Sugar
- Supply
- Production
- Demand & trade
- Pricing
- Producers

Topic 3: Coffee
- Overview of Coffee
- Supply
- Demand & Trading
- What Affects the Price?

Topic 4: Cotton
- Overview of Cotton
- Supply
- Demand & Trading
- What Affects the Price?

Topic 5: Orange Juice
- Overview of Orange Juice
- Supply
- What Affects the Price?

Topic 6: Cocoa
- Overview of Cocoa
- Supply

- What Affects the Price?

Common Errors – Excel Interactive

Description
Overview
This is one in a series of tutorials that provide an introduction to Microsoft Excel for financial services participants. The aim of this series is to demonstrate some of the key functions in Excel and show how they can be used to increase the efficiency and effectiveness of their work. This tutorial explains some of the common error messages in Excel that we frequently encounter. Knowing how to recognize them can help you fix these errors more efficiently.

Prerequisite Knowledge
Lookup Functions – Excel Interactive

Level: Intermediate
Duration: 45 minutes

Conditional Formatting – Excel Interactive

Description
Overview
This tutorial is one of a series that provides an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate how the formatting of cells in Excel can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on conditional formatting.

Prerequisite Knowledge
Naming & Referencing Cells – Excel Interactive

Level: Intermediate
Duration: 30 minutes

Conditional Statements – Excel Interactive

Description
Overview
This tutorial is one of a series that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and show how they can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on conditional statements.

Prerequisite Knowledge
Naming & Referencing Cells – Excel Interactive

Level: Intermediate
Duration: 20 minutes

Conduct Standards (Ireland)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the three types of Conduct Standard
- Explain how the Conduct Standards apply
- List the obligations and responsibilities each of the Conduct Standards places on individuals and firms

Tutorial Overview
The Conduct Standards are a key aspect of the Central Bank's Individual Accountability Framework, or IAF. They set the standards of behaviour that the Central Bank expects from regulated financial firms and those working within them.

This tutorial provides a high-level overview of the Conduct Standards and the obligations they place on regulated financial firms and individuals.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 35 minutes

Tutorial Outline
Topic 1: Introducing the Conduct Standards
- What are the Conduct Standards?

Topic 2: Business Standards
- What are the Business Standards?

Topic 3: Common Conduct Standards
- What are the Common Conduct Standards?
- Act with Honesty & Integrity
- Act with Due Skill, Care & Diligence
- Cooperate with Regulators
- Act in Customers' Best Interests
- Comply with Market Conduct Standards & Trading Venue Rules

Topic 4: Additional Conduct Standards
- What are the Additional Conduct Standards?

Topic 5: Obligations
- Firms' Obligations
- Reasonable Steps
- Guidance on Reasonable Steps

Conflicts of Interest (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define conflicts of interest (COIs)
- Name the key sources and categories of COIs
- List the major regulatory and legal frameworks that address COIs at financial firms
- Identify the COIs management process, including identification, monitoring, mitigation, and disclosure

Tutorial Overview
Conflicts of interest arise when you have a reason to act in favor of one set of interests over another. In recent years, they have become a major focus for regulators seeking to improve the quality of governance and risk management at financial firms.

This tutorial provides a high-level overview of conflicts of interest at financial firms, including how such conflicts arise, how they may expose firms to various risks, and how they can best be managed.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Conflicts of Interest Overview
- What is a Conflict of Interest?
- Categories of COIs
- Consequences of COIs
- Principal/Agent Problem
- Best-Interests Principle
- Scenario: Fund Management

Topic 2: Conflicts of Interest in Finance
- COIs & Market Functions
- Key Sources of COIs in Finance
- COIs & Financial Regulation
- Regulation in Europe & the UK
- Regulation in the US
- Regulation in Australia & Asia
- Case Study: Professional Services Firm Admits to COI Breach
- Trustees/Fiduciaries
- Directors
- Scenario: Investment Advice

Topic 3: Managing Conflicts of Interest
- Overview of COI Management
- Policies
- Identify
- Mitigate/Avoid
- Monitor & Report
- Disclose
- Scenario: Investment Banking

Consumer Banking – Customer Experience

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of bank operations to customer service
- Recall how customer experience depends on both what is delivered and how it is delivered
- Recognize the components of good customer service
- List the benefits of having a good customer service
- Identify the front, middle and back functions in a typical bank
- Recognize how customer service & satisfaction is measured
- List the key elements to delivering a good customer experience in a digital banking context

Tutorial Overview
For consumer (retail) banks that succeed in delivering superior customer service and experience, the rewards can be significant in terms of cross-selling opportunities, less price sensitivity on the part of customers, and the recruitment of active advocates for the bank.

This tutorial examines the techniques and metrics employed to ensure high levels of customer service and retention, going beyond traditional customer service to explore the wider realm of customer experience (the sum total of all bank-customer interactions).

Prerequisite Knowledge
Business of Consumer (Retail) Banking

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Customer Service & Bank Operations
- Customer Service & Customer Experience
- Service Quality
- Service Quality Gap Analysis
- Benefits of Customer Service
- Components of Customer Service
- Customer Service Operations
- Bank Organization
- Operations Complexity

Topic 2: Measuring Service Quality
- Service Quality Metrics
- Customer Satisfaction
- Net Promoter Score (NPS)
- Customer Retention

Topic 3: Customer Experience
- Defining Customer Experience
- Characteristics of Customer Experience
- Role of Bank Staff
- Customer Experience in a Digital Banking Context

Consumer Banking – Omnichannel Delivery

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the principles of omnichannel banking
- List some of the key barriers to a customer-centric approach
- Recognize the features of different banking channels
- Identify the two major stages in developing an effective omnichannel banking strategy

Tutorial Overview
Omnichannel delivery requires banks to integrate their banking channels so they relate to each other and to customer behaviors and preferences at all stages of the customer journey.

This tutorial examines best practice in omnichannel delivery and the steps required to facilitate a seamless customer journey through the product sales cycle.

Prerequisite Knowledge:
Business of Consumer (Retail) Banking

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Delivery Channels
- Changes in Delivery Preferences
- Multichannel Delivery
- Omnichannel Delivery

Topic 2: Omnichannel Principles
- Omnichannel Principles
- Following the Customer
- Branch-Centricity
- Ownership of the Sale
- Customer-Centric Approach

Topic 3: Advice Platforms
- Advice Platforms: Overview
- Advice Platforms: Benefits

Topic 4: Channel Features
- Categories of Channel Interactions
- Contact Centers

Topic 5: Customer Journey
- Sales Cycle
- Omnichannel Strategy
- Key Performance Indicators
- Customer Journey Models

Consumer Banking Products – Credit

Tutorial Description
Objective
On completion of this tutorial, you will be able to:

- Recognize that financial institutions offer many loan types
- List the different short-term lending facilities typically available
- Name some of the more common term loans
- Identify a mortgage and how it can differ to most other loans
- Define a lease
- List the various stages of the lending cycle
- Identify and manage problem loans

Tutorial Overview
Consumer/retail credit products come in multiple guises, from short-term facilities such as overdrafts to much longer-term financing in the form of mortgages. The various forms of financing are distinguished not just by term but also by features such as whether the credit facility comes with security (collateral) attached.

This tutorial describes the major credit product lines and the typical stages of the lending cycle.

Prerequisite Knowledge
Business of Consumer (Retail) Banking

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Consumer Credit Overview
- Types of Consumer Credit

Topic 2: Short-Term Facilities
- Overdrafts
- Overdrafts in Practice
- Overdrafts: Benefits & Drawbacks
- Credit Cards

Topic 3: Term Loans
- Consumer/Personal Loans
- Secured vs. Unsecured Loans

Topic 4: Mortgages & Other Home Loans
- Definition of a Mortgage
- Key Features of Mortgages
- Other Types of Home Loan

Topic 5: Lease-Type Financing
- Leases & Similar Arrangements

Topic 6: The Lending Cycle
- Typical Lending Cycle
- Loan Origination
- Loan Processing
- Loan Underwriting
- Loan Negotiation
- Loan Decision (Approval/Rejection)
- Loan Grading
- Loan Closing & Disbursement
- Loan Servicing & Monitoring

- Loan Repayment

Topic 7: Problem Credit Management
- Problem Loans
- Customer Classifications
- Managing Problem Loans

Consumer Banking Products – Noncredit

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define a checking/current account
- List the typical savings & investments products
- Identify the different payment methods
- Recognize how revenue is earned in currency exchange services
- List the different insurance products
- Define Islamic banking

Tutorial Overview
Banks have traditionally relied greatly on net interest income – the difference between interest charged (on loans and other credit products) and interest paid (on deposits and other customer funds) – as their major source of profits. But with interest margins under pressure in an era of low interest rates, there is a need for banks to generate alternative sources of income. At a basic level, they earn fee income from checking/current accounts and other products. But with the digitization of payments, banks are looking beyond transaction fees to generate value from customer payments data, as well as seeking to widen their product range and devise attractive, bundled product offerings.

This tutorial describes the various noncredit products that consumer banking businesses offer their customers.

Prerequisite Knowledge
Business of Consumer (Retail) Banking

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Checking/Current Accounts
- An Everyday Transactional Account
- A Gateway Product
- Fees & Benefits

Topic 2: Savings & Investments
- Savings/Deposit Accounts
- Fixed Term Products
- Structured Deposits
- Investment Products
- Other Products

Topic 3: Payments
- Banks' Role in Payments & Transfers
- Electronic Funds Transfer (EFT)
- Credit Transfers
- Debit Transfers
- Debit Transfers Vs Standing Orders
- Fast/Faster Payments
- Cross-Border Payments
- Payments Cards
- Importance of Payments Cards

Topic 4: Foreign Exchange
- Foreign Exchange

Topic 5: Insurance

- Banks & Insurance
- Life vs. Nonlife Insurance
- Life Insurance Products
- Nonlife Insurance Products

Topic 6: Product Bundles

- Product Bundling
- Third-Party Relationships

Topic 7: Islamic Banking

- Shari'a-Compliant Products

Consumer Banking – Risk Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key risk management issues and sources of risk for consumer banks
- Recognize how the fundamental business of banks – lending money – gives rise to credit/default risk
- Identify the reasons why understanding and managing liquidity risk is critical to a bank's survival
- Recognize how changes in interest rates can impact a bank's profitability
- Define the different types of operational risk that banks must manage, including two types of risk – cyber risk and conduct risk – that have become growing concerns for banks in recent times

Tutorial Overview
Consumer banks are exposed to many risks, from traditional banking risks such as credit and interest rate risk to more contemporary risks such as cyber and conduct risk. To mitigate the impact on financial performance, banks must have systems in place that identify, assess/measure, manage, and monitor all risks to which they are exposed. This tutorial provides a high-level overview of risk and risk management for consumer banking operations.

Prerequisite Knowledge
Business of Consumer (Retail) Banking

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Risk in Consumer Banking
- Overview of Consumer Banking Risk
- Risk Types & Interactions
- Sources of Risk
- Managing Risk

Topic 2: Credit Risk
- Credit & Default Risk
- Example of Credit Risk
- Credit Risk Exposure
- Credit Risk Assessment
- Credit Risk Management

Topic 3: Liquidity Risk
- Overview of Liquidity Risk
- Liquidity Risk & Leverage
- Maturity Transformation
- Customer Trust
- Managing Liquidity Risk & Leverage

Topic 4: Interest Rate Risk
- Interest Rate Basics
- Impact of Rate Changes
- Asset-Liability Management (ALM)

Topic 5: Operational Risk
- Definition of Operational Risk
- Operational Risk Categories

Topic 6: Cyber Risk
- Cyber Risk Overview
- Cyber Incidents

- Impact of Cyber Incidents
- Managing Cyber Risk
- Response & Recovery

Topic 7: Conduct Risk
- Greater Focus on Conduct
- Definition of Conduct Risk
- Drivers of Conduct Risk
- Managing Conduct Risk

Consumer Duty

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognise why the Consumer Duty is needed
- Identify the three components of the Duty: the Consumer Principle, the cross-cutting obligations and the four outcomes
- List firms' obligations under the Duty
- Describe why firms must monitor retail customer outcomes

Tutorial Overview
The Consumer Duty is a package of measures aimed at increasing the level of consumer protection in the UK's retail financial services market. It has three components and is based on the principle that all firms operating in the market must act to deliver good outcomes for retail customers. This tutorial provides a high-level overview of the Consumer Duty and firms' obligations under it.

Prerequisite Knowledge:
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Consumer Duty Initiative
- Need for the Consumer Duty
- Structure of the Duty
- Reasonableness
- Scope
- Penalties
- Case Study: Pension Schemes

Topic 2: Consumer Principle
- What is the Consumer Principle?
- The Principle in Detail

Topic 3: Cross-Cutting Obligations
- What are the Cross-Cutting Obligations?
- Cross-Cutting Obligations
- Scenario: Product Costs

Topic 4: Four Outcomes
- What are the Four Outcomes?
- Ensuring Good Outcomes

Topic 5: Governance & Culture
- Key Requirements
- Role of the Board

Topic 6: Monitoring Outcomes
- Purpose of Monitoring
- Monitoring Requirements

Contingent Convertibles (CoCos)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Compare contingent convertible and traditional convertible bonds
- Define the key features of CoCos, including the trigger point and loss absorption mechanism
- Recall the regulatory background to the development of the CoCo space

Tutorial Overview
Contingent convertibles are hybrid securities issued by banks that convert into the equity of the bank or are written down if a trigger event occurs. This tutorial describes the regulatory background to CoCos and outlines the key features and structures of these instruments.

Prerequisite Knowledge
Convertibles – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of CoCos
- What Are CoCos?
- Advantages of CoCos for Issuers & Investors
- CoCos vs. Conventional Convertibles
- CoCos vs. Conventional Convertibles: Risk Profiles

Topic 2: CoCo Structures
- Overview of CoCo Structures
- Trigger Point
- Types of Trigger Point
- Loss Absorption Mechanism
- CoCos & Seniority
- CoCo Pricing

Topic 3: Regulatory Issues
- Regulatory Landscape & CoCos
- Regulatory Landscape & CoCos: Capital Requirements
- Regulatory Landscape & CoCos: Triggers & Maturities
- CoCos vs. Bail-ins

Contracts for Difference (CFDs)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how a CFD works
- Identify the underlying securities used for CFDs
- Illustrate how a CFD can be used to take a leveraged position
- List the various advantages and disadvantages of CFDs

Tutorial Overview
Contracts for difference (CFDs) are just one part of a large derivatives market that includes futures and options. This tutorial looks at CFDs, an instrument that has seen an increased participation by hedge funds among others, and how CFDs can be used to take a leveraged position on an underlying security. Finally, this tutorial describes the advantages and disadvantages of CFDs.

Prerequisite Knowledge
Derivatives – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of CFDs

- Overview of CFDs
- Definition of a CFD
- Underlying Securities
- Users of CFDs
- Scope & Regulation of CFDs
- Clearing & Settlement

Topic 2: Trading CFDs

- Trading CFDs
- Margin
- Key Differences between CFDs & Common Stocks
- Margin Requirements
- Financing of Margined Positions
- CFD Long Position: Example
- CFD Short Position: Example
- Bid-Ask Spreads
- Stop & Limit Orders
- Stop Loss Orders

Topic 3: Benefits & Downsides to CFDs

- Benefits & Downsides to CFDs
- Advantages of CFDs
- Hedge Funds & CFDs
- Disadvantages of CFDs

Convertibles – An Introduction

Tutorial Description
On completion of this tutorial, you will be able to:

- Define the key benefits and costs/risks of convertibles for issuers and investors, and list the key types of convertible bond available
- Identify the key features of convertible securities
- Define the main mathematical terms used with convertibles

Tutorial Overview
Convertibles are hybrid securities that typically pay a fixed coupon but can also be converted into the common stock of the issuer. This tutorial provides a broad overview of the key features and cost-benefits of convertible bonds and their main-sub-types, and outlines the main mathematical terminology used with such instruments.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Convertibles
- What is a Convertible?
- Issuer Motivations
- Investor Motivations
- Convertibles: Disadvantages
- Types of Convertible

Topic 2: Features of Convertibles
- Overview of Convertible Bond Features
- Issuer Call Option
- Call Protection
- Investor Put Option
- Accrued Interest
- Dilution & Stock Splits

Topic 3: Mathematics of Convertibles
- Mathematical Terms Associated with Convertibles
- Mathematical Terms: Formulas
- Scenario: Mathematics of Convertibles

Convertibles – Valuation

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key factors affecting the prices of convertibles
- Calculate the lower bound on a convertible's price
- Estimate the fair value of a convertible bond
- Recognize the importance of other convertible pricing issues, such as issuer calls and investor puts, and measures of option sensitivity

Tutorial Overview
This tutorial looks at the pricing of convertible securities, with a particular focus on the lower bound on the convertible price, and the "moneyness" of the embedded call.

Prerequisite Knowledge
Convertibles – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Pricing Factors
- Factors Affecting Convertible Valuation

Topic 2: Bounds to Convertible Value
- Lower Bound to Convertible Value

Topic 3: Valuing the Embedded Call Option
- Embedded Option "Moneyness"
- Fair Value of the Embedded Call

Topic 4: Other Convertible Pricing Issues
- Other Key Convertible Pricing Issues
- Parity Delta & Parity Gamma
- Calculating Parity Delta: Example
- Issuer Call & Investor Put Options
- Convertible Valuation: Scenario

Convexity Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of convexity in approximating the change in bond price that isn't explained by duration
- Identify the different types of convexity
- Recall the connection between convexity and volatility

Tutorial Overview
Convexity helps to approximate the change in the price of a bond that is not explained by duration. This tutorial shows how convexity is calculated for a single security or a fixed income portfolio. The different types of convexity and the connection between convexity and volatility are also discussed in detail.

Prerequisite Knowledge
Duration Analysis

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Convexity

- Overview of Convexity
- Convexity: Example
- Convexity: Formula
- Convexity Analysis: Comparison
- Convexity & Coupon

Topic 2: Types of Convexity

- Positive Convexity
- Positive Convexity: Example
- Negative Convexity
- Approximate Convexity
- Effective Convexity
- Spread Convexity
- Portfolio Convexity
- Mixing Convexity & Duration: Example
- Bullets & Barbells

Topic 3: Convexity & Volatility

- Convexity Levels & Volatility
- Analogy With Options

Corporate Actions – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main types of corporate action and their impact from a number of different perspectives
- Recognize the key participants in the corporate actions processing chain and their role in that chain

Tutorial Overview
When a company issues a corporate action, it sets in motion an event that brings material change to the company and has ramifications for its stakeholders. But processing corporate action events is a complex business involving many different market participants and including many possible event types. This tutorial looks at the fundamentals of corporate actions, including the role of the various participants in the corporate actions processing chain (with particular emphasis on the part played by custodians).

Prerequisite Knowledge
Custody – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Corporate Actions Overview
- Introduction to Corporate Actions
- What Is a Corporate Action?
- Corporate Actions Categories
- Common Corporate Actions
- Impact of Corporate Actions

Topic 2: Processing Corporate Actions
- Corporate Actions Processing Chain
- Roles of Key Participants
- Challenges with Processing
- Common Errors
- Efforts to Standardize
- Custodian Reports
- Custodian Reports: Example
- Static Data

Corporate Actions – Types

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify some of the most common mandatory corporation actions and their key features
- Identify some of the most common voluntary corporate actions and their key features

Tutorial Overview
The list of corporate actions is long, with well over 60 different event types, according to some estimates. This tutorial explores some of the more common ones across two key categories, mandatory and voluntary, and one subcategory – mandatory with options.

Prerequisite Knowledge
Corporate Actions – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Mandatory Corporate Actions

- Mandatory vs. Voluntary Corporate Actions
- Dividend Payments
- Scrip Dividend Schemes
- Dividend Schedule
- Dividend Schedule Clashes
- Processing Interest Payments
- Mergers & Acquisitions
- Spin-Offs/Demergers
- Stock Splits
- Reverse Stock Splits
- Bonus Issues
- Early Redemption
- Other Mandatory Actions

Topic 2: Voluntary Corporate Actions

- Rights Issues
- Tender Offers
- Conversions
- Stock Buybacks
- Proxy Voting
- Other Corporate Actions

Corporate Banking – Client Acquisition & Pitching

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall how a bank can use its competitive advantage to develop effective marketing strategies for new market segments
- Identify the different forms of direct client acquisition, such as sector-related marketing, corporate client entertainment, and leveraging existing strengths, as well as indirect client acquisition, such as participation in bank syndicates
- Recognize the importance of a good pitch to acquiring new clients

Tutorial Overview
This tutorial provides an overview of the ways that corporate banking businesses acquire new clients. The different forms of direct and indirect client acquisition are outlined and the effective use of pitches is explored in detail.

Prerequisite Knowledge
Corporate Banking – Functions & Roles

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Overview of Client Acquisition
- Bank Competitive Advantage & Marketing Strategy
- Client Acquisition & Bank Type
- Name Recognition

Topic 2: Client Acquisition
- Direct Client Acquisition
- Indirect Client Acquisition

Topic 3: Pitching Strategy
- Pitching to New Clients
- Corporate Banking: Features of a Good Introductory Pitch
- Pitching to Existing Clients
- Pitch Books
- Electronic Pitch Books
- Tips for Effective Pitch Book Design & Pitching

Corporate Banking – Client Profiling

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Categorize the main types of corporate structure, such as public and private companies, special purpose vehicles, and sponsors
- Recognize the need for corporate profiling, including understanding the client market, aligning strategic objectives, matching risk profile, and budgeting and forecasting
- Recall the importance of market segmentation by industry, geography, and product
- Identify the steps involved in client profiling of new and existing clients

Tutorial Overview
This tutorial outlines how corporate banking organizations profile and segment new and existing clients to assess whether to enter into and/or continue banking relationships with them.

Prerequisite Knowledge
Corporate Banking – Functions & Roles

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Client Profiling
- Overview of Client Profiling
- Characteristics of Corporate Entities
- Sizing Corporates
- Corporate Entities

Topic 2: Need for Client Profiling
- Need for Client Profiling

Topic 3: Market Segmentation
- Market Segmentation
- Industry
- Geography
- Product

Topic 4: Profiling Corporate Clients
- Profiling Corporate Clients

Corporate Banking – Client Acquisition & Pitching

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall how a bank can use its competitive advantage to develop effective marketing strategies for new market segments
- Identify the different forms of direct client acquisition, such as sector-related marketing, corporate client entertainment, and leveraging existing strengths, as well as indirect client acquisition, such as participation in bank syndicates
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Tutorial Overview
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Prerequisite Knowledge
Corporate Banking – Functions & Roles

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Overview of Client Acquisition
- Bank Competitive Advantage & Marketing Strategy
- Client Acquisition & Bank Type
- Name Recognition

Topic 2: Client Acquisition
- Direct Client Acquisition
- Indirect Client Acquisition

Topic 3: Pitching Strategy
- Pitching to New Clients
- Corporate Banking: Features of a Good Introductory Pitch
- Pitching to Existing Clients
- Pitch Books
- Electronic Pitch Books
- Tips for Effective Pitch Book Design & Pitching

Corporate Banking – Commercial Awareness

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the key aspects of commercial awareness for corporate bankers and how this awareness can be demonstrated and improved
- Identify the factors that influence a country's corporate banking marketplace
- Recognize the range of products offered by corporate banking entities
- Identify the key commercial considerations that corporate bankers need to take into account

Tutorial Overview
Corporate bankers work in a dynamic commercial world, dealing with clients of all shapes and sizes and with differing business objectives and needs. Commercial awareness – the ability to understand a business and what makes it successful – is therefore a highly-valued skill for relationship managers and others working in a corporate banking environment. This tutorial is designed to help corporate bankers develop their commercial awareness skills by identifying the critical features and trends in the competitive landscape so they can best align their role and duties in pursuit of the bank's commercial objectives.

Prerequisite Knowledge
Corporate Banking – Functions & Roles

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Commercial Awareness Overview
- Commercial Awareness for Corporate Bankers
- Key Aspects of Commercial Awareness
- Demonstrating Commercial Awareness
- Improving Your Commercial Awareness

Topic 2: The Corporate Banking Industry
- Providers of Corporate Banking Products & Services
- Leading Market Players
- Marketplace Complexity
- Nonbank Financial Intermediation ("Shadow Banking")

Topic 3: Corporate Banking Product Suite
- Product Categories
- Core Lending Products/Credit Facilities
- Payments & Cash Management
- Corporate Risk & Treasury Management
- Trade Finance
- Asset-Backed Finance
- Specialized Lending

Topic 4: Commercial Considerations
- Sources of Funding for Corporates
- Commercial Terms/Pricing
- Refinancing
- Bank Groups/Syndicates
- Negotiation Points & Cross-Selling

Corporate Banking – Functions & Roles

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the main functions and roles in a typical corporate banking operation
- Identify the key roles in front office departments that deal directly with corporate clients
- Recognize the role played by credit analysts, credit administration, legal, and other teams in supporting client-facing staff
- List the main duties of staff working in loan administration roles
- Recognize the importance of the compliance function and the key compliance themes that apply to corporate banks
- Interpret the end-to-end process of a typical corporate banking transaction and the key roles and approvals involved

Tutorial Overview
Loans and other corporate banking transactions require the knowledge and skills of a range of banking professionals throughout the entire transaction process. This tutorial describes the main functions and roles within corporate banking, from revenue-generating front office staff to the essential work performed by loan administration staff in the operations (back office) area.

Prerequisite Knowledge
Business of Corporate Banking

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Corporate Banking Functions & Roles
- Corporate Banking Functions & Roles

Topic 2: Front Office
- Relationship Managers
- Product Specialists
- Syndication Roles
- Markets & Treasury
- Research

Topic 3: Front Office Support (Middle Office)
- Credit
- Credit Administration
- Legal
- Finance & Tax

Topic 4: Operations (Back Office)
- Loan Administration
- Administrative Agent

Topic 5: Compliance
- Key Areas of Concern

Topic 6: Roles, Processes, & Approvals
- End-to-End Process

Corporate Banking – Negotiation Skills

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key participants in the corporate banking negotiation process
- Recognize the importance of preparing for negotiation by assessing the bank's and the client's positions, the environment, and the bank group
- List the key negotiable terms in corporate banking transactions
- Recall the main strategic negotiation skills

Tutorial Overview
This tutorial looks at the key negotiation skills required for successful negotiations in corporate banking. It identifies the main participants in the negotiation process, the importance of preparing for negotiations by assessing bank and client positions, and looks at the main strategic skills required for effective negotiation.

Prerequisite Knowledge
Corporate Banking – Commercial Awareness

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Negotiation Process Participants
- Participants in the Negotiation Process

Topic 2: Preparing for Negotiation
- Importance of Preparation for Negotiations
- Assessment of Bank's Positions
- Assessment of Client's Position
- Assessment of the Bank Group/Environment

Topic 3: Negotiable Terms
- Key Negotiable Terms in Corporate Banking Transactions
- Commercial Terms
- Price Grids
- Banking Product Mix & Structure
- Credit/Legal Terms

Topic 4: Strategic Negotiation Skills
- Client/Bank Relationships
- Bank Group Relationships
- Distributive Negotiation
- What to Do in Negotiation
- Mixed-Motive Strategy: Example

Corporate Banking – Portfolio Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize why bank portfolio management strategies are based on ensuring profitability while meeting regulatory requirements
- Identify the common portfolio management tools used by banks

Tutorial Overview
Portfolio management refers to the practice of managing a bank's assets and liabilities in order to optimize the balance between risk, return, and liquidity. As these three parameters are opposed to each other, the balance can be difficult to achieve. This tutorial explores portfolio management in the context of a corporate banking operation, examining how and why it is an invaluable tool for banks.

Prerequisite Knowledge
Corporate Banking – Functions & Roles

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Portfolio Management
- Liquidity & Funding Costs
- Risk
- Capital Requirements
- Components of Regulatory Capital
- Why is Portfolio Management Necessary?
- Managing Risk & Capital

Topic 2: Portfolio Management Tools
- Reporting
- Committees
- Share of Wallet
- Client Relationship Management Plans
- Bank Strategy in Relation to a Client/Portfolio

Corporate Banking – Portfolio Management in Practice

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the role and responsibilities of relationship managers in relation to monitoring clients in their portfolio
- Identify the measures used by relationship managers to assess portfolio performance

Tutorial Overview
This tutorial looks at the monitoring and management of client and account performance. Using a detailed scenario involving a sample portfolio, it describes how a relationship manager can assess and take actions to improve portfolio performance.

Prerequisite Knowledge
Corporate Banking – Portfolio Management

Tutorial Level: Intermediate
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Client Monitoring
- Post-Approval Monitoring
- Sources of Monitoring Information
- Monitoring Account Performance
- Analyzing Financial Performance
- Monitoring Covenant Compliance
- Monitoring External Sources of Information
- Annual Reviews

Topic 2: Portfolio Review & Management
- Portfolio Review: Absolute Earnings
- Accounting for Risk
- Risk-Adjusted Earnings
- RAROC
- Comparison of Measures
- Risk Profile
- Improving Portfolio Performance

Corporate Banking – Preparing Credit Proposals

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the main stages involved in putting together a credit proposal as part of a bank's credit process
- Recognize how the initial assessment of a credit request forms the basis of the preparation stage for credit proposals
- Identify the key risks that need to be assessed and mitigated as part of the analysis and negotiation stage of the credit process
- Summarize the key elements that are included in credit proposals submitted to credit committees for a final decision

Tutorial Overview
The process of assessing whether or not to lend to a corporate client is referred to as the credit process. The preparation of a credit proposal for submission and decision as part of this process can be a lengthy and complex task. This tutorial looks at the various stages involved and the role played by corporate bankers throughout the process.

Prerequisite Knowledge
Corporate Banking – Commercial Awareness

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: The Credit Process
- Steps Involved in Preparing Credit Proposals

Topic 2: Preparing a Credit Proposal
- Client Requests
- Credit Structure
- Generating a Risk Rating
- RAROC
- Information Gathering

Topic 3: Analysis & Negotiation
- Risk Analysis
- Business Risks
- Financial Risks
- Structure Risks
- Warning Signs
- Additional Information/Negotiation
- Supplementary Approvals

Topic 4: Submission & Decision
- Drafting the Credit Proposal
- Submission Process
- Credit Committees & Credit Decisions

Corporate Banking – Relationship Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how the role and objectives of relationship management in a corporate banking environment are driven by a bank's strategy and structure
- Identify the main functions of relationship management in a corporate banking operation and the role of relationship managers within that function

Tutorial Overview
Corporate banking clients are managed on a relationship basis. This means that an individual, known as a relationship manager, is given responsibility for engaging with a potential new client (prospect) or an existing client. This tutorial describes in detail the functions of a bank's corporate banking relationship management teams and the role of relationship managers (RMs) within those teams.

Prerequisite Knowledge
Corporate Banking – Functions & Roles

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Relationship Management & Bank Strategy
- Role & Objective of Relationship Management
- Organization by Product Offering
- Organization by Geographical/Sector Coverage
- Relationship Management & Strategic Knowledge
- Internal Knowledge
- External Knowledge

Topic 2: Functions of Relationship Management
- Key Relationship Management Functions
- Developing New Client Relationships
- Structuring Transactions
- Structuring Transactions: Credit Process
- Monitoring/Managing Relationships
- Long-Term Relationship Development

Corporate Banking & Interest Rate Risk – Scenario

Description

Overview
This scenario explores how the potential impact of interest rate changes can be mitigated when a corporate banking customer takes out a term loan. This is achieved by looking at the costs and benefits of using both fixed and floating interest rate structures, and then considering how other products – such as interest rate derivatives – can be used to provide more flexibility or opportunities to minimize interest costs. The factors that impact decision making are also covered.

Prerequisite Knowledge
A solid knowledge of corporate banking risk management products – particularly interest rates swaps and options and FRAs – is required.

Level: Intermediate
Duration: 45 minutes

Corporate Banking Products – Accounts Receivable Finance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key features of both accounts receivable and the products used to finance these receivables
- Differentiate between the main accounts receivable finance products, namely invoice discounting, factoring, forfaiting, and supply chain finance
- Identify the main risks associated with accounts receivable finance and how these risks can be mitigated

Tutorial Overview
This tutorial describes accounts receivable, how they are generated, and the business needs they give rise to. It also provides detailed coverage of the various accounts receivable finance products and how their different combinations of features meet different business needs. The tutorial concludes by outlining the main product risks associated with accounts receivable financing and how these risks can be managed.

Prerequisite Knowledge
Corporate Banking Products – Short-Term Finance

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Basics of Accounts Receivable Finance
- What Are Accounts Receivable?
- Accounts Receivable & Business Needs
- Key Features of Accounts Receivable Finance Products
    - Funding Type
    - Advance Percentage
    - Interest
    - Amount Advanced
    - Repayment
- A/R Financing: Example
- Key Considerations
    - Recourse/Nonrecourse
    - Transparency
    - Assignment
    - Payment Routing
    - Credit Protection
    - Cross-Border Transactions
- Other Considerations

Topic 2: Accounts Receivable Finance Products
- Accounts Receivable Finance Products & Providers
- Developments in Accounts Receivable Finance Products
- Invoice Discounting
    - Basic Form
    - Assignment of Receivables
    - Receivables Portfolio
- Receivables Management
    - In-House vs. Factoring Services
- Factoring
    - Transaction Flow
- Forfaiting
    - Transaction Flow
- Supply Chain Finance (SCF)

    - Supplier Finance
    - Buyer Finance
- Aligning Products with Business Needs

Topic 3: Product Risks
- Key Product Risks
- Managing Credit Risk
- Managing Other Risks

Corporate Banking Products – Advisory & Other Services

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the business needs that advisory and other services are intended to meet and the providers of these services
- Identify the advisory services than can be provided to clients that are seeking to raise funds
- Identify the products and services available to clients at each stage of the M&A process
- List the range of other products and services provided to corporate banking clients
- Identify the key risks associated with the provision of advisory and other services and how these risks can be managed

Tutorial Overview
This tutorial focuses on advisory and other services offered to corporate banking customers. This includes debt and equity fund raising, M&A and restructuring activities, and a range of other services such as asset management, brokerage, and research. The tutorial describes how customer needs change as businesses grow and the products and services available to meet these larger and more complex needs. The tutorial also covers the risks that commonly arise when providing these products and services and the means by which these risks can be managed and mitigated.

Prerequisite Knowledge
Corporate Banking Products – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic One: Basics of Advisory & Other Services
- Business Needs for Advisory & Other Services
- Providers of Advisory & Other Services
  - Investment Banks
  - Investment Banking Arms of Full-Service Banks
  - Specialist ("Boutique") Providers
- Sources of Income
  - Fees
  - Subscriptions & Purchases
  - Market Movements ("Market-Making")
  - Risk Management Income
- The Changing Landscape
  - Repeal of the Glass-Steagall Act
  - Global Financial Crisis
  - Post-Crisis Regulatory Changes

Topic Two: Fund Raising
- Fund Raising Products & Services
- Fund Raising Options
  - Equity
  - Debt
  - Loans
  - Sale & Leasebacks
  - Project Finance
  - Structured Trade Finance
- Fund Raising Advisory Services
- Choosing the Right Funding Option
- Fund Raising Process
- Underwriting
- Market-Making

Topic Three: Mergers & Acquisitions (M&A)
- What Are Mergers & Acquisitions?
- The M&A Process
- M&A Products & Services
- Restructuring Advice & Execution

Topic Four: Other Services
- Asset Management
- Brokering
- Custody
- Prime Brokerage
- Privatizations & PPIs
- Research

Topic Five: Product Risks
- Key Product Risks
- Reputational Risk
  - Conflicts of Interest
- Underwriting Risk
- Other Risks
  - Market Risk
  - Liquidity Risk
  - Operational Risk
  - Credit Risk
- Managing Product Risks
- Business Risk

Corporate Banking Products – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the characteristics that help determine the different corporate banking product categories
- Recognize the key features of funded credit products and how they differ from unfunded products
- Identify the range of noncredit products offered by corporate banking businesses

Tutorial Overview
This tutorial provides an overview of the various products that banks, and some nonbanks, provide to corporate banking customers. Coverage includes an explanation of the factors that differentiate the various products in terms of how they meet customers' banking needs, how they generate revenue, and how they create risk. Based on these characteristics, products fit into a number of different product categories, such as short- and longer-term finance, details of which are explained.

Prerequisite Knowledge
Corporate Banking – Marketplace

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Corporate Banking Products
- What is a Product?
- What is a Corporate Banking Product?
- Corporate Banking Products: Further Considerations
    - Relationship Management
    - Pricing & Earnings
    - Risk Appetite
- Product Categorization
    - Credit or Noncredit
    - Funded or Unfunded
    - Revolving or Fixed
    - Tenor
    - Repayment Source
- The Need for Product Categorization
- Main Product Categories
- Product-Related Features
- Product Risks
    - Managing Product Risks

Topic 2: Funded Credit Products
- Short-Term Finance
- Term Finance
- Trade Finance (Funded)
- Accounts Receivable Finance
- Asset-Based Finance

Topic 3: Other Products
- Trade Finance (Unfunded)
- Investment Banking
- Risk Management
- Cash Management
- Payments
- Card Issuance & Processing

Corporate Banking Products – Asset-Based Finance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define asset-based finance and identify the various asset types that may be financed
- Recognize the different types of asset-based finance and the differences between loans and leases
- Identify the key risks associated with asset-based finance and how these risks can be managed
- Recognize the various stages of the asset realization process

Tutorial Overview
This tutorial details how asset-based finance works and how it meets corporates' business needs. It covers the different asset types, the common features of asset-based loans, and the differences between loans and leases. The risks associated with asset-based finance products and how these risks can be mitigated are discussed in detail. The tutorial concludes by looking at the asset realization process and the issues and challenges this can produce.

Prerequisite Knowledge
Corporate Banking Products – Term Finance

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Basics of Asset-Based Finance
- What Is Asset-Based Finance?
- Asset-Based Finance Vs. Other Forms of Secured Lending
- Asset Types
    - Asset Types & Finance Products
- Asset-Based Finance & Business Needs
    - Available Funds
    - Leverage
    - Cash Flow Projections
    - Cost
    - Market Conditions

Topic 2: Asset-Based Finance Products
- Types of Asset-Based Finance
    - Loans
    - Leases
    - Hire Purchase (HP)

Topic 3: Product Risks
- Key Product Risks
- Product Risks & Business Strategy
- Asset Valuation
- Managing Product Risks
    - Loan-to-Value (LTV)
    - Loan & Asset Value Profiles
    - Residual Value Risk
    - Documentation
    - Asset Value Protection
        - Insurance

        - Usage & Maintenance

Topic 4: Asset Realization
- The Repossession Decision
- Repossession
- Preparing for Sale
- Finalizing the Sale

Corporate Banking Products – Cash Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the attractions and drawbacks of cash management products and services from both the corporate customer's and the bank's perspective
- Identify the various products that can be used to fund corporate customer accounts
- Recognize the different types of account that corporate customers may open and the operation of sweeping and pooling arrangements in relation to these accounts
- Identify the key risks associated with the provision of cash management products and services to corporate customers and how these risks can be managed

Tutorial Overview
This tutorial focuses on cash management products and services, outlining their importance for customers and banks, and the costs and benefits of using these products and services. The various products that facilitate the paying in or receipt of funds are described in detail, as are the different types of account that businesses hold. There is also detailed coverage of sweeping and pooling arrangements and how these can be used to manage liquidity and optimize interest costs/earnings. The tutorial concludes by examining cash management product risks such as money laundering, know your customer, fraud, and operational risk.

Prerequisite Knowledge
Corporate Banking Products – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Basics of Cash Management
- What Is Cash Management?
- Why Is Cash Management Important to Businesses?
    - Facilitating Business Operations
    - Managing Liquidity
    - Optimizing Interest Earnings/Costs
- Evolution of the Cash Management Business
- Benefits of Providing Cash Management Products & Services
- Costs of Providing Cash Management Products & Services

Topic 2: Cash Management Products
- Means of Funding Customer Accounts
    - Cash
    - Checks
    - Electronic Funds Transfer (EFT)
    - Cards
    - Internal Transfers
- Cash Services
- Checking Services
    - Drawing Against Uncleared Effects (DAUE)
- EFT Services
- Card Payments
    - Processing
    - Advantages & Disadvantages

Topic 3: Account Management
- Types of Account
    - Checking/Current Accounts
    - Savings/Deposit Accounts
    - Fixed Term Products

- Multiple Accounts
- Sweeping
    - Example
- Pooling
    - Example
- Sweeping & Pooling
    - Customer Perspective
    - Bank Perspective
- Other Cash Management Services

Topic 4: Product Risks

- Key Product Risks
- Anti-Money Laundering (AML)
- Know Your Customer (KYC)
- Fraud
- Operational Risk

Corporate Banking Products – Payments

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key elements of the payments process and the key features of payments systems
- Recognize the various payments products and the factors that influence the choice of payment product
- Identify the key risks associated with the provision of payments products and how these risks can be managed

Tutorial Overview
This tutorial focuses on payments products, which often form part of a cash management product suite that banks offer to their corporate customers. The tutorial explains the payments process, the key features of that process, and the issues that can arise during pre-payment processing and post-authorization. This is followed by detailed coverage of the main payments products such as debit and credit transfers, standing orders, bulk payments, cross-border payments, checks, and card payments. The product risks that can arise when using electronic payments and checks – and the ways to mitigate these risks – are discussed, and we conclude by looking at the business risk associated with the emergence of nonbank competitors and new products.

Prerequisite Knowledge
Corporate Banking Products – Cash Management

Tutorial Level: Intermediate
Tutorial Duration: 75minutes

Tutorial Outline
Topic 1: Payments Processing
- The Payments Process
  - Instruction to Pay
  - Transfer of Funds
- Payments Systems
  - Low Value Payments
  - Large Value Payments
- Payments Messaging
- Pre-Payment Processing
- Payments Processing
- Processing Issues
  - Stopping Payments
  - Recalling Payments
  - Multiple Payments
- Bank Identifier Code (BIC)
- International Bank Account Number (IBAN)

Topic 2: Payments Products
- Main Products
- Electronic Funds Transfer (EFT)
  - Credit Transfers
  - Debit Transfers
  - Standing Orders
- Bulk Payments
- Cross-Border Payments
- Checks
  - Check Processing
- Payment Cards
- Sources of Income
- Choosing the Most Appropriate Product

Topic 3: Product Risks

- Electronic Payment Product Risks
- Check Risks
- Common Causes
- Consequences
- Mitigating & Managing Product Risks
- Business Risk: Nonbank Competitors

Corporate Banking Products – Project Finance

Tutorial Description
Objectives
On completion of this module, you should be able to:

- Identify the role of project finance in funding large-scale projects and the process for putting together a finance package
- Recognize the risks associated with projects and how they can change over the project lifecycle
- Identify the various tools and techniques that can be used to manage project risks

Tutorial Overview
Project finance is a method used to fund large-scale, capital-intensive projects, such as those involving power generation, public infrastructure, and extractive industries. Project finance deals are complex transactions involving a large number of participants and giving rise to significant risks. This tutorial provides a broad overview of project finance, including the process, parties involved, benefits, drawbacks, risks, and management of those risks.

Prerequisite Knowledge
Corporate Banking Products – Term Finance

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Project Finance
- Projects & Project Phases
- Parties Involved in a Project
- Project Structures
- Project Finance
- Project Finance: Process
- Project Finance: Packages
- Project Finance: Example
- Project Finance: Benefits & Drawbacks

Topic 2: Project Risks
- Wide Range of Risks
- Performance Risk
- Credit Risk
- Country Risk
- Market Risk
- Operational Risk
- Reputational Risk
- Other Risks
- Risk Linkages & Other Issues

Topic 3: Managing Project Risks
- Approaches for Managing Project Risks
- Factors Impacting the Choice of Approach
- Minimizing Risk
- Risk Management for Sponsors/Borrowers
- Risk Management for Finance Providers
- Considerations When Managing Project Risks
- Scenario: Project Finance Deal

Corporate Banking Products – Risk Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of market price risk that corporates must manage
- Recognize the features of the various risk management products provided by banks to their corporate customers and how these products can be used to manage interest rate and other price risks
- Identify the key risks associated with the provision of risk management products to corporate customers and how these risks can be managed

Tutorial Overview
This tutorial focuses on risk management products that can be used to mitigate price risks relating to foreign exchange, interest rate, and commodity exposures. An explanation is provided of the causes and consequences of these risks and the ways in which they can be addressed by businesses themselves and through the use of risk management products. This is followed by detailed coverage of the main types of risk management products such as forwards, futures, swaps, and options. Finally, the tutorial examines the risks that can arise with these products and how these risks can be managed.

Prerequisite Knowledge
Corporate Banking Products – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Price Risk for Corporate Customers
- Impact of Market Price Movements
  - On Costs
  - On Income
- Translation Exposure
- Managing Market Price Movements
- Mitigating Price Risks
- Tenor, Timing, & Price Expectations
- Making Informed Decisions

Topic 2: Risk Management Products
- Using Derivatives to Manage Risk
  - Forwards
    - Wheat Contract Example
  - Futures
    - Gold Futures Example
  - Swaps
    - Interest Rate Swap Example
  - Options
    - FX Option Example
- Interest Rate Risk Management
  - Fixed Rates
  - Derivatives
    - Interest Rate Cap Example
    - Forward Rate Agreement (FRA) Example

Topic 3: Managing Product Risks
- Overview of Product Risks
- Customer Suitability

- Pre-Settlement Risk
    - Managing Pre-Settlement Risk
- Settlement Risk
- Model Risk
- Operational Risk
    - Managing Operational Risk

Corporate Banking Products – Short-Term Finance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the various sources and uses of cash for corporates
- Recognize the key features of overdrafts, including drawings against uncleared effects, and short-term loans
- Identify the risks associated with short-term finance and how these risks are managed

Tutorial Overview
This tutorial focuses on short-term finance. It explains the cash conversion cycle and how this, and timing mismatches between cash inflows and outflows, give rise to the need for short-term funding. The tutorial describes, in detail, funded short-term credit products, such as overdrafts and short-term loans. It outlines the key features of these products and how they are aligned with the needs of a corporate business. The risks arising from providing these different products are also described, as well as how these risks are managed by assessing appropriateness, right-sizing, and monitoring usage.

Prerequisite Knowledge
Corporate Banking Relationship Management in Practice

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Short-Term Finance & Business Needs

- What is Short-Term Finance?
  - Tenor
  - Availability
  - Cost
- Why is Short-Term Finance Important?
- Assessing Business Needs: Cash Conversion Cycle
- Cash Conversion Cycle & Net Working Capital Days
  - Accounts Receivable Days
  - Inventory Days
  - Accounts Payable Days
- Sources & Uses of Cash
  - Stockholders
  - Term Finance Providers
  - Asset Purchases/Sales & Investments
  - Deposits
  - Taxes
- Assessing Business Needs: Cash Flow Forecasts
  - Short-Term Forecasts
  - Longer-Term Forecasts
  - Stress Testing

Topic 2: Aligning Products with Business Needs

- Determining Product Suitability
  - Timeframe
  - Source of Repayment
  - Purpose
  - Size of Funding Requirement
  - Timing of Cash Flows
  - Cost
- Short-Term Finance Products
  - Revolving Facilities
  - Short-Term Loans

    - Other Products
- Revolving Facilities
    - Overdrafts
    - Overdrafts in Practice
    - Drawings Against Uncleared Effects (DAUE)
- Short-Term Loans
    - Profile
    - Business Needs
        - Funding the Production Cycle
        - Agricultural Loans
        - Bridging Loans

Topic 3: Product Risks

- Managing Short-Term Finance Product Risks
- Setting Overdraft Limits
- Monitoring Overdraft Usage
- Managing Short-Term Loans

Corporate Banking Products – Syndicated Lending

Tutorial Description
On completion of this tutorial, you will be able to:

- Recognize the importance of the syndicated lending market and the role of the various participants in this market
- Identify the stages involved in a typical syndicated loan deal
- Recognize the risks associated with syndicated finance and how these risks can be managed

Tutorial Overview
This tutorial focuses on syndicated lending, which refers to any loan provided jointly by more than one lender. An explanation is provided of syndication structures, the parties involved, the types of syndication, fees, and the reasons why banks and borrowers use syndications. This is followed by coverage of the end-to-end process involved in forming and managing a syndicated loan, while the final section examines some of the key risks involved.

Prerequisite Knowledge
Corporate Banking Products – Term Finance

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Syndicated Lending
- Parties to a Syndication
- Participating Banks
- Structure of a Syndicated Loan
- Syndicated Facilities
- Syndicated Facilities: Key Differences
- Types of Syndication
- Deciding on the Type of Syndication
- Fee Structures
- Benefits & Drawbacks of Syndication for Borrowers
- Benefits & Drawbacks of Syndication for Banks
- Market Participants

Topic 2: Syndication Process
- Determining the Borrower's Needs
- Syndication Process: Stages
- Awarding the Mandate
- Scenario: Awarding the Mandate
- Arranging the Syndication
- Loan Documentation
- Loan Drawdown
- Post-Drawdown Loan Management
- Typical Timetable

Topic 3: Risk & Syndications
- Changes in Market or Borrower Conditions
- Managing Changes in Market or Borrower Conditions
- Loss of Borrower Control
- Managing Loss of Borrower Control
- Borrower Difficulties
- Managing Borrower Difficulties
- Workout Situations
- Managing Workout Situations

Corporate Banking Products – Term Finance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define term finance and identify the business needs that term finance products can meet
- Differentiate between the main types of term finance products, including term loans, real estate (property) loans, and project finance
- Identify the main risks associated with term finance and how these risks can be mitigated

Tutorial Overview
This tutorial focuses on term finance, which refers to any form of loan where a repayment period in excess of one year is warranted. The features of the various term finance products are described in detail, as well as their provision by multiple lenders through club deals and syndicated loans. Finally, the tutorial looks at term finance product risks and outlines how these risks can be mitigated, monitored, and managed.

Prerequisite Knowledge
Corporate Banking Relationship Management in Practice

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Basics of Term Finance
- What Is Term Finance?
    - Purpose
    - Source of Repayment
- Term Finance & Business Needs
- Funding Longer-Term Projects or Acquisitions
    - Providing Liquidity
    - Improving Return on Equity
    - Increasing Return on Capital
- Key Features of Term Finance Products
- Repayment Structures
    - Amortizing Loans
    - Bullet Loans
    - Balloon Loans

Topic 2: Term Finance Products
- Types of Term Finance
- Term Loans
    - Packaged Loans
- Real Estate Loans
    - Purchase Loans
    - Commercial Real Estate Loans
    - Construction Loans
- Project Finance
- Club Deals & Syndicated Loans
    - Parties
    - Typical Process
    - Use of Funds

Topic 3: Product Risks
- Key Product Risks
- Managing Product Risks
    - Loan Structuring
    - Mitigation
- Monitoring & Managing Loan Exposures

Corporate Banking Products – Trade Finance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different stages of the trade transaction lifecycle and the parties involved in the provision of various trade finance products and services
- Recognize the features of trade finance services as well as funded and unfunded credit products
- Identify the key risks associated with trade finance and how these risks can be managed

Tutorial Overview
This tutorial focuses on trade finance products and services. It describes trade transactions and the business needs they give rise to, along with various services and funded/unfunded products that are available to meet these needs. This is followed by an explanation of issues and risks that can occur with these products and the ways that these risks can be managed. Note that, while the tutorial concentrates on cross-border (international) trade, some of the products and services, such as bonds/guarantees, are also used domestically.

Prerequisite Knowledge
Corporate Banking Products – Term Finance

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Basics of Trade Finance
- Nature of Trade Transactions
- Trade Transaction Lifecycle
- Trade Finance & Business Needs
- Parties to Trade Transactions
    - Documentary Collections
    - Letters of Credit
    - Bonds & Guarantees
- Trade Finance Providers

Topic 2: Trade Finance Products
- Product Classifications
    - Services
    - Funded Credit Products
    - Unfunded Credit Products
- Trade Finance Services
    - Risks
- Funded Trade Finance Products
    - Risks
- Commodity Finance
    - Risks
- Unfunded Trade Finance Products
    - Risks
    - Trade Finance Products & The Transaction Lifecycle

Topic 3: Product Risks
- Trade Finance Product Risks
- Letters of Credit
    - Product Risks
    - Managing Product Risks
- Trade Finance Loans
    - Product Risks
    - Managing Product Risks
- Bonds & Guarantees
    - Product Risks

- Managing Product Risks

Corporate Finance – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key tasks that corporate finance teams undertake to ensure companies have effective financial management
- Recognize the typical structure of a corporate finance team and the key roles within that team
- Define the different types of business structure

Tutorial Overview
At a high level, corporate finance is concerned with decisions that companies take to maximize corporate value to the shareholders. At a deeper level, this involves key issues such as debt and equity financing (raising capital), managing short-term cashflows (working capital management) and acquiring all or part of a business (mergers, acquisitions, and so on). This tutorial provides a high-level overview of corporate finance, including the key roles and functions in the area.

Prerequisite Knowledge
Accounting – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Corporate Finance
- What is Corporate Finance?

Topic 2: Corporate Finance Functions
- Key Corporate Finance Functions

Topic 3: Financial Strategies & Planning
- Setting Financial Strategy & Objectives
- Planning for Future Financial Requirements

Topic 4: Corporate Actions
- Raising Capital
- Returning Value to Shareholders
- Analyzing Possible Expansion Projects
- Managing Cash Balances
- Communicating With Current & Potential Investors
- Analyzing Possible Mergers & Acquisitions
- Accounting & Financial Control

Topic 5: Corporate Finance Roles
- Structure of a Corporate Finance Team
- Chief Financial Officer (CFO)
- Treasury & Cash Management Roles
- Accounting & Financial Control Roles
- Financial Planning & Analysis Roles

Topic 6: Forms of Business
- Business Structures
- Sole Proprietorship
- Sole Proprietorship: Pros & Cons
- Partnership
- Partnership: Pros & Cons
- Company/Corporation

- Company/Corporation: Pros & Cons
- Agency Problem
- Governance

Corporate Finance – Capital Structure & Liquidity

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the factors that influence a company's capital structure
- Measure a company's financial leverage
- Identify the importance of assessing a company's operating leverage
- Recognize the various liquidity ratios used to analyze a company's liquidity position
- Measure a company's working capital cycle

Tutorial Overview
Some of the world's largest companies generate massive amounts of cash income and hold large cash balances on their balance sheets, yet still have corporate debt. Why is this the case? This tutorial answers this question by looking at the factors that influence capital structure decisions and how such decisions can impact solvency.

The tutorial also describes how a company's liquidity position can be analyzed and the importance of working capital management.

Prerequisite Knowledge
Corporate Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Capital Structure
- Overview of Capital Structure
- Choosing a Capital Structure: Case Study
- Factors Influencing Capital Structure

Topic 2: Financial Leverage
- Measuring Financial Leverage
- Leverage Ratios
- Debt Payback Metrics
- Leverage & Risk

Topic 3: Operating Leverage
- Fixed Vs. Variable Costs
- Cost Structure Risks
- Operating Leverage

Topic 4: Liquidity
- Measuring Liquidity
- Measuring Liquidity Through Ratio Analysis

Topic 5: Working Capital Management
- Working Capital Cycle
- Measuring the Working Capital Cycle

Corporate Finance – Cost of Capital

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the risk/return nature of debt capital and the tax benefits to be derived from the use of debt financing
- Define and use the capital asset pricing model (CAPM) to calculate the cost of equity capital
- Calculate the cost of debt and equity capital to get an overall weighted average cost of capital (WACC)

Tutorial Overview
Most companies are funded by a mixture of debt and equity capital. This means that their overall cost of capital is made up of the cost of equity finance and the cost of debt finance. This tutorial shows how to calculate the cost of each form of financing and how to combine the cost of debt and equity to get overall weighted average cost of capital (WACC) for a company.

Prerequisite Knowledge
Corporate Finance – Capital Structure & Liquidity

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Cost of Capital Overview
- Cost of Capital & Measuring Increasing Shareholder Value
- Components of the Cost of Capital

Topic 2: Cost of Debt Capital
- Cost of Debt
- Yield to Maturity (YTM) Approach
- Tax Effect of Debt
- Alternative Approach to Calculating the Cost of Debt
- Complications in Calculating the Cost of Debt

Topic 3: Cost of Equity Capital
- Approaches to Calculating the Cost of Equity
- Capital Asset Pricing Model (CAPM)
- Scenario: Calculating the Riskier Company
- Scenario: CAPM & the Cost of Equity
- Scenario: Calculating the Company With Higher Expected Return
- Bond yield plus risk premium approach
- Cost of Equity For a Private Company
- Implied Beta
- Scenario: Calculating the Cost of Equity For a Private Company
- Scenario: Un-Levering the Public Company's Asset Beta
- Scenario: Re-Levering the Private Company's Asset Beta
- Scenario: Calculating the Cost of Equity

Topic 4: Cost of Preferred Stock
- Cost of Preferred Stock

Topic 5: Weighted Average Cost of Capital (WACC)
- Calculating the Cost of Capital
- Calculating the WACC
- WACC & Shareholder Value Generation
- WACC & Changes in Capital Structure

- WACC & Risk Profile
- Divisional WACC

Corporate Finance – Measuring Business Performance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the accounting metrics that companies use to measure financial performance
- Recall the measures used to determine how well a company has managed its assets to generate profits
- Recognize alternative approaches to evaluate business performance, such as free cash to the firm, free cash flow to equity, enterprise value, and economic profit

Tutorial Overview
This tutorial looks at the key accounting metrics used to measure company business performance, such as return on equity, free cash flow to the firm, free cash flow to equity, enterprise value, and economic profit.

Prerequisite Knowledge
Corporate Finance – An introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Accounting Metrics
- Overview of Accounting Metrics

Topic 2: Calculating Accounting Metrics
- Margin Analysis
- Margin Analysis: Example
- Interpreting Margin Analysis Results
- Returns Analysis
- DuPont Analysis
- Shortcomings of Accounting Metrics

Topic 3: Free Cash Flow (FCF)
- What is FCF?
- Enterprise Value (EV)
- Calculating Free Cash Flow to the Firm (FCFF)
- International Differences in Financial Reporting
- Free Cash Flow to Equity (FCFE)
- FCFE: Example
- Economic Profit

Corporate Finance – Payout Policy

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the reasons why companies have different dividend policies
- Recognize the purpose of a share repurchase (stock buyback) program as well as the benefits and impact of such a program
- Distinguish between stock dividends and stock splits

Tutorial Overview
What would make a company choose to pay out a dividend rather than keep the cash as retained earnings on the balance sheet? This tutorial explains why a company might choose to do this. It also describes other methods through which companies can offer value or benefits to shareholders, such as share buybacks and how these differ to stock dividends and stock splits.

Prerequisite Knowledge
Corporate Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Payout Policy
- Overview of Payout Policy

Topic 2: Dividend Policy
- Accounting for Dividend Payments
- Mechanics of Dividend Payments
- Key Dates in Dividend Payments Chronology
- Setting the Dates
- Scenario: Dividend Announcement & Dates
- Scenario: Effect of Dividend
- Dividend Policy
- Dividend Policy: Approaches
- Evaluating Dividend Policy

Topic 3: Share Repurchase
- Motivations for Share Repurchases
- Accounting for Share Repurchases
- Impact of Share Repurchases
- Methods Used to Repurchase Shares

Topic 4: Stock Dividends & Stock Splits
- What is a Stock Dividend?
- Impact of Stock Dividends
- Benefits of Stock Dividends
- Stock Splits

Corporate Finance – Project Appraisal & Capital Budgeting

Tutorial Description
Objectives
On completion of this module, you should be able to:

- Recognize the importance of capital budgeting in selecting which investments and expenditures will increase shareholder wealth
- Identify the investment appraisal techniques used by analysts, including net present value, investment rate of return (IRR), the payback method, the discounted payback method, accounting rate of return, and profitability index (PI)

Tutorial Overview
Capital budgeting involves determining the most advantageous investment options for a company, in terms of increasing shareholder wealth.

Using the example of a small airline company, this tutorial looks at the key techniques used in this analysis, such as NPV, IRR, and the payback method.

Prerequisite Knowledge
Corporate Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Project Appraisal & Capital Budgeting
- Need for Project Appraisal & Capital Budgeting

Topic 2: Capital Budgeting
- Capital Budgeting Process
- Capital Budgeting: Detailed Process
- Capital Budgeting: Objectives

Topic 3: Project Appraisal Methods
- Overview of Project Appraisal Methods
- Net Present Value (NPV)
- Internal Rate of Return (IRR)
- Payback Period
- Accounting Rate of Return (Average Rate of Return)
- Profitability Index (PI)

Corporate Finance – Raising Capital

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the different types of equity finance that are available to companies throughout their lifecycle
- Identify the different forms of debt finance that companies use

Tutorial Overview
Over a company's entire lifecycle, it will have a need to raise financing in order to grow. At a high level, the choice is whether to issue equity capital or raise debt finance. However, there are many varieties of both forms of finance to consider in practice.

This tutorial describes the different options available to companies to fund their development and illustrates the reasons why they may choose one type of funding over another.

Prerequisite Knowledge
Corporate Finance – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Capital Finance
- Raising Capital

Topic 2: Equity Capital
- Equity Capital
- Seed Stage Financing
- Early Stage Financing
- Venture Capital
- Private Equity
- Choosing between VC & PE
- Mezzanine Financing
- Later Stage Financing
- Public Listing
- Public Listing: Benefits
- Public Listing: Drawbacks
- Getting Listed
- IPO Process

Topic 3: Debt Capital
- Early-Stage Debt Financing
- Longer-Term Debt Financing
- Debt Security & Seniority
- Corporate Bonds

Corporate Finance – Scenario

Description
This scenario explores the application of various corporate finance activities in practice. You will observe a situation where a New York-headquartered international company is seeking to expand its operations into the Australian market. As it does so, you will see the work undertaken by various members of the company's corporate development team as they assess the expansion options available.

Prerequisite Knowledge
A broad understanding of corporate finance concepts is required.

Level: Intermediate
Duration: 30 minutes

Corporate Governance – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define corporate governance and recognize the benefits of "good" governance
- Distinguish between different theories of corporate governance and how they explain why companies might fail
- Recognize the key principles, guidelines, and regulations that influence corporate governance today
- Identify why the concept of individual accountability has gained greater prominence in a corporate governance context in recent times

Tutorial Overview
Corporate governance – the system by which organizations are directed and controlled – lies at the heart of the successful running of any business. Some of the gravest corporate failures and scandals have their origins in poor corporate governance. This tutorial describes why sound governance practices are in the interests of all stakeholders and looks at the measures in place to ensure that standards remain high.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of CG
- The Need for Corporate Governance
- Defining CG
- Benefits of Good CG
    - Sustainability & Resilience
    - Access to Financing
    - Investor Protection
- Roles & Responsibilities
    - Chair
    - Executive Directors
    - Nonexecutive Directors

Topic 2: CG Failures
- Reasons for CG Failures
- Principal-Agent Problem
- Multiple Principal Problem
- Stakeholder Theory
- Balancing Stakeholder Needs
- Case Studies
    - FTX
    - Enron
    - AIG

Topic 3: Guidelines & Regulation
- G20/OECD Principles of Corporate Governance
- Regulation
    - Company Law
    - Corporate Governance Legislation
    - Securities Regulation
    - ESG/Sustainability Reporting
- Other Regulatory Obligations
    - Basel III (Pillar 3)
    - MiFID II

    - Dodd-Frank Act
    - FATCA
    - Common Reporting Standard (CRS)
    - IFRS/GAAP

Topic 4: Individual Accountability

- What Is Individual Accountability?
- Accountability Regimes
    - UK
    - Australia
    - Hong Kong
    - Singapore
    - Ireland
- Individual Accountability & Corporate Culture

Corporate Governance in Practice

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the key components of an effective corporate governance structure
- Recognize the structure and role of a typical board of directors, as well as its various committees
- Identify the role of risk, audit, and compliance
- List the reasons why an appropriate remuneration structure is necessary for sound corporate governance
- Recognize why a strong disclosure regime can be a powerful tool for influencing corporate behavior and protecting investors
- Identify how shareholders and investors, especially institutional investors, can influence corporate governance
- Recognize the role of industry regulators/supervisors in overseeing and guiding corporate governance

Tutorial Overview
There are many benefits to following corporate governance best practices and guidelines/principles issued by national and international bodies. But implementing and operating an effective corporate governance structure and framework takes a lot of effort, from the board of directors down. This tutorial sets out the practical measures that companies implement in their pursuit of good corporate governance, specifically for key areas such as board responsibilities, risk governance and control, audit, compliance, remuneration, and disclosure.

Prerequisite Knowledge
Corporate Governance – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Corporate Governance Structures
- Components of an Effective Structure

Topic 2: Board of Directors
- Board Models
- Board Roles
    - Chair
    - Chief Executive Officer (CEO)
    - Executive Directors
    - Nonexecutive Directors
- Board Composition & Size
- Board Responsibilities
- Risk Governance
- Board Committees
    - Executive Committee
    - Strategy Committee
    - Audit Committee
    - Risk Committee
    - Nomination/Governance Committee
    - Remuneration Committee
    - Ethics/Compliance Committee
    - ESG Committee
- Board & Senior Management
- Group Structures

Topic 3: Risk Management

- Overview of Risk Management
- Risk Controls
    - First Line of Defense
    - Second Line of Defense
    - Third Line of Defense
- Risk Communication

Topic 4: Audit
- Internal Audit
- External Audit

Topic 5: Compliance
- Role of the Compliance Function

Topic 6: Remuneration
- Executive Compensation

Topic 7: Transparency & Disclosure
- Benefits of Transparency

Topic 8: Shareholder Influence
- Role of Institutional Investors
- Assessing Governance Quality

Topic 9: Role of Regulators
- Regulation & Supervision

Corporate Sustainability Reporting Directive (CSRD)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the background and rationale for the CSRD
- Recognize its scope, objectives, and the principles on which it is based
- Identify the disclosure requirements specified in the European Sustainability Reporting Standards (ESRS)

Tutorial Overview
Since the Nonfinancial Reporting Directive (NFRD) of 2013, the EU has led the world in its promotion of legislation supporting sustainability and its reporting. The CSRD is just one of the latest in a line of EU sustainability-related initiatives. This tutorial examines the background and rationale for the CSRD, its scope and objectives, and the principles on which it is based.

Prerequisite Knowledge
Sustainability Reporting

Tutorial Level: Introductory
Tutorial Duration: 65 minutes

Tutorial Outline
Topic 1: Overview of the Directive
- Background on Sustainability Reporting
- Objectives of CSRD
- Scope of Directive
- Double Materiality Principle
- Assurance & Audit
- European Sustainability Reporting Standards (ESRS)

Topic 2: Cross-Cutting Standards
- Key Types of Cross-Cutting Standards
  - ESRS 1 – General Requirements
    - Value Chain Principles
    - Mandatory Disclosures
    - Materiality Assessment
    - Interoperability & Alignment
    - Report Structure
  - ESRS 2 – General Disclosures
    - ESRS 2 – General Disclosures: Structure

Topic 3: Topical Standards
- Environmental Standards
  - ESRS E1 – Climate Change
  - ESRS E2 – Pollution
  - ESRS E3 – Water & Marine Resources
  - ESRS E4 – Biodiversity & Ecosystems
  - ESRS E5 – Resource Use & Circular Economy
- Social Standards
  - ESRS S1 – Own Workforce
  - ESRS S2 – Workers in the Value Chain
  - ESRS S3 – Consumers & End-Users
  - ESRS S4 – Affected Communities
- Governance Standards
  - ESRS G1 – Business Conduct

Corporate Valuation – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the purpose of corporate valuation and calculate the key valuation metrics
- Distinguish between absolute and relative valuation methodologies

Tutorial Overview
This tutorial introduces the common valuation techniques employed by analysts when valuing companies. These techniques fall under the general categories of absolute valuation methods (such as DCF analysis) and relative valuation methods (trading comps and transaction comps).

The tutorial outlines the high-level approach used in each of these methods and demonstrates how they can be combined to build a picture of a company's overall value.

Prerequisite Knowledge
Accounting – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Corporate Valuation: Overview
- Overview of Corporate Valuation

Topic 2: Basics of Corporate Valuation
- Company Valuations
- Main Valuation Methods
- Factors Affecting Valuations

Topic 3: Valuation Metrics
- Key Valuation Metrics
- 52-week range
- Market Capitalization (Equity Value)
- P/E Ratio
- Enterprise Value (EV)
- Valuation Outputs: Football Field Analysis

Topic 4: Relative Valuations
- Relative Valuation
- Relative Valuation: An Analogy
- Relative Valuation: financial metrics
- Common Multiples Used as Benchmarks for Relative Valuations

Topic 5: Absolute Valuations
- Absolute Valuation: Free Cash Flow
- Calculating Free Cash Flow
- Forecasting the Cash Flows

Corporate Valuation – DCF Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the steps involved in a DCF valuation, and the advantages and disadvantages of the approach
- Calculate a firm's unlevered free cash flows
- Recognize the two methods used to calculate the terminal value of a company
- Calculate the weighted average capital of cost (WACC) used to present value free cash flows
- Calculate an implied share price for a company as part of a DCF valuation

Tutorial Overview
Discounted cash flow (DCF) analysis is a valuation technique used by analysts to derive the intrinsic value of a company based on projected cash flows. This tutorial describes each of the key steps involved in a DCF analysis, demonstrating how analysts create a model that outputs an implied share price for a company by discounting its forecast future free cash flows.

Prerequisite Knowledge
Corporate Valuation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Discounted Cash Flows (DCF)
- Overview of DCF Analysis

Topic 2: Basics of DCF Valuation
- Steps Involved in DCF Valuation
- Importance of Forecasting
- Benefits & Drawbacks of DCF Analysis

Topic 3: Forecasting Unlevered Free Cash Flows
- Free Cash Flow
- Forecasting the Cash Flows

Topic 4: Calculating Terminal Value
- Methods of Calculating Terminal Value
- Perpetuity Growth Method
- Terminal Multiple Method

Topic 5: Discounting the Cash Flows Using the WACC
- Cost of Financing
- Calculating the Cost of Equity
- Calculating the Cost of Debt
- Calculating the WACC

Topic 6: Calculating an Implied Share Price
- From Enterprise Value to Equity Value
- From Equity Value to an Implied Share Price

Corporate Valuation – LBO Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the participants in an LBO deal and the factors that make a company suitable for a leveraged buyout
- Recognize the sources of return for LBO investors and how these returns are measured
- Identify the key components of a typical LBO model

Tutorial Overview
This tutorial describes the main concerns for financial sponsors (private equity firms) when they seek out potential companies in which to invest. It explains the many factors that make a company an attractive investment for LBO purposes and describes in detail how PE firms make money on these leveraged buyout deals. The tutorial also outlines how analysts working on an LBO deal build a model to calculate the risks and returns associated with the transaction.

Prerequisite Knowledge
Corporate Valuation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of LBO Analysis
- Using LBO Analysis in Corporate Valuation

Topic 2: Profiting from LBO Deals
- Hurdle Rates
- Sources of Return
- Measuring Returns
- Scenario: Measuring Firestarz's Returns
- Firestarz's Internal Rate of Return (IRR)

Topic 3: Basics of LBO Deals
- LBO Deal Structure & Participants
- What Makes a Company Suitable for an LBO?

Topic 4: Anatomy of an LBO Model
- Key Inputs & Drivers
- Operating Model
- Sources & Uses of Funds Statement
- Debt Schedules
- Forecast Scenarios
- Model Outputs: Returns Analysis
- Model Outputs: Credit Metrics

Corporate Valuation – Merger Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the purpose of an upfront analysis before building a merger model
- Recognize the different sources of financing for a merger
- Identify the steps involved in consolidating the balance sheet and income statement whenever one company acquires a controlling stake in another
- Recognize the key outputs of a merger model

Tutorial Overview
This tutorial describes the basic mechanics of a merger analysis. It examines how analysts prepare the calculations to assess which deals are earnings per share (EPS) accretive and how the deal financing is determined. It also outlines the key steps involved in post-merger balance sheet and income statement consolidation, before concluding with a look at the output analysis that is prepared for the acquiring company in a merger transaction.

Prerequisite Knowledge
Corporate Valuation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Merger Analysis
- Using Merger Analysis in Corporate Valuation

Topic 2: Upfront Analysis
- Purpose of an Upfront Analysis
- Upfront Analysis: Example

Topic 3: Financing a Merger
- Sources & Uses of Funds Statement
- Uses of Funds
- Sources of Funds (Financing a Deal)

Topic 4: Consolidation Accounting
- Balance Sheet Consolidation
- Income Statement Consolidation

Topic 5: Key Merger Model Outputs
- Purpose of a Merger Model
- EPS Accretion/Dilution
- Credit Metrics
- Ownership & Exchange Ratios
- Contribution Analysis
- Return on Investment

Corporate Valuation – Trading Comparables

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key steps required when conducting a trading comparables analysis
- Outline the mechanics of a trading comparables analysis, including determining the comparables universe, inputting the financials from the comparable companies into a trading comps model, and deriving a valuation range

Tutorial Overview
Comparable company analysis, or trading comparables, is one of two methods that can be used to determine the relative value of a company (the other is transaction comparables, which is based on precedent transactions). This tutorial looks at each stage of comparable company analysis and describes how it is carried out from a practical point of view. It also examines some of the technical difficulties and considerations that analysts have to make when undertaking a trading comps analysis.

Prerequisite Knowledge
Corporate Valuation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Trading Comparables
- Overview of Trading Comparables

Topic 2: Basics of Trading Comparables
- Valuing OK Coffee
- Steps Involved in Trading Comps

Topic 3: Identifying the Comparables Universe
- Identifying the Comparables Universe

Topic 4: Inputting the Financials
- Spreading the Comps
- Equity Value & Enterprise Value
- Calculating Equity Value
- Calculating Enterprise Value from Equity Value
- Valuing the Components of Enterprise Value
- Calculating Profitability Metrics
- Sourcing the Data
- Normalizing the Income Statement
- Normalizing the Income Statement: Tax Adjustments
- Adjusting the Financials for Comparability
- Deciding Which Periods to Use

Topic 5: Deriving a Valuation Range
- Analyzing Multiples
- Trading at a Premium or Discount

Corporate Valuation – Transaction Comparables

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key steps required when performing a transaction comparables analysis
- Recognize the key questions that analysts must answer when determining precedent transactions
- Calculate and analyze deal premiums
- Derive a valuation range

Tutorial Overview
Acquisition comparables analysis, or transaction comparables, is one of two methods that can be used to determine the relative value of a company (the other is trading comparables, which uses the position and performance of other companies to give an indication of the value of a target company). This tutorial describes how analysts decide on the precedent transactions to include in a transaction comps analysis, how they calculate the offer premium and deal price, and which metrics they analyze as part of the valuation.

Prerequisite Knowledge
Corporate Valuation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Transaction Comparables
- Overview of transaction comparables
- Steps involved in a transaction comparables analysis

Topic 2: Determining a Deal List
- Determining the Precedent Transactions
- Key Questions
- Sources of Information for the Deal

Topic 3: Calculating Deal Premiums
- Why do Acquirers Pay Premiums on Deals?
- Calculating the Deal Premium

Topic 4: Calculating & Analyzing Deal Values
- What is the Deal Value?
- Calculating the Deal Value

Topic 5: Deriving a Valuation Range
- Scenario: Implying a Valuation

Correlation & Covariance – Excel Interactive

Description
Overview
This tutorial uses video and interactive exercises to show the calculation of covariance and correlation using Microsoft Excel.

Prerequisite Knowledge
Correlation & Regression Analysis

Level: Intermediate
Duration: 20 minutes

Correlation Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the concept of correlation
- Calculate the correlation coefficient between two variables

Tutorial Overview
In everyday life we can find plenty of examples of relationships between variables, whether physical, social, economic, political, or otherwise. For example, there exists a clear and direct relationship between the height of a person's body and his weight.

Correlation is one meaningful way to measure the relationships among variables. This tutorial describes the calculation of correlation and provides some examples of how it is applied in the financial world.

Prerequisite Knowledge
A reasonable level of mathematical and statistical knowledge is assumed.

Tutorial Level: Intermediate
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: Calculating Correlation
- Definition of Covariance
- Calculating Covariance
- Correlation Coefficient
- Significance of Correlation Coefficient
- Computing Correlation Coefficient
- Computing Correlation: Example

Topic 2: Use of the Correlation Coefficient in Practice
- Correlation Coefficient of a Sample
- Correlation Coefficient of a Sample/Population
- Correlation & Causality

Counterparty Credit Risk (CCR) – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the sources of counterparty credit risk (CCR) and the risk factors that impact CCR
- Recognize the key measures of CCR exposure
- Identify the various tools and techniques that can be used to manage CCR

Tutorial Overview
The global financial crisis focused attention on risks beyond "simple" measures of credit exposure. Among many other issues, the crisis highlighted the problem of counterparty credit risk (CCR) in financial markets. This is a risk that was not fully recognized or effectively managed in the lead-up to the crisis. Further, it was not adequately covered by bank capital at the time. In light of this, Basel III strengthened the regulatory requirements in relation to CCR. This tutorial provides a high-level overview of CCR, including its measurement for capital adequacy purposes and the tools and techniques used to manage it.

Prerequisite Knowledge
Credit Risk – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of CCR

- What Is CCR?
- Credit Value Adjustment (CVA)
- CCR & Default Timing
- CCR & The Financial Crisis
- Sources of CCR
- Factors Affecting CCR Exposure
- CCR & CCPs
- CCR & Other Risks

Topic 2: Measuring CCR

- Measuring CCR
- Exposure Measures
- PD, LGD, & Recovery Rate
- Regulatory Capital Calculations

Topic 3: Managing CCR

- How Banks Manage CCR
- Tools & Techniques for Managing CCR

Counterparty Credit Risk (CCR) – Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how tools and techniques such as netting, portfolio compression, and collateralization can be used to manage CCR
- Identify the crucial role played by central counterparties (CCPs) when it comes to managing CCR in the market
- Identify the key components of bank's CCR risk management framework and the role played by CVA desks

Tutorial Overview
Once a bank has measured its CCR exposure, it must decide on the best method for managing this risk. A variety of risk management tools and techniques are available for such purposes, including netting, portfolio/trade compression, collateralization, termination, hedging, and limits. This tutorial examines all of these techniques, in addition to describing how CCPs work in today's market and the risks associated with them.

The tutorial also looks at the role of bank's CVA desk in managing CCR, CVA, and other risks and how it uses a transfer pricing model to charge for its services.

Prerequisite Knowledge
Counterparty Credit Risk (CCR) – Measurement

Tutorial Level: Advanced
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Tools & Techniques for Managing CCR
- Netting
- Application of Netting in Practice
- Netting Agreements
- Portfolio Compression
- Scenario: Portfolio Compression
- Collateralization
- Key Elements of a CSA
- Collateralization in Practice
- Collateralization in Practice: Example
- Requirements for Effective Collateralization
- Issues with Collateralization
- Termination & Other Actions
- Hedging
- Limits

Topic 2: CCR & Central Counterparties
- CCR & CCPs
- How Do CCPs Work?
- Margins & Default Funds
- Default Waterfalls
- Risks Associated with CCPs
- Qualifying CCPs

Topic 3: Managing & Reporting CCR
- CCR Management

- Risk Management Framework for CCR
- CVA Desks
- CVA Desks & Transfer Pricing
- CCR Reporting: Internal
- CCR Reporting: External

Counterparty Credit Risk (CCR) – Measurement

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the difference between current exposure and future exposure and calculate CCR using the various exposure measures
- Define credit value adjustment (CVA) and the various other value adjustments (xVAs)
- Identify the various approaches for calculating regulatory capital charges for CCR and CVA risk

Tutorial Overview
Regulatory requirements mandate that banks measure and manage their CCR exposure. These requirements generate a significant burden as regards data aggregation and the use of often complex measurement approaches and models. While this has been the case for many years, the global financial crisis and subsequent Basel III requirements resulted in significant changes to the measurement of the CCR and the associated capital charges. This tutorial examines these issues in detail.

Prerequisite Knowledge
Counterparty Credit Risk (CCR) – An Introduction

Tutorial Level: Advanced
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: CCR Exposure Measurement
- Determining CCR Exposure
- Determining CCR Exposure: Considerations
- Importance of Measuring CCR
- Current Exposure (CE)
- Current Exposure vs. Future Exposure
- Expected Exposure (EE)
- Potential Future Exposure (PFE)
- PFE vs. EE
- Probability of Default (PD)
- Recovery Rate (RR) & Loss Given Default (LGD)
- Methodologies for Calculating Exposure
- Factors Affecting Exposure
- Measurement Challenges
- Scenario: Current Exposure

Topic 2: CVA & xVAs
- Credit Value Adjustment (CVA)
- Other Value Adjustments (xVAs)
- xVAs, Collateralization, & CCPs

Topic 3: Capital Requirements
- CCR Capital Charges: SA-CCR vs. IMM
- Application of Netting & Collateral
- Double Default
- Wrong-Way Risk (WWR)
- CCPs & Capital Charges
- CCPs & Capital Charges: Trade Exposures & Default Funds
- CVA Capital Charges

Covered Bonds

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key characteristics of covered bonds, especially the dual recourse and hard/soft bullet features, as well as the main investor benefits of these products
- List the main covered bond metrics such as LTV and DTI ratios, seasoning, loan repayment and interest, regional distribution, loan purpose, level of arrears, and triggers
- Recall recent developments in the covered bond market, especially legislative changes in the EU

Tutorial Overview
Covered bonds are bank secured senior debt that are collateralized by a pool of assets that remain on the bank's balance sheet. A key feature of these bonds is dual recourse – bondholders have direct recourse over the underlying cover pool as preferred creditors and, at the same time, remain entitled to claim against the issuer as ordinary creditors. This tutorial looks at the key features of covered bonds, the main metrics used with these instruments, and the development of the covered bond market.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Covered Bonds

- What Is a Covered Bond?
- Covered Bonds: Investor Benefits
    - Diversification
    - Overcollateralization
    - High Ratings
- Covered Bonds & MBS
    - True Sale
    - Seller Support
    - Cash Flow Structures
- Covered Bonds: Cash Flow Structures
- Covered Bonds: Maturity Repayment
    - Hard Bullet
    - Soft Bullet
- Covered Bonds: Ratings
- Ongoing Monitoring & Transparency

Topic 2: Covered Bond Metrics

- Covered Bonds: Key Metrics
    - LTV Ratios
    - Regional Distribution
    - Seasoning
    - Loan Repayment & Interest
    - Loan Purpose
    - Type of Income Verification
    - Arrears, Delinquency, & Default
    - Triggers & Responses

Topic 3: Market Developments

- Covered Bond Markets & Regulation

Credit Analysis – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the process of credit analysis and recognize what it is used for
- Identify the basic structure of the main financial statements and how they interact with each other
- Recognize some of the potential issues and pitfalls associated with the use of financial statements, including differing international accounting standards and the flexibility afforded to company accounting policies

Tutorial Overview
This tutorial introduces the concept of credit analysis and sets out the details of a structured approach that will help credit analysts and other interested parties to extract meaningful information from the key sources of financial data and information – the balance sheet, the income statement, and the statement of cash flows.

Prerequisite Knowledge
Credit Risk – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Overview Of Credit Analysis
- What Is Credit Analysis?
- Overview Of Credit Analysis
- Who Undertakes Credit Analysis?
- Credit Analysis: Art Or Science?
- Credit Analysis: Using Outputs
- Outsourcing Credit Analysis

Topic 2: Basics Of Financial Statements
- Key Financial Statements
- Linkages Between Financial Statements

Topic 3: Analysis Of Financial Statements
- Balance Sheet
- Income Statement
- Statement Of Cash Flows

Topic 4: Issues Using Financial Statements
- Issues Using Financial Statements
- International Accounting Standards
- Company Accounting Policies
- Revenue Recognition
- Asset Valuation
- Depreciation
- Other Ways Of Adjusting Financial Statements

Topic 5: Audit Function
- Auditors & Audit Opinions
- The Value Of Auditors

Credit Analysis – Balance Sheet Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the main types of assets and liabilities that appear on a balance sheet Calculate the key measures and ratios that can be derived from balance sheet values
- Recognize the typical adjustments made when accounts are consolidated or merged for groups or acquisitions, and the differences between contingent liabilities and off-balance sheet items

Tutorial Overview
This tutorial describes balance sheet structures in detail and provides an introduction to the key measures – such as the debt/equity ratio and various liquidity ratios – that can be derived from balance sheet values. Further commentary on other aspects of balance sheet accounting, such as consolidated accounts and off-balance sheet items, is also provided.

Prerequisite Knowledge
Credit Analysis – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Balance Sheet Structure
- Balance Sheet Structure
- Current Assets
  - Valuation of Current Assets
- Noncurrent Assets
  - Valuation of Noncurrent Assets
- Current Liabilities
- Noncurrent Liabilities
  - Valuation of Liabilities
- Stockholders' Equity

Topic 2: Balance Sheet Analysis
- Tools of Balance Sheet Analysis
- Key Balance Sheet Terms & Calculations
  - Total Assets
  - Net Assets
  - Capital Employed
  - Working Capital
- Balance Sheet Percentage Analysis
  - Industry Comparisons
  - Peer Comparisons
- Capital Structure & Leverage
  - Debt/Equity Ratio Calculations
  - Factors Affecting the Debt/Equity Decision
  - Taking on Debt: Benefits & Drawbacks
- Liquidity
  - Working Capital
  - Current Ratio
  - Quick Ratio
  - Drawbacks of Liquidity Ratios

Topic 3: Other Balance Sheet Considerations
- Consolidated Accounts
  - Example
- Mergers & Acquisitions

    - Price Differences
    - Noncontrolling Interests
- Contingent Liabilities
- Off-Balance Sheet Items
    - Operating Leases
    - Nonrecourse Structures

Credit Analysis – Cash Flow Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Construct a typical statement of cash flows
- Recognize the importance of the cash conversion cycle
- Calculate the impact of changes to key parameters on a company's cash flow
- Define EBITDA and recognize its limitations as a measure of cash flow
- Identify the structural features of balance sheets that can have adverse cash flow implications
- Recognize the value of cash flow forecasts and the need to stress test such forecasts

Tutorial Overview
This tutorial looks at the statement of cash flows, and describes the cash conversion cycle and its impact on working capital ratios. Working capital days measures are also covered, including the use of such measures to identify the drivers of cash flow from operations. Other measures, such as EBITDA, are also explained, along with balance sheet structural elements – such as overleverage – that can have adverse cash flow implications. Finally, the topic of cash flow forecasting and associated stress testing are also introduced.

A good understanding of these measures, and accounting policies and practices to look out for, will help credit analysts and others to understand the key drivers of a company's cash flow.

Prerequisite Knowledge
Credit Analysis – Income Statement Analysis

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Statement of Cash Flows
- A Perspective on Cash Flow
- What is a Statement of Cash Flows?
- Noncash Adjustments
- Statement of Cash Flows Structure
    - Operating Activities
    - Investing Activities
    - Financing Activities
- Constructing a Statement of Cash Flows
    - Direct Method
    - Indirect Method

Topic 2: Cash Conversion Cycle
- Cash Conversion Cycle
    - Example
    - Why Understanding the Cash Conversion Cycle is Important
    - Impact of Changing Key Parameters
        - Changing Cash Purchases
        - Changing Cash Sales
        - Increasing Sales
        - Extending the Receivables Period
        - Combined Impact
        - Key Takeaways
- Cash Conversion Cycle & Working Capital Ratios
    - Current & Quick Ratios
    - Impact of Changing Key Parameters
    - Key Takeaways
- Working Capital Days

- Accounts Receivable Days
- Inventory Days
- Accounts Payable Days
- Interpretation
- Example

Topic 3: EBITDA

- What is EBITDA?
- Ratios Using EBITDA
    - Debt/EBITDA
    - Interest Coverage
    - EBITDA Margin
    - Business Valuation
- Limitations of EBITDA

Topic 4: Other Cash Flow Considerations

- Balance Sheet Structural Issues with Cash Flow Implications
    - Leverage
    - Funding Mismatches
    - Currency Mismatches
    - Warning Signs
- Cash Flow Forecasts
    - Assumptions
    - Stress Testing

Credit Analysis – Forecasting

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how forecasting provides a forward-looking view and how timing impacts the value of financial statement analysis
- Identify the importance of having clear assumptions, robust revenue projections, and well-defined relationships that underlie forecasts
- Construct a forecast income statement, balance sheet, and statement of cash flows
- Recognize the importance of stress testing financial forecasts

Tutorial Overview
This tutorial looks at the importance of financial forecasting in overcoming the backward-looking nature of audited financial statements. The tutorial also highlights the need for clear assumptions when forecasting, the role of stress testing, and the common pitfalls that analysts need to watch out for when building their forecasts.

Prerequisite Knowledge
Credit Analysis – Performance & Other Measures

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Importance of Financial Forecasting
- The Nature of Financial Statements
- Overview of Financial Forecasts
- The Value of Financial Forecasts
- The Financial Forecasting Process

Topic 2: Forecast Income Statements
- Generating a Forecast Income Statement
- Forecasting Income Statements: Issues
- Assessing Projected Sales
- Sales & Cost Relationships
- Forecasting Unit Costs & Breakeven Analysis
- Constructing a Forecast Income Statement
- Analyzing a Forecast Income Statement

Topic 3: Forecast Balance Sheet & Statement of Cash Flows
- Generating a Forecast Balance Sheet
- Impact of New Investment
- Forecast Statement of Cash Flows

Topic 4: Stress Testing
- Forecasts & Outcomes
- Overview of Stress Testing
- Scenario Planning

Credit Analysis – Income Statement Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main types of revenue and expense items that appear on an income statement
- Calculate the key earnings/profitability measures and ratios that can be derived from income statement values

Tutorial Overview
This tutorial describes in detail the structure and elements of an income statement and introduces various income/profit measures, such as gross and net income/profit, and profitability ratios, such as gross and net margins, that can be derived from income statement values. The tutorial also covers measures such as earnings per share, dividend payout ratios, and dividend cover. A good understanding of all these measures, and related accounting policies and practices, will help credit analysts and others to understand a company's profitability/earnings, as well as the key drivers and sustainability of this profitability/earnings.

Prerequisite Knowledge
Credit Analysis – Balance Sheet Analysis

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Income Statement Structure

- What is an Income Statement?
- Income Statement Structure
    - Single-Step Format
    - Multi-Step Format
- Sales & Revenue Recognition
- Sales Adjustments
- Cost of Sales
    - Inventory Valuation
- Operating Expenses
- Non-Operating Expenses
- Unusual or Infrequently Occurring Items
- Accruals & Provisions

Topic 2: Earnings/Profitability Analysis

- Earnings Measures
- Profitability Ratios
    - Gross Profit Margin
    - Net Profit Margin
    - Operating Profit Margin
    - Margin Analysis
    - Peer Comparisons
    - Industry Comparisons
    - Limitations of Profitability Analysis
- Earnings Per Share (EPS)
    - Interpretation
    - Adjusting for Preferred Dividends
    - Dilution
- Dividend Payout Ratio
- Dividends Per Share (DPS)
- Dividend Cover

Credit Analysis – Other Factors

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify how the size and complexity of businesses, business structures, and business models impact financial statements and credit analysis
- Recall how to approach the analysis of holding companies, and describe bank and insurance company balance sheet structures
- Recognize the importance of analyzing both company and consolidated accounts for groups
- Identify how leases, pension liabilities, deferred taxes, and discontinued operations impact a company's financial statements

Tutorial Overview
This tutorial looks at how a business entity's structure, business model, and the industry in which it operates affect the size and complexity of the entity and its financial statements. The tutorial also looks at how analysts approach the financial statements of holding companies, banks, and insurance companies.

Prerequisite Knowledge
Credit Analysis – Forecasting

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Business Size, Complexity, & Additional Influences

- Overview of Business Size & Complexity
- Business Structures
    - Sole Proprietorships
    - Partnerships
    - Limited Liability Companies
    - Corporations
- Business Structure & Balance Sheet Size
- Other Influences on Financial Statements
    - Industry
    - Service vs. Manufacturing Businesses
    - Business Models

Topic 2: Financial Statements of Specialized Companies & Industries

- Overview of Specialized Companies & Industries
- Holding Companies
    - Forms
    - Motives
    - Structures
- Banks
- Insurance Companies

Topic 3: Large Company Financials & Other Issues

- Overview of Large Company Financials
- Large Company vs. Group Financials
- Other Issues Affecting Company Financials
    - Deferred Tax
    - Leases
    - Pension Liabilities
    - Discontinued Operations

Credit Analysis – Performance & Other Measures

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Calculate return on equity and recognize the key drivers associated with it
- Calculate return on assets, identify its key components, and assess the effectiveness of cost controls
- Interpret market-related measures, such as earnings per share and the price-earnings ratio

Tutorial Overview
This tutorial looks at how information from financial statements can be used to calculate key financial ratios such as return on equity (ROE). It also describes other ratios that can be calculated using information from sources such as share prices.

Prerequisite Knowledge
Credit Analysis – Cash Flow Analysis

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Return on Equity (ROE)
- Overview of ROE
- ROE Comparisons
- Trends in ROE
- Drivers of Return on Equity
- Drivers of Return on Equity: Example
- Analyzing ROE Drivers

Topic 2: Return on Total Assets (ROTA)
- Overview of ROTA
- ROTA & Profitability
- Effectiveness of Cost Controls
- Effectiveness of Cost Controls: Example
- Interest Expense Ratio
- Interest Expense Ratio & Leverage
- Tax Ratio
- Asset Turnover
- Decomposing Asset Turnover

Topic 3: Market-Related Measures
- Overview of Market-Related Measures
- Earnings Per Share (EPS)
- Earnings Per Share: Interpretation
- Price/Earnings (P/E) Ratio
- Price/Earnings Ratio: Interpretation
- Share Prices & Expectations
- Market-to-Book Ratio
- Market-to-Book Ratio: Interpretation

Credit Analysis – Scenario

Description

Overview
Credit analysts use a variety of techniques to gauge the strengths and weakness of a business. This scenario describes the most commonly employed techniques as used by credit analysts when assessing the financial health of a corporate customer. The scenario shows how analysts apply different financial measures and ratios to a company's historical and forecast financial statements. It also demonstrates how analysts employ stress testing and scenario analysis to estimate company performance under different stress scenarios.

Prerequisite Knowledge
A good understanding of financial statements and the techniques of credit analysis is required.

Level: Intermediate
Duration: 60 minutes

Credit Cards

Tutorial Description
Objectives
On completion of the tutorial, you will be able to:

- Recognize the revenue drivers
- Describe how credit cards are approved
- Identify the different operations undertaken by credit card issuers
- List the various user types and their behaviors
- Describe how credit card issuers market cards to different users
- List some of the important regulations around credit cards

Tutorial Overview
With cash and check usage being replaced more and more by electronic formats, such as credit cards, the number of credit card issuers continues to rise. It can be a very profitable market – although potentially risky with many banks organizing their credit card business as a standalone profit centre.

In this tutorial, we discuss the revenues streams from credit cards, and how they are designed and marketed to different user groups.

Prerequisite Knowledge
Payments Cards

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Revenue Model
- Revenue Drivers
- Revenue Sources
- Financing Charges
- Fees

Topic 2: Credit Card Approval
- Credit Scoring

Topic 3:Credit Card Operations
- Statements & Billing
- Customer Payments
- Collections
- Delinquencies
- Loss Provisions
- Recoveries

Topic 4: Product Design
- User Types
- Behavioral Considerations

Topic 5: Marketing
- Borrowing Incentives
- Credit Card Rates
- Grace Period
- Rewards

Topic 6: Regulation
- Regulatory Measures

Credit Derivatives – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how credit derivatives are used to transfer credit risk and how they differ from insurance
- List the main types of credit derivative, including single and multi-name CDS, total return swaps, and credit-linked notes
- Identify the key features of credit derivatives such as agreed and contingent payments, upfront payments, protection buyers and sellers, reference entities and obligations, protection periods, credit events, and determination committees
- Recognize how credit risk and interest rate risk are unbundled in credit derivatives
- List the main factors that affect CDS prices
- Recall the development of the credit derivatives market and the main market participants

Tutorial Overview
Credit derivatives allow one party to transfer an asset's credit risk to another party without transferring ownership of the underlying asset. This tutorial outlines the basics of credit derivatives and examines the structure of a basic credit derivatives trade, known as a credit default swap (CDS). Other topics covered include the development of the market pre- and post-financial crisis, and the risks associated with undertaking credit derivatives transactions.

Prerequisite Knowledge
Derivatives Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Credit Derivatives
- Overview of Credit Derivatives
- Credit Derivatives & Insurance

Topic 2: Types of Credit Derivative
- Credit Default Swaps (CDS)
- Other Credit Derivatives

Topic 3: Features of Credit Derivatives
- Key Features of CDS

Topic 4: Risk & Credit Derivatives
- Unbundling of Risk
- Counterparty Risk & Clearing

Topic 5: CDS Pricing
- Single-Name CDS Pricing
- CDS Price Dynamics: Example

Topic 6: Market Dynamics
- Market Development
- Market Participants

Credit Derivatives – CDS Documentation & Settlement

Tutorial Description
On completion of this tutorial, you will be able to:

- Identify the documentation framework for credit default swaps and show how this framework has developed
- Interpret how auction settlement is used to determine recovery rates
- Recall the main clearing and risk management procedures for credit derivatives

Tutorial Overview
A well-understood and widely-accepted CDS documentation framework and a robust credit event auction system have evolved under the auspices of ISDA. This framework, periodically adjusting in response to market challenges, has standardized trading practices and settlements.

This tutorial outlines the key features of the ISDA documentation framework and shows how auction settlement is used to determine recovery rates.

Prerequisite Knowledge
Credit Derivatives – CDS Indices

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Credit Derivatives Documentation
- Standardization of Credit Derivatives Documentation
- CDS Documentation Framework
- 2009 Protocols
- Post-Crisis Changes
- Financial Reference Entities
- Asset Package Delivery
- Standard Reference Obligations (SROs)
- 2014 Protocols

Topic 2: CDS Auction Settlement
- Overview of Auctions
- Auction Participants
- Auction Mechanics
- CDS Auction Price Determination
- CDS Auction Price Determination: First Stage
- CDS Auction Price Determination: Second Stage

Topic 3: Clearing
- Clearing & Risk Mitigation
- Clearing & CSAs
- Clearing Agreements & Execution Agreements
- Noncleared Credit Derivatives

Credit Derivatives – CDS Indices

Tutorial Description
On completion of this tutorial, you will be able to:

- Identify the main features of credit indices
- Recall how CDS indices are constructed and the key terms of these indices
- Recognize how total return indices replicate the total return on a funded long credit position
- Recall what happens to a CDS index when a credit event occurs on a constituent name
- Recognize the key market dynamics and pricing strategies for CDS indices

Tutorial Overview
Index swaps allow participants to increase or decrease general credit exposure, although the creation of credit indices has always been directly connected to the trading of index products. There is significantly more liquidity in these products than in single-name CDS transactions. This tutorial looks at the construction of credit indices, the mechanics of index swaps, and the market environment.

Prerequisite Knowledge
Credit Derivatives – Single-Name CDS

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of CDS Indices

- What is a CDS Index?
- Features of CDS Indices
- Total Return Indices

Topic 2: Index Construction & Terms

- CDS Index Construction
- Credit Index Terms
- Key Terms of Major CDS Indices
- Credit Events, Versions, & Factors

Topic 3: CDS Index Trading

- CDS Index Trading & Liquidity
- CDS Index Trade: Example
- Trading Strategies

Topic 4: CDS Market Dynamics & Pricing

- Market Levels
- Composite vs. Theoretical Levels
- Trading CDS Index Spreads: Example
- CDS Index Pricing

Credit Derivatives – CDS Pricing & Valuation

Tutorial Description
On completion of this tutorial, you will be able to:

- Recall how credit default swap pricing is broken up into the valuation of protection and default streams
- Recognize the importance of the credit triangle in CDS valuation
- Calculate conditional and unconditional default probabilities, survival probabilities, hazard rates, and default intensities
- Identify other CDS pricing factors such as upfront payments, standardized coupons, and recovery rate sensitivity

Tutorial Overview
CDS pricing is theoretically straightforward – whatever is paid as protection premium should be offset by the expected gains from contingent default payments. However, calculating the present values of these payments involves more subtle assumptions about default probabilities and recovery rates. There must also be some method for calculating the fair value of the upfront payments generated by differences between theoretical spreads and fixed coupons. This tutorial outlines the key calculations in CDS pricing and shows how valuation has coalesced around standard pricing models and simplified assumptions.

Prerequisite Knowledge
Credit Derivatives – CDS Indices

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of CDS Valuation & Pricing
- Overview of CDS Valuation & Pricing

Topic 2: Credit Pricing Triangle
- Credit Triangle
- Spread
- Recovery Rate
- Probability of Default

Topic 3: Default & Survival Probabilities
- Conditional & Unconditional Default Probabilities
- CDS Pricing: Example
- Hazard Rates
- Default Intensities
- Default & Survival Probabilities: Example

Topic 4: Other Pricing Factors
- Upfront Payments
- Standardized Coupons
- Changing Default Intensities
- Price Sensitivity to the Recovery Rate

Credit Derivatives – CDS Scenario

Tutorial Description

Overview
This scenario examines how a regional bank with a credit portfolio concentrated in just four main sectors addresses this concentration risk in order to avoid a stock outlook or credit downgrade. The scenario explores how the bank can use single-name CDS to hedge existing exposures as well as gain exposure to a wide group of credits, thus diversifying its credit portfolio.

Prerequisite Knowledge
A broad understanding of credit derivatives is required.

Tutorial Level: Intermediate
Tutorial Duration: 25 minutes

Credit Derivatives – Single-Name CDS

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the basic structure of a single-name CDS
- List the key features of single-name CDS, including maturities, roll dates, lookback periods, and fixed coupons
- Recall how upfront payments are based on accrued interest and the differences between the market spread and the standard coupon
- Recognize the main documentation and regulatory requirements as they apply to single-name CDS
- Identify the main features of the restructuring credit event

Tutorial Overview
A single-name CDS is a credit default swap where there is only one reference entity, typically a corporate or sovereign. The buyer of protection in a single-name CDS makes periodic premium payments to the seller of protection in return for credit protection.

This tutorial outlines the key features and trading practices surrounding single-name CDS.

Prerequisite Knowledge
Credit Derivatives – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Single-Name CDS
- Overview of Single-Name CDS
- Market Developments in CDS

Topic 2: Key Features
- Standardized Features
- Maturities
- Roll Dates
- Lookback Periods

Topic 3: Upfront Payments
- Upfront Payments
- Standardized Coupons
- Accrued Interest for Single-Name CDS

Topic 4: Documentation & Regulation
- ISDA Credit Derivatives Definitions
- Determinations Committees (DCs)
- Governmental Intervention
- Narrowly-Tailored Credit Event

Topic 5: Restructuring Credit Event
- Restructuring
- Modified Restructuring

Credit Derivatives – Variations

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key strategies used with CDS options and CDS index swaptions
- Recall how credit default swaps are used to transfer credit risk in synthetic CDOs
- Identify other key CDS variations, including CDS index ETFs, CDS (LCDS), recovery products, and constant maturity CDS (CMCDS)

Tutorial Overview
This tutorial explores the key relationship between different credit products, and introduces some of the lesser-known variations in the credit derivatives market.

Prerequisite Knowledge
Credit Derivatives – CDS Documentation & Settlement

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: CDS Swaptions
- CDS Swaptions
- Impact of CDS Swaption Activity on CDS Indices
- CDS Index Swaptions
- CDS Index Swaption Strategies

Topic 2: Synthetic CDOs
- Synthetic CDOs
- Synthetic CDOs: Mechanics
- CDS Index Tranches
- Risks of Synthetic CDOs

Topic 3: CDS Index ETFs
- CDS Index ETFs

Topic 4: Other CDS Variations
- Loan CDS (LCDS)
- Recovery Products
- Constant Maturity CDS (CMCDS)

Credit Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define credit management
- List the questions credit managers should ask before making the decision to extend credit to customers
- Identify the risk analysis process credit managers may use to assess a customer's financial position
- Name the key elements of a credit agreement and the issues they must address
- List the credit control procedures used by a typical company's credit collections department

Tutorial Overview
Offering customers credit can help a company increase sales. However, credit provision raises risks, in particular the risk that customers may not repay their debts. Effective credit management processes are needed to help manage this risk. This tutorial provides a high-level overview of credit management and highlights the key processes and procedures that can help ensure debts are paid on time and in full.

Prerequisite Knowledge
Accounting – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Credit Management & Risk Analysis

- Role of Credit Management
- Credit Decisions
- Characteristics of Creditworthy Clients
- Risk Analysis: Margin Analysis
- Risk Analysis: Liquidity
- Risk Analysis: Leverage
- Scenario: Risk Analysis
- Credit Agreements

Topic 2: Credit Control

- Credit Control Overview
- Case Study: Serple Gardens
- Credit Terms & Conditions
- Monitoring Customer Accounts
- Average Time to Receive Cash
- Calculating Receivables Days
- Aging Analysis
- Late Payment Collection
- Debt Factoring
- Policy Monitoring and Feedback

Credit Risk – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify how credit risk arises and the key factors that influence the size of credit risk exposures
- Define a credit risk exposure, recognize the factors that give rise to such exposures, and recall how exposures are measured and graded
- Identify the main regulatory capital requirements for credit risk
- Recognize the importance of an effective risk management framework for credit risk and its key components

Tutorial Overview
Despite all the innovation and complexity of recent decades, the fundamental business of banks remains the lending of money. The major risk is that of default when the money does not get repaid by customers.

This tutorial outlines how credit risk is generated by the business of financial institutions, as well as the structures these institutions should have in place to manage this risk. It describes in detail the entire credit risk lifecycle, from risk assessment through to ongoing risk reporting and monitoring. The tutorial also explains why it is important for banks to look beyond credit risk and take into account other risks such as market and operational risk when making credit decisions.

Prerequisite Knowledge
Risk Management – Risk Types & Measurement

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Credit Risk
- Credit Risk in Banking
- Credit Risk: Example & Sources
- Types of Credit Risk

Topic 2: Credit Risk Exposure
- Credit Risk Exposure
- Credit Risk Exposure: Factors
- Credit Risk Measures
- Credit Grades
- Performing & Nonperforming Credit Exposures

Topic 3: Regulatory Requirements for Credit Risk
- Regulatory Requirements for Credit Risk
- Calculating Capital Requirements

Topic 4: Credit Risk Management
- Risk Management Framework
- Components of an RMF for Credit Risk
- Business Strategy & Risk Appetite
- Credit Risk Lifecycle
- Managing RWAs
- Risk Types & Their Interactions
- Portfolio Risk Management

Credit Risk – Lessons From Mismanaging Risk

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall how both banks and regulators failed to understand or quantify the risks that were building up in the system in the lead-up to the global financial crisis (GFC) and Greek debt crisis
- Identify the lessons learned from the failure of leading banks and from banks that didn't fail
- Recognize the response of regulators to the crisis, including updated regulatory requirements, strengthened regulatory oversight, and greater loan loss provisioning
- Recognize the response of bank management, including a review of business strategy and credit risk appetite limits, and enhanced balance sheet management

Tutorial Overview
Credit risk is largest risk type that banks are exposed to and is often the prime source of earnings. It is important therefore that bank management fully understands the size and nature of these exposures when accepting them and managing them until they are settled, canceled or written off. In doing so, management should learn lessons from not only their own failures but those of others. In this context this tutorial sets out some of the lessons learned from systemic and bank specific failures, why some banks didn't fail, and how these learnings have been used to inform changes to regulatory requirements and management practices.

Prerequisite Knowledge
Credit Risk – Lifecycle

Tutorial Level: Intermediate
Tutorial Duration: 65 minutes

Tutorial Outline
Topic 1: Lessons Learned from Systemic Events
- Lessons Learned from Mismanaging Credit Risk
- Lessons Learned from the GFC
- GFC: Rapid Expansion of Credit Exposures
- Lowering Credit Risk Acceptance Criteria: Retail Products
- Lowering Credit Risk Acceptance Criteria: Subprime Loans
- Credit Concentration Risk
- New Dimensions
- Greek Debt Crisis

Topic 2: Lessons Learned from Bank Failures
- Lessons Learned from Bank Failures
- Lessons Learned from Bank Failures: HBOS
- Lessons Learned from Bank Failures: Credit Suisse
- Lessons Learned from Banks That Didn't Fail

Topic 3: Regulatory Response
- Update of Regulatory Requirements
- Other Enhancements to Regulatory Requirements
- Regulatory Oversight
- Loan Loss Provisioning

Topic 4: Response of Bank Management
- Business Strategy
- Credit Risk Appetite
- Balance Sheet Management

Credit Risk – Lifecycle

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Distinguish between the different stages of the credit risk lifecycle for all customer relationships or transactions
- List the factors that affect the credit risk lifecycle and how such risk is mitigated
- Identify some key examples of the credit key lifecycle, namely a new corporate customer, a retail mortgage loan, a credit card application, and a bank contract

Tutorial Overview
This tutorial looks at the key stages in the credit risk lifecycle and the key factors that impact how the lifecycle operates. It also provides examples of how the lifecycle works in practice for different customer and product combinations.

Prerequisite Knowledge
Credit Risk – Types & Asset Classes

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Credit Risk Lifecycle
- Overview of Credit Risk Lifecycle
- Stages in the Credit Risk Lifecycle
- Credit Risk Assessment
- Credit Risk Decision
- Documentation
- Credit Risk Reporting
- Credit Risk Monitoring
- Timeframes

Topic 2: Factors Affecting Credit Risk Lifecycle
- Overview of Factors Affecting the Life Cycle
- Other Customer Types
- Credit Risk Mitigation
- Credit Risk: Warning Signs & Default

Topic 3: Examples of Credit Risk Lifecycle
- Examples of Credit Risk Lifecycle

Credit Risk – Types & Asset Classes

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Distinguish between the different types of credit risk, including the difference between direct and contingent credit risks, as well as those that arise from settlement, trading, and underwriting activities
- Recognize the different credit risk customer types and the importance of differentiating between these customer types
- Identify how credit risk arises in both the banking book and the trading book and the significance of this distinction
- List the different types of asset class as defined by regulators

Tutorial Overview
Banks must have appropriate risk management frameworks and personnel in place to deal with many different types of credit risk. This tutorial describes these different risk types and the characteristics that determine whether a particular credit risk falls into one risk type or another. It goes beyond the credit risks that arise in the traditional banking book to examine those that arise in the trading book and the regulatory and risk management implications of this distinction. The tutorial also describes in detail how banks segment different customer types and why this differentiation matters from a credit risk point of view.

Prerequisite Knowledge
Credit Risk – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Credit Risk
- Overview of Credit Risk Types
- Credit Risk Types
- Allocating Exposures to Credit Risk Types

Topic 2: Key Types of Credit Risk
- Direct & Contingent Credit Risks
- Settlement Risk
- Counterparty Credit Risk (CCR)
- Underwriting Risk
- Country Risk

Topic 3: Customer Types
- What Is a Customer Type?
- Individuals: Short-Term Finance
- Individuals: Long-Term Finance
- Corporates
- Financial Institutions (FIs)
- Sovereigns

Topic 4: Asset Classes
- Asset Classes

Credit Risk Appetite – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of credit risk appetite for banking organizations
- Determine how banks can identify and manage concentration risks

Tutorial Overview
Credit risk appetite is the level of risk that a bank is prepared to accept to achieve its objectives. It is important for banks to set risk appetite at an appropriate level to ensure credit risks are only accepted and managed within that appetite. Appetite must be reviewed and reset in light of changing market conditions and portfolio performance. This tutorial describes the importance of setting credit risk appetite, the various measures of risk appetite, and the impact of risk appetite on credit decisions.

The financial crisis highlighted the importance of understanding and managing concentration risks. Frameworks for identifying and managing concentration risks have been refocused due to the events of the financial crisis. This tutorial outlines the key concentration risks faced by banks.

Prerequisite Knowledge
Credit Risk Management – Strategic & Business Unit Management

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Credit Risk Appetite
- What is Credit Risk Appetite?
- Risk Capacity
- Setting Credit Risk Appetite
    - Quantitative Inputs
    - Qualitative Inputs
- Credit Risk Appetite Measures
- Credit Risk Decision Making & Appetite
- Monitoring & Updating Credit Risk Appetite

Topic 2: Concentration Risk
- Overview of Concentration Risk
- Types of Concentration Risk
    - Customers
    - Industries
    - Products
    - Countries

Credit Risk Appetite – Customer & Industry Risk

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe how credit risk appetite differs depending on the customer type
- Explain how banks identify and manage industry risk

Tutorial Overview
Credit risk appetite varies considerably by customer type. Credit extended to a customer must comply with the lender's credit risk appetite – proposals outside appetite may be approved, but only exceptionally.

Banks also need to manage industry risk – the risk that companies in a particular industry will be negatively impacted by various internal and external factors.

This tutorial looks at how banks identify, manage, and mitigate both customer and industry risk.

Prerequisite Knowledge
Credit Risk Appetite – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Customer Risks
- Customer Groups
    - Customer Groups: Aggregation of Facilities
- Customer Types & Concentration Limits
- Credit Facilities & Credit Risk Appetite
- Other Appetite Considerations
- Proposals Outside Credit Risk Appetite

Topic 2: Industry Risk
- The Importance of Industry Classification
- Industry Classification Codes
- Understanding & Assessing Industry Risk
- Setting Industry Risk Appetite
- Reporting & Managing Industry Risk

Credit Risk Appetite – Product & Country Risk

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the importance of understanding and managing product risk
- Outline the key types of country risk

Tutorial Overview
Every product gives rise to a different combination of risks, although not all create credit risk. Key product risks must be identified, quantified where possible, and accepted, mitigated, or avoided. This tutorial discusses the importance of understanding and managing product risk. It describes the various factors that determine whether a particular product is considered high or low risk and some of the approaches banks use for setting and managing product risk appetite.

Managing country risk is a challenging task for banks. It is important to be able to identify country risks both effectively and efficiently when processing transactions and assessing credit proposals. Failure to do so can lead to banks accepting risks outside appetite. It can also slow down processing and lead to a loss of business. This tutorial explores the issues surrounding the identification of country risk, describing the methods used by banks to ensure country risks are identified and managed effectively and risk appetite is not exceeded.

Prerequisite Knowledge
Credit Risk Appetite – Customer & Industry Risk

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Product Risk
- Managing Product Risk
- Product Versus Relationship Management
- Product Risk Appetite: Customer Level
- Product Risks: High or Low Risk Products
- Overlooking or Understating Product Risks
- Managing Product Risk

Topic 2: Country Risk
- What is Country Risk?
- Identifying Country Risk
- Measuring & Reporting Country Risk
- Country Events
- Setting Country Risk Appetite
- Managing Country Risk

Credit Risk Customer Management – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how the preferred customer position can vary from bank to bank
- Aggregate the credit facilities and utilizations for customers and customer groups, and determine the need for such aggregation

Tutorial Overview
This tutorial is the first in a series that looks at the issue of customer management from a credit risk point of view. The focus here is on customer positioning and aggregation.
In recent times, there have been substantial changes in banking services and how customers do business with their bank(s). With competition in the industry escalating – including an increased threat from nonbank entities – banks have had to reconsider their positioning strategies in an attempt to increase their market share, improve their profitability, and so on. This tutorial describes some of the key issues related to customer positioning from a bank's point of view. The tutorial also looks at the importance of correct aggregation of credit facilities and/or utilizations for customers and customer groups, as well as some of the difficulties and challenges that banks face in that regard.

Prerequisite Knowledge
Credit Risk Customer Management – Customer & Industry Risk

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Customer Positioning
- What is Customer Positioning?
- Share of Wallet
    - Issues
        - Availability of Information
        - Broad Brush Measure
        - Focus on Absolute Income
        - Inward-Looking Measure
- New vs. Existing Customer Relationships
- Banking Needs
    - Banking Needs by Customer Type
        - Small Businesses
        - Small-to-Medium Sized Corporates
        - Larger Corporates
        - Multinationals
- Managing Customer Positioning
    - Avoiding Unfavorable Positions

Topic 2: Aggregation
- Aggregation
    - Single Customer
    - Multiple Legal Entities
    - Different Risk Types
- Why is Aggregation Important?
    - Understanding & Managing Customer Risks
    - Determining Risk Appetite Compliance
    - Determining Credit Authorities
    - Meeting Regulatory Requirements
- Aggregation Rules
    - Ownership
    - Control

- Additional Rules
- Applying Aggregation Rules

Credit Risk Customer Management – Covenants & Credit Decisions

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of covenant, why they are necessary, and the issues involved in monitoring them and managing any breaches
- Recognize the crucial nature of the decision to accept credit risk, and the need for such decisions to be made by the appropriate credit authority

Tutorial Overview
This first part of this tutorial looks at covenants that are included by banks and other lenders in credit facility agreements. It describes the various types of covenant that are used, with particular focus on financial covenants, which are the most exacting type. The actions required to deal with both potential and actual breaches of covenants are also outlined.

The second part of the tutorial looks at credit decisions and how they are made. The importance of credit authority levels in making such decisions is described in some detail.

Prerequisite Knowledge
Credit Risk Customer Management – Structuring Credit Facilities

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Covenants
- What Are Covenants?
    - Examples of Covenants
- Why Are Covenants Required?
- How Many Covenants Are Required?
- Financial Covenants
    - Examples of Financial Covenants
    - Setting Financial Covenants
- Monitoring Covenants
    - Challenges
- Covenant Breaches
    - Potential Breaches
    - Actual Beaches

Topic 2: Credit Decisions
- When Are Credit Decisions Made?
- Credit Decision Timeframe
- Who Makes Credit Decisions?
    - Individual
    - Joint
    - Collective
    - Automated Decisions Systems
- Credit Authorities
    - Credit Authority Matrix
- Facility Approvals vs. Transactional Approvals
    - Facility Approvals
    - Transactional Approvals Within Limits
    - Transactional Approvals With Exceptions
- Exceptions, Appeals, & Overrides

Credit Risk Customer Management – Credit Facilities

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of credit facility offered by banks to their customers
- Recognize the risks associated with different products offered as part of customer credit facilities

Tutorial Overview
The credit risk that a bank incurs is a function not only of the creditworthiness of the customer, but also the size, nature, and structure of the credit facilities provided. This tutorial looks at the main factors to be considered when assessing the risks for a proposed package of credit facilities for a customer. The tutorial also describes much of the terminology associated with credit facilities – such as advised/unadvised, committed/uncommitted, and recourse/nonrecourse – as well as the factors that impact credit risk for different products that form part of credit facilities.

Prerequisite Knowledge
Credit Risk Customer Management – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Credit Facilities
- Key Features of Credit Facilities
    - Credit Limits for Each Product
    - Terms & Conditions of Approval
    - Review Date
- Credit Risk & Credit Facilities
    - General Features
    - Product Characteristics
    - Structure
    - Measurement
    - Mitigation
- Advised vs. Unadvised Credit Facilities
- Committed vs. Uncommitted Credit Facilities
- Recourse vs. Nonrecourse Credit Facilities

Topic 2: Impact of Products on Credit Risk
- How Products Impact Credit Risk
- Guarantees & Bonds
- Trade Finance Facilities
- Asset-Backed Credit Facilities
- Receivables Finance

Credit Risk Customer Management – Structuring Credit Facilities

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main determinants of customer needs for credit facilities and how banks structure facilities to meet those needs
- Recognize the risks, both credit and noncredit, that arise when structuring credit facilities, including the risks associated with foreign currency facilities and non-amortizing structures

Tutorial Overview
when structuring credit facilities, a bank must consider both the needs of its customers and how meeting those needs can give rise to risks that the bank needs to identify, assess, and accept/mitigate. This tutorial covers both of these aspects in detail.

Prerequisite Knowledge
Credit Risk Customer Management – Credit Facilities

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Facility Structures & Customer Needs
- Structuring Facilities to Meet Customer Needs
- Determinants of Customer Needs
    - Cash Conversion Cycle
    - Industry
    - Expansion Plans
- Aligning Facilities to Customer Needs
- Facility Structures & Credit Risk Appetite
- Amending Facility Structures
- Negotiating Facility Structures

Topic 2: Facility Structures & Risk
- Facility Structures & Risk
    - Products
    - Terms & Conditions
    - Collateral/Security
- Foreign Currency Facilities
    - Example (Impact of Currency Devaluation)
- Non-Amortizing Interest Rate Structures
    - Payment Holiday
    - Interest-Only
    - Balloon Payment
    - Bullet Payment
    - Bridging Loan
- "No Risk" Facility Structures
- Changing & Restructuring Facilities

Credit Risk Management – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of sound credit risk management within banks
- Identify the common failings of banks in relation to managing credit risk

Tutorial Overview
Here are many reasons why banks need to manage credit risk appropriately. At a broad level, it is the main risk that most banks face and the one against which they must hold the most capital. However, despite the critical importance of credit risk, there are many common failures when it comes to its management.

This tutorial describes in detail the reasons why managing credit risk is so important to banks, from low margins on loan products to making the best use of scarce capital resources. The tutorial also details the common failings of banks when it comes to managing credit risk, including not heeding the lessons learned from previous events to a tendency to look at situations from a single risk perspective.

Prerequisite Knowledge
Credit Risk – Lessons from the Financial Crisis

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Why Managing Credit Risk is Important
- Net Interest Margin
- Margins are Thin
- Banking is Competitive
- Capital is a Scarce Resource
- Credit Risk Concentrations can Hurt
    - Concentration Risk: Example
- Expect the Unexpected

Topic 2: Common Failures of Credit Risk Management
- Forgetting Lessons Learned
- Lack of Investment in Credit Risk Management
- Not Addressing Credit Culture
- Not Knowing When Enough is Enough
- Failing to Understand Other Risks
    - New or Revised Products
    - Refinance Risk
    - Reputational Risks

Credit Risk Management – Credit Culture

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain how a bank's credit culture – strong or weak – drives staff behavior
- Describe the key issues surrounding the creation and maintenance of a strong credit culture

Tutorial Overview
This tutorial describes in detail how a bank's credit culture drives behavior. It looks at both appropriate and inappropriate staff behaviors as well as a number of common risk culture failures. Some examples of high-profile events where weak risk cultures were a root cause are discussed. Finally, the tutorial also outlines many of the difficulties and challenges in creating and sustaining a strong credit culture.

Prerequisite Knowledge
Credit Risk Management – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1:Culture & Behavior
- What is Credit Culture?
- Culture Drives Behavior
    - Relationship Manager Scenario
- Drivers of Behavior
    - Cultural Influences
    - Strategy & Rewards
    - Behavior of Peers & Line Management
- Appropriate Behaviors
- Inappropriate Behaviors
- Common Risk Culture Failings
- Risk Culture Failings: Some Real-Life Examples

Topic 2: Improving the Credit Culture
- Creating & Sustaining a Strong Credit Culture
- Improving the Credit Culture: Challenges
    - Agreeing Expected Behaviors
    - Communication
    - Training
    - Implementation
    - Sustainability
    - Creating the Right Environment
- Creating the Right Environment: Challenges
    - Commitment to Consistent Financial Performance
    - Credit Risk Management Framework
    - People Management
    - Cultural Influences
    - Measuring Progress
- Importance of Leadership

Credit Risk Management – Data & Reporting

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain why banks need credit data, some of the issues surrounding credit data capture, and the requirements for turning credit data into information
- Describe the various credit risk reports produced by banks, including customer level, portfolio level, and statutory reports

Tutorial Overview
Complete, accurate, and timely credit risk reports are essential for effective credit risk management. This tutorial describes the importance of credit data to a bank's business, the challenges and issues associated with data capture and data ownership, and the factors to be considered when turning credit data into information. The tutorial also explains how complete, accurate, and timely credit risk reporting – customer level, portfolio level, and statutory reports – are vital if a bank's business and credit staff are to understand and manage credit risks.

Prerequisite Knowledge
Credit Risk Management – Risk/Reward

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Credit Data
- The Importance of Data
- Creating & Storing Data
- Why is Credit Data Needed?
    - Beyond Transactional Data
- Issues with Credit Data Capture
- Credit Data Ownership
- Turning Credit Data into Information

Topic 2: Credit Risk Reporting
- Types of Report
    - Internal Reports
    - Statutory Reports
- Internal Reporting
    - Customer Level Reports
    - Portfolio Level Reports
- Statutory Reporting
    - Regulatory Reports
    - Listed Company Reports
    - Annual & Interim Accounts
    - Pillar 3 Disclosures

Credit Risk Management – Framework

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the concept of credit risk appetite in the context of a framework for managing credit risk
- Outline the key elements of a bank's credit risk management framework

Tutorial Overview
Banks should have stringent structures in place to accept and manage credit risk, revolving around the creation of a robust credit risk management framework with high-level management participation. A key input into this framework is credit risk appetite, which is the level of risk that a bank is prepared to accept to achieve its objectives. This tutorial explains why establishing and maintaining an effective credit risk management framework is a necessary condition if a bank is to achieve its objectives by only taking on and then managing those risks that are within credit risk appetite. The tutorial also describes the various elements of a bank's credit risk management framework, including credit policies, processes, people, authorities, and infrastructure.

Prerequisite Knowledge
Credit Risk Management – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Credit Risk Appetite & Management Framework

- Credit Risk Appetite
- Credit Risk Management Framework
    - Key Elements
- Managing Customer Risks
- Managing Portfolio Risks
- Learning Lessons and Resetting Appetite

Topic 2: Credit Risk Management Framework

- Credit Policies
- Credit Risk Processes
    - Policies vs. Processes
- People
- Credit Risk Authorities
- Infrastructure

Credit Risk Management – Risk/Reward

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the various sources of income for banks and the main factors affecting loan pricing and revenue
- Explain the importance of measuring risk-adjusted returns and why they are more meaningful at a portfolio level than a customer level

Tutorial Overview
Banks are in business in order to generate returns for their stakeholders. To achieve this, they must take risks and embed them in the products and services they provide. This tutorial describes the various sources of revenue for banks, including both interest and noninterest income. It looks in detail at the factors influencing loan pricing, in addition to calculations for relationship earnings, risk-adjusted earnings, and return on capital employed (ROCE).

Prerequisite Knowledge
Credit Risk Management – Credit Culture

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Sources of Revenue
- Interest Income
- Noninterest Income
- Loan Pricing: Cost of Funds
- Loan Pricing: Other Factors
    - Availability of Long-Term Funding
    - Reference Rates
    - Currency
    - Interest Rate Expectations
    - Competition
    - Credit Risk Appetite
- Funds Transfer Pricing (FTP)
- Pricing in Practice
    - Variable, Fixed, & Combination Pricing
    - Pricing Structure, Reference Rates, & Margin

Topic 2: Risk-Adjusted Returns
- Relationship Earnings, Risk-Adjusted Returns, & ROCE
    - Example
- Issues with Risk-Adjusted Returns
- Risk-Adjusted Return Calculators
- Customer vs. Portfolio Measures
    - Example
- Costs & Cost Allocations
- Actual vs. Projected Returns
- Monitoring & Managing Actual Returns

Credit Risk Management – Stakeholders

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the different types of stakeholder that banks must manage and the importance of managing these stakeholders
- Explain the crucial role played by the various regulatory stakeholders

Tutorial Overview
Balancing the needs of shareholders, who are looking to maximize returns, with those of other stakeholders is notoriously difficult. However, ignoring stakeholder needs can have an adverse effect on company performance and, in extreme cases, lead to company failure.

This tutorial describes the various stakeholders that banks must manage, the importance of managing their often conflicting expectations, and some of the strategies and techniques for stakeholder management in the context of credit risk. There is a particular focus on regulatory stakeholders, who are among the most important stakeholders from a bank's point of view – and an even more influential player since the financial crisis.

Prerequisite Knowledge
Credit Risk Management – Framework

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Many Stakeholders to Manage
- Types of Stakeholder
    - Internal
    - Connected
    - External
- Importance of Managing Stakeholders
- Conflicting Stakeholder Expectations
- Stakeholder Management
    - External/Connected
    - Internal

Topic 2: Regulatory Stakeholders
- Who are the Regulators?
    - Regulators Around the World
- Why is Regulation Needed?
- Regulators' Remit
    - Minimizing Systemic Risk
    - Managing Prudential Risk
    - Setting Standards for Conduct of Business
- Rules-Based vs. Principles-Based Regulation
    - Pros and Cons
    - Jurisdictional Differences
- Regulatory Framework

Credit Risk Management – Strategic & Business Unit Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe how banks manage credit risk at the strategic level and the challenges associated with this
- Explain the need to manage credit risk at the business unit level as well as the strategic level and the role of business heads in that regard

Tutorial Overview
Banks must manage credit risk at both a strategic and business unit level. This tutorial looks in detail at the requirements for banks to manage credit risk at the strategic level and some of the challenges they face in that regard, including internal and external constraints on business objectives, the issues involved in setting group credit risk appetite, establishing an appropriate and robust strategic credit risk management framework, and creating and sustaining a strong credit culture. The tutorial also describes the importance of managing credit risk at the business unit level and the role of business heads, in conjunction with credit, in implementing business unit strategy in line with the bank's business objectives and target market.

Prerequisite Knowledge
Credit Risk Management – Stakeholders

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Strategic Credit Risk Management
- Business Goals & Constraints
    - Business Goals
    - Internal Constraints
    - External Constraints
- Business Goals & Target Market
- Group Credit Risk Appetite
    - Trade-Offs
- Strategic Credit Risk Management Framework
- Credit Culture
    - Creating & Sustaining a Strong Credit Culture
- Performance Monitoring

Topic 2: Business Unit Credit Risk Management
- Business & Credit Risk Organizational Structures
- Business Unit Credit Risk Appetite
- Business Unit Credit Risk Management Framework
- Framework Adequacy and Performance
- Reporting & Monitoring Customer Performance

Credit Risk Measurement – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the range of measures that banks
- Use to estimate credit risk
- Outline some of the issues surrounding these measures

Tutorial Overview
This tutorial explains the various measures that enable banks and other institutions to estimate or measure the level of credit risk to which they are exposed. These measures include absolute currency amounts for products such as term loans and estimated currency amounts for products where credit risk varies due to market price/rate movements, in addition to risk-weighted assets (RWAs) and measures of expected loss (EL). The tutorial also outlines some of the limitations and complexities associated with these credit risk measures.

Prerequisite Knowledge
Credit Risk – Measurement & Capital Requirements

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Credit Risk Measures
- Types of Credit Risk Measure
- Credit Exposure
    - Credit Limit
    - Utilization
    - Undrawn Committed Limit
    - Overdraft Example
- Exposure Measurement Methodologies
    - FX Forwards Example
- Gross Exposure vs. Net Exposure
    - Netting Example
- Expected Loss (EL)
    - Probability of Default (PD)
    - Exposure at Default (EAD)
    - Loss Given Default (LGD)
    - Calculating EL
    - EL vs. UL
- Risk-Weighted Assets (RWAs)
    - Calculating RWAs

Credit Risk Measurement – Capital Calculations

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the process of calculating risk-weighted assets (RWAs) under both the Standardized Approach (SA) and the Internal Ratings-Based (IRB) approach
- Outline the impact of Basel III on credit risk capital calculations, in particular the amendments relating to capital ratios and qualifying capital

Tutorial Overview
It is critical that banks' risk exposures are backed by a high quality capital base. But the global financial crisis showed that this was not the case. As a result, significant revisions were made to the Basel capital framework as part of the Basel III reforms.

This tutorial describes the two Basel approaches that banks can use to calculate risk-weighted assets (RWAs) for credit risk – Standardized Approach (SA) and Internal Ratings-Based (IRB) approach. The tutorial also discusses the key changes implemented by Basel III in relation to RWA calculations and outlines some of the ongoing issues surrounding RWAs. In addition, the definition of qualifying capital and the associated calculations are described in detail.

Prerequisite Knowledge
Credit Risk Measurement – EAD & LGD

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Standardized Approach
- Capital Adequacy
- Risk-Weighted Assets (RWAs)
- Calculating RWAs
    - Example
- Adjustments to RWAs

Topic 2: Internal Ratings-Based (IRB) Approach
- The IRB Approach
    - Foundation IRB (F-IRB)
    - Advanced IRB (A-IRB)
- Calculating RWAs
    - Formula
    - Points to Note

Topic 3: Basel III & RWAs
- RWAs: From Basel I to Basel III
- Ongoing Issues with RWAs
- Leverage Ratio

Topic 4: Qualifying Capital
- Capital Adequacy & Qualifying Capital
- Qualifying Capital: Tiering
- Minimum Capital Adequacy
- Qualifying Capital Requirements
- Deductions
- Calculating Qualifying Capital

Credit Risk Measurement – EAD & LGD

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Calculate EAD for credit facilities and outline the key issues associated with EAD as a measure of credit risk
- Calculate LGD and describe the key drivers behind LGD values

Tutorial Overview
Exposure at default (EAD) and loss given default (LGD) are core components of the credit risk measures used to determine bank capital requirements (risk-weighted assets) and to manage credit risk (expected loss). This tutorial describes the fundamentals of EAD as a measure of credit risk, the calculation of EAD values, and the issues to be considered when calculating EAD. The tutorial also explains the role of loss given default (LGD) in measuring credit risk, the steps involved in calculating LGD rates, and the key factors that influence LGD values.

Prerequisite Knowledge
Credit Risk Measurement – PD & Risk Rating

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Exposure at Default (EAD)
- What is Exposure at Default (EAD)?
- EAD Formula
- EAD Calculations
- EAD for Revolving Facilities
- EAD for Contingent Obligations
- EAD for Other Products
- EAD: A Note of Caution

Topic 2: Loss Given Default (LGD)
- What is Loss Given Default (LGD)?
- LGD Formula
- Actual Loss
- Recovery Rates & Actual LGDs
- LGD Drivers
- Determining LGD Values
- Calculating Customer & Facility LGDs
    - Worked Example
- Issues with LGDs

Credit Risk Measurement – Models

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain why banks use credit models to measure credit risk and the factors to be considered when using these models to make decisions
- Describe the various types of model risk that arise from the use of credit models and outline some of the ways in which this risk can be minimized

Tutorial Overview
Banks and other financial institutions rely heavily on quantitative analysis and models in nearly all aspects of their financial decision-making, including credit risk measurement and management.

This tutorial describes the key components of a credit model, the many uses of model outputs, and the broad types of credit model used by banks. It also examines the various stages of the credit model lifecycle and the challenges that banks and other financial institutions face to ensure models are reliable and robust. Finally, the tutorial outlines how model risk arises from the use of credit models, as well as the structures that should be in place to manage this risk.

Prerequisite Knowledge
Credit Risk Measurement – Capital Calculations

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Credit Models
- What is a Credit Model?
- Using Credit Model Outputs
- Credit Model Lifecycle
- Credit Model Governance
- Making the Most of Credit Models
- Types of Credit Model
    - Structural Models
    - Reduced-Form Models
- Credit Model Issues

Topic 2: Model Risk
- What is Model Risk?
- Alternative Approaches & Model Risk
    - Internal Model Migration
    - Expert Panels
    - Third-Party Models
- Model Risk Management
- Model Risk Framework
    - Requirements
- Model Risk & The Financial Crisis

Credit Risk Measurement – PD & Risk Rating

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the importance of probability of default (PD) and how it is used in determining an internal credit rating
- Identify the differences between internal and external credit ratings, and outline the function of external credit ratings that are provided by credit rating agencies (CRAs)

Tutorial Overview
This tutorial describes probability of default (PD), the factors that affect it, how it is calculated, and how it can be converted into an internal credit rating. The tutorial also outlines some of the issues associated with PDs and internal credit ratings, in addition to the differences between internal and external credit ratings. The role of credit rating agencies in the provision of external ratings is also described in detail, along with the main issues surrounding the use of such ratings.

Prerequisite Knowledge
Credit Risk Measurement – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Probability of Default (PD)
- What is Probability of Default (PD)?
- Factors Affecting PD
- PD vs. Internal Credit Ratings
- Calculating PDs & Determining Internal Credit Ratings
- Ratings Substitution & Capping
- Uses of Internal Credit Ratings
- Issues with PDs & Internal Credit Ratings

Topic 2: External Credit Ratings
- Internal vs. External Credit Ratings
- Credit Ratings Providers & Ratings
- Ratings Methodologies
- Transition Matrices
- How are External Ratings Used?
- Issues with External Credit Ratings

Credit Risk Mitigation – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the concept of credit risk mitigation (CRM) and recognize the benefits of taking mitigation
- Identify the main risks associated with taking mitigation

Tutorial Overview
This tutorial introduces the concept of credit risk mitigation and outlines the two broad categories of mitigation – funded and unfunded. The benefits of mitigation are described, and its impact on expected loss is demonstrated. The tutorial also discusses the taking and management of mitigation, the different types of mitigant used, and the various risks associated with credit risk mitigation.

Prerequisite Knowledge
Credit Risk Measurement – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Mitigation
- What is Credit Risk Mitigation?
- Benefits of Credit Risk Mitigation
  - Lower Expected Loss (EL)
  - Other Benefits
- Taking & Managing Credit Risk Mitigation
- Types of Credit Risk Mitigation
- Collateral (Security) Coverage
  - Calculation of Collateral Coverage
- Why Credit Risk Mitigation Does Not Eliminate Risk

Topic 2: Risks of Mitigation
- Legal Risk
- Counterparty Risk
- Concentration Risk
- Liquidity Risk
- Market Price Risk
- Correlation Risk
- Operational Risk
- Costs

Credit Risk Mitigation – Collateralization

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the various uses of collateral and the motivations for providing and taking collateral
- Identify the various forms of collateral that can be used to reduce credit risk exposure

Tutorial Overview
This tutorial discusses the use of collateral (or security) as a credit risk mitigant, describing the motivations for collateral usage from the point of view of collateral takers and providers. The tutorial also examines the increasingly important and ever-evolving role of a bank's collateral management function. Finally, the tutorial describes the various types of collateral taken as security and the attractions/drawbacks of each as a credit risk mitigant.

Prerequisite Knowledge
Credit Risk Mitigation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Collateral
- What is Collateral?
- Who Uses Collateral?
- Why Use Collateral?
    - Collateral Takers
        - Lower EL
        - Other Motivations
    - Collateral Providers
- Collateral Management

Topic 2: Types of Collateral
- Range of Eligible Assets
- Cash
- Liquid Assets
- Real Estate
- Movable/Tangible Assets
- Receivables
- Commodities
- Intangible Assets
- Insurance Policies

Credit Risk Mitigation – Management & Realization

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Outline the key stages involved in effectively managing credit risk mitigation (CRM)
- Describe the key requirements in relation to CRM prior to drawdown of credit facilities as well as post-drawdown
- Describe the process for realizing both funded and unfunded mitigation

Tutorial Overview
This tutorial looks at the key stages involved in effectively managing mitigants taken in support of a loan or other credit facility. It begins by outlining the assessment and approval stages of proposed mitigation, and the differences between disclosed and undisclosed mitigation. The importance of legal certainty and enforceability of mitigation is explained, as are the capital eligibility requirements under the Basel framework. Subsequent topics describe the key requirements in relation to CRM both before and after drawdown of credit facilities, as well as the process of actually realizing mitigation when necessary to do so.

Prerequisite Knowledge
Credit Risk Mitigation – Other Types of Mitigant

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Mitigation Management
- Mitigation & The Credit Risk Lifecycle
  - Assessment & Approval
  - Pre-Drawdown vs. Post-Drawdown
  - Realization
  - Assessment & Approval
- Disclosed vs. Undisclosed Mitigation
- Legal Certainty & Enforceability
- Capital Eligibility

Topic 2: Pre- & Post-Drawdown Requirements
- Pre-Drawdown Requirements
  - Overview
    - Documentation of Credit Facilities
    - Legal Documentation
    - Registrations
  - Role of Documentation Unit
  - Documentation of Claims on Third Parties
  - Initial Valuations
    - Valuers
- Post-Drawdown Requirements
  - Monitoring
  - Revaluation

Topic 3: Realizing Mitigation
- Factors Affecting Realization
- Realizing Funded Mitigation
  - Taking Possession
  - Liquidation
    - Cost-Benefit Analysis
- Realizing Unfunded Mitigation
- Lessons Learned

Credit Risk Mitigation – Other Types of Mitigant

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the different types of credit risk mitigation (other than collateral) that can be used to reduce credit risk exposure

Tutorial Overview
While collateral remains a common form of credit risk mitigation (CRM), it is not always suitable in every situation. Lenders and regulatory authorities have come to recognize the usefulness of alternative mitigation techniques.

This tutorial examines other CRM tools and techniques that are used by banks and other lenders. It begins by describing the use of netting, which – like collateral – is a type of funded CRM technique. The tutorial then describes the use of a number of unfunded credit risk mitigants, namely guarantees/standby letters of credit, credit insurance, and credit derivatives. Finally, the tutorial looks at the eligibility of the various CRM techniques for lowering capital requirements under the Basel framework.

Prerequisite Knowledge
Credit Risk Mitigation – Collateralization

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Other Types of Mitigant

- Netting
    - Payments (Settlement) Netting
    - Netting by Novation (Replacement Netting)
    - Close-Out Netting
    - Netting Example
- Guarantees
    - Guarantors
    - Guarantees vs. Standby Letters of Credit
- Letters of Comfort
- Credit Insurance
    - Domestic
    - Cross-Border (Export Credit Insurance)
    - Benefits & Risks
- Credit Derivatives (Credit Default Swaps)
    - Benefits & Risks
- Credit Risk Mitigants & Basel III

Cryptography

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define secret key cryptography and identify its uses
- Define public key cryptography and list its function
- Define hash functions and recognize their role in secure messaging systems

Tutorial Overview
Cryptography plays a critical role in many contemporary financial technologies, underpinning a wide range of applications from secure cash transfers to blockchain. Therefore, it is important for financial professionals to understand at least the basics of modern cryptography. This tutorial provides an overview of cryptography, covering three key cryptographic tools, and examining the role of cryptography in financial technology (FinTech).

Prerequisite Knowledge
Digital Assets

Tutorial Level: Intermediate
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: Cryptography Overview
- What Is Cryptography?

Topic 2: Secret Key Cryptography
- SKC Overview
- SKC Limitations

Topic 3: Public Key Cryptography
- PKC Overview
- RSA
    - Public/Private Key Composition
    - Encryption/Decryption Process
- Quantum Computing

Topic 4: Hash Functions
- Hash Functions Overview
- Combining Cryptography Methods
- Certificates & PGPs
    - Certificates
    - PGPs

Crypto Assets – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize where crypto assets fit into the broader digital asset complex
- Identify different crypto ecosystems and their functions compared with both traditional finance and one another
- Identify key features of Bitcoin and recognize how a typical Bitcoin transaction works
- Identify key features that distinguish Ethereum from Bitcoin, recognize potential real world use cases for Ethereum, and list enhancements associated with Ethereum 2.0
- Recognize other types of crypto assets, including non-fungible tokens (NFTs) and stablecoins, and their key features
- Identify key risks and challenges that crypto assets pose to their users and investors

Tutorial Overview
Crypto assets are a rapidly growing asset class defined primarily by their use of cryptography and digital ledger technology (DLT), or blockchains. Initially seen as digital payment systems or "currencies," blockchain technology is increasingly being deployed for other purposes as the crypto universe expands and new assets emerge. This tutorial provides an overview of a range of crypto assets, including Bitcoin, Ethereum, stable coins, and non-fungible tokens (NFTs). It explores the key features of these assets and the functionality of the ecosystems they operate in, while also looking at some of the key risks crypto assets pose and how regulation of the crypto universe is shaping up.

Prerequisite Knowledge
Blockchain

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Crypto Assets Overview
- Characteristics of Crypto Assets
- Placing Crypto Assets
  - Digital Assets
  - Crypto Assets
  - Cryptocurrencies

Topic 2: Crypto Ecosystems
- What Is a Crypto Ecosystem?
- Payment vs. Platform
  - Payment
  - Platform
- User Essentials
  - Accounts
  - Crypto Wallets
- Consensus Mechanisms
  - Proof of Work
  - Proof of Stake
  - Proof of Replication
  - Proof of Spacetime

Topic 3: Bitcoin
- Bitcoin Key Features
  - Proof of Work (PoW)
  - Block Reward

    - Scarcity
    - Pseudonymous Nature
    - Transparency
    - Payment Coin
    - Investable Asset
- Bitcoin Transactions

Topic 4: Ethereum

- Ethereum vs. Bitcoin
    - Smart Contracts Platform
    - Transaction Speed
    - PoS
    - DeFI
    - Uncapped Supply
    - Gas Fees
- Smart Contracts: Potential Uses
- Ethereum 2.0
    - Shard Chains/Sharding
    - eWASM
    - Crosslinking
    - State Execution Layer
    - Casper FFG
- Improved Energy Efficiency

Topic 5: Other Crypto Assets

- Stablecoins
    - Fiat-Collateralized
    - Crypto-Collateralized
    - Algorithmic
- Tokenization: NFTs
- Tokenization: “Real Assets”
    - Real Estate
    - Art/Collectibles
    - Securities
    - Venture Capital
    - Commodities
    - Luxury Assets

Topic 6: Challenges & Risks

- Key Challenges & Risks
    - Transaction Speed
    - Transaction Issues
    - Theft
    - Fraud
    - Volatility
    - Smart Contract Risks
    - Regulatory Uncertainty
    - Environmental Concerns
    - Plagiarism/Copycat Projects
- Case Study: FTX Unraveling
- Regulation: Emerging Framework
    - Core Principles
    - KYC/AML

CSDR

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the background and timeline to the CSDR regime and its impact beyond CSDs.
- Identify the key components of the CSDR framework, namely standards, authorization, standardized settlement, dematerialization, and settlement discipline.

Tutorial Overview
The European Central Securities Depositories Regulation (CSDR) is one of the key regulations adopted in the EU in the aftermath of the financial crisis. CSDR introduces new measures for the authorization and supervision of CSDs and creates a common set of prudential, organizational, and conduct of business standards at a European level. This tutorial looks at the background to the CSDR legislation and its key components, namely standardization, authorization, standardized settlement, dematerialization, and settlement discipline.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of CSDR

- The CSDR Framework
- What Is a CSD?
- Legislative Framework
- Impact Beyond CSDs
- Summary Timeline

Topic 2: CSDR Components

- Key Elements of CSDR
- Standards
- Authorization
- Standardized Settlement
- Dematerialization
- Settlement Discipline Regime (SDR)
- Settlement Failures: Cash Penalties
- Settlement Failure Procedures: Mandatory Buy-Ins
- Settlement Failure Procedures: Unsuccessful Buy-Ins

CSR & RBC – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define corporate social responsibility (CSR)
- List the reasons for the growing prominence of CSR
- Describe how a company can benefit from having a CSR regime
- Recognize the importance of sustainability reporting

Tutorial Overview
Corporate social responsibility (CSR), or the equivalent term responsible business conduct (RBC), is the idea that companies have a responsibility to do what is best for people, the planet, and society at large. CSR has seen companies integrate social, environmental, and human rights concerns into their mainstream business operations and their interactions with stakeholders. A properly implemented CSR regime can bring a company a variety of competitive advantages, and CSR is now viewed less as a desirable and optional addendum to corporate activities and more as an essential element.

This tutorial provides a high-level overview of CSR, tracing its evolution, identifying the reasons for its growing prominence, and explaining developments in sustainability reporting.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: CSR/RBC
- A History of CSR/RBC
- Overview of CSR/RBC
    - OECD
    - European Commission
    - ISO
- Putting CSR Into Action
- Engaging Stakeholders
    - Employees
    - Customers
    - Suppliers
    - Competitors
    - Government
    - Local Communities
    - Nongovernmental Organizations

Topic 2: CSR Today
- CSR: Driving Factors
- The Case for CSR
    - Recruitment & Retention
    - Enhanced Risk Management
    - Competitive Advantage
    - Enhanced Innovation
    - Stronger License to Operate
    - Better Access to Capital
- Case Against CSR
    - Protectionism
    - Wokeism
- CSR & ESG
    - Product Liability

    - Stakeholder Opposition
    - Social Opportunities
- Anti-ESG Investing

Topic 3: Sustainability Reporting
- Evolution of Reporting
- Sustainability Reports
- GRI Sustainability Reporting Standards
- GRI Reporting: Concepts
    - Impact
    - Material Topics
    - Due Diligence
    - Stakeholder Inclusiveness
- GRI Reporting: Principles
    - Accuracy
    - Balance
    - Clarity
    - Comparability
    - Completeness
    - Reliability
    - Sustainability Context
    - Timeliness
    - Verifiability
- Other Reporting Initiatives
    - Sustainable Accounting Standards Board (SASB) Standards
    - Corporate Sustainability Reporting Directive (CSRD)

CSR & RBC in Practice

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize why it is important for an organization to adopt a CSR/RBC strategy
- Compare CSR/RBC frameworks developed by international organizations:
    - The UN Global Compact
    - ISO 26000: 2010, Guidance on Social Responsibility
    - The OECD Guidelines for Multinational Enterprises on Responsible Business Conduct
- Recognize why CSR is particularly important for the financial sector

Tutorial Overview
Corporate social responsibility (CSR)/responsible business conduct (RBC) is a management concept in which an organization integrates social and environmental concerns into its governance, business operations, and interactions with stakeholders. Although CSR/RBC is mostly a voluntary concept, there is increasing pressure on organizations to make a positive impact on society and the environment.

This tutorial provides a high-level overview of CSR/RBC, discusses international frameworks that can be a starting point for organizations that want to implement a CSR/RBC strategy, and explains why such a strategy is particularly important for financial institutions.

Prerequisite Knowledge
CSR & RBC – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Another Look at CSR
- The Importance of CSR
- CSR
- Case Study: Kenya

Topic 2: UN
- UN Global Compact
    - Human Rights
    - Labor
    - Environment
    - Anticorruption

Topic 3: ISO
- ISO 26000
- Principles of Social Responsibility
    - Accountability
    - Transparency
    - Ethical Behavior
    - Respect for Stakeholder Interests
    - Respect for the Rule of Law
    - Respect for International Norms of Behavior
    - Respect for Human Rights
- Core Subjects of Social Responsibility
    - Organizational Governance
    - Human Rights
    - Labor Practices
    - Environment
    - Fair Operating Practices

  - Consumer Issues
  - Community Involvement & Development

Topic 4: OECD

- OECD Guidelines
- Areas of Business Responsibility
  - Disclosure
  - Human Rights
  - Employment & Industrial Relations
  - Environment
  - Combating Bribery & Other Forms of Corruption
  - Consumer Interests
  - Science, Technology, & Innovation
  - Competition
  - Taxation
- Due Diligence Process
- NCPs
  - Promote the Guidelines & Policy Coherence
  - Handle Cases Related to the Guidelines

Topic 5: CSR & the Financial Sector

- Financial Institutions
  - Banks
  - Asset Managers
- Risk Control & Transparency
- Remuneration
- Consumer Protection & Financial Access
- UNEP FI
  - Principles for Responsible Banking (PRB)
  - Principles for Sustainable Insurance (PSI)
  - Principles for Responsible Investment (PRI)

Custody – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the custody business in the context of modern markets and identify the key players and client base
- Recognize key aspects of a custodian's recordkeeping and reporting obligations
- Identify a custodian's role in processing client trades
- List some of the ancillary services provided by custodians

Tutorial Overview
Custody is a highly specialized business area centered around the safekeeping of client assets, while encompassing a broad range of other services, from trade processing to asset servicing to fund services and securities lending. This tutorial provides an overview of the custody business, the various entities that provide custodial services, the clients they serve, and the range of services provided.

Prerequisite Knowledge
Business of Asset Management

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Business Overview & Key Players
- Custody in Modern Markets
- Custody Business Overview
- Custodians by Type
- Client Base
- CSDs
- Typical Custodial Network
- Position vs. Control
- Custodian as Nominee

Topic 2: Recordkeeping & Reporting
- Client Information
- Account Maintenance
- Security Master Database
- Reporting Requirements
- Regulatory Requirements

Topic 3: Trade Processing
- Trade Processing: Scope of Services
- Trade Settlement

Topic 4: Ancillary Services
- Asset Servicing: Corporate Actions
- Dividend Schedules
- Other Services
- Lending/Borrowing Restrictions

Cybercrime (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define cybercrime and understand the threat it poses to the financial services industry
- Recognize why cybercrime is committed, and by whom
- Classify types of cyberattack and ways to defend against them

Tutorial Overview
Cybercrime is any criminal activity that is committed using information and communications technology (ICT). It includes both cyber-dependent crimes, such as hacking, which are committed entirely through ICT, and cyber-enabled crimes, which are more traditional crimes, such as fraud, whose scale can be dramatically increased by the use of ICT.

Cybercrime is increasing and represents one of the biggest threats to every organization in the world. This tutorial provides a high-level overview of cybercrime and discusses ways in which you can help protect yourself and your organization from cyberattacks.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Overview of Cybercrime
- What is Cybercrime?
- Aims of Cybercrime
- Risks Posed to Organizations
- Cost of Cybercrime
- Cyberattackers: Insiders & Outsiders

Topic 2: Cyberthreats & Defenses
- What is a Cyberthreat?
- Common Cyberthreats
- Defending against Cyberthreats
- Case Study: Ransomware Payment

Topic 3: Social Engineering
- Are you a Threat?
- Social Engineering Attacks: Phishing
- Case Study: Phishing Attack
- Other Types of Social Engineering Attack
- Case Study: Social Engineering
- Case Study: Social Engineering & Penetration Testing
- Defending Against Social Engineering Attacks
- Scenario: A Wedding & Birthday

Topic 4: Web-Based Attacks
- What Are Web-Based Attacks?
- Common Types of Web-Based Attack
- Defending against Web-Based Attacks

Data Protection (2024)

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define data protection and identify the key terms associated with it
- Recognize the key responsibilities of data controllers, data processors, and data protection officers
- List common data protection principles and the rights of data subjects
- Define key concepts in data protection, such as data transfers, impact assessments, and the principle of data protection by design and default

Tutorial Overview

Data protection, or data privacy, is concerned with upholding the privacy rights of individuals when their personal data is processed. This tutorial provides a high-level overview of data protection and the associated legislation, describing in detail how it helps to protect individuals' privacy.

Prerequisite Knowledge

None

Tutorial Level: Introductory

Tutorial Duration: 70 minutes

Tutorial Outline

Topic 1: Key Terms

- What is Data Protection?
- International Data Protection
- Data Protection Fundamentals
- Processing Personal Data
- Data Controllers & Processors

Topic 2: DP Principles

- What are Data Protection Principles?
- Case Study: TikTok
- Scenario: Principles

Topic 3: Data Subjects' Rights

- Rights of Data Subjects
- Access Requests
- Case Study: Data Breach

Topic 4: Other Concepts & Areas

- Supervisory Authority
- Basis for Processing
- Consent
- Data Protection Officer
- Data Protection Impact Assessment
- Data Protection by Design & Default
- Data Transfers
- Case Study: Data Transfers
- Breach Notifications
- Scenario: Consent

Dark Trading

Tutorial Description
On completion of this tutorial, you will be able to:

- Define dark trading
- List the advantages and disadvantages of dark trading
- Identify the major dark trading regulatory regimes around the world

Tutorial Overview
Dark trading has become a core part of most equity trading ecosystems. Offering minimal market impact, lower costs, and potential price improvement, dark trading can help traders find the best possible execution for their transactions. However, critics content that dark trading harms price discovery and overall market efficiency. In recent years, these criticisms and unethical dark trading practices have resulted in new regulatory regimes that target dark trading and dark pools. This tutorial provides a high-level overview of dark trading and the different regulatory approaches taken around the world.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Dark Trading Overview
- Traditional Trading
- Dark Trading
- History of Dark Trading
- Types of Dark Trading
- Quasi-Dark Trading
- Smart Order Routing (SOR) & Dark Trading
- Advantages of Dark Trading
- Disadvantages of Dark Trading
- Dark Trading Today

Topic 2: Regulatory Regimes
- US Regulatory Overview
- Regulation ATS
- Regulation NMS
- EU & UK Regulatory Overview
- MiFID
- MiFID II
- Other Regimes

Data Science – Mathematical Methods

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define functions and list their uses in computing
- Identify and define key mathematical methods, including linear algebra and calculus, and recall their role in computing applications
- Recognize and define important statistical measures and methods and identify their role in advanced business computing applications

Tutorial Overview
Advanced business computing applications such as artificial intelligence (AI) and machine learning (ML) require advanced mathematics and statistics. While relatively few financial professionals need to be experts in these disciplines, it is important for all those who use financial technology tools to understand the mathematical and statistical concepts and methods that underlie them. Doing so can help financial professionals use technology more effectively, as well as help them to identify appropriate applications for different tools and to be aware of those tools' limitations. This tutorial provides an overview of the core mathematical and statistical methods that are important to contemporary data science.

Prerequisite Knowledge
AI & Machine Learning (ML) – Primer

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Methods Overview
- Introduction
- Modeling
- Decision-Making

Topic 2: Mathematical Functions
- Functions Overview
- Complex Functions
- Apply Your Knowledge
- Explanatory Functions

Topic 3: Mathematical Methods
- Linear Algebra
- Matrix Algebra & Machine Learning
- Calculus

Topic 4: Statistical Methods
- Statistics Overview
- Measures of Central Tendency
- Apply Your Knowledge
- Comparing Measures of Central Tendency
- Correlation & Covariance
- Regression
- Error Testing & Goodness Of Fit
- Hypothesis Testing

Data Security

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define open source software (OSS) and identify its advantages, disadvantages, and costs
- Recall the responsibilities associated with maintaining software systems and databases
- Recommend strategies for maintaining data security and complying with privacy regulations

Tutorial Overview
Running corporate systems involves more than guaranteeing that the system performs its function. Corporate IT also needs to manage software, database, and hardware maintenance, organize training and onboarding of new users, and ensure that systems are secure. The ongoing cost of achieving these goals far outstrips the upfront cost of buying software. This tutorial provides an overview of maintaining systems and data security.

Prerequisite Knowledge
Technology Stack

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Building Secure Systems
- Source Code
- Machine Code
- Open Source software
- OSS issues

Topic 2: System Maintenance
- System Maintenance Overview
- Maintaining the Software
- Software as a Service (SaaS)
- Data Maintenance

Topic 3: Managing Data Security
- Data Security Overview
- Hardware
- Software
- Second-Order Vulnerabilities
- Data Erasure
- Data Security, Regulations, & GDPR

Data Tables – Excel Interactive

Tutorial Description
Overview
This tutorial is one of a series that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate the use of data tables in Excel and show how they can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on setting up and editing data tables.

Prerequisite Knowledge
Naming & Referencing Cells – Excel Interactive

Tutorial Level: Introductory
Tutorial Duration: 15 minutes

Data Validation – Excel Interactive

Tutorial Description
Overview
This tutorial is one of a series that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate the use of data validation in Excel and show how it can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on drop down boxes and popup error messages.

Prerequisite Knowledge
Formulas & Calculation Functions (Part 2) – Excel Interactive

Tutorial Level: Introductory
Tutorial Duration: 30 minutes

Date Functions – Excel Interactive

Tutorial Description
Overview
This tutorial is one of a series that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and show how they can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on date functions.

Prerequisite Knowledge
Formatting Basics – Excel Interactive

Level: Intermediate
Duration: 20 minutes

Day Count Conventions

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key day count conventions used in the money markets
- Recognize the main day count conventions used with fixed income securities
- Compare investments which have different day counts and compounding methods

Tutorial Overview
The use of different day count conventions in the bond and money markets coupled with the use of different compounding frequencies can make a significant difference to the amount of interest paid or received on an investment or debt instrument. This tutorial looks at how to calculate interest on a bond and market basis and convert from one basis to another, allowing for the use of different compounding frequencies where necessary.

Prerequisite Knowledge
Interest Calculations

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Money Market Basis
- Overview of Day Count Conventions
- What Is Money Market Basis?
- Money Market Basis: Variations

Topic 2: Bond Basis
- Overview of Bond Basis
- Bond Basis: Other Variations
- Bond Basis: Scenario
- Link Between Bond Basis & Money Market Basis
- Link Between Bond Basis & Money Market Basis: Example

Topic 3: Day Count Conventions & Compounding Frequencies
- Different Day Count Conventions & Compounding Frequencies
- Different Day Count Conventions & Compounding Frequencies: Example

Deforestation

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain the effects of mass deforestation
- List the reasons for deforestation
- Describe how current levels of deforestation may be halted

Tutorial Overview
Deforestation is the second-leading cause of climate change, and it has many other worrisome effects. This tutorial gives a high-level view of the impact of deforestation, the reasons for it, and what can be done to halt it.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 13 minutes

Derivatives – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the historical development of the derivatives market
- Identify the key types of derivative, namely futures and options
- Define an interest rate swap <li> List the main uses of derivatives, namely, hedging, speculation, and arbitrage
- Recognize how derivatives may use physical or cash settlement
- Compare exchange-traded derivatives to OTC derivatives
- Recognize the importance of clearing arrangements in reducing counterparty risk in derivatives markets

Tutorial Overview
This tutorial focuses on the basic types of derivatives – forward-type instruments (forwards, futures, and swaps) and options. The key differences between these instruments are described, along with the basics of their pricing. The tutorial also discusses the uses of these instruments, differences between exchange-traded and OTC instruments, and how derivatives are settled and cleared.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Derivatives
- Development of Derivatives Markets

Topic 2: Types of Derivative
- Derivative Structures
- Forwards/Futures
- Options
- Symmetrical & Asymmetrical Payoffs

Topic 3: Swaps
- What is a Swap?

Topic 4: Uses of Derivatives
- Uses of Derivatives

Topic 5: Settlement
- Types of Settlement

Topic 6: Exchange-Traded & OTC Derivatives
- Types of Trading
- Exchange-Traded Markets: Key Features
- Exchange-Traded Derivatives: Basis Risk
- OTC Derivatives

Topic 7: Clearing
- Role & Impact of Central Clearers

Derivatives – Scenario

Description
Overview
This real world scenario examines how a bank identifies and manages – as part of its ALM strategy – both interest rate risk and liquidity risk using interest rate futures such as SOFR futures.

Prerequisite Knowledge
A broad understanding of derivatives is required.

Level: Intermediate
Duration: 20 minutes

Derivatives – Markets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Distinguish between exchange-traded and OTC markets for derivatives
- Identify the key features of derivatives on financial and nonfinancial assets
- List the main motivations for trading derivatives, such as hedging, speculation, arbitrage, investing in intangible instruments, avoiding delivery, asset allocation, and accessing foreign markets
- Identify the main types of instruments with embedded options, such as callable bonds, CoCos, and dual-currency bonds
- Recognize the difference between linear products such as forwards/futures and nonlinear products such as options

Tutorial Overview
This tutorial describes derivatives markets today, both OTC and exchange-traded – and how the lines between these have become blurred by regulations adopted following the global financial crisis. The tutorial also looks at the many applications of derivatives for the various market players as well as instruments with embedded options, and linear and nonlinear products.

Prerequisite Knowledge
Derivatives – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Marketplaces
- Exchange-Traded vs. OTC Transactions

Topic 2: Financial & Nonfinancial Assets
- Financial Assets
- Nonfinancial Assets

Topic 3: Derivatives Strategies
- Why Use Derivatives?
- Hedging
- Speculation
- Arbitrage
- Other Trading Motivations

Topic 4: Embedded Derivatives
- Instruments with Embedded Derivatives

Topic 5: Linear & Nonlinear Products
- Derivatives & Linearity
- Linear Products
- Nonlinear Products

Digital Assets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain what a digital asset is
- Recognize why cryptocurrencies do not fulfill any of the core functions of money
- Describe central bank digital currencies

Tutorial Overview
A digital asset is anything of value that is stored digitally such as digital art, digital money, or physical assets represented by a digital token. Crypto assets, including cryptocurrencies, are also a type of digital asset. This tutorial provides a high-level overview of digital assets.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 15 minutes

Digital Banking – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify how the emergence and growth of digitalization in banking led to the development of multichannel and omnichannel banking
- Recognize the business models that have emerged in banking as a result of digitalization and enabling legislation
- Identify the importance of cybersecurity and digital resilience in the implementation of digital banking processes

Tutorial Overview
Digitalization – developing processes and changing workflows to convert analogue data and improve manual systems – has been hugely disruptive and transformative in many industries. Banking is no exception. This tutorial looks at how digitalization has evolved banking processes and how this has, in turn, influenced the development of new business models.

Prerequisite Knowledge
Banking – Primer

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Digital Channels & Process Optimization
- Digitalization in Banking
- Process Optimization
- Multichannel & Omnichannel Banking
- Ownership in a Multichannel Environment
- Channel Digitalization
  - Mobile Devices
  - Social Media
  - Contact Centers
  - Video Banking Digital Branches

Topic 2: Business Models
- From Open Banking to Open Finance
- Open Banking Benefits
  - Products & Innovation
  - Customer Experience
  - Nonbanking Services
- Banking-as-a-Service (BaaS)
- Banking-as-a-Platform (BaaP)

Topic 3: Digital Implementation & Security
- Encryption
- Customer Authentication
- What Do You Think?
- Digital Fraud
  - Remote/Virtual Access
  - Deception or Falsification
  - Customer-Oriented
  - Banks' Indirect Role
- Common Security Attacks
  - Phishing
  - DoS/DDoS
  - Trojan

    - Voice/Cloning/Spoofing
    - Man-in-the-Middle (MITM)
- Digital Resilience
    - Transparency
    - Banking Services
    - Regulation

Digital Money & Mobile Payments

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the difference between object-based and claim-based money
- Recognize the role of central bank money, namely cash and (potentially) central bank digital currency (CBDC)
- Identify the different forms of e-money, including stored-value facilities and prepaid cards, and their impact on the payments landscape
- Define other potential means of payment, including b-money (bank deposits), i-money (investment money), and cryptocurrency/stablecoin
- Recognize the role played by mobile money schemes and mobile/digital wallets in the development of payments

Tutorial Overview
The emergence of digital has seen the payments industry experience a radical reshaping in terms of new technologies, modernized infrastructure, and new entrants. The result has been a vastly improved consumer experience as new payments instruments and innovations proliferate via FinTech solutions. This tutorial describes these solutions in detail.

Prerequisite Knowledge
Payments – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Means of Payment
- Object- vs. Claim-Based Money
- Means of Payment

Topic 2: Central Bank Money
- Physical Cash
- Central Bank Digital Currency (CBDC)

Topic 3: E-Money
- What Is E-Money?
- Types of E-Money
- Risks of E-Money
- Impact of E-Money

Topic 4: Other Means of Payment
- B-Money
- Cryptocurrency
- Stablecoin/Libra
- I-Money

Topic 5: Mobile Payments & Wallets
- Rise of Mobile
- Mobile Money Schemes
- Mobile Money Schemes: Considerations
- Mobile Wallets
- Types of Mobile Wallet
- Contactless Payments
- Mobile Point of Sale (mPOS)

Distributions

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe how a random variable is distributed
- Compute the expected value and standard deviation/variance of a random variable
- Test hypotheses about the expected value of a variable
- Evaluate the likelihood of a certain event with a specified probability

Tutorial Overview
This tutorial is about random variables, probability distributions, the testing of hypotheses, and confidence levels. Understanding these concepts is essential in the financial world, particularly in option pricing and risk measurement. The tutorial covers the types of random variable and the probability distributions that each follows.

Prerequisite Knowledge
Probability
Risk & Return – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Random Variables & Simple Distributions
- Discrete & Continuous Variables
- Binomial Random Variables
- Properties of a Binomial Probability Distribution
- Binomial Distribution – Example
- Mean, Variance, & Standard Deviation for a Binomial Random Variable

Topic 2: Continuous Distribution
- Continuous Probability Distribution
- Normal Distribution
- Normal Distribution: Properties
- Standardized Normal Distribution
- Normal Distribution: Example
- Qualifying as a Normal Distribution
- Standard Normal Distribution: Scenario
- Skewness & Kurtosis

Topic 3: Other Continuous Probability Distributions
- Other Continuous Probability Distributions
- Uniform Probability Distribution
- Lognormal Probability Distribution
- Lognormal Probability Distribution: Example
- Exponential Probability Distribution

Topic 4: Hypothesis Testing & Confidence Levels
- Hypothesis Testing
- Confidence Levels
- Rejection & Non-Rejection of a Hypothesis
- Rejection & Non-Rejection of a Hypothesis: Example
- Confidence Levels – Example
- One-Tailed Confidence Level
- Two-Tailed Confidence Level
- Hypothesis Testing: Scenario

Documentary Collections

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define a documentary collection and recognize its role in facilitating payment for international trade transactions
- Recognize the benefits and drawbacks of documentary collections from the point of view of buyers/importers, sellers/exporters, and the various banks involved in the process
- Summarize the key requirements of the Uniform Rules for Collections (URC 522) that govern documentary collections

Tutorial Overview
Documentary collection is a service provided by banks to sellers (exporters) involved in international trade. This tutorial describes how documentary collections work, outlines the role of the parties involved, and lists the benefits and drawbacks of this method of payment. The tutorial also covers the Uniform Rules for Collections (URC), the internationally-recognized rules for all parties involved in documentary collections.

Prerequisite Knowledge
Trade Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Documentary Collections

- What Is a Documentary Collection?
- Parties to a Documentary Collection
- Documents Required
- Documentary Collection Process
- Step 1: Contract of Sale
- Step 2: Documents Sent to Remitting Bank
- Step 3: Documents Processed & Forwarded to Presenting Bank
- Step 4: Documents Processed & Payment/Acceptance Obtained
- Step 5: Payment Made to Seller
- Handling Discrepancies
- Buyer Refuses to Pay

Topic 2: Benefits & Drawbacks of Documentary Collections

- Buyer's Perspective
- Seller's Perspective
- When Are Documentary Collections Used?
- D/P vs. D/A Terms
- D/P vs. D/A Terms: Further Considerations
- Banks' Perspective
- Sources of Income for Banks
- Risks for Banks in Handling Documentary Collections

Topic 3: Uniform Rules for Collections (URC 522)

- What Is URC 522?
- Key Sections of URC 522

Dodd-Frank Act

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the 16 titles of the Dodd-Frank Act
- Identify the Dodd-Frank Act's impact on bank regulation, derivatives markets, corporate governance, securitization, insurance, and other areas of the financial system

Tutorial Overview
The 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act was enacted in the wake of the global financial crisis to update and reform US financial regulation. The wide-ranging legislation affects almost all aspects of the US financial system, imposing new obligations on financial market participants and expanding the powers of regulators. In the period since its implementation, the Dodd-Frank Act has been subject to various revisions and updates. This tutorial provides a high-level overview of the Dodd-Frank Act and highlights its impact on important aspects of the US financial system.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview

- Financial Crisis Context
- Dodd-Frank Act Titles
- Key Agencies

Topic 2: Key Areas of Reform

- Overview
- Financial Stability Oversight Council (FSOC)
- Systemically Important Financial Institutions (SIFIs)
- Bank Regulation
- Addressing "Too Big to Fail" Bailouts
- Consumer Financial Protection
- Federal Reserve Reform
- Derivatives Market Reform
- Mortgage Reform
- Private Fund Advisors
- Credit Rating Agencies (CRAs)
- Corporate Governance
- Insurance
- Securitization
- Investor Protection

Duration Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall how bond prices are sensitive to movements in yield
- Calculate the Macaulay duration and modified duration on a bond
- Recognize how duration can be used to hedge and immunize a single bond or bond portfolio
- Identify rate sensitivity measures for other types of fixed income instrument such as floating rate notes, swaps, and inflation-linked securities

Tutorial Overview
Duration is a measure of the sensitivity of bond prices to changes in yield. This tutorial looks at the key types of duration figure, including Macaulay duration, modified duration, and spread duration. It also examines the use of duration in hedging and immunizing fixed income portfolios as well as looking at rate sensitivity measures for other types of fixed rate instrument such as floating rate notes, swaps, inflation-linked bonds.

Prerequisite Knowledge
Fixed Income Analysis – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Bond Price Sensitivity
- Bond Price Sensitivity

Topic 2: Overview of Duration
- Bond Prices & Yield Changes
- Bond Prices & Yield Changes: Duration
- Macaulay Duration: Example
- Macaulay Duration: Non-Integer Periods

Topic 3: Modified Duration
- Modified Duration
- Dollar Duration & DV01
- Duration Calculations for Coupon-Paying Bonds

Topic 4: Factors Affecting Duration
- Factors Affecting Duration

Topic 5: Uses of Duration
- Duration-Based Hedging
- Duration-Based Hedging: Issues
- Immunization
- Immunization of a Bond Portfolio
- Other Uses of Duration

Topic 6: Duration of Other Products
- Duration of Non-Fixed-Coupon Securities

Economic Indicators – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify basic features of economic indicators and different types of indicators
- List and define some of the most closely watched economic indicators
- Recognize some of the methods used to interpret and analyze economic indicators

Tutorial Overview
Few roles in the financial sector can be performed well without some awareness of the current health and trajectory of the broader economy, for which an understanding of the key indicators that track the economy is important. This tutorial provides an overview of economic indicators, including different types of indicators, their compilation and publication, and some of the methods used to interpret and analyze them.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 65 minutes

Tutorial Outline
Topic 1: Overview of Economic Indicators
- Volume, Price, & Value
- Compilation & Publication
- Presentation & Formats
- Other Distinctions
- Data Revision & Adjustments

Topic 2: Key Indicators
- GDP & GDP Growth
- Inflation
- The Business Cycle
- Interest rates
- Labor Market
- Trade
- Fiscal

Topic 3: Interpretation & Analysis
- Processing the Data
- Converting to Index Numbers
- Composite Indexes: Weighting Effect
- Index Weighting Example
- Weighting Techniques
- Adjusting for Inflation
- Nominal to Real Wage Conversion
- Calculating Real Growth
- Annualizing Rates of Change
- Comparative Analysis
- Common Pitfalls

Editing Cell Names – Excel Interactive

Tutorial Description
Overview
This tutorial is one of a series that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate the use of data validation in Excel and show how it can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on naming cells.

Prerequisite Knowledge
Naming & Referencing Cells – Excel Interactive

Tutorial Level: Introductory
Tutorial Duration: 25 minutes

Efficient Markets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the concept of efficient markets
- Discuss the Random Walk Theory
- Identify the different levels of the EMH
- List the various implications of the EMH
- List the main research findings that either support or contradict the different levels of the EMH
- Recognize the concept of adaptive markets

Tutorial Overview
One of the key factors when building a theoretical framework required for making rational financial decisions and policies is an understanding of the concept of market efficiency. This concept is one of the most widely studied and contentious areas in the financial world today. This tutorial explains in detail the characteristics of an efficient market, describing the random walk theory and examining the different forms of the efficient market hypothesis and their various implications for analysts, management, and investors. It also discusses the concept of adaptive market hypothesis and why it is becoming a popular alternative to EMH.

Prerequisite Knowledge
APT & Factor Models

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Efficient Market Hypothesis (EMH)
- Efficient Market Hypothesis (EMH)
- What is an Efficient Market?
- Effect of New Information on Stock Prices
- High Frequency Trading
- Mispriced Securities
- Random Walk Theory
- Random Walk Theory: An Example
- Mean-Reverting
- Cyclical Patterns
- Levels of Market Efficiency
- Implications of Efficient Market Hypothesis

Topic 2: Market Efficiency: The Evidence
- Efficient Market Efficiency: The Evidence
- Evidence of Market Efficiency
- Weak Form
- Semi-Strong Form
- Strong Form
- Evidence of Market Inefficiency

Topic 3: Adaptive Markets Hypothesis
- Coming Next
- Critique of EMH
- Adaptive Markets Hypothesis
- Behavioral Bias
- Efficient Markets under AMH
- Implications of AMH

Embedded Finance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize embedded finance, how it evolved and its drivers
- Identify the different business models for embedded finance and its applications
- Recall how embedded payments work and their benefits
- Identify embedded lending and its benefits
- List the other types of embedded finance

Overview
Embedded finance is an umbrella term that describes the integration of various financial products and services into the business, platforms, and applications of nonfinancial entities. It enables customers of these entities to access these products and services – such as payments, lending, insurance, and investing – without leaving the platform or app they are using, thus providing them with a more convenient and integrated experience where they can undertake their core activities and financial transactions in the same place.

This tutorial examines the forces driving the rise of embedded finance, the multiple business models and use cases, and the various types of embedded finance.

Prerequisite Knowledge
Open Banking & Open Finance

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Embedded Finance Overview
- What Is Embedded Finance?
- Evolution of Embedded Finance
- Drivers of Embedded Finance
    - Consumer Demand
    - Digital Infrastructure
    - Information Sharing
- Embedded Finance Value Chain
    - Providers
    - Distributors
    - Enablers
    - End-Users/Customers
- Regulatory Considerations

Topic 2: Business Models & Use Cases
- Business Models
    - Business-to-Consumer (B2C)
    - Business-to-Business-to-Consumer (B2B2C)
    - Business-to-Business (B2B)
    - Business-to-Business-to-Business (B2B2B)
- Sectoral Applications
    - Retail & E-Commerce
    - Health
    - Education
    - Telecommunications
    - Manufacturing
    - Logistics
- The Bank Perspective
    - Strategic Goals
    - Partnership Approach

    - Platform Design & Development

Topic 3: Embedded Payments

- Payments: The Foundation of Embedded Finance
- How Embedded Payments Work
- Card Payments
- Alternative (Noncard) Payments
    - Instant Payments
    - Account-to-Account (A2A) Payments
- Embedded Payments Benefits
    - Sales Conversion Rates
    - Customer Satisfaction
    - Repeat Business
    - Customer Churn
    - Data Analytics
    - New Business

Topic 4: Embedded Lending & BNPL

- What Is Embedded Lending?
- Embedded Lending Benefits
    - Access to New Customer Groups
    - Superior Customer Experience
    - Increased Revenue & Shorter Sales Cycle
    - Competitive Advantage
    - Data Insights
    - Fast Credit Decisions
- BNPL
    - Discovery
    - Checkout
    - Post-Purchase
    - Personal Finances
- BNPL Revenue Model
    - Payment Fees
    - Interest & Late Payment Fees
    - Interchange Fees
    - Advertising & Marketing Affiliation
    - Interest on Cash

Topic 5: Other Types of Embedded Finance

- Other Embedded Finance Solutions
    - Embedded Banking
    - Embedded Insurance
    - Embedded Investment
    - Embedded Wealth Management

Emerging Markets – Advanced & Secondary Markets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define advanced emerging markets and secondary emerging markets
- List the key differences between advanced emerging markets and secondary emerging markets
- Name the countries categorized as advanced and secondary emerging markets and identify their key characteristics

Tutorial Overview
Emerging markets have grown to be an important global asset class. Increasingly, investors make fine distinctions among markets, considering factors such as economic structure, fiscal and monetary health, and demographic trends. This tutorial provides a high-level overview of advanced and secondary emerging markets and highlights key factors to consider when analyzing these markets from an investment perspective.

Prerequisite Knowledge
Emerging Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview
- Country Classification Process
- Advanced & Secondary EMs
- Advanced EMs vs. Secondary EMs
- Variation Among Markets
- Importance Of China

Topic 2: Country Profiles
- How To Use This Section
- Brazil
- Chile
- China
- Colombia
- Czech Republic
- Egypt
- Greece
- Hungary
- India
- Indonesia
- Kuwait
- Malaysia
- Mexico
- Pakistan
- Peru
- Philippines
- Qatar
- Russia
- Saudi Arabia
- South Africa

- Taiwan
- Thailand
- Turkey
- United Arab Emirates
- Data Notes

Emerging Markets – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define emerging markets and list their key characteristics
- Identify key sources of growth in emerging markets
- Name important emerging markets and frontier markets
- List the potential risks and benefits of investing in emerging markets
- Identify the key emerging market assets available to investors

Tutorial Overview
In recent decades, emerging markets have emerged as an important asset class, offering investors the potential for rapid growth and attractive returns. However, investing in emerging markets can be risky and a good understanding of the potential advantages and disadvantages of emerging market assets is important. This tutorial provides a high-level overview of emerging markets and highlights key factors to consider when investing in emerging market assets.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Emerging Markets Overview
- Background
- What Is An Emerging Market?
- Emerging Markets From An Investment Perspective
- Characteristics of Emerging Markets
- Drivers of Emerging Market Growth
- Future of Emerging Markets

Topic 2: Key Emerging Markets
- Investment Cycles
- Investment Cycles: 1980s-1990s
- Investment Cycles: 2000s
- Investment Cycles: 2010s
- Advanced & Secondary Emerging Markets
- Frontier Markets

Topic 3: Investing in Emerging Markets
- Benefits
- Risks
- Assets
- Assets: Equities
- Assets: Fixed Income
- Assets: Other
- Outlook

Emerging Markets – Frontier Markets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define frontier markets
- List the key differences between frontier markets and emerging markets
- Name the countries categorized as frontier markets and identify their key characteristics

Tutorial Overview
Rapidly growing frontier markets are becoming an increasingly important global asset class. Investors in this high-risk, high-reward sector must make distinctions among markets, considering factors such as economic structure, fiscal and monetary health, and demographic trends. This tutorial provides a high-level overview of frontier markets and highlights key factors to consider when analyzing these markets from an investment perspective.

Prerequisite Knowledge
Emerging Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview
- Background
- Frontier Markets Defined
- Frontier Markets vs. Emerging Markets
- Frontier Market Risks
- Variation Among Markets
- Performance Variation

Topic 2: Country Profiles
- How To Use This Section
- Argentina
- Bahrain
- Bangladesh
- Botswana
- Bulgaria
- Côte d'Ivoire
- Croatia
- Cyprus
- Estonia
- Ghana
- Iceland
- Jordan
- Kazakhstan
- Kenya
- Latvia
- Lithuania
- Malta
- Mauritius
- Morocco
- Nigeria
- North Macedonia
- Oman
- Palestine
- Romania

- Serbia
- Slovak Republic
- Slovenia
- Sri Lanka
- Tunisia
- Vietnam
- Data Notes

EMIR

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the purpose, key provisions, and scope of EMIR
- Define the clearing obligation and list key exemptions
- Define the reporting obligation and recognize the role of trade repositories
- List and define the key risk mitigation provisions of EMIR, including portfolio reconciliation and collateral exchange

Tutorial Overview
The European Market Infrastructure Regulation (EMIR) is a binding European law that imposes a regulatory framework on the over-the-counter (OTC) derivatives market, trade repositories, and central clearing counterparties (CCPs). EMIR contains provisions that mandate central clearing for certain OTC contracts and counterparties and that require detailed reporting of transactions. The goal of the legislation is to reduce systemic risk in OTC derivatives markets. EMIR has been amended, updated, and modified by a number of supplementary rules, including the EMIR Refit. This tutorial provides an overview of EMIR and the changes introduced by the EMIR Refit.

Prerequisite Knowledge
Derivatives – Markets

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Topic 1: Overview of EMIR
- Purpose of EMIR
- Legislative Framework
- Key Requirements
- Regulation of Key Industries
- What Contracts are Affected?
- Territorial Scope
- Outlook

Topic 2: Clearing Obligation
- Overview
- What Contracts Must Be Cleared?
- Categories of Counterparties
- Clearing Threshold Overview
- Clearing Thresholds
- Who Can Clear?
- Exemptions

Topic 3: Reporting Obligation
- Overview
- Required Data
- Identifiers
- Dual Reporting
- Trade Repositories (TRs)

Topic 4: Risk Mitigation
- Overview
- Timely Confirmation
- Portfolio Reconciliation
- Portfolio Compression
- Dispute Resolution Procedures

- Daily Valuation
- Collateral Exchange
- Collateral Exchange Under EMIR

Employment & Unemployment – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define unemployment and employment and list the limitations of the standard measures of unemployment
- Determine how unemployment affects households and the economy
- List the different types of unemployment
- Determine the potential causes of unemployment

Tutorial Overview
Unemployment is a potentially damaging phenomenon that can negatively impact both economies and households. Thus, it is important to understand the types and causes of unemployment and how they may affect individuals, firms, and the economy overall. This tutorial provides a high-level overview of unemployment and outlines the key causes thereof.

Prerequisite Knowledge
Economic Indicators – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Employment & Unemployment
- Overview
- Unemployment Measurement: Limitations
- Costs of Unemployment: Social
- Costs of Unemployment: Economic
- Who Are the Unemployed?

Topic 2: Causes of Unemployment
- Types of Unemployment
- Cyclical Unemployment
- Wages & Unemployment
- Natural Rate of Unemployment
- Full Employment & Inflation: Phillips Curve
- Full Employment & Inflation: NAIRU

Equity Derivatives – An Introduction

Tutorial Description
On completion of this tutorial, you will be able to:

- List the structures and applications of single stock and stock index futures and options, warrants, convertibles, equity swaps, structured products, volatility indices, contracts for difference (CFDs), equity-linked securities, and quantos
- Recognize investors motivations for entering equity derivative transactions, including cost effectiveness, market access, creating short positions, optionality, leverage, hedging, income variation and enhancement, and index tracking and passive investment, as well as issuer motivations such as lower financing costs, deferring issuance, and accessing a wider investor base
- Identify the key risks of equity derivatives as well as the role of these instruments in risk management

Tutorial Overview
An equity derivative is a derivative whose underlying instrument is a stock or stock index. Hence, the value of an equity derivative is a function of the value of the stock or index. The market for equity derivatives continues to expand with new product structures constantly appearing.

This tutorial introduces the most important equity derivatives, including stock options, stock index futures and options, warrants and convertibles, structured and synthetic equity derivatives. The benefits and risks of these products are also described in detail.

Prerequisite Knowledge
Derivatives – Markets

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Equity Derivatives
- Overview of Equity Derivatives

Topic 2: Equity Futures & Options
- Equity Futures & Options
- Warrants

Topic 3: Securities with Embedded Equity Derivatives
- Convertibles
- Exchangeable Bonds
- Structured Equity Derivatives

Topic 4: Equity Swaps
- Equity Swaps

Topic 5: Other Equity Derivatives
- Contracts for Difference (CFDs)
- Equity-Linked Securities
- Volatility Indices
- Quantos

Topic 6: Issuer & Investor Motivations
- Issuer Motivations
- Investor Motivations

Topic 7: Risks of Equity Derivatives
- Risks of Equity Derivatives
- Risk Management

Equity Hedging

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how equity risk can be reduced through the diversification and the use of equity derivatives
- Recognize how hedge funds use hedging techniques to achieve target returns

Tutorial Overview
Equity hedging is the reduction of the risk of investing in equities using various techniques and hedging instruments. This tutorial provides an overview of the key techniques and instruments, in equity hedging such as diversification and derivatives including equity futures and options. The different types of hedging strategies by hedge funds is also examined.

Prerequisite Knowledge
Equity Trading – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Equity Hedges
- Equity Hedges
- What is an Equity Hedge?
- Equity Risk Hedging: Techniques
- Equity Options
- Equity Options: Long & Short
- Equity Option Hedging Strategies
- Hedging with a Covered Call
- Protective Put: Scenario

Topic 2: Equity Forwards & Futures
- Equity Forwards & Futures
- Equity Forward Contracts
- Equity Forwards: Example
- Equity Futures

Topic 3: Hedge Fund Strategies
- Hedge Fund Strategies
- Overview of Hedge Funds
- Hedge Fund Strategies
- Long/Short Equity Strategies
- Equity Market Neutral Funds
- Event-Driven Funds: M&A

Equity Index Futures & Options

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define equity index futures and options
- Determine the intrinsic value of both index futures and options
- Identify how equity index futures and options are used in arbitrage

Tutorial Overview
Traders typically deal in multiple stock positions rather than a single position, which means they are required to manage portfolios and cope with various risks associated with these portfolios. Consequently, traders need to be aware of the various financial derivatives available to help them manage their portfolios.

This tutorial looks at equity index futures and options, two of more popular financial derivatives used by traders. Finally, we look at how derivatives can be grouped together to dynamically hedge a portfolio's market exposure over time.

Prerequisite Knowledge
Equity Derivatives – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Index Equity Futures
- Index Equity Futures
- What is an Equity Index Future?
- Equity Index Futures: Long Position
- Stock Index Futures: Short Position
- Equity Index Futures: Pricing
- Cost of Carry
- Fair Value
- Reasons for Mispricing
- Arbitrage
- Hedging with Index Futures
- Cash Equitization
- Benefits of Index Futures

Topic 2: Equity Index Options
- Equity Index Options
- Equity Index Options: Call & Put Options
- Buying an Index Call Option: Example
- Buying an Index Call Option: Breakeven Point
- Buying an Index Put Option: Example
- Buying an Index Put Option: Breakeven Point
- Combining Index Futures & Options
- Option Strategies: Covered Call (Buy-Write)
- Option Strategies: Capping the Downside
- Options: Hedging Strategies

Equity Indices

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain how equity indices are put together
- List some companies that measures them
- Illustrate how they calculate increases and decreases in equity markets
- Recognize how indices represent market sentiment and market measures
- Discuss why investors care about how they perform

Tutorial Overview
Stock market indexes serve a number of important functions, such as providing a barometer of equity market performance, acting as benchmarks against which investment performance for portfolio managers is measured, and index investing.
This tutorial looks at the different types of stock market index and the construction of these indexes.
Prerequisite Knowledge
Equity – Indices

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Indices
- Overview of Indices
- Equity Market Indices
- Equity Market Indices: Types
- Equity Market Indices: Uses

Topic 2: Constructing an Index
- Constructing an Index
- Selecting Markets & Assets
- How to Construct an Index
- Implications of Market Capitalization vs. Price Weighting
- Float-Adjusted Market Capitalization Indices
- Attribute-Weighted Indices
- Index Rebalancing
- Index Review and Management
- Measuring Returns on an Index

Equity Markets – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the equity markets and their role in raising risk capital for issuers
- Recognize the importance of dividends in providing a return for equity investors
- List the key features of common stock, such as voting rights and share classes
- Recognize the main features of preferred stock and its key subtypes
- Identify the role of stock markets and alternative trading venues such as dark pools
- Recognize the importance of algorithmic trading and high frequency trading
- List the differ types of equity market order, including market orders, stop orders, limit orders, and stop-limit orders

Tutorial Overview
This tutorial focuses on wholesale money markets, which are markets where the lending/borrowing or buying/selling of short-term funds and securities occurs between large institutions such as banks, institutional investors, corporations, and central banks. The tutorial discusses the main sectors and products of the money market and the key risks involved in trading and investing in money market instruments.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Equity Markets
- What is Equity?

Topic 2: Dividends
- What Are Dividends?
- Dividend Announcements & Key Dates

Topic 3: Common Stock
- Common Stock & Voting Rights
- Limited Liability
- Dual/Multiple Class Stock

Topic 4: Preferred Stock & Other Equity Types
- Features of Preferred Stock
- Preferred Stock: Types
- Other Key Types Of Equity

Topic 5: Stock Exchanges
- The Changing Nature Of Stock Markets
- Stock Exchanges & Alternative Off-Exchange Venues

Topic 6: Algorithmic Trading & HFT
- Algorithmic Trading & High Frequency Trading (HFT)

Topic 7: Orders
- Order-Driven vs. Quote-Driven Markets
- Key Order Types

Topic 8: Equity Metrics & Ratios

- Key Equity Metrics & Ratios

Equity Markets – Issuing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize why companies decide to go public
- Recall how companies decide how much stock to list and where to list it
- Identify the key participants in an IPO
- Recognize the underwriting, pricing and distribution processes in an IPO
- List the various stages in an IPO timeline
- Recall the various alternatives to a traditional IPO
- Compare the various alternatives to a traditional IPO
- Determine how companies that have already issued stock can make follow-on or secondary offerings to new investors or existing shareholders

Tutorial Overview
This tutorial describes the equity issuance (primary) market in its different forms. This incorporates the public sale of existing private shareholdings, private transfers between investors, and the creation of new equity. The tutorial covers highly visible initial offerings (IPOs and privatizations), private transactions, and various forms of subsequent issuance such as rights offerings.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Going Public
- Going Public
- Going Public
- Reasons for Going Public
- Drawbacks of Going Public
- Global Equity Issuance

Topic 2: Listing Volumes & Locations
- Listing Volumes & Locations

Topic 3: IPO Participants
- IPO Participants
- Advisors
- Underwriting Syndicate
- Underwriting Syndicate: Responsibilities

Topic 4: Underwriting, Pricing, & Distribution
- Underwriting, Pricing, & Distribution
- Underwriting Process
- Pricing An Issue
- Distribution

Topic 5: IPO Timeline & Performance
- IPO Timeline & Performance
- IPO Timeline
- IPO Performance

Topic 6: Alternatives to IPOs

- Alternatives to IPOs
- Key Alternatives to IPOs
- Privatizations

Topic 7: Subsequent Offerings

- Subsequent Offerings
- Raising Capital Post-IPO
- Rights Issue
- Rights Issue: Scenario
- Apply Your Knowledge
- Apply Your Knowledge
- Rights Issue: Scenario
- Apply Your Knowledge
- Bonus Issue
- Bonus Issue: Scenario
- Apply Your Knowledge
- Apply Your Knowledge
- Bonus Issue: Scenario
- Stock Split

Equity Options & Warrants

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the terminology surrounding equity options and warrants
- List the typical payoffs associated with these instruments
- List the similarities of warrants to equity options
- Recognize how warrants can be a source of capital for the company
- Recall how warrants are effectively geared instruments and the effect of gearing

Tutorial Overview
Equity options are a derivative type that has seen phenomenal growth over the past decade or two, especially as fund managers combine them with underlying equities as part of their portfolio management.

From its humble beginnings in the 1980s, when the market developed out of the need for Japanese corporations with relatively poor credit ratings to raise cheap debt, the warrant market has continued to thrive up to the present day. It has changed beyond recognition and now represents an important source of funding for a variety of borrowers, in addition to being a highly lucrative investment market for many fund managers.

In this tutorial, you will learn about the terminology surrounding equity options and the different payoffs that make them so attractive. Further, you will be introduced to warrants and how they compare with equity options.

Prerequisite Knowledge
Equity Derivatives – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Equity Options
- Equity Options
- Equity Option: Definition
- Equity Option: Terminology
- Equity Option: Example
- Option Moneyness
- Equity Option Payoffs
- Option Profitability
- Option Profitability: Long Call
- Option Profitability: Short Call
- Option Profitability: Long Put
- Option Profitability: Short Put
- Exchange-Traded vs. Over-The-Counter Options
- Price Quotations
- Exotic Equity Options

Topic 2: Warrants
- Warrants
- Warrants Terminology
- Warrants vs. Options
- Warrants: Example
- Pricing Warrants
- Traditional Warrants
- Call Warrant Payoff
- Covered Warrants
- Vanilla & Index Warrants

Equity Returns Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Calculate the return on an equity security
- Use variance and standard deviation to estimate a stock's volatility
- Interpret the meaning of beta as a measure of equity risk

Tutorial Overview
This tutorial focuses on some of the measures that investors use when making decisions about equity securities. It demonstrates how to measure the returns on stocks as well as the risks that are associated with equity securities

Prerequisite Knowledge
Equity Valuation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Measuring Equity Returns
- Sources of Return
- Scenario: Calculating the Return on a Stock
- Holding Period Return

Topic 2: Measuring Equity Risk
- Risk & Volatility
- Variance
- Interpreting Variance
- Standard Deviation
- Normal Distribution

Topic 3: Analyzing Stock Betas
- CAPM
- Equity Market Risk Premium
- Beta
- Calculating Beta
- Interpreting Beta
- Scenario: CAPM & Beta
- Adjusted Beta
- Beta for Private Companies
- Beta for Private Companies: Example

Equity Swaps

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how equity swaps can replicate the returns from an equity index in exchange for a series of interest payments
- Identify the different features and uses of equity swaps
- List the different types of equity swap
- Recognize the existence of credit risk with equity swaps and how this is managed
- Recall how to price an equity swap

Tutorial Overview
An equity swap is a generic term for the repackaging of one payment stream, such as that from an interest-bearing security, into a payment stream that would be paid on an equity index. The equity swap adds value for investors because it allows the repackaging of existing payment streams into equity index payment streams without requiring them to liquidate their existing investment. The result is a synthetic security that presents the characteristics uniquely sought by the investor.

In this tutorial, we will explain the structure of equity swaps, outline some of their uses and applications, and illustrate how they may be priced.

Prerequisite Knowledge
Equity Derivatives – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Equity Swaps
- Overview of Equity Swaps
- Features of an Equity Swap
- Role of a Swap Dealer

Topic 2: Equity Swap Payments
- Calculating Payments
- Equity Swap with Constant Notional Principal
- Equity Swap with Variable Notional Principal

Topic 3: Types of Equity Swap
- Key Types of Equity Swap

Topic 4: Uses & Benefits of Equity Swaps
- Uses of Equity Swaps
- Benefits of Equity Swaps

Topic 5: Credit Risk of Equity Swaps
- Credit Risk of Equity Swaps

Topic 6: Equity Swap Pricing
- Pricing an Equity Swap

Equity Trading – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the different types of position that equity traders and investors can take
- Identify the various participants in equity markets and the mechanics of how trades work
- Recognize how margin trading can be used to take leveraged positons and increase returns

Tutorial Overview
Every day, billions of trades are made with global investors buying and selling stocks in order to make money. Although equities are not the biggest financial product (being eclipsed by the volume of FX and debt trading), stock markets are certainly the most recognizable marketplace for financial assets. This tutorial describes how equity trades are executed and demystifies some of the jargon associated with the buying and selling of equity securities.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Equity Positions
- Equity Positions
- Long Positions & Short Positions
- Long Positions & Short Positions: Example
- Exposure for the Long
- Exposure for the Short
- Equity Option Positions
- Equity Option Positions: Calls & Puts

Topic 2: Trading Mechanics
- Trading Mechanics
- Key Market Participants
- Mechanics of Trade Execution
- Executing an Order
- Order Instructions
- Order Types

Topic 3: Margin Trading
- Margin Trading
- What Is Margin Trading?
- Increased Returns
- Scenario: Margin Trading
- Margin Requirements
- Scenario: Margin Call
- Risks of Margin Trading

Equity Trading Strategies

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how active investing strategies aim to exploit stock market mispricings to earn above-market returns
- Recall how passive traders track a market index

Tutorial Overview
This tutorial looks at how investors use active and passive trading strategies to achieve target returns for investors. Key active trading strategies, such as day trading, momentum trading, scalping, swing trading, and position trading, are also examined in detail.

Prerequisite Knowledge
Equity Trading – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Active Trading
- Active Trading
- What is Active Trading?
- Costs of Active Trading
- Types of Active Trader
- Day Trading
- Day Trading: Issues
- Active Trading & Bid-Ask Spreads
- Relative Value Trading
- Algorithmic (Algo) Trading
- Momentum Trading
- Momentum Trading: Volume & Strength
- Scalping
- Scalping: Market Liquidity
- Swing Trading
- Position Trading

Topic 2: Passive Trading
- Passive Trading
- Passive Trading Strategies
- Advantages of Passive Trading
- Comparison of Active & Passive Trading Strategies

Equity Trading – Technical vs. Fundamental Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the process of technical trading
- Identify the key tools used by technical traders
- Recognize how fundamental analysts issue trading recommendations based on company fundamentals

Tutorial Overview
This tutorial looks at how traders and investors trade equities based on both the technical analysis of stock prices and the analysis of underlying company fundamentals. The key tools used by technical traders, such as bar charts, line charts, candlestick charts, moving averages, Bollinger bands, and relative strength indices, as well as the process of investing based on technical analysis are examined in detail.

Prerequisite Knowledge
Equity Trading – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Technical Trading
- Technical Trading
- What is Technical Trading?
- Technical Trading: Process

Topic 2: Tools of Technical Analysis
- Tools of Technical Analysis
- Tools Used by Technical Analysts
- Line Charts
- OHLC Chart (Bar Chart)
- OHLC Chart: Example
- Chart Analysis: Candlestick charts
- Candlestick Charts: Interpretation
- Moving Averages
- MACD: Example
- Bollinger Bands
- Bollinger Bands: Example
- Relative Strength Index (RSI)
- Stock Selection in Technical Analysis

Topic 3: Fundamental Trading
- Fundamental Trading
- Overview of Fundamental Analysis
- Equity Research Process
- Scenario: Fundamental Analysis
- Equity Research: Stock Splits & Stock Events

Equity Valuation – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the different types of equity value
- Recognize why investors demand a required rate of return on equity securities
- Identify the relationship between risk and return for equity securities
- Recognize the different types of model that analysts use when valuing equities

Tutorial Overview
This tutorial focuses on the principles that analysts employ to arrive at the intrinsic value of a stock and some key terminology that underpins those principles. It examines the relationship between the market price of the stock and the intrinsic value and what this means for equity investors. The tutorial also introduces the various valuation models that analysts use when valuing stocks.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Types of Equity Value
- Market Value
- Market Value: Example
- Book Value
- Book Value: Example
- Intrinsic Value
- Intrinsic Value: Example
- Scenario: Market Value vs. Intrinsic Value

Topic 2: Required Rate of Return
- Returns to Debt Investors vs. Returns to Equity Holders
- Required Rate of Return
- Calculating the Required Rate of Return

Topic 3: Risk & Return
- Risk & Return: Basic Relationship
- Returns on Equity Securities
- Risk of Equity Securities
- Combining Risk & Return

Topic 4: Equity Valuation Models
- Types of Valuation Model
- Combining Valuation Models
- Scenario: Using the Most Appropriate Valuation Model

Equity Valuation – DCF Models

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of discounted cash flow (DCF) model that are used to value equities
- Calculate the intrinsic value of a stock using both the dividend discount model and the free cash flow to equity model

Tutorial Overview
This tutorial focuses on the use of DCF models by equity analysts. It describes how to use the different types of present value model, namely the dividend discount model and the free cash flow to equity model, to calculate the intrinsic value of a stock. The inputs into the calculations for these models are examined as are the estimates and assumptions that analysts are required to make about these inputs. The problems and limitations associated with using these models to estimate intrinsic value are also covered.

Prerequisite Knowledge
Equity Valuation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Types of Model
- Types of Model
- Two Types of DCF Model

Topic 2: Dividend Discount Models
- Dividend Discount Method
- Dividend Discount Method: Example
- Calculating the Discount Rate
- Value of Preferred Stocks
- Gordon Growth Model
- Sustainable Growth Rate
- Limitations of the Gordon Growth Model
- Multi-Stage Dividend Discount Models

Topic 3: Free Cash Flow to Equity (FCFE) Models
- Overview of the FCFE Model
- Calculating the FCFE
- Forecasting the Visible Period
- Calculating a Terminal Value
- Calculating a Terminal Value: Methods
- FCFE: Example

Equity Valuation – Other Methods

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Calculate the various financial metrics and ratios that are used to imply values using comparable multiples
- Recognize how asset-based valuation models can be used to provide a baseline valuation for an equity security
- Identify how economic value added (EVA) calculations are used for residual income valuation

Tutorial Overview
This tutorial focuses on approaches other than DCF analysis that analysts and investors can use to add to the picture of a stock's intrinsic value. The tutorial describes comparable valuation methods that use market multiples to compare a peer group of companies to the target company. It also covers asset-based valuation, which show the value of a company based on its net assets, and residual income valuation models, which are based on forecasting a company's future residual income or excess earnings.

Prerequisite Knowledge
Equity Valuation – DCF Models

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Comparable Multiple Valuation Models
- Valuation Process
- Peer Group Selection
- Commonly-Used Multiples
- Trailing vs. Forward Multiples
- Price/Earnings Multiple
- Price/Earnings Multiple: Example
- Price/Sales Multiple
- Price/Sales Multiple: Example
- Scenario: Using Price/Sales as a Comparative Valuation Multiple
- Price/Book Multiple
- Price/Book Multiple: Example
- Price/Cash Flow Multiple
- Enterprise Value Multiples
- Dividend Yield
- Scenario: Comparable Multiple Valuation
- Assessing Fairness of Value

Topic 2: Asset-Based Valuation Models
- The Case for Asset-Based Valuation
- Difficulties with the Asset-Based Valuation Method
- Valuing Assets
- Appropriateness of an Asset-Based Valuation Model
- Scenario: Choosing the Appropriate Valuation Model

Topic 3: Residual Income Valuation Models
- Overview of the Residual Income Model (RIM)
- Economic Value Added (EVA)
- EVA as a Valuation Tool

ESG – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define environmental, social, and governance (ESG) investing and lending
- List key ESG indices
- Define ESG factors
- List the major sources of ESG data
- Name the major strategies of incorporating ESG

Tutorial Overview
Traditionally, investors have been concerned with one thing: financial returns. But in recent decades, many investors have begun to move beyond purely financial considerations. More and more, investors are considering environmental, social, and governance (ESG) factors when making investment decisions.

Broadly speaking, ESG means pursuing an investment strategy that considers both financial returns and broader social and environmental impacts. This tutorial provides a high-level overview of ESG.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: ESG Overview
- Introducing ESG
- Origin of Incorporating ESG
- Incorporating ESG Today
- ESG indices
- Performance of ESG-Incorporated Portfolios
- ESG factors

Topic 2: Environmental Case Study
- Environmental Factors Overview
- Case Study: Norilsk Nickel
- Consequences

Topic 3: Social Case Study
- Social Factors Overview
- Case Study: General Motors
- Consequences

Topic 4: Governance Case Study
- Governance Factors Overview
- Case Study: Pharmacies' Sale of Opiods
- Consequences

Topic 5: ESG Data
- ESG Reporting
- ESG Data Providers

ESG – Primer

Tutorial Description
Overview
As the world grapples with emerging risks such as climate change, aging populations, and technological vulnerabilities, investors are searching for investment options that go beyond simple financial concerns. Increasingly, both retail and institutional investors are seeking out assets that perform well on environmental, social, and governance (ESG) dimensions. The incorporation of ESG factors into decision-making is rapidly gaining popularity, and assets under management with such a mandate are growing fast. This tutorial provides a high-level overview of responsible and sustainable investing and identifies the key ESG incorporation strategies and considerations.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 7 minutes

ESG Data & Ratings – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of ESG data and ratings available
- Recognize why there is a large market of ESG data providers and the potential for greater oversight/regulation of this market
- Identify the main uses of ESG ratings
- Recognize the key challenges associated with the use of ESG data and ratings

Tutorial Overview
Just as credit ratings and financial ratios/indicators support banks and other financial institutions in understanding the financial performance and risk of companies, governments, and other entities, ESG data supports a similar understanding in relation to ESG performance, risk, and impact. While financial data is more well established, ESG data has become increasingly crucial in informing decision-making across the entire financial industry. This tutorial provides an introduction to the area of ESG data and ratings.

Prerequisite Knowledge
ESG – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of ESG Data & Ratings
- Definitions
- Types of ESG Data & Ratings
- Compliance with ESG-Related Norms
- Financial Risks & Opportunities Related to ESG
- Impact on Society & The Environment
- Choosing the Right Dataset/Framework

Topic 2: ESG Ratings Providers
- Market for ESG Ratings
- Regulation of Ratings Providers

Topic 3: Uses of ESG Ratings
- ESG Analysis
- ESG Incorporation
- ESG Products
- Other uses

Topic 4: ESG Data Challenges
- Correlation
- Coverage
- Biases
- Materiality & relevance
- Conflicts of interest
- Conclusion

ESG Data & Ratings – Reporting Frameworks

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize why different ESG frameworks can yield different results when applied to the same company or asset
- Recognize the different global goals and principles in integrating sustainability
- Identify the different reporting frameworks that allow companies showcase their sustainability efforts and future objectives
- Identify the main conventional and tech-assisted ratings/indices
- Recall the legislative developments to support the sustainability transition
- Recognize how financial institutions can apply their own methodologies to the raw ESG data

Tutorial Overview
Environmental, social, and governance (ESG) frameworks are fundamental to supporting financial institutions rapid change toward sustainable development by facilitating the incorporation of ESG-related data into their analysis, product development, and strategic decision making. Further, these frameworks encourage more transparent reporting of ESG and nonfinancial data, allow for benchmarking and learning from others, and enable companies to track their positive (and negative) contributions to the environment and society.

The purpose of this tutorial is to provide an overview of the important frameworks that exist, and how they might be useful to various audiences.

Prerequisite Knowledge
ESG Data & Ratings – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of ESG Data & Ratings
- Overview of ESG Data & Ratings
- Framework Categorization

Topic 2: Global Goals & Principles
- Global Goals & Principles

Topic 3: Reporting Frameworks
- Reporting Frameworks

Topic 4: ESG Ratings & Indices
- ESG Rating & Indices
- Conventional Ratings
- Tech-Assisted Ratings
- Conventional Ratings vs. Tech-Assisted Ratings

Topic 5: Regulation
- Disclosure Regulations
- EU Taxonomy
- Future Developments

Topic 6: Engage with ESG Data & Frameworks
- How Different Audiences Engage With ESG Data & Frameworks
- Incorporating ESG Into The Credit Research Process
- Example of ESG Issues

- How to Select an ESG Framework
- Future of ESG Data & Frameworks

ESG Factors

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define environmental factors and identify how they impact corporate performance
- Define social factors and identify how they impact corporate performance
- Define governance factors and identify how they impact corporate performance
- Recognize the role that ESG analysis can play in identifying investing risks and opportunities

Tutorial Overview
Environmental, social, and governance (ESG) factors can have a profound impact on corporate performance and investment returns. Understanding these factors and how they may influence companies and markets can help investors enhance their returns and reduce their risk. This tutorial defines ESG factors and explores case studies that illustrate their impact on companies and investment returns.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: ESG Overview
- What is ESG?
- ESG History
- ESG Investment & Lending

Topic 2: Environmental Factors
- What are Environmental Factors?
- Areas of Impact
- Climate Change
- Case Study: Stranded Assets
- Apply Your Knowledge
- Resource Depletion
- Case Study: Sand
- Apply Your Knowledge
- Pollution & Waste
- Case Study: Microplastics
- Apply Your Knowledge

Topic 3: Social Factors
- What are Social Factors?
- Areas of Impact
- Decent Workplaces
- Case Study: Child Labor
- Apply Your Knowledge
- Product Safety
- Case Study: Opiates
- Apply Your Knowledge
- Community Relations
- Case Study: Digital Privacy
- Apply Your Knowledge

Topic 4: Governance Factors

- What are Governance Factors?
- Areas of Impact
- Board Structure & Composition
- Case Study: Failed IPO
- Board Diversity Rule
- Apply Your Knowledge
- Transparency & Accuracy
- Case Study: Audit Failure
- Apply Your Knowledge
- Executive Compensation
- Case Study: Overpaid CEOs
- Apply Your Knowledge

Topic 5: ESG Analysis

- Identifying & Mitigating Risk
- Capitalizing on New Opportunities

ESG Investing – Scenario (Institutional)

Tutorial Description
Overview
This scenario examines how an asset management firm that manages corporate retirement funds on behalf of clients implements ESG investing. It explores why clients may demand the adoption of ESG strategies and how ESG principles can be implemented across client types. It follows the progress of the firm's ESG investing policy implementation from inception to full implantation and examines how ESG analysis may be applied to practical investment decisions. This scenario will test your knowledge of key principles, terminology, strategies, and drivers.

Prerequisite Knowledge
ESG – An introduction

Tutorial Level: Intermediate
Tutorial Duration: 25 minutes

ESG Investing – Scenario (Retail)

Tutorial Description
Overview
This scenario examines how a boutique investment advisory firm that works with retail clients implements ESG investing. It explores why a firm may choose to adopt ESG strategies and how it can implement new processes and communicate ESG investing principles to clients. It follows the progress of the firm's ESG policy implementation from inception to its practical application at a client meeting, testing your knowledge of key principles, terminology, strategies, and drivers.

Prerequisite Knowledge
ESG – An introduction

Tutorial Level: Intermediate
Tutorial Duration: 25 minutes

ESG Risk Management – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key principles for effective ESG risk management in banking institutions
- Recognize how the key traditional banking risks can be influenced by ESG factors

Tutorial Overview
Identifying, assessing, and incorporating environmental, social, and governance (ESG) risks into their operations has become a key aspect of many banks' management strategies. This comes against a backdrop of increased scrutiny by governments, regulators, nongovernmental organizations (NGOs), and the general public over the role of the financial sector in addressing socioeconomic challenges and facilitating the growing opportunities for private players to explore new sustainability-related paradigms within their business plans. This tutorial introduces the key concepts associated with ESG risks and their management in the context of a banking institution.

Prerequisite Knowledge
Risk Management – Risk Types & Measurement

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Principles for ESG Risk Management
- Key Principles for Managing ESG Risks
- ESG Risk Mapping & Reward Analysis
- Integrating ESG into Risk Matrices
- Data Collection & Processing
- Criteria for Effective ESG Risk Management
- Top-Down vs. Bottom-Up Risk Management
- Challenges in Assessing ESG Risks

Topic 2: ESG Risk Exposure & Materiality Assessment
- Risk Exposure & Materiality
- Impact of ESG Factors on Banking Risks
- Climate Stress Testing

ESG Risk Management – Strategic Integration

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how banks are progressively aligning their business strategies to the set of ESG risk factors that have emerged in recent times
- Identify the standard approach to embedding ESG risk factors into bank risk management frameworks, including into three lines of defense models and the use of tools such as heat maps and KRIs
- Identify the key factors that make ESG risks different and challenging for bank executive teams
- Recognize the role of the board in supporting ESG risk management throughout the bank

Tutorial Overview
ESG risks have firm-wide implications and can potentially impact on a bank's business strategy, product suite, and the long-term robustness of the organization. However, understanding and integrating ESG risk factors is still relatively new for banking risk managers. This tutorial explores the strategic integration of ESG risk factors into a bank's risk control framework, including the differences compared to standard risk management practices and the challenges of aligning business strategy and risk appetite with ESG ambitions and constraints.

Prerequisite Knowledge
ESG Risk Management – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Integrating ESG Risks
- Embedding ESG Risks
- Critical Factors
- ESG Standards & Guidelines
- Priority Areas of ESG Risk
- Regulatory Landscape
- ESG Dimensions

Topic 2: Integration Techniques
- ESG Risk Management Maturity Ladder
- Three Lines of Defense (3lod)
- Heat Maps
- KPIs & KRIs

Topic 3: Identifying & Measuring ESG Risks
- BCBS Approach
- Measuring the ESG Risk Impact on Capital & Liquidity
- Embedding ESG risks into Bank Performance
- Ensuring Proper Data Management for ESG Risks
- ESG Risk Modeling & Climate Stress Testing

Topic 4: Role of the Board
- Board Responsibility & Accountability
- Roadmap for Robust ESG Risk Management

ETFs – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define an ETF and recognize the creation and redemption process for these funds
- Identify the key features of ETFs from an investing and trading perspective
- Compare ETFs with mutual funds
- Identify the key market and regulatory developments that have impacted the ETF industry in recent times

Tutorial Overview
An ETF (exchange-traded fund) is an investment vehicle that is designed to enable investors to track (usually) a particular index through a single liquid instrument that can be bought or sold on a stock exchange. ETFs offer the characteristics of investment funds, such as pooled investment and broad market diversification, but combine this with characteristics more commonly associated with equities, such as continuous pricing and trading. This tutorial provides a high-level introduction to the world of ETFs and their key features.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: ETF Creation & Redemption
- What is an ETF?
- How are ETFs Created?
- ETF Creation Process
- In-Kind vs. Cash Create
- Net Asset Value (NAV)
- Redemption/Closing Out of ETF Positions

Topic 2: ETF Trading & Investing
- Discounts & Premiums
- Intraday Valuation
- Trading & Investing Applications
- Liquidity
- Costs
- Investment Strategies

Topic 3: ETFs vs. Mutual funds
- ETFs vs. Mutual funds: similarities
- ETFs vs. Mutual funds: differences

Topic 4: Market Development
- ETF Growth
- ESG/Sustainability
- Notable Regulatory/Other Developments

ETFs – Types

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of equity (stock) ETFs, from traditional broad market index funds to more contemporary smart beta ETFs
- Recognize the other ETF asset classes, in addition to some of the more innovative and recent ETF structures

Tutorial Overview
There are many different types of exchange-traded fund (ETF). The products originated as equity funds that tracked the performance of broad market indices, but there are now ETFs that offer exposure to specific sectors and regions as well as other asset classes such as commodities, currencies, and other alternative assets. This tutorial explores the different types of ETF and the sub-types within each category. It is important to note that this is not an exhaustive list, with new and innovative structures emerging all the time from ETF sponsors.

Prerequisite Knowledge
ETFs – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of ETF Types
- ETFs Types – An Overview

Topic 2: Equity ETFs
- Equity ETFs
- Broad market ETFs
- Sector/Industry ETFs
- International/Global ETFs
- Smart Beta ETFs

Topic 3: Other ETFs
- Fixed Income ETFs
- Fixed Income ETFs: Attractions
- Fixed income ETFs: Risks
- Commodity ETFs
- Exchange-Traded Commodities (ETCs)
- Currency ETFs
- Synthetic ETFs
- Leveraged ETFs
- Actively Managed ETFs
- Actively Managed ETFs: Transparency
- Exchange-Traded Managed Funds (ETMFs)
- Exchange-Traded Notes (ETNs)
- Exchange-Traded Notes (ETNs): return

Ethics, Culture, & Conduct (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the inter-relationship between ethics, culture, and conduct
- Describe why this is such an important area of focus
- Identify what firms are doing to try to improve culture and conduct within their organizations
- Recognize how these measures go beyond the regulators' focus on the importance of "culture" and "tone at the top"

Tutorial Overview
Ethics has come to dominate the recent global regulatory agenda after many financial scandals have come to light. Various regulatory initiatives have been introduced with a focus on ethics, culture, and conduct in financial services.

This tutorial looks at the importance of ethics in financial services and how firms are going about integrating it within their business plans for the betterment of society.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Ethics Overview
- Ethics in Financial Markets
- Ethics, Culture, & Conduct
- Why the Focus?
- Poor Culture
- Conduct Changes Need Cultural Change
- Regulatory Expectations of Firms
- Case Study: China Tackles Its Corruption Culture
- Scenario: Credit Analyst

Topic 2: Conduct Risk
- Defining Conduct Risk
- Conduct Risk in Practice
- Technological Developments
- Scenario: Equity Trader

Topic 3: Ethical Outcomes
- Ethical Framework
- Culture & Behaviors
- Leadership, Governance, & Controls
- People-Related Practices
- Customers & Conduct of Business
- Ethics and AI
- Other Stakeholders
- Case Study: Industry Assessments

Topic 4: Measuring Effectiveness
- Installing Good Culture
- Codes of Conduct: Examples
- Measurement & Metrics

Eurobonds & International Bonds

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the origins of the Eurobond market
- Recognize how the prices of securitized bonds are expressed as spreads and how different risks affect such prices

Tutorial Overview
The Eurobond and international bond markets offer issuers a means to raise capital in nondomestic bond markets. This tutorial looks at the development of the market for such securities and their key features.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Market Overview
- Origins of the Eurobond Market
- Bearer Bonds
- Other Benefits of Eurobonds
- Global Notes & Bonds
- Older International Bonds

Topic 2: Market Standards & Conventions
- Market Standards
- Market Liquidity & Calculation Conventions
- Other Key Conventions

Europe Anti-Money Laundering (AML)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define money laundering and list its stages
- Define terrorist financing and list its stages
- Recognise the laws and regulations in relation to money laundering and terrorist financing
- Identify the responsibilities of the various participants
- List the systems and controls a firm should employ in relation to managing financial crime risks

Tutorial Overview
The growth in international crime and terrorism has seen greater efforts by criminals to unearth new ways of integrating their illicit funds into financial markets. Financial centres are the target of lucrative, highly-skilled organised crime networks that range from small local gangs to large trans-regional operations with the sophistication, organisation and facilities of a major corporation.

Identifying and bringing to justice those who help launder illicit funds is a priority for both governments and financial markets regulators. You have an important part to play in this work – ignorance is no longer a valid form of defence. The penalties for non-compliance can include a fine and/or a custodial sentence.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Money Laundering
- Need for Laundering Money
- What Is Money Laundering?
- Legislative Treatment of ML Stages
- Case Study: Money Laundering
- Trade-Based Money Laundering
- TBML: Moving Funds
- Scenario: Opening an Account

Topic 2: Terrorist Financing
- Overview of Terrorist Financing
- What is Terrorist Financing?
- Case Study: Terrorist Financing
- Innovation in Terrorist Financing
- Scenario: Charitable Organisation

Topic 3: Global Frameworks
- Global Nature of AML & CFT
- Case Study: Stage 1 (UK)
- Case Study: Stage 2 (France)
- Case Study: Stage 3 (Belgium)
- Case Study: Final Stage (Dubai)
- Global Response
- Financial Action Task Force (FATF)
- International Monetary Fund (IMF)
- AML & CFT Frameworks
- Laws & Regulations
- Transnational Application
- Case Study: Transnational Application

Topic 4: Detecting & Preventing AML

- Detecting & Preventing AML
- Primary & Secondary Offences
- Secondary Offences: Failing to Report
- Case Study: Failing to Report
- Secondary Offences: Tipping Off
- Case Study: Tipping Off
- Secondary Offences: Impeding an Investigation
- Case Study: Impeding an Investigation
- Suspicious Activity Reports (SARs)
- Whistleblowing
- Scenario: Secondary Offences

Topic 5: AML Responsibilities

- Who is Responsible?
- Senior Management Responsibilities
- MLRO Responsibilities
- Individual Responsibilities
- Case Study: Individual Accountability

Topic 6: Systems & Controls

- Fighting Financial Crime
- AML Regime Elements
- Customer Due Diligence
- Customer Risk
- Know Your Customer (KYC)
- Case Study: Know Your Customer (KYC)
- Due Diligence Procedures
- High-Risk Customers
- Case Study: PEPs
- Recordkeeping Procedures
- Staff Training
- Case Study: Inadequate Systems & Controls

European Bond Markets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify issuance procedures for European bonds
- Identify the structure of European bond trading markets
- Quantify the impact of regulation on bond trading market operations

Tutorial Overview
The European bond market is a large and liquid debt market. It is comprised of various bond sectors, including sovereign bonds, corporate bonds, agency bonds, and covered bonds. This tutorial provides a high-level overview of the European bond market and its key sectors.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Overview Of European Bond Markets
- Overview Of European Bond Markets
- Geographical Breakdown
- European Vs. US Bond Markets: Differences
- Investors

Topic 2: Government Bond Markets
- European Government Bonds
- French Government Securities
- German Government Securities
- German Government Securities: Repo Market & Pricing
- Italian Government Securities
- Government Bond Futures
- European Union Bonds
- Government Bonds & Risk

Topic 3: Other European Bond Markets
- Supranational, Sub-Sovereign, & Agency (SSA) Issuers
- Private Sector Borrowers
- Covered Bonds
- ESG & Green Bonds

Topic 4: Market Operations
- European Bond Trading
- European Bond Settlement

European Equity Markets

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define the European equity market and describe its structure and size
- Identify the key regulations governing the European equity market
- Estimate the impact of MiFID II on the European equity market
- List the major European stock exchanges and trading venues
- Name the key European stock market indices

Tutorial Overview

The European equity market is the large and liquid market in which stocks are issued and traded in Europe. It includes a complex network of brokers, exchanges, investors, trading venues, and regulators. Over recent years, equity trading in Europe has been dramatically restructured by the impact of new regulations and technologies. This tutorial provides a high-level overview of the European equity market and the regulations and technologies that have reshaped it.

Prerequisite Knowledge

Equity Markets – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: European Equity Market Overview

- European Equity Market Overview
- European Equity Market Structure
- European Equity Market Size: Market Capitalization

Topic 2: European Equity Market Regulation

- Equity Market Regulation Background
- MiFID & Trading Venues
- MiFID II & MiFIR
- MiFID II Share Trading Obligation
- Algorithmic Trading
- High Frequency Trading (HFT)
- Dark Pools & MiFID
- Dark Pools & MiFID II

Topic 3: European Exchanges & Trading Venues

- Pan-European vs. Local/Regional Exchanges
- Euronext
- Euronext Market Model
- Deutsche Börse Group
- Nasdaq, Inc.
- Cboe Europe Equities
- Other Exchanges
- MTFs

Exotic Options – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the development of the market for exotic options and the main benefits of these instruments for investors
- Identify the different types of exotic option, such as Asian options, barrier options, binary options, and lookback options
- Recall how to analyze the sensitivities of key exotic options, such as Asian, barrier, and, binary calls

Tutorial Overview
Exotic options are instruments that vary one or more elements of the basic structure of plain vanilla options. This tutorial outlines the development of the market for exotic options and describes some of the most popular exotic option structures - such as Asian options, barrier options, binary options, and lookback options – and their associated sensitivities.

Prerequisite Knowledge
Options – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview
- Development of the Exotic Option Market
- Benefits of Exotic Options

Topic 2: Types of Exotic Option
- Exotic Option Formats
- Exotic Option Structures
- Key Types of Exotic Option
- Asian Options
- Asian Options: Averaging
- Barrier Options
- Barrier Options: Valuation
- Barrier Options: Example
- Barrier Options: Variants
- Lookback Options
- Lookback Options: Scenario
- Other Exotics

Topic 3: Option Sensitivities
- Sensitivities of Exotic Options
- Asian Options: Sensitivities
- Barrier Options: Sensitivities
- Binary Options: Sensitivities

Exotic Options – Applications

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key applications of exotic options, such as binary options, Bermudan options, barrier options and Asian options
- Recognize the use of exotic options in callable asset swaps, exposure to option sensitivities ("Greeks"), portfolio insurance strategies, and structured notes

Tutorial Overview
Exotic options have a range of applications. This tutorial looks some of the main uses of exotic options, including callable asset swaps, portfolio insurance, and structured products.

Prerequisite Knowledge
Exotic Options – Pricing

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview
- Key Applications of Exotic Options

Topic 2: Applications of Binary Options
- Binary Options: Trading Strategies
- Binary Options: Trading Strategies (cont'd)

Topic 3: Applications of Bermudan Options
- Bermudan Options: Callable Asset Swaps

Topic 4: Applications of Barrier Options
- Key Applications of Barrier Options
- Barrier Options: Exposure to Option Sensitivities
- Barrier Options: Example
- Portfolio Insurance
- Portfolio Insurance: Options
- Portfolio Insurance: Barrier Option Strategies

Topic 5: Applications of Asian Options
- Asian Options: Structured Notes
- Asian Options: Example of a Structured Note

Exotic Options – Pricing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the challenges involved in pricing options with nonstandard payoffs
- Recognize how the binomial option pricing model (BOPM) can be used to price American and Bermudan options, as well as exotic options, such as barrier options
- Recall how Monte Carlo simulation can be used to price path-dependent options

Tutorial Overview
Exotic options are options that have nonstandard payoffs and are unsuitable for pricing using closed-form solutions such as the Black-Scholes model. This tutorial looks at how exotic options can be priced using numerical techniques such as the BOPM and simulation approaches and how path-dependent products can be priced using Monte Carlo simulation.

Prerequisite Knowledge
Exotic Options – An Introduction

Tutorial Level: Advanced
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview
- Option Pricing & Exotics

Topic 2: Binomial Option Pricing Model (BOPM)
- Mechanics of the BOPM
- BOPM: Example
- Criticisms of the Binomial Technique

Topic 3: Monte Carlo Simulation
- Path-Dependent Products & Monte Carlo Simulation
- Pricing a Barrier Option
- Pricing a Barrier Option: Example

Export & Import Finance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize that the provision of trade credit creates a financing need and that this need differs for exporters and importers
- Identify the different types of export and import finance
- Recognize the role of export credit insurance in international trade

Tutorial Overview
There are several forms of finance that can be used to meet the needs of exporters and importers involved in international trade – existing bank facilities, invoice discounting, factoring, forfaiting, and supply chain finance (SCF). This tutorial describes these forms of finance in detail, in addition to examining the importance of export credit insurance provided by commercial insurers and export credit agencies (ECAs).

Prerequisite Knowledge
Trade Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Export & Import Finance Overview
- Export & Import Finance – An Overview
- Financing Trade Credit
- Domestic vs. Cross-Border Trade Credit
  - Timeframe
  - Credit Risk
  - Country Risk
  - FX Risk
  - Disputes & Delays
  - Risk Mitigation
  - Financing Options
- Cross-Border Trade Negotiations
- Export vs. Import Finance
- Factors Affecting Financing Needs
  - Type of Goods
  - Manufacturing Time
  - Form of Payment
  - Period of Credit
  - Currency
- Preshipment Finance
- Post-Shipment Finance

Topic 2: Export & Import Finance Options
- Bank Credit Facilities
  - Overdrafts
  - Export/Import Loans
  - Inter-Available Facilities
- Invoice Discounting
- Invoice Discounting: Analysis
- Factoring
- Factoring: Analysis
  - Credit Control
  - Collection

    - Receivables Management
- Forfaiting
    - Contractual Relationship with Forfaiter
    - Contractual Relationship with Importer
    - Shipment
    - Bank Guarantee
    - Promissory Note
    - Payment
    - Presentation & Payment of Promissory Note
- Forfaiting: Analysis
    - Credit Risk
    - Country Risk
- Supply Chain Finance (SCF): Supplier Credits
- Supply Chain Finance (SCF): Buyer Credits
- Finance Options: Exporter/Importer's Perspective
- Finance Options: Bank/Lender's Perspective

Topic 3: Export Credit Insurance

- Typical Terms of Export Credit Cover
    - Parties Covered
    - Maximum Cover
    - Percentage Cover
    - Maximum Tenor
    - Risk Coverage
    - Premium
- Benefits & Drawbacks of Export Credit Cover
- Insurance Providers
    - Commercial Insurance Companies
    - Export Credit Agencies (ECAs)

Export Credit Agencies (ECAs)

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- List the functions of export credit agencies (ECAs)
- Recognize the different ways in which ECAs provide financial assistance to exporters

Tutorial Overview

This tutorial looks at the role played by export credit agencies in addressing the difficulties posed by the cost and availability of finance and insurance to entities carrying out international trade.

Prerequisite Knowledge

Trade Finance – An Introduction

Tutorial Level: Intermediate

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Export Credit Agencies (ECAs)

- What is an Export Credit Agency?
- Limitations of the Consensus
- Types of ECAs
- ECA Support: Range of Products
- Why are ECAs Needed?
- ECAs & Commercial Entities – Complementary or Competitive?
- Advantages & Disadvantages of ECA Support

Topic 2: ECAs – Products

- Types of Products
- Eligibility Criteria
- Product Terms & Conditions
- Considerations Once Payment is Agreed
- Products Provided by ECAs
- Pre-Shipment Finance, Post-Shipment Finance, & Supplier Credit Finance
- Supplier Credit Finance – Alternative Structure
- Alternative Structure vs. Traditional Structure
- Local Currency Finance
- Insurance Products – Terms & Conditions
- Uninsurable Risks
- Insurance Products – Types
- Insurance: Other Considerations
- Other ECA Products

Factor-Based Investing – Primer

Description
Overview
This video provides a high level overview of factor-based investing, describing how this investment approach seeks to exploit excess returns by focusing not on asset class selection but on the selection of assets with appropriate factor exposures. The video outlines the emergence and development of factor-based investing, the factors that are common to most strategies, the theories that attempt to explain why a factor-based approach works, and the issues and challenges in implementing such an approach.

Prerequisite Knowledge
APT & Factor Models

Level: Introductory
Duration: 9 minutes

FATCA

Tutorial Description
On completion of this tutorial, you will be able to:

- Define important FATCA-related terms and concepts
- Recognize the requirements that must be satisfied to avoid withholding taxes, including exceptions and exemptions
- Identify the registration process that foreign financial institutions (FFIs) must follow
- Recognize the reporting requirements that US taxpayers must satisfy
- Recognize "passthru" payments and the need for multilateral agreements into which the US Department of the Treasury has entered into with other countries

Tutorial Overview
The Foreign Account Tax Compliance Act (FATCA) is a controversial and unpopular piece of legislation, but the US government deems it necessary in order to ensure that its ability to determine the ownership of US assets in foreign accounts is not hindered. Through enhanced reporting requirements, FATCA is designed to combat tax evasion that the government believes is the result of the use of offshore accounts by US taxpayers.

This tutorial will provide you with a detailed overview of the Act, including two major elements of the legislation – the requirements that must be satisfied for foreign entities to avoid withholding taxes and the requirements that US taxpayers must satisfy.

Prerequisite Knowledge
No prior knowledge is assumed

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Key Definitions
- Key Definitions
- Key FATCA Terms & Concepts

Topic 2: Requirements for Avoiding Withholding Taxes
- Requirements for Avoiding Withholding Taxes
- Satisfying the Requirements
- Terms for Compliance
- Case Study: Swiss Banker Found Guilty of Defrauding the US
- Avoiding Withholding Taxes
- Exceptions & Exemptions
- Exempt Beneficial Owners
- Excepted FFIs
- Deemed-Compliant FFIs
- FFIs Subject to the Same Reporting Requirements as US Financial Institutions

Topic 3: Registration Process for FFIs
- Registration Process for FFIs
- FACTA Registration Process

Topic 4: Reporting Requirements for US Taxpayers
- Reporting Requirements for US Taxpayers
- Reporting Requirements that US Taxpayers Must Satisfy

Topic 5: Implementation of FATCA
- Implementation of FATCA
- FATCA Implementation
- Passthru Payments

- Passthru Payments: Preventing this Scenario
- Determining a Passthru Payment
- Determining a Passthru Payment: Example
- Multilateral Agreements

Financial Authorities (Australia)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the Reserve Bank of Australia (RBA) and list its functions
- Recall the role and functions of the Australian Prudential Regulation Authority (APRA)
- Recall the role and functions of the Australian Securities and Investment Commission (ASIC)
- List other key Australian financial regulators

Tutorial Overview
Australia has a sophisticated and highly regulated financial system. Its key regulators include the Reserve Bank of Australia (RBA), the Australian Prudential Regulation Authority (APRA), and the Australian Securities and Investment Commission (ASIC). This tutorial describes the role and function of Australia's primary financial regulators and the tools they use to pursue their objectives.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview
- Financial Regulation in Australia
- History & Outlook

Topic 2: Reserve Bank of Australia (RBA)
- Reserve Bank of Australia (RBA) Overview
- Structure
- Relationship to Government
- Monetary Policy
- Payments & Infrastructure
- Financial Services
- Banknotes
- Financial Stability

Topic 3: Australian Prudential Regulation Authority (APRA)
- Australian Prudential Regulation Authority (APRA) Overview
- Functions
- Structure

Topic 4: Australian Securities and Investments Commission (ASIC)
- Australian Securities and Investments Commission (ASIC) Overview
- Functions
- Structure

Topic 5: Other Regulatory Bodies
- Council of Financial Regulators (CFR)
- Australian Transaction Reports & Analysis Centre (AUSTRAC)
- Australian Competition and Consumer Commission (ACCC)

Financial Authorities (China)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the historical development of the banking sector in China
- Recognize the role of the People's Bank of China (PBC), particularly in relation to monetary policy
- Recognize the significance of China's other main financial regulators, the China Banking Regulatory Commission (CBRC) and the China Securities Regulatory Commission (CSRC)

Tutorial Overview
This tutorial examines China's economic and political history, the recent liberalization of its monetary policy, and the roles played by its regulators in upholding the government's economic strategies

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of the Chinese Banking Sector
- Background
- Top-Tier Commercial Banks in China
- Second-Tier Commercial Banks in China
- Financial Authorities

Topic 2: People's Bank of China (PBC)
- History of the PBC
- Functions of the PBC
- Monetary Policy
- Interest Rates
- Interest Rate Changes
- Reserve Requirements
- Open Market Operations
- Exchange Rate Management
- Non-Market Operations

Topic 3: Other Regulators
- Other Regulators
- China Banking Regulatory Commission (CBRC)
- China Securities Regulatory Commission (CSRC)

Financial Authorities (Europe) – ECB

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- The structure and responsibilities of the ECB within the Eurosystem
- The ECB's role in defining and implementing monetary policy
- The ECB's other main tasks: conducting foreign exchange operations, managing official foreign reserves, and promoting the smooth operation of payment systems

Tutorial Overview
The European Central Bank (ECB) is the central bank for the Member States that comprise the euro area. This tutorial looks at the structure of the ECB and its role in conducting monetary policy on behalf of Member States, including its interest rate setting mechanism (standing facilities), open market operations, and minimum reserve requirements. The tutorial also covers the ECB's foreign exchange operations, its management of official foreign reserves, and its role in promoting the smooth operation of payment systems.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of the ECB
- Structure of the ECB
- Responsibilities of the ECB

Topic 2: Monetary Policy
- Objective of Monetary Policy
- Monetary Policy Tools
- Open Market Operations
- Categories of Open Market Operations
- Standing Facilities
- Reserve Requirements
- Reserve Requirements: Compliance
- Monetary Policy Measures During the Financial Crisis

Topic 3: Other Tasks of the ECB
- Foreign Exchange Operations
- Official Foreign Reserves Management
- Payment Systems

Financial Authorities (Europe) – ESFS

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Understand the EU's framework for financial supervision
- List the three European Supervisory Authorities (ESAs) of the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA), and the European Insurance and Occupational Pensions Authority (EIOPA)
- Define the role of the European Systemic Risk Board (ESRB)
- List the key EU financial markets directives of MiFID II / MiFIR, Capital Requirements Directive (CRD IV), Market Abuse Directive (MAD II/MAR), Fourth AML Directive, UCITS Directive, Alternative Investment Fund Managers (AIFM) Directive, and Solvency II Directive

Tutorial Overview
This tutorial provides an introduction to the regulation and supervision for EU financial services. It details who is responsible for the different products and how those responsibilities are divided.

It also provides a high-level overview of the EU directives and regulations used to regulate the market.

Prerequisite Knowledge
Financial Authorities (Europe) – ECB

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: European Financial Regulation
- Regulatory Structure

Topic 2: Microprudential Regulation
- Microprudential Regulation Structure
- Role of the ESAs
- European Banking Authority (EBA)
- European Securities and Markets Authority (ESMA)
- European Insurance and Occupational Pensions Authority (EIOPA)

Topic 3: Macroprudential Regulation
- Macroprudential Regulation Structure
- Composition of the ESRB
- Role of the ESRB

Topic 4: Key EU Directives & Regulations
- The Need for EU Directives & Regulation
- Key Financial Markets Directives & Regulations

Financial Authorities (Hong Kong)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the historical factors which contributed to Hong Kong's significance as a financial center
- Identify the idiosyncrasies of financial regulation in Hong Kong
- Identify the roles carried out by each of the regulatory bodies in Hong Kong

Tutorial Overview
This tutorial examines Hong Kong's position as a global financial power, and explains the duties assumed by each of the regulatory bodies, as well as the tools they use to pursue their objectives

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Background
- Historical Background
- Regulatory Authorities

Topic 2: Hong Kong Monetary Authority (HKMA)
- Overview of the Hong Kong Monetary Authority (HKMA)
- The Linked Exchange Rate System
- The Linked Exchange Rate System: Suitability & Requirements
- Limitations of the Linked Exchange Rate System
- The Monetary Base
- Effects of the Global Financial Crisis on the Monetary Base
- Exchange Fund
- Banking Supervision
- Advisory Committees

Topic 3: Other Financial Regulators
- Securities & Futures Commission (SFC)
- Regulatory Objectives of the SFC
- Regulatory Scope of the SFC
- Hong Kong Exchange (HKEx)

Financial Authorities (Japan)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall Japan's recent economic history
- Identify the steps that have been taken to attempt to counteract the stagnation of Japan's economy
- Recognize Japan's monetary policy as administered by the Bank of Japan
- Identify the roles carried out by each of the regulatory bodies in Japan

Tutorial Overview
This tutorial examines the recent economic history of Japan, and its current activities duties assumed by each of Japan's financial regulators, as well as the tools they use to pursue their objectives.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Economic Background
- Growth of Japanese Economy
- Collapse of Japanese Economy
- Japan since the Global Financial Crisis
- Financial Authorities

Topic 2: Bank of Japan
- Bank of Japan: History
- Monetary Policy
- Monetary Policy: Quantitative Easing
- Implementation of Monetary Policy
- Monetary Policy Tools: Market Operations
- Monetary Policy: Lending Facility
- Monetary Policy: Complementary Deposit Facility
- Financial Stability
- Measures to Promote Financial Stability

Topic 3: Key Japanese Regulators
- Financial Services Agency (FSA)
- Financial Services Agency (FSA): Better Regulation Initiative
- Financial Services Agency (FSA): 'Better Market Initiative'
- Securities and Exchange Surveillance Commission (SESC)

Topic 4: Other Regulators
- Japan Securities Dealers Association (JSDA)
- Financial Futures Association of Japan (FFAJ)
- Japanese Bankers Association (JBA)

Financial Authorities (Singapore)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize Singapore’s significance as a global financial hub
- Identify the idiosyncrasies of financial regulation in Singapore
- Recognize on the roles carried out by each of the regulatory bodies in Singapore

Tutorial Overview
This tutorial examines the duties assumed by each of Singapore’s financial regulators, as well as the tools they use to pursue their objectives.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Monetary Authority of Singapore (MAS)
- Key Functions of MAS
- Monetary Policy: Principles
- Monetary Policy: Exchange Rate Management
- Monetary Policy: Example
- Liquidity Management
- Functions of MAS: Regulation & Supervision
- Functions of MAS: Financial Stability
- Functions of MAS: Management of Singapore's Official Foreign Reserves
- Functions of MAS: Development of Singapore
- Functions of MAS: Other

Topic 2: Singapore Exchange (SGX) & Securities Industry Council (SIC)
- Singapore Exchange (SGX)
- Regulatory Functions of the SGX
- Securities Industry Council (SIC)

Financial Authorities (UK) – Bank of England

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the role of the Bank of England in implementing monetary policy
- Recognize the importance of the Bank of England in maintaining financial stability

Tutorial Overview
The Bank of England is the central bank for the United Kingdom and has a wide range of responsibilities, similar to those of most central authorities worldwide. This tutorial looks at the Bank's two core duties – executing monetary policy by setting Bank Rate and (if necessary) buying financial assets through the asset purchase facility, and protecting and enhancing the resilience of the UK financial system as a whole.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Monetary Stability
- Overview of the Bank of England
- Maintaining Monetary Stability
- Monetary Policy Committee (MPC)
- Implementing Monetary Policy
    - Setting Bank Rate
    - Quantitative Easing
- Monetary Policy Implementation

Topic 2: Financial Stability
- Overview of Financial Stability
- Financial Policy Committee (FPC)
- Functions of the FPC
    - Monitoring the Stability of the UK Financial System
    - Giving Directions to the PRA & the FCA
    - Making Recommendations
    - Preparing Financial Stability Reports
- Financial Stability Reports
- Macroprudential Tools
    - Countercyclical Capital Buffer (CCB)
    - Sectoral Capital Requirements (SCRs)
    - Leverage Ratio

Financial Authorities (UK) – PRA & FCA

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize why the UK Government established both the Prudential Regulatory Authority (PRA) and the Financial Conduct Authority (FCA)
- Identify the role played by the PRA in the supervision and regulation of deposit-taking institutions in the UK
- Identify the role played by the FCA in the supervision and regulation of those financial institutions not regulated by the PRA and understand its role as a customer champion

Tutorial Overview
This tutorial focuses on the microprudential regulation and supervision of the UK financial services industry. We examine the two microprudential regulators in terms of who they manage, their statutory objectives and the means by which they meet those objectives.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: UK Financial Regulation
- The Need for Banking Regulation
- Problems with the Tripartite System
- Financial Services Act 2012
- Twin Peaks Approach

Topic 2: Prudential Regulation Authority (PRA)
- Structure of the PRA
- Objectives of the PRA
- The PRA's Approach
    - Judgment-Based
    - Forward-Looking
    - Focused
- Authorizing Entities
- Special Resolution Regime (SRR)
- Financial Services Compensation Scheme (FSCS)
- International Engagement
- Regulatory Action
- Banking Reform Act
- Individual Accountability Regime (IAR) & Certified Persons

Topic 3: Financial Conduct Authority (FCA)
- The Need for Improved Conduct Regulation
- Role of the FCA
- Objectives of the FCA
- Prudential Supervision
- Conduct Supervision
- Customer Protection
- Customer Champion
- Enforcement
- Principles of Good Regulation

Financial Authorities (US) – CFTC

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the Commodity Futures Trading Commission (CFTC) and identify its key responsibilities
- List the divisions of the CFTC and their roles
- Name the key offices of the CFTC and define their functions
- Identify the key laws the CFTC seeks to enforce

Tutorial Overview
The US Commodity Futures Trading Commission (CFTC) is an independent federal regulatory agency that is responsible for regulating the US commodity futures and options markets. This tutorial provides a high level overview of the CFTC, its structure, and the key laws it seeks to enforce.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 25 minutes

Tutorial Outline
Topic 1: CFTC Overview

- Structure
- CFTC Divisions
- CFTC Offices
- Key Legislation
- Enforcement

Financial Authorities (US) – Federal Reserve

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the history and structure of the Federal Reserve System
- Identify Federal Reserve System's key responsibilities
- Name the tools that the Federal Reserve System may use to achieve its goals

Tutorial Overview
The Federal Reserve System is the central banking system of the US. The Fed has a range of functions, including managing monetary policy, ensuring financial stability, supervising and regulating banks and other financial institutions, and overseeing and supporting the US payment system. This tutorial provides an overview of the history, structure, functions, and responsibilities of the Federal Reserve System and the tools it uses to pursue and achieve its objectives.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview
- History
- Responsibilities
- Structure

Topic 2: Monetary Policy
- Overview
- Tools
- Open Market Operations
- Discount Window Lending
- Reserve Requirements
- Other Tools

Topic 3: Supervision & Regulation
- Overview
- Supervisory Jurisdiction
- What Is the FSOC?
- Approach to Supervision
- Areas & Types of Examination
- Other Supervisory & Regulatory Functions

Topic 4: Financial Stability
- Overview
- Types of Financial System Vulnerabilities & Risks
- Supervision of Large Institutions

Topic 5: Payment & Settlement Systems
- Key Payment System Functions
- Payments System
- Payment Services
- Regulating & Supervising the Payment System

Topic 6: Consumer Protection & Community Development

- Consumer-Focused Supervision & Examination
- Research & Analysis
- Community Economic Development Activities

Financial Authorities (US) – SEC

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the Securities and Exchange Commission (SEC) and identify its key responsibilities
- List the divisions of the SEC and their roles
- Name the key offices of the SEC and define their functions
- Identify the key securities laws the SEC seeks to enforce

Tutorial Overview
The US Securities and Exchange Commission (SEC) is an independent federal agency that is responsible for securities law and regulating the securities industry. This tutorial provides a high level overview of the SEC, its structure, and the key laws it seeks to enforce.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 25 minutes

Tutorial Outline
Topic 1: SEC Overview
- Structure
- SEC Divisions
- SEC Offices
- Securities Law
- Enforcement

Financial Management – Scenario

Tutorial Description

Overview

This scenario explores the application of various financial management processes in practice. You will meet the financial management team of a listed hotel chain, which is implementing a new strategy to attract clients. You will see how each member of the team contributes to the company's budgets and financial plans, and how the company manages its cash flows and credit risks.

Prerequisite Knowledge

A broad understanding of financial management.

Tutorial Level: Intermediate

Tutorial Duration: 30 minutes

Financial Markets – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Distinguish between investment/funding markets, transactional markets, and risk management markets and name their respective purposes
- Identify key financial market participants and the roles they play
- List the key characteristics of financial markets, and the major influences on their development

Tutorial Overview
Financial markets affect all our lives, but many of us do not fully understand them. What are their functions? Who needs them? What products do they offer? Where are they? How do they operate? How are they changing? This tutorial defines financial markets and outlines their key characteristics, focusing on the ways in which money shifts between participants. It describes the types of financial markets that exist, the products they offer, the people and organizations involved in them, and the different types of marketplace.

Prerequisite Knowledge
No prior knowledge is assumed for this tutorial.

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Financial Markets
- What is a Financial Market?
- Types of Financial Markets

Topic 2: Funding Markets
- Funding/Investment Markets Overview
- Equity
- Debt
- Government/Sovereign Debt
- Short-Term Debt
- Primary & Secondary Markets
- Capital Structure

Topic 3: Transactional Markets
- Transactional Markets Overview
- Foreign Exchange
- Trade Finance
- Commodities

Topic 4: Risk Management Markets
- Risk Management Markets Overview
- Insurance
- Derivatives
- Types Of Derivative

Topic 5: Financial Market Participants
- Key Market Players
- Banks
- Nonbank Financial Firms
- Institutional Investors
- Corporates

- Individuals
- Governments & Sovereigns
- Regulators & Regulation

Topic 6: Marketplace Characteristics
- Key Developments
- Liquidity
- Exchange Trading vs. OTC Trading
- Dark Pools
- Public vs. Private Markets
- Financial Centers

Financial Planning & Modeling

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the role of financial models in financial planning
- Recall the financial modeling process
- Identify and estimate internal and external inputs for financial models
- Calculate basic financial models
- Recognize the use of sensitivity analysis in financial modeling

Tutorial Overview
Financial planning is a complex process that involves the estimation of a wide range of data. To help facilitate the planning process, financial models can be used to monitor key inputs and calculate key outputs. This tutorial provides a high-level overview of financial planning and highlights the role that financial models can play in the financial planning process.

Prerequisite Knowledge
Accounting – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Financial Modeling
- Financial Planning & Financial Models
- Financial Models Overview
- Financial Modeling Process
- Three-Statement Models

Topic 2: Generating Inputs
- Income Statement
- Income Statement: Forecast Drivers
- Balance Sheet
- Balance Sheet: Working Capital
- Balance Sheet: Capital Items
- Departmental Input

Topic 3: External Factors
- Macroenvironmental Data
- Industry Data

Topic 4: Financial Model Outputs
- Basic Financial Model
- Scenario: Financial Model
- Sensitivity Analysis

FinTech – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define FinTech and identify its key drivers, benefits, and challenges
- List the key technologies behind the FinTech revolution
- Identify the impact FinTech has had on the broader financial industry

Tutorial Overview
Developments in financial technologies have spurred the emergence of a new industry dedicated to using these tools to disrupt and improve finance. From blockchain to artificial intelligence (AI) to the Internet of Things (IoT), FinTech is revolutionizing the business of finance. As FinTech innovations spread to all corners of the financial industry, they are having a significant impact on competition, jobs, markets, customer experiences, and more. This tutorial provides an overview of FinTech, exploring its definition, goals, key technologies, and impacts.

Prerequisite Knowledge
Information Technology (IT) in Business

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Fintech Overview
- What is Fintech?
- Fintech Drivers
- Fintech Benefits
- Risks & Challenges

Topic 2: Key Technologies
- Apps & Interfaces
- Automation & RPA
- Big Data & Data Analytics
- Artificial Intelligence (AI) & Machine Learning (ML)
- Internet of Things (IoT)
- Blockchain & Crypto Assets

Topic 3: Impact & Outlook
- Disruption Overview
- Competitive Landscape
- Customer Expectations
- Workplace Changes
- Fintegration
- Fintech & Big Tech
- Fintech Outlook

Fiscal Policy Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define fiscal policy and list its component
- Determine the relationship between fiscal policy and GDP
- Quantify the impact of fiscal policy using the GDP multiplier
- List the limitations of fiscal policy

Tutorial Overview
When the economy is in recession, citizens look to government to mitigate the impact of the downturn. Among policymakers' options for dealing with economic issues is fiscal policy. The government can adjust its spending and tax policies to reduce the negative impacts of recessions and to achieve other economic policy goals. This tutorial gives a high-level overview of fiscal policy and how it can affect the economy.

Prerequisite Knowledge
GDP – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Fiscal Policy Overview
- What Is Fiscal Policy?
- Government Spending
- Fiscal Policy: Taxation
- Government Budgets
- Deficits & National Debt

Topic 2: Fiscal Policy in Action
- Types of Fiscal Policy
- GDP Multiplier
- GDP & Fiscal Policy
- Induced Budget Deficit Changes
- GDP & Automatic Stabilizers

Topic 3: Fiscal Policy Limitations
- Crowding Out
- Fiscal Policy Lags
- Fiscal Policy & Politics
- Fiscal Policy Today

Fixed Income Analysis – An Introduction

Tutorial Description
Objectives
On completion of this module, you should be able to:

- Recognize the significance of the inverse price/yield relationship
- Calculate yields on bullet bonds
- Identify how coupon frequencies and day count fractions affect bond calculations
- Recognize the difference between clean and dirty bond prices
- Recall how bond transactions are settled

Tutorial Overview
Most global capital market instruments are some form of tradable debt security (“bond”). The term “fixed income” is often used to refer to the whole bond market since the vast majority of these securities (although not all) have regular, fixed, interest payments (“coupons”). Bond valuation requires methods of calculating and comparing the current values of multiple potential future cash flows.

This tutorial introduces the basic concept of the inverse price/yield relationship and explains how prices and yields are calculated for simple “bullet” bonds.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Bonds
- Overview of Bonds
- Bullet Bonds

Topic 2: Bond Value & Prices
- Par Value Vs. Market Value
- What Impacts the Value of a Bond?
- Clean Vs. Dirty Prices

Topic 3: Yield
- Yield to Maturity
- Yield to Maturity: Shortcomings
- Nonvanilla Bonds
- Current Yield & Simple Yield
- Nominal, Periodic, & Annualized Yields

Topic 4: Day Count Conventions
- Day Count Conventions
- Day Count Conventions: Example
- Day Count Conventions: ACT/ACT Example
- Nonwhole Periods

Topic 5: Compounding Frequencies
- Compounding Frequencies
- Comparing Different Compounding Rates
- Ex-Coupon/Ex-Interest

Topic 6: Settlement
- Settlement

Fixed Income Analysis – Credit Risk

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify how bondholders are exposed to credit risk
- Recognize how credit spreads are embedded in market prices
- Recall how ratings agencies assess the credit risk of fixed income securities
- Recognize how credit has evolved into a distinct asset class

Tutorial Overview
Credit risk is a key concern for bondholders. This tutorial looks at how credit risk is reflected in market spreads and how rating agencies assess this risk. The evolution of credit risk into a distinct asset class is also examined.

Prerequisite Knowledge
Fixed Income Analysis – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Credit Risk in Fixed Income
- Credit Risk in Fixed Income
- Bonds & Credit Risk
- Credit Spreads: Swap Rates & FRNs
- Credit Spreads in Theory
- Credit Spreads in Practice
- Conditional & Unconditional PDs
- Bootstrapping of Implied Conditional PDs
- Credit Models
- Bond Documentation & Credit Risk

Topic 2: Credit Ratings
- Overview of Credit Ratings
- Ratings Scales
- Credit Ratings for Structured/Securitized Products
- Credit Ratings Issues
- Rating Methodologies

Topic 3: Credit Default Swaps
- Credit Default Swaps: Isolating Credit
- CDS & Credit Spreads

Fixed Income Derivatives

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key types of bond derivative
- Recognize the structures of interest rate swaps and other swaps such as basis swaps and inflation swaps, and their key uses
- Identify the main types of short-term interest rate future, such as SOFR futures, and their key features
- List the main types of interest rate option, such as options on STIR futures, caps, floors, and swaptions
- Recognize the main structures and uses of credit derivatives
- Recall how risk can be "unbundled" and transformed using derivatives contracts

Tutorial Overview
Derivative products add flexibility to investor portfolios by allowing risks to be offset, increased, or transformed. This tutorial describes the most important fixed income derivatives, their structures, and key uses.

Prerequisite Knowledge
Fixed Income Analysis – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Bond Derivatives
- Bond Derivatives

Topic 2: STIR Futures & SPs
- Short-Term Interest Rate (STIR) Futures
- Single-Period Swaps (SPS)

Topic 3: Interest Rate Swaps
- What Is an Interest Rate Swap?
- IRS: Mark-To-Market Value
- IRS & Other IR Derivatives: Uses
- IRS: Market Developments
- Other Types of Swap

Topic 4: Interest Rate Options
- Interest Rate Options
- Interest Rate Options: Pricing

Topic 5: Credit Derivatives
- Credit Derivatives

Topic 6: Unbundling Risk
- Risk Transformation With Derivatives
- Unbundling Risk

Fixed Income Strategies – An Introduction

Tutorial Description
Objectives
On completion of this module, you will be able to:

- Identify the key sources of risk in fixed income markets, including inflation, discounting, credit spread, liquidity, and currency movements, and strategies for managing such uncertainty
- Recall the different investment styles in fixed income portfolio management, as well as the importance of portfolio diversification
- Recognize key bond trading strategies such as directional plays, curve trading, and credit spread trading

Tutorial Overview
Fixed income investments represent a vital part of many investors' portfolios. This tutorial looks at the key sources of risk and return in bond markets and the key investment and trading strategies used with these instruments.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Risk in Bond Markets
- Sources of Bond Market Uncertainty
- Inflation
- Discounting
- Discounting: Strategies
- Discounting: Calculating the Forward Curve
- Credit Spread
- Liquidity
- Currency Movements

Topic 2: Bond Investing & Trading
- Arbitrage Opportunities & Anomalies
- Fundamental & Technical Trading Strategies
- Relative Value Strategies
- Investing in Fixed Income: The Diversification Rationale
- Fixed Income Portfolio Management
- Fixed Income Trading Strategies
- Directional Trading
- Directional Trading: Choices
- Curve Trading
- Credit Spread Trade

Fixed Income Strategies – Running a Book

Tutorial Description
Objectives
On completion of this module, you will be able to:

- Recognize the role of repos and reverse in fixed income book management and the importance of portfolio rate sensitivity
- Recall how risk can be mitigated using strip and stack hedging
- Identify the key methods used in credit spread trading and pricing analytics
- Recognize the importance of profit and loss (P&L) calculations and how realized and unrealized P&L is determined

Tutorial Overview
This tutorial looks at the business of running a dealer-firm trading book, with a particular focus on the business of providing bond market liquidity to institutional investors as either a licensed or an “ad hoc” dealer firm. The use of repos/reverses, stack and stack hedging, and P&L calculations are all covered in detail.

Prerequisite Knowledge
Fixed Income Strategies – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Book Management & Sensitivities
- Managing Positions with Repos
- Repos & Reverses: Rate Sensitivity
- Strategic Trading & Sensitivities
- Trading Book Sensitivity: Issues

Topic 2: Hedging
- Stack & Strip Hedging
- Stack Hedging
- Strip Hedging

Topic 3: Credit Spread Trading & Pricing Analytics
- Credit Spreads
- Pricing Analytics
- Computing a Par Yield Curve

Topic 4: P&L Management
- Profit & Loss (P&L) Calculations
- P&L: Realized & Unrealized Positions

Foreign Corrupt Practices Act (FCPA)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the different types of corrupt behavior and the need to legislate against such behavior
- Identify the key elements of both the anti-bribery and accounting provisions of the FCPA and the consequences of being found guilty of an offence under the Act
- Recognize the importance of a firm's systems and controls in relation to managing bribery and corruption risks

Tutorial Overview
This tutorial is a guide for financial services staff at all levels to help them avoid the risks of being found guilty of bribery and corruption offences under the FCPA. The tutorial details the relevant laws and regulations that companies and individuals need to follow, as well as the systems and controls that are used to manage the risks associated with bribery and corruption. The information is pitched so that the tutorial is relevant to those with no experience of the FCPA regime, although there is sufficient detail to make the tutorial useful to more senior staff as well.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Bribery & Corruption
- A Perspective on Corruption
- Types of Corruption
- Costs of Corruption
- Grand Corruption: Case Study
- Benefits of Anti-Corruption Legislation
- Your Obligations

Topic 2: Statutory Framework
- Transnational Legislation
- Overview of the FCPA
- Core Focus
- Anti-Bribery Provisions
- Definition of a Foreign Official
- Scenario: Payments to Foreign Governments
- Meaning of "Anything of Value"
- Meaning of "Corruptly"
- Business Purpose Test
- Willfulness
- Payments to Third Parties
- Exceptions & Defenses
- Accounting Provisions
- Accounting Provisions: Some Points to Note
- Penalties
- Case Study: Severe Penalty for FCPA Violations

Topic 3: Systems & Controls
- Managing Bribery & Corruption Risks
- Proportionate Procedures
- Top-Level Commitment
- Risk Assessment

- Due Diligence
- Gifts & Hospitality Controls
- Communication & Training
- Reporting
- Monitoring & Review
- Whistleblowing
- Case Study: Benefits of Strong Internal Controls
- Scenario: Payments to Foreign Officials

Foreign Exchange – Factors Influencing Exchange Rates

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify and list the key macroeconomic factors that influence the value of a currency
- Describe the effect of sentiment, event risk, and financial resource shocks on the value of a currency

Tutorial Overview
Currency values change almost every minute of the trading day as new information is released to the market. While some information might have no bearing on exchange rates, other types of information and data can be very important. For example, information relating to inflation, interest rates, government budget deficits, and international trade is collected and analyzed by traders because together they play a key role in determining the future strength of a country's currency. This tutorial looks at how each of these factors affects FX markets, in addition to examining the impact of changes in investor sentiment and the occurrence of unforeseen events.

Prerequisite Knowledge
The Foreign Exchange Business

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Macroeconomic Influences
- Macroeconomic influences
- Differentials in inflation
- Interest rates
    - Interest Rates: Credit Risk
- Cross currency investment
- Fiscal Policy
    - Budget Deficits
- Monetary Policy
    - Indirect Monetary Intervention
    - Direct Monetary Intervention
- Trade & Current Accounts
    - Current Account Deficit
    - Current Account Surplus

Topic 2: Sentiment
- Sentiment in the Marketplace
- Effect of Market Sentiment
- World Tensions
- Speculation

Topic 3: Event Risk
- Effect of Events
- News of Potential Events
- Release of Statistics

Topic 4: Economic & Financial Resources
- Investment in Financial Assets
- Investment in Raw Materials

Foreign Exchange (FX) Market – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the foreign exchange (FX) market
- List the uses of foreign exchange
- Interpret currency prices quoted in the market
- Identify the different exchange rate systems and currency unions

Tutorial Overview
This tutorial explores the hugely popular FX market and its role in the global economy. Further, it outlines the composition of exchange rates, how currencies are traded, and the benefits of currency trading markets.

We examine topics such as the difference between hard and exotic currencies, the reason why the US dollar is important, the different exchange rate systems, and the major currency pairs that are traded globally on a daily basis.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Need for FX Market
- Reasons for the FX Market

Topic 2: Overview of FX Market
- FX As A Commodity
- A 24-hour Global Market
- Liquidity
- Exchange Rates

Topic 3: Uses of the FX Market
- Uses of the FX Market

Topic 4: World Currencies
- Hard Currencies
- Importance of the US Dollar
- Currency Codes
- Significant Currency Pairs
- Major FX Trading Centers

Topic 5: Exchange Rate Systems
- Types of Exchange Rate System

Topic 6: Currency Unions/Areas
- Currency Areas

Formatting Basics – Excel Interactive

Tutorial Description
Overview
This is the fifth in a series of tutorials that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and how they are used to increase the efficiency and effectiveness of work practices. The focus here is on formatting cells and worksheets.

Prerequisite Knowledge
Menus & Shortcut Basics – Excel Interactive

Level: Intermediate
Duration: 15 minutes

Formulas & Calculation Functions (Part 1) – Excel Interactive

Tutorial Description
Overview
This is the second in a series of tutorials that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and how they are used to increase the efficiency and effectiveness of work practices. The focus here is on basic formulas and calculation functions.

Prerequisite Knowledge
Menus & Shortcut Basics – Excel Interactive

Level: Intermediate
Duration: 15 minutes

Formulas & Calculation Functions (Part 2) – Excel Interactive

Tutorial Description
Overview
This is the third in a series of tutorials that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and how they are used to increase the efficiency and effectiveness of work practices. The focus here is on the COUNT, MIN, MAX, AVERAGE functions.

Prerequisite Knowledge
Formulas & Calculation Functions (Part 1) – Excel Interactive

Level: Intermediate
Duration: 20 minutes

Forwards & Futures – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify different types of future exposure such as agricultural, FX, and interest rate exposure, and how such exposure might be hedged
- List the key differences between forwards and futures
- Recognize how forward/future prices are linked to spot through the economics of ownership but are not predictors of actual prices in the future
- Identify some main features of contracts for difference (CFDs)

Tutorial Overview
This tutorial focuses on the most basic derivatives building block, the forward transaction, which can take the form of an OTC forward contract or an exchange-traded futures contracts. The similarities and the differences between these two product types are examined in detail. The tutorial also covers contracts for difference (CFDs), which have similarities to forwards/futures contracts.

Prerequisite Knowledge
Derivatives – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Future Exposures
- Development of Forwards & Futures
- Types of Future Exposure
- Hedge: Scenario

Topic 2: Forwards vs. Futures
- Forwards vs. Futures
- Why Standardize?
- Counterparty Risk

Topic 3: Forward & Future Prices
- Predictive Power of Forward/Futures Prices
- Contango vs. Backwardation
- Fair Forward Price

Topic 4: Contracts for Difference
- What are Contracts for Difference (CFDs)?
- Market Liquidity & CFDs

Forwards & Futures – Hedging

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how forwards and futures can be used to hedge the predominant risk or one or more of several risks associated with the hedged instrument
- Recall how to hedge stock portfolio and bond portfolio using beta and DV01 respectively
- Recognize the importance of basis risk, rollover risk, and cross-hedging when putting on a futures or forward hedge

Tutorial Overview
Hedging is one of the key uses of forward and futures contracts. This tutorial looks at how such contracts are used to hedge FX exposures as well as stock and bond portfolios. The key risks associated with putting on a hedge, such as rollover risk and basis risk, are also discussed in detail.

Prerequisite Knowledge
Forwards & Futures – Pricing

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Hedging Risk with Forwards & Futures
- Hedging Concepts
- Hedging the Predominant Risk Using Forwards & Futures
- Hedging Multiple Risks Using Forwards & Futures

Topic 2: Hedging Basis Risk
- Basis & Basis Risk
- Sensitivity-Related Sources of Basis Risk
- Using Beta to Hedge a Stock Portfolio
- Using Beta to Hedge a Stock Portfolio: Hedge Calculations
- Calculating & Using a Beta-Based Hedge
- Using DV01 to Hedge a Bond Position
- Using DV01 to Hedge a Bond Position: DV01 Changes
- Hedging with Negative Convexity

Topic 3: Cross-Hedges, Rollovers, & Replication
- Cross-Hedging
- Rolling Hedges & Rollover Risk
- Replication & Hedging with RFR Futures

Forwards & Futures – Markets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key differences between forward and futures contracts
- Identify the main factors influencing forward prices and rates
- Recall the main method used to settle forwards and futures, including cash settlement and physical settlement

Tutorial Overview
Forward and futures contracts both allow the purchase or sale of a specified asset at a certain point in the future. However, there are also key differences in the operation of forwards and futures markets. This tutorial looks at these differences and also examines the pricing of these instruments.

Prerequisite Knowledge
Forwards & Futures – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Features of Forwards & Futures
- Forwards & Futures Compared
- Market Liquidity
- Futures: Maximizing Liquidity & Transparency
- Forward Commitments & Price Exposure
- Legal Nature of Forward Contracts
- Forwards & Collateral

Topic 2: Forward Prices & Rates
- Concepts of Forward Prices & Rates
- Pricing an FX Forward
- Pricing an FX Forward: Excel
- Forward Interest Rates

Topic 3: Settlement Mechanisms
- Types of Settlement Mechanism
- Physical Delivery
- Physical Delivery: Bonds
- Cash Settlement

Forwards & Futures – Pricing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key factors involved in the fair pricing of a forward and the main exceptions to the theoretical forward pricing
- Calculate the fair price of a government bond future
- Recognize the importance of cash and carry trades in fair pricing of government bond futures

Tutorial Overview
Forward and futures contracts are linked to the price of the cash/spot asset through a number of factors. This tutorial looks at the determination of the fair forward price for an asset and the fair pricing of a government bond future.

Prerequisite Knowledge
Forwards & Futures – Markets

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Fair Forward Pricing
- Theoretical Forward Pricing
- Theoretical Forward Pricing: Exceptions
- FX Forward: Example

Topic 2: Government Bond Futures Pricing
- Government Bonds: Fair Futures Price
- Cash & Carry Trades & Implied Repo Rates
- Reverse Repos & Reverse Cash & Carry Trades
- Calculating a Fair Government Bond Futures Price
- Calculating a Fair Government Bond Futures Price: Example
- Pricing: SOFR vs. LIBOR Futures

Forwards & Futures – Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key forward-related products such as FX swaps, forward rate agreements (FRAs), and interest rate swaps (IRS) and the potential for trading of forwards
- Recognize how futures contracts are traded via electronic exchanges and open outcry, the potential for algorithmic trading, and the risks involved
- Identify the key types order and the use of technical analysis in futures trading
- Recognize the importance of margining, especially the use of SPAN margining

Tutorial Overview
This tutorial discusses the trading of forward and futures contracts with a particular emphasis on order types, algorithmic trading and HFT, technical analysis, and the margining of futures contracts.

Prerequisite Knowledge
Forwards & Futures – Hedging

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Trading in Forwards
- Forward Trading
- Forward Trading: Markets
- Forward Trading in Equities & Bonds

Topic 2: Trading in Futures
- Futures Trading
- Electronic vs. Open Outcry Trading
- Algorithmic & High Frequency Trading (HFT)
- Market Access Through Futures & Forwards
- Risks in Futures Trading

Topic 3: Order Types & Technical Analysis
- Stop-Loss Orders
- Stop-Loss Orders: Example
- Market-if-Touched (MIT) Orders
- MIT Orders: Example
- Technical Analysis in Forwards & Futures Trading
- Position Size & Volume

Topic 4: Margining
- Margining Timeline
- SPAN Margining
- SPAN Margining: Example

Fraud (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define fraud and understand why it is committed
- Compare internal and external fraud
- List some common types of internal and external fraud
- Identify the policies and procedures an organization can put in place to reduce its exposure to fraud

Tutorial Overview
Fraud is a crime in which deception is used to gain a dishonest advantage over another person or entity. It takes many forms, including embezzlement, theft, corruption, and cyber fraud. An organization faces a fraud risk from its own employees as well as from people outside the organization.

The consequences for an organization that commits fraud include reputational damage, loss of customers, and large fines. Individuals that commit fraud can be subject to stiff penalties, including imprisonment. Victims of fraud also suffer from loss or damage.

This tutorial provides a high-level overview of fraud and discusses anti-fraud measures organizations can take.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Overview of Fraud
- What is Fraud?
- The Problem of Fraud
- Types of Fraud
- Why Individuals Commit Fraud
- Why Organizations Commit Fraud
- Case Study: Corporate Fraud

Topic 2: Internal Fraud
- What is Internal Fraud?
- Common Types of Internal Fraud
- Case Study: Internal Fraud

Topic 3: External Fraud
- What is External Fraud?
- Common Types of External Fraud
- Case Study: Data Theft

Topic 4: Tackling Fraud
- Fraud Policy
- Managing Internal Fraud
- Managing External Fraud
- Reporting Suspicions
- Investigating Fraud
- Case Study: Sam Bankman-Fried

FRNs – An Introduction

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recall the historical development of the FRN market
- Recognize the key features of FRNs such as benchmark indices, reset formulas, reset margins, and discount margins
- Identify the interest rate sensitivities of set-in-arrears and set-in-advance FRNs

Tutorial Overview

An FRN is a debt security that pays a coupon linked to a benchmark index, such as SOFR. This tutorial looks at the key features of FRNs, examines how FRN coupons are determined, how the discount margin on FRNs is calculated, and discusses the price sensitivity of FRNs.

Prerequisite Knowledge

Financial Markets – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 40 minutes

Tutorial Outline

Topic 1: Overview of FRNs

- Overview of FRNs
- Development of the FRN Market

Topic 2: FRN Features

- Key Features of FRNs
- Key Features of FRNs: Example
- Discount Margin
- Libor Rates, Fallback Approaches, & Spreads
- Time Lags

Topic 3: FRN Sensitivities

- Overview of FRN Sensitivities
- Interest Rate Sensitivity of Set-in-Advance FRNs
- Interest Rate Sensitivity of Set-in-Arrears FRNs: example
- Market Dynamics

FRNs – Structures

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the key features of an FRN, including benchmark indices, caps and floors, duration, and interest rate sensitivity
- Recognize the key variants of FRN, including constant maturity-based FRNs, callable FRNs, inverse FRNs, and collateralized mortgage obligation (CMO) products.

Tutorial Overview

An FRN is an instrument frequently seen in the structured product space. This tutorial looks at some of the key features and sensitivities of FRNs and the different variants of these instruments.

Prerequisite Knowledge

FRNs – An Introduction

Tutorial Level: Intermediate

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Overview of FRN Structures

- Overview of FRN Structures

Topic 2: Caps & Floors

- Caps & Floors
- FRN Sensitivity in the Presence of Caps & Floors
- FRNs & Effective Duration
- Embedded Options & Option-Adjusted Spread (OAS)

Topic 3: CMS-Based FRNs

- What Are CMS-Based FRNs?
- CMS-Based FRNs: Risks
- Constant Maturity Treasury (CMT) Rates & Spreads

Topic 4: Callable FRNs

- What is a Callable FRN?
- Step-Up-And-Call-Notes: Credit Implications

Topic 5: Inverse FRNs

- What is an Inverse FRN?
- Scenario: Inverse FRN

Topic 6: Collateralized Mortgage Obligation (CMO) FRNs

- CMO FRNs

Fund Administration

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the critical importance of fund accounting and the calculation of a fund's net asset value (NAV)
- Identify key fund administration activities such as middle office risk reporting and profit and loss determination, fund formation, taxation, income processing, company secretarial and governance, and proxy voting
- Identify compliance-related fund administration activities, such as customer due diligence, and ensuring compliance with FATCA, AML, and CFT requirements

Tutorial Overview
Fund administration operations are often outsourced to a specialist, who may or may not be the fund's investment manager or custodian. This tutorial looks at the crucial fund administration activity of fund accounting and valuation, as well as other key fund administration services.

Prerequisite Knowledge
Fund Types & Structures

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Fund Accounting & Valuation

- Overview of Fund Accounting
- Mechanics of Fund Accounting
- Accounting Rules
- Corporate Actions
- Trial Balance
- Valuation & Marking to Market
- NAV Calculation
- Scenario: NAV Calculation

Topic 2: Other Fund Administration Services

- Middle Office Services
- Risk Reporting
- Risk Reporting Tools
- Corporate Secretarial & Governance
- Fund Formation
- Income Processing
- Tax Services
- Proxy Voting
- Proxy Voting: Registration
- Compliance with Common Reporting Standard (CRS)
- Investor Services: KYC/AML
- Outsourcing AML/CFT Activities
- Outsourcing AML/CFT Activities: CDD Documentation
- AML/CFT Due Diligence
- FATCA Compliance

Fund Types & Structures

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the features and characteristics of the various funds available to investors
- Recognize the importance of the separation of “funds” and “fund management” when establishing most investment funds

Tutorial Overview
Investment funds control a vast amount of global wealth, but there are many different fund types and structures that investors can choose from. This tutorial examines the main differences between these funds and provides an overview of the funds available in various jurisdictions around the world.

Prerequisite Knowledge
Business of Asset Management

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Main Fund Types & Structures
- What Is an Investment Fund?
- Types of Fund
- Public vs. Private Funds
- Regional Fund Structures: US
- Regional Fund Structures: Europe
- Regional Fund Structures: UK
- Regional Fund Structures: Asia-Pacific
- Globally-Recognized Fund Structures
- Funds of Funds (FOFs)
- Single-Class vs. Multi-Class Funds
- Fund Organizational Structure: Separation of Funds & Fund Management

Fund Valuation

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the role of accounting in the calculation of fund assets, liabilities, capital, income, and expenses
- Recognize the importance of accurate net asset value (NAV) calculations in enabling fund investors to make correct trading decisions
- Identify the main regulatory issues concerning money market funds and NAV calculations

Tutorial Overview
This tutorial looks at how funds account for the different transactions in which they engage, especially buying and selling securities, and how the critical measure of NAV per share is calculated for funds .

Prerequisite Knowledge
Fund Administration

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Fund Accounting & the NAV Cycle
- Fund Accounting
- General Ledger Categories
- The Accounting Equation
- Double-Entry Accounting
- NAV Per Share
- NAV Cycle
- Capital Activity
- Expenses
- Variable Expenses
- Fund Expenses: Scenario
- Income: Interest
- Income: Cash Dividends
- Dividends: Effect on the Share Price

Topic 2: NAV Calculation
- Marking to the Market
- Fair Value
- NAV Calculation: Example

Topic 3: Money Market Funds
- Constant NAV Funds
- Distributing vs Accumulating CNAVs
- Variable NAV
- Accounting Issues for MMFs
- US MMF Reform
- European Money Market Funds Regulation (MMFR)

FX Forward Market – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List and define the different periods used in the forwards market
- Explain the terms "premium" and "discount" and their relationship to interest rates
- Describe the basic characteristics of the forward FX market

Tutorial Overview
Many foreign exchange transactions settle on the spot date, but what happens if a market participant wants to exchange currency, say, in two months' time rather than in two days? The forward foreign exchange market, which accounts for almost two-thirds of the daily turnover in the entire FX market, provides a solution.

A forward FX contract is simply a transaction agreed today that allows for the exchange of two currencies at a prespecified settlement date in the future at a preset exchange rate. This tutorial describes these contracts, their relationship with the money markets, and the different forms they take. The tutorial also explores different settlement dates and how the market handles public holidays.

Prerequisite Knowledge
FX Spot Market – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Forward FX
- Forward FX
- Forward FX Market: An Overview
- FX Forwards & Interest Rates
- Forward Market: Instruments
- Forward Outrights
- FX Swaps
- Non-Deliverable Forwards (NDFs)

Topic 2: Swap Points
- Swap Points
- Forward Rate
- Premium & Discounts
- Premiums & Discounts: Rule
- Cost & Earnings: Positive Swap Points
- Cost & Earnings: Negative Swap Points

Topic 3: Forward Value Dates
- Forward Value Dates
- Fixed Dates
- Broken Dates
- Goodbusiness Day Finder
- Calculating the Forward Date
- End-End Convention
- Short Dates (O/N, T/N, S/N, S/W)
- Forwards-Forwards
- Quotations & Dates

FX Forward Market – Calculating Swap/Forward Points & Cross Rates

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Calculate the forward points for a currency pair
- Identify the forward points on a forward outright
- Calculate a forward cross rate

Tutorial Overview
Swap points, also known as forward points, are the price paid by the holder of the higher interest-bearing currency to a counterparty holding the lower interest bearing-currency for the period of a forward FX transaction (outrights and FX swaps). This tutorial explains how the forward rate, and by extension, the swap points, can be derived from the interest rate differential between two currencies. For currency pairs not involving US dollar (cross rates), market participants must use the process of triangulation. The tutorial describes in detail how to do this.

Prerequisite Knowledge
FX Forward Market – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Calculating Swap/Forward Points
- Interest Rate Differentials
- Interest Rate Differentials & Forward Rates
- Calculating the Forward Rate
- Calculating the Forward Rate: Formula
- Calculating Swap/Forward Points
- Adding & Subtracting Forward Points
- Adding & Subtracting Forward Points: Rule
- Forward Points Order
- Effect of Interest Rate & Yield Curve Changes

Topic 2: Forward Outrights
- Forward Outrights
- Forward Outrights: An Overview
- Forward Outrights: Quotations
- Forward Outrights: An Example

Topic 3: Forward Cross Rates
- Forward Cross Rates
- Forward Cross Rates: Calculations
- USD as Base Currency for Both Quotes
- USD as Base Currency for One Quote & Quote Currency for Another
- USD as the Quote Currency for Both Quotes
- Forward Cross Rates: Typical Quotation Screen

FX Forward Market – Cross-Currency Borrowing & Investing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe how FX forwards can be used for arbitrage
- Explain how the currency risk can be managed with FX forwards when borrowing and investing in foreign currency

Tutorial Overview
Corporates and fund managers need to analyze all their options when they are investing or borrowing money. The best deal may not be obvious at first, so they need to weigh up the different options – these options can involve borrowing or investing in foreign currencies and the use of swaps to hedge the FX exposure. This tutorial looks at the decision to invest/borrow in a foreign currency and the additional costs that may be incurred when hedging the associated FX risk.

Prerequisite Knowledge
FX Forward Market – Calculating Swap/Forward Points & Cross Rates

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Using FX Swaps in Cross-Currency Finance
- Comparative Advantage in International Money Markets
- Domestic vs. International Borrowing: Example
- Calculating the All-In Cost of Borrowing a Foreign Currency
- Borrowing in the Base Currency of an FX Quote
- Borrowing in the Quote Currency of an FX Quote
- Investing in the Base or Quote Currency of an FX Quote

Topic 2: Using Relative Value in Different Currencies
- Arbitrage Methods and FX Swaps
- Money Market Trading
- Issuing Commercial Paper (CP)
- Why Don't Dealers Eliminate Arbitrage Opportunities?

FX Forward Market – FX Swap Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe how traders deal on a swap's bid and offer price
- Explain the impact of interest rate movements on swap points

Tutorial Overview
FX swaps are one of the most liquid financial instruments and are extremely important in currency markets. Their role as both a hedging instrument and a speculative tool have helped them become the popular instrument they are today.

This tutorial describes how FX swaps are traded from the viewpoint of the rates to be used, how the transactions are agreed between parties, and the profits/losses that are paid to the different parties to the swap. The tutorial also looks at the effect that interest rate changes have on FX swaps through the underlying interest differential between currencies.

Prerequisite Knowledge
FX Forward Market – Short-Dated Outrights & FX Swaps

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: FX Swap Dealing Terminology & Mechanics
- Dealing FX Swaps
- Dealing on the Swap Bid Price
- Dealing on the Swap Ask Price
- Swap Costs & Earnings for Market Makers & Price Takers
- High on the Bid & Low on the Ask
- Low on the Bid & High on the Ask

Topic 2: How Swap Traders Make a Profit or Loss
- Offsetting Swap Trades
- Offsetting Swap Trades: Same Spot Prices
- Offsetting Swap Trades: Different Spot Prices
- Impact of Interest Rate Changes
- Higher Base Currency Interest Rates
- Lower Base Currency Interest Rates
- Key Points for Profiting from FX Swap Trading
- Money Market & Derivative Products

FX Forward Market – Non-Deliverable Forwards (NDFs)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the basics of NDFs, why they are used, and by whom
- Recognize how NDFs are quoted on trading platforms
- Explain the process by which the settlement amount is calculated under an NDF

Tutorial Overview
Non-deliverable forwards (NDFs) have seen incredible growth as a means of hedging the volatility in the currencies of emerging economies. In Asia, their use has grown tenfold since the turn of the century. As trade between developed and developing economies continues to increase, so too does the level of demand for methods of hedging against adverse currency fluctuations.

This tutorial describes how NDFs are used to lock in future exchange rates, lists the details included in NDFs contract, and explains how they are traded. It also explores the payoff achieved through the use of an NDF.

Prerequisite Knowledge
FX Forward Market – Calculating Swap/Forward Points & Cross Rates

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Basics of NDFs
- What are NDFs?
- Why Use an NDF?
- Features of an NDF
- Typical Quotation Screen
- Information Required To Complete Trade
- NDF Prices Versus Forward Outrights Prices
- Synthetic Foreign Currency Loans

Topic 2: Calculating NDF Settlement Amounts
- Calculating the Settlement Amount in an NDF
    - An Appreciation of the Nonconvertible Currency
    - A Depreciation of the Nonconvertible Currency
- Hedging Final Payments using NDFs

FX Forward Market – Short-Dated Outrights & FX Swaps

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the challenges associated with pre-spot settlement in the FX market
- Explain the terms used for short-dated trades, such as "spot/next" and "tom/next"
- Outline how a short-dated trade is priced

Tutorial Overview
Some short-dated currency trades allow for settlement taking place before the spot value date. Instruments such as forward outrights and FX swaps are typically used for trades that settle after the spot value date. However, with some adjustments, these instruments can be used for short-dated trades. This tutorial describes the mechanics of this in detail.

Prerequisite Knowledge
FX Forward Market – Uses Of Outrights & FX Swaps

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Trading for Settlement Before Spot
- Trading for Settlement Before Spot
- Short-Dated Delivery Dates
- Is Value Date Today Achievable?
- Logic of Pricing Short-Dated Trades

Topic 2: Pricing Short-Dated Trades
- Pricing Short-Dated Trades
- Short Dates: Terminology
- Covering Short-Dated Trades
- Short-Dated Swaps
- Hedging the FX Exposure of a Short-Dated Swap
- Short-Dated Outrights
- Hedging the FX Exposure of a Short-Dated Outright
- Shortcut to Calculating the Outright Price
- Market for Short-Dated Swaps and Outrights

FX Forward Market – Uses Of Outrights & FX Swaps

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main users and uses of forward outrights
- Recognize how FX swaps are used to manage cash flows, move maturity dates, maintain open positions, and cover short positions

Tutorial Overview
This tutorial describes some of the more popular forward foreign exchange instruments used on a daily basis in the market. A forward outright is an instrument that is constructed in a similar way to a spot transaction. However, the value date on the forward outright occurs after the spot value date. FX swaps, on the other hand, involve the exchange of two currencies on the spot value date and then the re-exchange of the currencies on the swap value date. The tutorial looks at the main users of forward outrights and FX swaps and the reasons why they might use these instruments.

Prerequisite Knowledge
FX Forward Market – Calculating Swap/Forward Points & Cross Rates

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Using Forward Outrights
- Using Forward Outrights
- Who Uses Forward Outrights?
- Use of Forward Outrights by Corporates
- Hedging a Once-off Future Receivable Using Forward Outrights
- Hedging a Series of Future Payments Using FX Swaps
- Use of Forward Outrights by Fund Managers

Topic 2: Using FX Swaps
- Using FX Swaps
- Use of FX Swaps to Manage Cash Flows
- Other Uses of FX Swaps

FX Options

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the key features of FX options and the development of the market since the financial crisis
- Recall how FX option prices are quoted in terms of implied volatility and identify some of the key option pricing models
- Recognize the main trading and hedging applications of FX options, including strangle and spread trades, collars, and participating forwards

Tutorial Overview

The market for FX options is a key sector of the OTC derivatives market. This tutorial looks at the development of the FX option market, including the use of cleared OTC trades, how FX options are quoted and priced, and the main trading and hedging applications of these instruments, including straddles, strangles, spreads, collars, and participating forwards.

Prerequisite Knowledge

Options – An Introduction

Tutorial Level: Intermediate

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Market Overview

- Overview of FX Options
- Market Participants
- Terminology

Topic 2: Implied Volatility & Valuation

- Implied Volatility
- Volatility Smile
- Volatility Smile: Put/Call Parity & Other Issues
- FX Option Pricing Models
- FX Options: ATM Options
- FX Options & Forward Pricing

Topic 3: Trading & Hedging Strategies

- FX Option Trading Strategies
- Spreads
- Spreads: Examples
- Straddles
- FX Hedging Strategies
- FX Hedging Strategies: Collars & Participating Forwards
- Exotic FX Options

FX Spot Market – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the basic characteristics of the spot FX market
- Interpret spot FX rates
- Calculate cross rates
- Understand how and when settlement takes place

Tutorial Overview
The FX market is a seamless 24-hour market that exercises an enormous influence over virtually every financial and economic trend. This tutorial introduces the spot FX market and explains how currencies can be treated similar to commodities in terms of how they can be traded. There is a particular focus on the method by which they are quoted in the market and how a price can be ascertained for any currency pair.
Prerequisite Knowledge
The Foreign Exchange Business

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of FX Spot Market
- Overview of FX Spot Market
- FX Spot Market Overview

Topic 2: Spot Market Quotations
- Spot Market Quotations
- Spot Rates
- Market Maker vs. Price Taker
- Bid-Ask Spreads
- Interpreting Spot Market Quotations
- Quotation Conventions: Base Currencies
- Quotation Conventions: Order of a Currency Pair
- Quoting Conventions: Decimal Places in Currency Pairs

Topic 3: Cross Rates
- Cross Rates
- Cross Rates: Basics
- Cross Rates: Examples
- Calculating Cross Rates: Same Base Currency
- Rule for Calculating Cross Rates: Same Base Currency
- Calculating Cross Rates: Different Base Currency
- Rule for Calculating Cross Rates: Different Base Currency
- Calculating Cross Rates: Same Quote Currency
- Rule for Calculating Cross Rates: Same Quote Currency

Topic 4: Value Dates
- Value Dates
- Standard Value Dates
- Impact of Weekends & Holidays
- Exceptions to T+2 Settlement
- Value Date Rollover

FX Spot Market – Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Determine which party buys and sells the base currency at the bid and ask rates
- Interpret an electronic trading screen
- Recognize the typical dealing room terminology
- Recognize how to run and square an FX trading position
- Identify the reasons a trader may employ a stop-loss order

Tutorial Overview
Every second of the day the value of currencies will change, driven by global trade, investment, and speculation. This is a world where bulls and bears fight for control, where a "yard" is a billion and "cable" is an exchange rate between two of the most active currencies.
This tutorial looks at the buying and selling of currencies, the means by which currencies are traded, and how trades are actually transacted in the market. The tutorial also describes the positions that traders may take in currencies, the constraints that may be applied to those positions, and how the profit/loss on those positions is calculated.

Prerequisite Knowledge
FX Spot Market – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Spot Market: Overview
- Spot Market: Overview
- Spot Market Trading

Topic 2: Mechanics of Spot Trading
- Mechanics of Spot Trading
- Buying & Selling Currencies
- Buying & Selling Currencies: Example

Topic 3: Electronic Trading
- Electronic Trading
- A Typical Trading Screen
- Identifying a Good Price
- Bid-Ask Spread

Topic 4: Voice/Telephone Trading
- Voice/Telephone Trading
- Telephone Jargon
- Dealing Etiquette
- Trading Amounts
- Trading Currencies

Topic 5: Managing Spot Positions
- Managing Spot Positions
- Open & Square Positions
- Open & Square Positions: Making a Profit
- Opening & Squaring a Position
- Position Control: Trading Limits
- Position Control: Impact of FX Spread
- Calculating Profit & Loss

- Average Rate
- Marking to Market
- Shading the Price

Topic 6: Stop-Loss Orders

- Stop-Loss Orders
- Stop-Loss Orders: Example
- FX Risk Management

FX Swaps & Outrights – Scenario

Description

Overview

The use and trading of foreign exchange forwards, particularly FX swaps, can be difficult to master. This scenario will provide you with a better understanding of the principles involved by examining a number of situations in which a corporate treasurer uses FX swaps and outrights to manage cross-currency cash flows. It will demonstrate how some exposures are identified, together with the trades and cash flows required to cover them in the FX market.

Prerequisite Knowledge

A good understanding of both spot and forward FX trading is required.

Level: Intermediate

Duration: 45 minutes

GDP – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define gross domestic product and list three approaches to estimating GDP
- Identify and define alternative measures of economic activity
- Determine the impact of inflation on GDP estimates
- Recall the chain-weighted method of estimating real GDP
- List the limitations of GDP as a measure of living standards

Tutorial Overview
Gross domestic product is the most widely used economic indicator in contemporary markets. There are important issues to consider when using GDP data. GDP estimation can be approached in different ways and economic factors such as rising prices can affect the accuracy of GDP estimates. GDP is also subject to several limitations when used as an indicator of economic activity and living standards. This tutorial provides a high-level overview of GDP and highlights key factors to consider when using GDP data.

Prerequisite Knowledge
Economic Indicators – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of GDP
- What Is GDP?
- Approaches to Estimating GDP: Expenditure
- GDP as Expenditure
- Approaches to Estimating GDP: Income
- GDP as Income
- Approaches to Estimating GDP: Production
- GDP as Production
- GDP Estimates Publication Schedule
- Alternatives to GDP

Topic 2: GDP & Inflation
- Relationship Between GDP & Prices
- Real vs. Nominal GDP
- Real vs. Nominal GDP: Example
- Changing Economy, Changing Prices
- Changing Prices, Changing Behavior
- Impact of the Base Year
- Chain-Weighted Real GDP
- Chain-Weighted Real GDP: Example

Topic 3: Limitations of GDP
- GDP & Living Standards
- GDP & Living Standards: Limitations
- Comparing GDP Across Countries
- Comparing GDP Across Countries: PPP

GDP Indicators

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define GDP growth and determine why it is a useful economic indicator
- Interpret adjusted GDP growth measures
- Recall supply-side and demand-side theories of GDP growth
- Define the GDP multiplier
- Identify the impact GDP growth data may have on financial markets, including fixed-income, equity, foreign exchange and commodity markets

Tutorial Overview
The GDP growth rate is an important and closely watched indicator of economic health. GDP growth estimates are typically subject to various adjustments that facilitate their use as an indicator. Financial markets, including equities, fixed income, foreign exchange, and commodities, often react to GDP growth estimates in predictable ways. This tutorial provides a high-level overview of GDP growth and highlights key factors to consider when using GDP growth estimates as an economic indicator.

Prerequisite Knowledge
GDP – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: GDP Growth
- What Is GDP Growth?
- Calculating GDP Growth
- GDP Growth: Annualized Rate
- GDP Growth & Seasonality
- GDP Growth: Seasonal Adjustment
- GDP Growth & Cyclicality
- GDP Growth: Long-Term Trends

Topic 2: Theories of GDP Growth
- Long-Term GDP Growth Drivers
- Short-term GDP Growth Volatility
- Supply-Side Economics
- Demand-Side Economics
- Supply-Side vs. Demand-Side
- Equilibrium GDP
- The GDP Multiplier

Topic 3: GDP Growth & Markets
- Economic Indicators
- GDP Growth as an Economic Indicator
- GDP Growth: Impact on Markets
- Market Impact: Historical Example
- Currency Markets
- Fixed Income Markets
- Stock Markets
- Commodities Markets
- GDP Growth & Market Expectations
- Scenario: Market Impact of GDP Growth Estimates

GDPR (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the material and territorial scope of the General Data Protection Regulation (GDPR) as well as fundamental GDPR concepts such as "personal data" and "processing"
- Recognize the key responsibilities of data controllers in relation to the processing of personal data as described by the GDPR's data protection principles
- Identify the rights of data subjects under the GDPR
- Define other key concepts associated with the GDPR, such as consent, data protection by design and by default, data transfers, and data protection impact assessments

Tutorial Overview
Data protection legislation is concerned with upholding the privacy rights of individuals in relation to their personal data. This tutorial provides a high-level overview of the EU's GDPR and its significance in terms of protecting an individual's privacy in today's world.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Scope & Key Definitions
- Scope of the GDPR
- Scenario: In or Out of Scope?
- Personal Data
- Processing Personal Data
- Scenario: Personal Data

Topic 2: Data Protection Principles
- Data Protection Principles
- Case Study: Violation of Data Protection Principles
- Scenario: Data Protection Principles

Topic 3: Rights of Data Subjects
- Data Subjects' Rights
- Case Study: Protection Of Childrens' Data

Topic 4: Other Concepts & Areas
- Key GDPR Concepts
- Key GDPR Areas
- Case Study: Data Protection by Design and by Default
- Scenario: Consent
- Notification of Breaches
- Remedies, Liability, & Penalties

Ghana Anti-Money Laundering (AML)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define terrorist financing, money laundering and its related stages
- Recognie the Ghanaian laws and regulations in relation to money laundering and terrorist financing
- Identify the responsibilities of the various participants
- List the systems and controls a firm should employ in relation to managing financial crime risks

Tutorial Overview
Ghana has increased enforcement measures and made a commitment to strengthen the effectiveness of its Anti-Money Laundering & Counter Financing of Terrorism (AML/CFT) regime especially after appearing on the EU blacklist. Laws have been updated to match international banking standards which means banks will have to apply more stringent controls.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Money Laundering
- Money Laundering
- Need for Laundering Money
- What is Money Laundering?
- Legislative Treatment of ML Stages
- Case Study: Money Laundering
- Trade-Based Money Laundering
- TBML: Moving Funds
- Scenario: Opening an Account
- Apply Your Knowledge
- Apply Your Knowledge
- Scenario: Conclusion

Topic 2: Terrorist Financing
- Terrorist Financing
- Overview of Terrorist Financing
- What is Terrorist Financing?
- Case Study: Terrorist Financing
- Innovation in Terrorist Financing
- Scenario: Charitable Organisation
- Apply Your Knowledge
- Apply Your Knowledge
- Scenario: Conclusion

Topic 3: Global Frameworks
- Global Frameworks
- Global Nature of AML & CFT
- Case Study: Stage 1 (UK)
- Case Study: Stage 2 (France)
- Case Study: Stage 3 (Belgium)
- Case Study: Final Stage (Dubai)
- Global Response

- Financial Action Task Force (FATF)
- International Monetary Fund (IMF)
- AML & CFT Frameworks
- Laws & Regulations
- Transnational Application
- Case Study: Transnational Application

Topic 4: Detecting & Preventing AML
- Detecting & Preventing AML
- Primary & Secondary Offences
- Secondary Offences: Failing to Report
- Case Study: Failing to Report
- Secondary Offences: Tipping Off
- Case Study: Tipping Off
- Secondary Offences: Impeding an Investigation
- Case Study: Impeding an Investigation
- Suspicious Activity Reports (SARs)
- Whistleblowing
- Scenario: Secondary Offences
- Apply Your Knowledge
- Apply Your Knowledge
- Scenario: Conclusion

Topic 5: AML Responsibilities
- AML Responsibilities
- Who is Responsible?
- Senior Management Responsibilities
- MLRO Responsibilities
- Individual Responsibilities
- Case Study: Individual Accountability

Topic 6: Systems & Controls
- Systems & Controls
- Fighting Financial Crime
- AML Regime Elements
- Customer Due Diligence
- Customer Risk
- Know Your Customer (KYC)
- Case Study: Know Your Customer (KYC)
- Due Diligence Procedures
- High-Risk Customers
- Case Study: PEPs
- Recordkeeping Procedures
- Staff Training
- Case Study: Inadequate Training

Global Financial Crisis – Causes, Impact, & Legacy

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the magnitude of the crisis as emphasized by the number and type of institutions, markets, and countries affected
- Recognize the causes of the crisis and the series of actions and events that created an operating environment within which many institutions would eventually run into difficulties
- Identify the consequences of the crisis and the impact that regulatory changes such as Basel III have had on banks' business strategies

Tutorial Overview
The global financial crisis of the late 2000s was a watershed event in financial markets. Problems originating in one local market (US subprime lending) set off a train of events that ultimately led to the need for concerted action by central banks and governments to prevent the complete collapse of the global financial system. This tutorial describes the unfolding of this historic event, from the development of the crisis in the US to its spread across global markets and institutions. It also looks at how the authorities responded and the lessons to be learned for future generations.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline

Topic 1: Crisis Background & Timeline
- Overview of the Global Financial Crisis
- The Crisis: a Two-Minute Summary
- Key Events: Timeline
- Spread to the Real Economy
- Minimizing the Impact
- Who Avoided the Crisis?

Topic 2: Causes of the Crisis
- What Caused the Financial Crisis?
- Changes in Operating Conditions
- Impact of Changes in Operating Conditions
- Internal Drivers
- Role of Subprime
- Role of Subprime: A More Detailed Look
- Impact of Securitization
- Why Were Losses so Large?

Topic 3: Consequences & Legacy of the Crisis
- Consequences of the Crisis
- Government & Central Bank Initiatives
- Regulatory Response
- Business Response
- New Playing Field

Goal Seek & Scenario Manager – Excel Interactive

Tutorial Description
Overview
This tutorial is one of a series that provides an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate how the Goal Seek and Scenario Manager in Excel can be used by market participants to increase the efficiency and effectiveness of their work.

Prerequisite Knowledge
Naming & Referencing Cells – Excel Interactive

Tutorial Level: Intermediate
Tutorial Duration: 20 minutes

Green Bonds – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define green bonds and other green assets and list their key characteristics
- Name and compare important global green bonds standards

Tutorial Overview
As interest in environmental, social, and governance (ESG) issues has grown, the market for green bonds and other green assets has expanded rapidly. Today, this market includes a wide range of green debt instruments and new asset types are emerging regularly. However, a lack of universal global standards for defining and categorizing these assets poses a challenge for investors. Global and national efforts are underway to enhance standards and reporting. This tutorial provides an overview of green bonds and other green assets and discusses emerging global green bond standards.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Green Bonds Overview
- Green Bonds & Assets Landscape
- What are Green Assets?
- History
- Green Securitization
- Types of Green Asset
- Structures & Pricing

Topic 2: Standards & Guidelines
- Standards & Guidelines Overview
- ICMA Green Bond Principles (GBP)
- Green Projects
- Components & Review
- LMA Green Loan Principles (GLP)
- Climate Bonds Initiative (CBI)
- EU Action Plan
- EU Taxonomy
- EU Green Bond Standard
- Green Bonds in China

Green Bonds in Practice

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Name key green bond indices and identify their role in the green bond market
- List major green bond issuers
- Name important green bond certifiers and identify the role of certification in the green bond market

Tutorial Overview
The green bond market is growing rapidly and becoming ever-more complex. Increasingly, it includes a wide network of issuers, certifiers, and data providers that work together to ensure the smooth functioning of the market. As a growing range of green bond funds and benchmark indices emerge, the future of the market looks bright. This tutorial explores the contemporary green bond market, covering issuers, certifiers, funds, and indices.

Prerequisite Knowledge
Green Bonds – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Investing Landscape
- Market Overview
- Green Bond Indices
- Green Bond ETFs

Topic 2: Green Bond Issuers
- Issuers Overview
- French Government
- Federal National Mortgage Association
- Fannie Mae Green MBS
- European Green Covered Bonds

Topic 3: Green Bond Certifiers
- Role of Certification
- Certifiers

Topic 4: Green Bond Market Outlook
- Market Skepticism
- Pricing Advantage

Greenwashing

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define greenwashing
- Describe common greenwashing practices
- Recognize the consequences of greenwashing
- Identify how greenwashing can occur in the financial sector

Tutorial Overview

Greenwashing is a misleading or deceptive marketing practice used by companies and other organizations to portray themselves or their products and services as environmentally friendly or sustainable. This tutorial provides a high-level overview of greenwashing and how it takes place.

Prerequisite Knowledge

None

Tutorial Level: Introductory

Tutorial Duration: 15 minutes

Hedge Funds – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the concept of hedging and outline its evolution into the modern hedge fund industry
- Recognize the main characteristics of a modern hedge fund
- Identify the key players in the hedge fund industry and the roles they perform

Tutorial Overview
Hedge funds are an integral part of today's financial markets. Yet defining what they are and what they do is not straightforward, owing in part to the broad scope of strategies operating under the hedge fund banner. This tutorial provides an overview of hedge funds, covering their evolution from the early days of hedging into a full-fledged industry, their key features and characteristics, the main players and their roles.

Prerequisite Knowledge
Alternative Assets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Evolution & Development
- A Brief History of Hedging
- Hedging vs. Short-Selling
- The First Modern Hedge Fund
- The Golden Age
- The Fallow Post-Financial Crisis Years
- Hedge Fund Growth in Context
- Post-Pandemic Era

Topic 2: Main Characteristics
- Legal Structure: Limited Partnership
- Master Feeder Structure
- Absolute Returns
- Fees
- High Water Marks & Hurdle Rates
- Management & Performance Fee Example
- Leverage
- Regulation

Topic 3: Key Players in Hedge Funds
- Key Players
- More Institutionalized Investor Base
- More Commoditized Industry
- Service Providers

Hedge Funds – Investing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define risk according to financial theory
- Identify some of the methods used to calculate risk-adjusted returns
- Recognize some of the techniques other than alpha that can be used to generate superior returns
- Identify sources of risk associated with capital loss to which hedge funds are particularly susceptible
- Recognize the importance of risk management and the various measures used

Tutorial Overview
Financial theory holds that risk and return are two sides of the same coin. Hedge funds aim to deliver superior risk-adjusted returns, where risk is defined as volatility. Then there is the risk of permanent loss, which can come in various guises and which hedge funds can be particularly susceptible to.

This tutorial provides an overview of risk-adjusted returns, the methods used to calculate them, and the means to achieving them. It then focuses on the risk of losses, the identification and management of which are crucial to a hedge fund's long-term survival.

Prerequisite Knowledge
Hedge Funds – Strategies

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Defining Risk
- What is Risk?

Topic 2: Risk-Adjusted Returns
- Risk-Adjusted Returns: Key Ratios
- Using These Ratios

Topic 3: Rethinking Alpha
- Rethinking Alpha
- Accepting Beta
- 2010s Bull Market: A Perfect Storm for Hedge Funds

Topic 4: Identifying Risk
- Permanent Loss of Capital
- Perils of Shorting
- Short Squeezes
- Gamestop: A Squeeze for the Ages
- Other Risks

Topic 5: Managing Risk
- Managing Risk
- VaR
- Systematic Approach
- Qualitative Assessment
- Derivatives
- Costs of Risk Management

Hedge Funds – Strategies

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize competing theories about how markets work and their implications for hedge fund investing strategies
- Identify some of the different investment styles that often precede strategy selection
- List some of the most widely used strategies, and recognize how they relate to investment style

Tutorial Overview
Hedge funds share a common goal – making money, ideally in both good times and bad. Where they diverge is on the best way to achieve this goal. This tutorial provides an overview of some of the different investing styles deployed to this end, the theories that often underpin them, and the various strategies through which they are expressed.

Prerequisite Knowledge
Hedge Funds – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Market Theories & Making Money
- How do Hedge Funds Make Money?
- Two Competing Theories
- Reflexivity & its Implications

Topic 2: Investment Styles
- Winning Big Vs. Winning Small
- Asymmetry
- Systematic Investing
- HFT
- Activism
- Derivatives

Topic 3: Strategies
- Categorization
- Relative Value
- Strategies
- Long/Short Equity
- Global Macro
- Pure Systematic
- Event-Driven

High Yield Debt

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how high yield (HY) debt is graded by the main ratings agencies and recall how the market for high yield assets developed
- Identify the key structures and features of high yield debt
- Recall the main issuers and investors in high yield debt
- Recognize the key features of the primary and second markets for high yield debt

Tutorial Overview
High yield debt refers to securities and loans rated below the investment grade thresholds laid down by the major credit rating agencies. High yield debt compensates investors for the additional credit risk by generating additional returns. This tutorial looks at the ratings attached to high yield debt, the key structures used, and the primary and secondary markets for these assets.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Overview Of HY Debt
- What Is High Yield (HY) Debt?
- Benefits & Risks of HY Debt
- Diversification Using HY Debt
- HY Credit Spreads
- Size of HY Debt Market

Topic 2: HY Debt Structures
- HY Debt Structures
- Covenants
- Redemption of HY Bonds
- Leveraged Loans

Topic 3: Issuers & Investors
- Issuers
- Issuers: Rising Stars & Fallen Angels
- Issuers: Crossover Bonds
- Investors
- Credit Protection

Topic 4: Market Operations
- HY Debt: Primary & Secondary Markets
- HY Bond Indexes

Hong Kong Anti-Money Laundering (AML) (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define money laundering and list its stages
- Define terrorist financing
- Recognise the laws and regulations in relation to money laundering and terrorist financing
- Identify your responsibilities and those of key personnel in your organisation
- List the systems and controls a firm should employ in relation to managing financial crime risks

Tutorial Overview
The growth in international crime and terrorism has seen greater efforts by criminals to unearth new ways of integrating their illicit funds into financial markets.

Identifying and bringing to justice those who help launder illicit funds is a priority for both governments and financial markets regulators. You have an important part to play in this work – ignorance is no longer a valid form of defence. The penalties for non-compliance are severe and can include a fine and/or a custodial sentence, so understanding your obligations in relation to anti-money laundering (AML) and counter terrorist financing (CTF) is vital.

Prerequisite Knowledge:
None

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Money Laundering
- Need for Money Laundering Regulations
- What is Money Laundering?
- Legislative Treatment of ML Stages
- Case Study: Money Laundering
- Trade-Based Money Laundering
- TBML: Moving Funds
- Scenario: Opening an Account

Topic 2: Terrorist Financing
- Need to Counter Terrorist Financing
- What is Terrorist Financing?
- Innovation in Terrorist Financing
- Scenario: Charitable Organisation

Topic 3: Global Frameworks
- Global Nature of AML & CFT
- Global Response
- Financial Action Task Force (FATF)
- International Monetary Fund (IMF)
- AML & CFT Frameworks
- Laws & Regulations
- Transnational Application
- Case Study: International Money Laundering

Topic 4: Detecting & Preventing ML & TF
- ML & TF Legislation in Hong Kong
- ML & TF Offences

- Obligation to Report: DTROP, OSCO & UNATMO
- Tipping Off
- Obstructing an Investigation
- Prejudicing an Investigation
- Suspicious Transaction Reports
- Whistleblowing
- Case Study: Money Laundering Syndicate
- Scenario: Suspicious Activity

Topic 5: AML Responsibilities

- Regulatory Authorities
- Regulated Entities
- Penalties Under AMLO
- Who is Responsible?
- Senior Management Responsibilities
- MLRO Responsibilities
- Individual Responsibilities
- Case Study: AMLO Breaches

Topic 6: Systems & Controls

- Fighting Financial Crime
- AML Regime Elements
- Customer Due Diligence
- Customer Risk
- Know Your Customer (KYC)
- Due Diligence Procedures
- High-Risk Customers
- Record-Keeping Procedures
- Staff Training

Hong Kong Bond Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the features of Hong Kong's bond markets
- List the factors that have led to Hong Kong's success as an offshore RMB center
- List the challenges and opportunities in Hong Kong's bond market today

Tutorial Overview
Viewed as a gateway to mainland China, Hong Kong is a leading financial marketplace globally. Its bond markets, both governmental and corporate, are highly active, and have expanded considerably due to the growing investor interest in offshore renminbi financing. This tutorial provides a detailed introduction to the features of Hong Kong's bond markets, its relationship with China and the bearing this has on its bond markets, and the challenges and opportunities for Hong Kong's traders and issuers.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Market Overview

- Overview
- Key Issuers
- Issuance Volume
- Key Terminology
- Bond Pricing
- Trading Volume

Topic 2: Market Development
- Offshore RMB Bonds Center
- International Impact
- Belt & Road Initiative
- Bond Connect

Topic 3: Government Bonds
- Overview of Hong Kong Debt Products
- HKGBs
- EFBs & EFNs
- Issuance & Auction
- Primary Dealers vs. Recognized Dealers
- Role of The Central Moneymarkets Unit (CMU)

Topic 4: Corporate Bonds
- Overview
- Issuers
- Credit Rating & Credit Risk
- Professional Investors
- Investor Protection for Bondholders
- Hong Kong Corporate Bonds – Trading on the Secondary Market
- Government-Linked Corporation Securitized Debt Issues
- Offshore Renminbi Bonds
- Islamic Bonds (Sukuk)

Topic 5: Challenges & Opportunities

- Hong Kong Bond Market Challenges
- Opportunities for Growth in the Hong Kong Bond Market

Hong Kong Equity Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the stock exchanges, market regulators, stock indices, and types of security in the Hong Kong market
- Describe the listing, trading, and settlement procedures for equities in Hong Kong

Tutorial Overview
This tutorial explores the history of the Hong Kong equity market, as well as the position it holds in the world of finance today. Many factors, including its special relationship with China and the sophistication of its capital market platforms, have made Hong Kong one of the most important financial centers in the world.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Market Overview
- History
- Market Capitalization
- Hong Kong Markets
- Mainland Enterprises
- Other Securities Traded

Topic 2: Indices
- Hang Seng Index (HSI)
- Hang Seng Composite Index Series
- Other Indices
- Market Regulation

Topic 3: Listing
- Listing Sponsors
- Listing Requirements
- Acceptable Jurisdictions
- Financial Requirements
- Other Requirements

Topic 4: Trading Systems
- Short Selling
- Trading System
- Charges, Fees, & Taxes
- Clearing & Settlement

Impact Investing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define impact investing and identify the difference between impact investing and other forms of ESG investing
- List the core characteristics of impact investing, major impact investing asset classes, and key players in the impact investing market
- Name and define the tools and frameworks used to manage and measure investment impact

Tutorial Overview
The global problems humanity is facing, from climate change to rising inequality, present significant investment challenges and opportunities. Impact investing is one of the most valuable tools that financial institutions have to address these challenges in a commercially viable manner. While it is growing rapidly, however, impact investing is still a developing field, with many unanswered questions about how to measure and manage investment impact. This tutorial provides an overview of impact investing and the key challenges it faces and opportunities it provides.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Impact Investing Overview
- Investment & Impacts
- What is Impact Investing?
- Impact Investing & ESG

Topic 2: Impact Investing Landscape
- Market Size
- Investors
- Asset Classes & Sectors
- Returns
- Impact Targets
- Impact Performance

Topic 3: Impact Measurement & Management
- Impact Measurement
- Impact Management Cycle
- Intentions & Constraints
- Five Dimensions of Impact
- Delivery Models
- Case Study: Bridges Fund Management
- Other Frameworks

Topic 4: Impact Investing Outlook
- Impact Investing: Looking Ahead

Income Statement – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main types of revenue and expense items that appear on an income statement and the differences in presentation and layout between US GAAP and IFRS
- Recognize the importance of accounting rules relating to revenue recognition and the calculation of diluted earnings per share (EPS)

Tutorial Overview
This tutorial describes in detail the structure and elements of income statements, including revenue, gross profit, operating expenses, operating income, interest income/expense, taxation, and the calculation of net income. The tutorial also covers crucial accounting policies related to income statement-related concepts, such as revenue recognition and the calculation of diluted earnings per share (EPS).

Prerequisite Knowledge
Balance Sheet – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of the Income Statement
- Overview of the Income Statement
- Income Statements: IFRS vs. US GAAP

Topic 2: US GAAP Income Statement
- US GAAP Income Statement
- Revenue
- Revenue: Footnotes
- Gross Profit
- Operating Expenses
- Operating Income
- Interest & Taxes
- Net Income

Topic 3: Recognition of Revenue
- Recognition of Revenue

Topic 4: Earnings Per Share (EPS)
- Earnings Per Share (EPS)
- Diluted EPS

Income Statement – Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the techniques used to analyze an income statement
- Calculate key measures of revenue growth and profitability
- Identify other key performance measurement techniques used in income statement analysis

Tutorial Overview
The key focus for financial analysts is a company's future performance against that of its peers. This tutorial looks at the key measures of company revenue growth and profitability that help analysts determine a company's ongoing and future performance. The income statements of both US and European companies are used for peer group comparison.

Prerequisite Knowledge
Income Statement – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Overview of Income Statement Analysis
- Overview of Income Statement Analysis

Topic 2: Revenue Metrics
- Key Revenue Metrics
- Key Revenue Metrics: Product Mix & Competition

Topic 3: Margin Analysis
- Margin Analysis
- Revenue Growth & Margins

Topic 4: Common Size Analysis
- Overview of Common Size Analysis

Topic 5: Profitability
- Normalized Profits
- Profitability Ratios
- Return on Capital Employed (ROCE)
- Return on Assets (ROA)

Topic 6: Key Performance Ratios
- Key Performance Ratios

Indices, Exponents, & Logs

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Ascertain the basic rules of indices
- Define the natural exponential function
- Calculate a logarithm using some basic rules, and understand that a logarithm is the reverse of an exponential function
- Describe geometric series, and calculate the sum of finite and infinite geometric series

Tutorial Overview
An understanding of some basic mathematical tools is crucial in order to have a solid grasp of financial concepts. Indices, exponents, and logarithms, which are explained in this tutorial, are some of the most basic and important tools employed in finance.

These mathematical concepts are particularly important in the context of calculating the price of capital market and derivative products.

Prerequisite Knowledge
A reasonable level of mathematical and statistical knowledge is assumed.

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Indices
- What are Indices?
- Indices: Basic Rules
- Inverse & Reciprocal
- Need for Caution on Indices
- Indices in Practice: Compound Interest

Topic 2: Natural Exponential Function
- What is the Natural Exponential Function?
- Graphing the Natural Exponential Function
- Using the Exponential Function

Topic 3: Logs
- What Are Logarithms?
- Comparing Logarithm Functions Having Different Bases
- Natural Logarithmic Function Vs. Exponential Function
- Laws of Logarithms
- Using Logs to Solve Equations

Indian Equity Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the structure of the Indian equity market
- Identify the types of trading, including algorithmic and Dabba, in the Indian equity market
- Recall the role of regulatory bodies and legislation in the Indian equity market

Tutorial Overview
This tutorial describes the structure of the Indian equity market and its various indices. The more common forms of equity trading that are practiced and the regulatory structure that underpins the Indian equity market are discussed.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Market Structure
- Major Stock Exchanges & Trading Venues
- Primary & Secondary Markets
- Stock Market Indices

Topic 2: Trading
- Trading Conventions
- Algorithmic Trading
- Algorithmic Trading: Development
- Algorithmic Trading: Regulatory Considerations
- "Dabba" Trading

Topic 3: Regulation
- Securities & Exchange Board of India (SEBI)
- Key Regulatory Developments
- Primary Legislation
- Legislation & Foreign Direct Investment
- Impact of MiFID II

Individual Accountability Framework (IAF)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognise why the Individual Accountability Framework (IAF) is needed
- Describe the Senior Executive Accountability Regime (SEAR)
- Identify the Conduct Standards
- Explain the enhancements to the Fitness & Probity (F&P) Regime
- Describe the amendments to the Administrative Sanctions Procedure (ASP)
- List the obligations of firms and CF role holders under the IAF

Tutorial Overview
The Individual Accountability Framework (IAF) is one of the most significant regulatory developments in Ireland in recent times. Its overarching objective is to improve governance, performance and accountability in relation to regulated financial service providers and their management/employees. By establishing a clear framework as to who is responsible for what within these firms, the reforms will encourage greater individual accountability and enhance the Central Bank's ability to hold individuals to account when their conduct or performance falls below regulatory expectations.

This tutorial describes the IAF in detail, with particular focus on the key areas covered by the new rules – the Senior Executive Accountability Regime (SEAR), Conduct Standards, enhancements to the existing Fitness & Probity (F&P) Regime and modifications to the Administrative Sanctions Procedure (ASP).

Prerequisite Knowledge:
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of the IAF
- The need for the Individual Accountability Framework
- Legislative & Regulatory Measures
- Key Elements of the IAF

Topic 2: SEAR
- What is the Regime?
- SEAR Responsibilities
- Assignment of Prescribed Responsibilities
- Responsibilities of NEDs and INEDs
- Statements of Responsibilities
- Submitting Statements
- Statements of Responsibilities: Additional Information
- Management Responsibilities Map
- What Should the Map Include?
- Duty of Responsibility

Topic 3: Conduct Standards
- Types of Conduct Standard
- Business Standards
- Common Conduct Standards
- Additional Conduct Standards
- Reasonable Steps
- Guidance on Reasonable Steps
- Reporting Obligations

Topic 4: F&P Regime

- Changes to the F&P Regime
- Certification
- Certification Process
- When to Certify
- F&P Records

Topic 5: ASP

- Strengthening the Procedure
- Sanctions on Individuals
- High Court Oversight

Industry & Company Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the tools that can be used to identify peer group companies
- Recognize how PESTEL analysis and Porter's five forces analysis are used by equity analysts
- Recognize how an industry's stage within its lifecycle can influence the assessment of a company's competitive position
- Identify the importance of analyzing a company's internal structure, processes, and operations

Tutorial Overview
While a lot of the analysis of a company's stock price is based on financial metrics and indicators, a true analysis of the company's value is not possible without also considering the company's nonquantifiable value drivers. This tutorial looks at the processes, frameworks, and techniques that equity analysts use to provide a comprehensive company profile of these nonfinancial factors.

Prerequisite Knowledge
Equity Valuation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Identifying Peer Companies
- Comparables Universe
- Industries & Sectors
- Cyclical vs Noncyclical Companies

Topic 2: External & Industry Analysis
- Competitive Pressures
- PESTEL Analysis
- PESTEL Analysis: Factors
- Five Forces Analysis
- Rivalry
- Rivalry: Key Factors
- Power of Customers
- Power of Customers: Key Factors
- Power of Suppliers
- Power of Suppliers: Key Factors
- Substitute Products
- Threat of New Entrants
- Threat of New Entrants: Key Factors
- Five Forces Analysis: Conclusion

Topic 3: Industry Lifecycle Analysis
- Industry Lifecycle Analysis
- Industry Lifecycle
- Scenario: Industry Lifecycle Analysis

Topic 4: Internal Company Analysis
- Key Considerations
- Maintaining a Sustainable Competitive Advantage
- Cost Leadership
- Product Differentiation
- Focus on a Niche
- "Stuck in the Middle"

- Scenario: Internal Company Analysis

Inflation – An Introduction

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define inflation, hyperinflation, and deflation
- Identify the potential positive and negative impacts of inflation
- Name the potential causes of inflation
- List the fiscal and monetary policies that may be implemented to control inflation

Tutorial Overview

Inflation is a key macroeconomic variable that has a broad impact on the economy. Both hyperinflation and deflation pose unique threats to the healthy functioning of an economy. Inflation can be driven by a variety of factors and governments typically respond to unacceptable levels of inflation using a full range of fiscal and monetary tools. This tutorial provides a high-level overview of inflation, its causes, and its potential remedies.

Prerequisite Knowledge

Economic Indicators – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Overview of Inflation

- What Is Inflation?
- Inflation Around the World
- Hyperinflation
- Deflation

Topic 2: Impact of Inflation

- Negative Effects of Inflation
- Positive Effects of Inflation

Topic 3: Causes of Inflation

- Demand-Pull Inflation
- Cost-Push Inflation
- Built-In Inflation
- Quantity Theory of Money

Topic 4: Controlling Inflation

- Government & Inflation
- Monetary Policy
- Fiscal Policy
- Price Controls

Inflation Indicators

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Calculate the inflation rate
- Define the consumer price index and list its limitations
- Name and define alternative inflation indicators
- Determine the impact of inflation on monetary policy
- Estimate the impact of inflation on equity, fixed-income, and currency markets

Tutorial Overview
Inflation has a significant impact on monetary policy and on equity, fixed-income, and currency markets. It is therefore important to understand how inflation is measured and how the inflation rate and inflationary expectations may affect policy and markets. This tutorial provides a high-level overview of the measurement of inflation and highlights the various ways in which the inflation rate may influence government policymaking and asset pricing.

Prerequisite Knowledge
Inflation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Measuring Inflation
- Calculation
- Price Levels
- Indices
- Valuing Cash Using Inflation Indices
- Analyzing Returns Using Inflation Indices
- Scenario: Calculating Inflation

Topic 2: Inflation Indicators
- Consumer Price Indices (CPI)
- CPI Limitations
- Alternatives to CPI
- CPI Impact: Indexing
- CPI Impact: Policy

Topic 3: Inflation & Markets
- Inflation & Equities: Hedging
- Inflation & Equities: Valuations
- Inflation & Bonds
- Inflation & Currencies: Purchasing Power
- Inflation & Currencies: Interest Rates

Inflation-Linked Securities

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the phenomenon of inflation in modern economies
- Identify the key structures used with inflation-linked securities and how these instruments are used to manage inflation risk
- Calculate yields and prices for conventional bonds and inflation-linked securities
- Identify the key features of inflation swaps

Tutorial Overview
Inflation-linked securities (ILS) are securities that pay a fixed coupon plus an amount tied to an inflation index, thus protecting the investor's return against inflation. This tutorial looks at how inflation arises, how investors can manage inflation risk using inflation-linked securities, and the structures used with these instruments.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Inflation
- Overview of Inflation
- Inflation Indices

Topic 2: Overview of ILS
- Overview of Inflation-Linked Securities
- Benchmark Indices
- Inflation-Linked Securities: Methodology
- Deflation Floor
- Liquidity Premium
- Inflation Strategies
- Issuers & Investors

Topic 3: Yield & Price Calculations
- Yield Components of Conventional Bonds
- Yield & Price Calculations For ILS
- Yield & Price Calculations For US Conventional Securities
- Other ILS Calculations

Topic 4: Inflation Swaps
- Inflation Swaps

Information Technology (IT) in Business

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define computers and identify their hardware and software components
- Define Enterprise Resource Planning (ERP) and list its potential benefits and applications, including the role and uses of automation
- Recall key events and technologies in the development of networking and the Internet
- Name the six stages of IT development

Tutorial Overview
Information technology (IT) has transformed business, and in recent years, this process has accelerated with the emergence of new networking and programming capabilities. While relatively few financial professionals need to develop coding skills, all can benefit from an enhanced understanding of the role of technology in the financial industry. This tutorial provides an overview of the role of IT) in business, covering its evolution from the earliest days of computing to contemporary developments in artificial intelligence, cloud computing, and other areas.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: IT & Business Overview
- Introduction
- Computer Basics
- The WWW Revolution

Topic 2: Early IT in Business
- Use Of Computers
- Enterprise Resource Planning (ERP)
- ERP Benefits
- Case Study: ERP In Banking
- Automation
- Artificial Intelligence

Topic 3: IT In Business Today
- Front Office Technology
- Decentralization & Networking
- Internet Era
- New Fintech Frontiers
- Six Stages of IT Development

Insurance Distribution Directive (IDD)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the scope and objectives of the Insurance Distribution Directive (IDD)
- List the key provisions of the IDD, including registration, professional and organizational requirements, the introduction of the Insurance Product Information Document (IPID), and the rules for insurance-based investment products (IBIPs)

Tutorial Overview
The European Union's Insurance Distribution Directive (IDD) is intended to promote competition, consumer protection, and a level playing field in insurance distribution. This tutorial provides a high-level overview of the IDD and describes its key provisions and their implications.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: IDD Overview
- Overview
- Application
- Consumer Benefits

Topic 2: Key Provisions
- General Principles
- Registration
- Freedom to Provide Services
- Freedom of Establishment
- Professional & Organizational Requirements
- Continuing Professional Development (CPD)
- Provision of General Information
- Product Information
- Insurance Product Information Document (IPID)
- Cross-Selling
- Product Oversight & Governance
- Other Key Provisions
- Insurance-Based Investment Products (IBIPs)
- Sanctions

Interbank Money Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the global nature of the interbank market and its key participants, such as banks, nonbank corporates, pension funds and money market funds, and governments
- List the key money market instruments and rates
- Identify the main money market settlement systems worldwide, such as Fedwire, CHIPS, Target2, and CHAPS
- Recognize the importance of appropriate credit risk assessments in the interbank market and the key elements involved in such assessments

Tutorial Overview
Money markets play a key role in the economy of every country, and the interbank market in particular is the lifeblood of the money markets in those countries. This tutorial focuses on banks and their role in the interbank money market. The structure of the wholesale money markets is examined, as well as the .relationship that banks have with each other in terms of credit and their ability to manage currency payments. The key money market instruments and rates as well as the practicalities associated with trading and settlement in the interbank market are also outlined in detail.

Prerequisite Knowledge
Money Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of the Interbank Money Market
- Overview of the Interbank Money Market
- Market Participants
- Onshore & Offshore Markets

Topic 2: Money Market Instruments & Rates
- Key Interbank Instruments
- Eurodollar Markets & Benchmark Rates
- Fed Funds
- Money Market Yield Curves

Topic 3: Interbank Settlement & Payments
- Interbank Settlement & Payments

Topic 4: Interbank Credit Assessment
- Interbank Credit Assessment
- Assessment Framework ("CAMELS")
- Secured Lending

Interest Calculations

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key factors that affect the calculation of simple interest
- Calculate compound interest using a stated interest rate, compounding frequency, and investment
- Decompound an interest rate and compare investment opportunities with different compounding bases

Tutorial Overview
Although the calculation of interest might seem straightforward, there are a number of factors that can make a significant difference to the growth of an asset or liability under different interest rate environments. This tutorial looks at the subject of interest calculations in detail, beginning with simple and compound interest before moving on to more difficult calculations involving the comparison of investments with different compounding bases.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Simple Calculations
- What Is Interest?
- Calculating Simple Interest
- Calculating Simple Interest: Time Horizon

Topic 2: Compound Interest
- What is Compound Interest?
- Calculating Compound Interest
- Comparing Compound & Simple Interest
- Compound Interest: Different Compounding Frequencies
- Different Compounding Bases: Example
- Different Compounding Bases: More than One Year
- Continuous Compounding
- Continuous Compounding: Example

Topic 3: Payment & Compounding Frequency
- Payment Frequency
- Payment Frequency: Example
- Compounding Frequency
- Compounding Frequency: Calculator
- Decompounding
- Converting Between Compounding Bases
- Converting Between Compounding Bases: Example

Interest Calculations – Scenario

Description
Overview
This scenario explores how deposit products which have different compounding frequencies and day count bases can be compared by converting them to a common basis.

Prerequisite Knowledge
Day Count Conventions

Level: Intermediate
Duration: 20 minutes

Interest Rate Benchmarks – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key uses of interest rate benchmarks, namely discounting and the calculation of payments
- Recognize the circumstances that gave rise to the need to replace LIBOR as a benchmark rate
- List the key characteristics of the SOFR benchmark index and recall how a SOFR curve can be bootstrapped using SOFR futures
- Identify other key benchmark rates, namely €STR and SONIA, as well as credit-sensitive benchmarks

Tutorial Overview
This tutorial looks at the rise and fall of LIBOR as the key benchmark rate for the pricing of swaps and other financial instruments, and its replacement by SOFR and other benchmark indices.

Prerequisite Knowledge
Money Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Interest Rate Benchmarks
- What Are Interest Rate Benchmarks?
- Uses of Interest Rate Benchmarks
  - Payments
  - Discounting

Topic 2: Replacement of LIBOR
- Historical Development of LIBOR
- Libor & the Global Financial Crisis
- Beginning of the End for LIBOR
- Cessation of LIBOR

Topic 3: SOFR
- SOFR: Background
- SOFR: Calculation & Publication
- SOFR Methodology: Advantages
- SOFR Volatility
- Bootstrapping a SOFR Zero-Coupon Curve
- Bootstrapping a SOFR Zero-Coupon Curve: Example

Topic 4: Other Benchmarks
- €STR & SONIA
- Credit Sensitive Benchmarks
  - Ameribor
  - ICE Bank Yield Index
  - Across-the-Curve Spread Indexes (AXI)

Interest Rate Benchmarks – Product Applications

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the new benchmark indices that will replace LIBOR and other IBOR rates
- Identify the main contract specifications of SOFR futures
- Define the main types of interest rate swap
- Recognize the role of credit products
- Identify the key types of SOFR-based cap and floor product

Tutorial Overview
This tutorial looks at the key features of the new benchmarks, especially SOFR, that replaced LIBOR, and how SOFR differs from LIBOR with its backward-looking approach. It also looks at different SOFR-based products, such as SOFR futures, interest rate swaps, and floating rate notes.

Prerequisite Knowledge
Interest Rate Benchmarks – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Interest Rate Benchmarks
- Overview of Interest Benchmarks
- The Libor Act

Topic 2: STIR Futures
- SOFR Futures
- SOFR Futures: Contract Specifications
- STIR Futures Price Sensitivity
- Single-Period Swaps (SPS)

Topic 3: Interest Rate Swaps
- Post-LIBOR IRS Market
- Term SOFR
- Term-SOFR: ARRC Recommendations

Topic 4: Credit Products
- Overview of Credit Products
- Loans
    - LIBOR Legacy Loans
    - New Loans
- Floating Rate (FRNs)
- SOFR-Based FRN: IR Sensitivity

Topic 5: Caps & Floors
- Caps & Floors

Interest Rate Options – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the terminology employed with interest rate options
- Recognize the key uses of interest rate caps, floors, and collars
- Identify the main applications of swaptions and how these instruments are settled

Tutorial Overview
Interest rate options are financial derivatives that allow the holder to speculate on – or hedge against – interest rate movements. This tutorial looks at the main types of interest rate option, including caps, floors, collars, and swaptions and their main applications.

Prerequisite Knowledge
Options – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Terminology
- Interest Rate Products & Dematerialization
- Interest Rates: Options Terminology

Topic 2: Caps, Floors, & Collars
- Overview
- Caps & Floors
- Cap: Example
- Caps & Floors Combined
- Collars
- Caps, Floors, & Collars: Example
- Caps & Floors: Swaps

Topic 3: Swaptions
- Swaptions & IRS
- Swaptions & Early Swap Termination
- Swaption Applications: Example
- Cash Settlement

Interest Rate Options – Applications

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main applications of capped FRNs and their interest rate sensitivity
- Recall how caps are embedded into CMO-based FRNs
- Recognize the use of binary options in range index binary (RIB) notes
- Identify other exotic interest rate options and their applications

Tutorial Overview
This tutorial looks at the main applications of interest rates options and how they are embedded into structured notes.

Prerequisite Knowledge
Interest Rate Options – Pricing

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: FRNs With Caps & Floors
- FRNs With Embedded Caps/Floors
- Pure vs. Capped FRNs: Interest Rate Sensitivity
- Monte Carlo Analysis of FRN With Cap/Floor: Excel
- Monte Carlo Analysis of FRN With Cap/Floor: Example

Topic 2: Range Index Binary (RIB) Notes
- What Is an RIB Note?
- RIB Note: Example
- Volatility & RIB notes
- RIB: Convexity

Topic 3: CMO FRNs & Other Exotic IROs
- CMO FRNs & Notional Captions
- CMO PAC Tranches
- CMO FRN: Example
- CMO FRN: Issues
- Exotic Caps & Floors
- Limited & Flexible Caps

Interest Rate Options – Market Considerations

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the convergence between OTC derivatives such as swaptions and their exchange-traded equivalents
- Recall how the clearing of swaps has become mandatory and is also recommended for swaptions contracts
- Identify the implications for swaps of the move from uncollateralized benchmarks such as LIBOR to collateralized rate such as SOFR
- Recognize how futures bundles and options thereon can be used to replicate swaps and swaptions respectively

Tutorial Overview
This tutorial looks at the main regulatory and market infrastructure changes to the interest rate derivative markets, especially the market for interest rate options such as swaptions.

Prerequisite Knowledge
Interest Rate Options – Applications

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Convergence of OTC & Exchange-Traded Derivatives
- OTC & Exchange-Traded Derivatives
- Benefits of Exchange-Traded Derivatives

Topic 2: Clearing
- Clearing of Swaps & Swaptions

Topic 3: Curve Changes
- Changes to Curves Used by CCPs
- Changes to Index & Discounting Curves

Topic 4: Other Issues
- Other Key Issues
- Replication of Swaps Using Futures
- Options on Bundles
- Benchmark Rates
- Swaptions & Implied Volatility
- Other IR Option Market Changes

Interest Rate Options – Pricing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the use of the Black-Scholes and Black 76 model in pricing interest rate options as well as the key shortcomings of these approaches
- The pricing of caps and floors using Black-Scholes and the pricing of swaptions in Excel

Tutorial Overview
This tutorial looks at the pricing of caps, floors, and swaptions using Black-Scholes and other iterative approaches.

Prerequisite Knowledge
Interest Rate Options – Types

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Pricing Models
- Black-Scholes & Interest Rate Options (IROs)
- Drawbacks of the Black-Scholes Model
- Black 76 Model
- Interest Rate Models: Other Desirable Features

Topic 2: Pricing Caps, Floors, & Swaptions
- Pricing Index Caps & Floors
- Pricing Swaptions
- Pricing Swaptions: Example
- Pricing Swaptions: Excel
- Pricing Swaptions: Summary

Interest Rate Options – Types

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key features and uses of caps and floor contracts
- Identify the main features and applications of swaptions, including swap opening and termination

Tutorial Overview
Interest rate options such as caps, floors, and swaptions have a variety of applications. This tutorial looks at the main features of these instruments and their key uses.

Prerequisite Knowledge
Interest Rate Options – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Caps & Floors
- Cap/Floor: Specifications
- Floating Rate Loan with Caps & Floors
- Floating Rate Loan with Caps & Floors: Example
- Caps/Floors: Interest Rate Sensitivity
- Nonlinearity
- Delta

Topic 2: Swaptions
- What Is a Swaption?
- Swaptions: Specifications
- Cross-Currency Swaption
- Swaptions: Counterparty Credit Risk Mitigation
- Uses of Swaptions

Interest Rate Risk – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define interest rate risk and identify the different types of reference rate used by banks
- Identify the potential impact of interest rate risk on a bank and the need to manage this risk
- Recognize how banks approach the management of interest rate risk and the expectations of regulators in relation to this

Tutorial Overview
Banking products are affected by interest rates in different ways. As such, it is important to understand the potential impact of interest rate risk on a bank's earnings and economic value. This tutorial introduces the concept of interest rate risk and how banks manage it. Note that the focus of the tutorial is primarily on interest rate risk in the banking book – interest rate risk for the trading book falls within the scope of market risk.

Prerequisite Knowledge
Risk Management – Risk Types & Measurement

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Interest Rate Risk
- Overview of Interest Rate Risk
- What Is Interest Rate Risk?
- Some Interest Rate Basics
- Reference Rates
- Interest Rate Sensitivity
- Interest Rate Sensitivity & Gap Analysis
- Interest Rate Risk, Economic Value, & Earnings
- Impact of Adverse Changes in Interest Rates
- Regulatory Perspective
- Regulatory Expectations

Topic 2: Risk Management Framework for Interest Rate Risk
- Risk Management Framework for Interest Rate Risk
- Asset-Liability Management (ALM)
- Strategic Decisions & Interest Rate Risk
- Tactical Decisions & Interest Rate Risk
- Interest Rate Outlook
- Difficulties in Assessing the Interest Rate Outlook
- Risk Management Framework (RMF) for Interest Rate Risk
- Risk Appetite & RMFs for Interest Rate Risk
- Management Structures for Interest Rate Risk
- Regulatory Oversight & RMFs

Interest Rate Risk – Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the role of funds transfer pricing (FTP) in the management of interest rate risk
- Identify the importance of limit setting and monitoring in ensuring that interest rate risk remains within appetite
- Recognize how a matching strategy can be used to reduce interest rate risk and the difficulties in adopting such a strategy in practice
- Identify the different types of derivative that can be used to mitigate interest rate risk
- Recognize some of the difficulties associated with managing interest rate risk, especially in a low interest rate environment

Tutorial Overview
Interest rate risk is a phenomenon that is integral to the nature of banking. It is not always desirable to eliminate this risk, even if it is possible to do so, because banks would be denying themselves opportunities and hampering their ability to handle customer business profitably. But it is important to manage it. This tutorial looks at the various approaches that banks take to interest rate risk management.

Prerequisite Knowledge
Interest Rate Risk – Management

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Funds Transfer Pricing (FTP)

- Funds Transfer Pricing (FTP)
- What Is FTP?
- Benefits of FTP
- Implications of FTP for Earnings & Profitability
- Drawbacks of FTP

Topic 2: Limit Setting

- Limit Setting
- Types of Limit
- Limits in Practice

Topic 3: Matching & Mismatching Strategies

- Matching & Mismatching Strategies
- Matching
- Matching vs. Mismatching
- Minimizing Maturity Mismatches

Topic 4: Hedging

- Hedging
- Hedging Using Derivatives
- Types of Interest Rate Derivative
- Scenario: Hedging Using Derivatives
- Hedging Considerations
- Hedging Decisions
- Hedging Issues

Topic 5: Considerations When Managing Interest Rate Risk

- Considerations When Managing Interest Rate Risk
- Interest Rate Risks That Are Difficult to Measure & Manage

- Interest Rate Risk Management in a Low Rate Environment
- Interest Rate Risk Management in a Low Rate Environment: Difficulties

Interest Rate Risk – Measurement

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key considerations and challenges when measuring interest rate risk
- Distinguish between the use of earnings-based measures, such as gap analysis, and economic value measures, such as economic value of equity (EVE) and economic value at risk (EVaR), to assess interest rate risk

Tutorial Overview
Regulators expect banks to assess interest rate risk in the banking book based on outcomes of both economic value and earnings-based measures, arising from a wide and appropriate range of interest rate shock and stress scenarios. This tutorial looks at the various measures of interest rate risk that banks used and the issues and challenges they face in that regard.

Prerequisite Knowledge
Interest Rate Risk – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Interest Rate Risk Measurement
- Overview of Interest Rate Risk Measurement
- The Need to Measure Interest Rate Risk
- Types of Interest Rate Risk
- Types of Interest Rate Risk Measure
- Earnings-Based Measures vs. Economic Value Measures
- Behavioral & Modeling Considerations
- Behavioral & Modeling Considerations: Assumptions
- Yield Curve Changes
- Stress Testing
- Stress Testing: Scenarios
- Stress Testing: Purpose

Topic 2: Earnings-Based Measures
- Stress Testing
- Net Interest Income (NII)
- Net Interest Margin (NIM)
- Interest Rate Gap Analysis
- Interpreting Interest Rate Gaps
- Interest Rate Gap Reports
- Interest Rate Gap Reports vs. Liquidity Gap Reports
- Limitations of Gap Reports
- Dynamic Gap Reports
- Using Gap Reports
- Using Gap Reports: Repricing of RSAs & RSLs
- Using Gap Reports: Further Repricing Considerations

Topic 3: Economic Value Measures
- Economic Value Measures
- Types of Economic Value Measure
- Economic Value of Equity (EVE) & Duration Gap
- Limitations of EVE & Duration Gap
- Economic Value at Risk (EVaR)

Investment – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the concept of investment and identify the key motives for investment
- Recognize the different perspectives on, and approaches to, investment
- List the key characteristics of various asset classes
- Recognize the risk-return trade-off and the main risks to which investors are exposed

Tutorial Overview
Terms like "investment" and "investing" are used in the media every day without anyone actually defining what exactly they mean. This tutorial adopts a different perspective and will set you out on the road to understanding the fundamentals of investment and the associated concepts of risk and return.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Investment Basics
- Investment Basics
- Investment & Investment Management
- Definition of Investment
- Investment Motivations
- Investing vs. Gambling

Topic 2: Investment Perspectives & Approaches
- Investment Perspectives & Approaches
- Economics vs. Finance
- Investors
- Passive vs. Active Investment
- Direct vs. Indirect Investing

Topic 3: Investable Assets
- Investable Assets
- Asset Classes
- Equities
- Fixed Income
- Cash & Cash-Equivalents
- Alternative Assets

Topic 4: Investment Risk & Return
- Investment Risk & Return
- Trading Risk for Return
- Modern Portfolio Theory (MPT)
- MPT & Risk Aversion
- Attitude to Risk
- Alternatives to MPT
- Investment Risks
- Risk & Leveraging

Investment Banking – Backpack to Briefcase

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key challenges involved in the transition period from student to investment banking analyst
- Distinguish how a junior analyst's time is managed in a typical investment bank from how it is managed in a college environment
- Recognize the various communication tools that bankers use and the implications of recording such communications
- List some of the key rules and etiquette requirements in relation to remote working
- Identify the reasons why personal social media accounts should be kept separate from work

Tutorial Overview
Becoming an investment banker typically requires years of academic study and hard work. Even after years of study, transitioning to the banking world can be a difficult period for even the best graduates. This tutorial looks at the transition period from backpack-wearing college student to the traditional image of the briefcase-carrying investment banker.

Prerequisite Knowledge
Business of Investment Banking

Tutorial Level: Introductory
Tutorial Duration: 25 minutes

Tutorial Outline
Topic 1: Transitioning to a New Environment
- Transitioning to Investment Banking

Topic 2: Time Management
- What Do You Think?
- Don't Be Late!
- Personal Time

Topic 3: Communications
- What Do You Think?
- Recorded Communications
- Frequency & Responsiveness
- Formal vs. Informal Communications

Topic 4: Remote Working
- Working From Home (WFH)
- Video Calls
- Scenario: Remote Working

Topic 5: Social Media
- Personal Social Media

Investment Banking – Client Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the core competencies required of investment bankers when building and managing client relationships
- Recognize how strong relationships are built on a client's trust in the investment banking team
- Identify the key aspects of effective relationship management for an M&A transaction

Tutorial Overview
For investment banks, effective client management involves becoming a trusted advisor and financier to their clients. This, in turn, enables clients to achieve their strategic objectives. All bankers, from junior analysts up, have a role to play in this. This tutorial looks at the key skills and competencies expected of investment bankers when it comes to managing client relationships effectively. While the focus is on bankers that work on M&A/corporate finance transactions, some of the material is broad enough to be relevant to sales and trading staff that must also manage client relationships.

Prerequisite Knowledge
Investment Banking – Backpack to Briefcase

Tutorial Level: Introductory
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: Core Competencies
- Core Competencies in Investment Banking

Topic 2: Building Trust & Relationships
- What Do You Think?
- Building Trust with Clients
- Managing Client Requirements
- Role of Senior Bankers

Topic 3: Managing Client Transactions
- Importance of Relationship Management
- Relationships with Selling Companies
- Client Relationship Milestones
- Core Aspects of Relationship Management
- Relationships with Buying Companies

Investment Banking – Commercial Awareness

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the key aspects of commercial awareness for investment bankers and how this awareness can be demonstrated and improved
- Recognize the different types of investment bank and the competitive environment in which they operate
- Identify the key sources of revenue for investment banks, including M&A advisory, debt and equity securities underwriting, and corporate restructuring

Tutorial Overview
Commercial awareness – the ability to understand a business and what makes it successful – is a highly-valued skill. This tutorial looks at the importance of commercial awareness for investment bankers. While there several aspects to obtaining and demonstrating commercial awareness, particular focus is paid to understanding how banks derive revenue from core/classic investment banking services and the competitive environment in that regard.

Prerequisite Knowledge
Investment Banking – Backpack to Briefcase

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Commercial Awareness Overview
- Commercial Awareness for Investment Bankers
- Demonstrating Commercial Awareness
- Improving your Commercial Awareness

Topic 2: Competitive Environment
- Investment Banking Activities
- Investment Banking Competitors

Topic 3: Revenue Sources
- M&A
- M&A revenues
- Underwriting
- Equity Capital Markets (ECM)
- ECM Revenues
- Initial Public Offerings (IPOs)
- IPO Revenues
- Debt Capital Markets (DCM)
- Other Debt Teams
- DCM Revenues
- Restructuring (RX)
- What Do You Think?
- RX Revenues

Investment Banking – Negotiation Skills

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify how the context for an M&A transaction can influence the negotiations during the deal process
- Recognize the different strategies and styles used by the negotiating parties in an M&A deal
- Identify the importance of different fee structures when negotiating fees with clients for advising on M&A deals

Tutorial Overview

Winning and closing deals is a consequence of good negotiation. But even the best investment banking advisors are not necessarily great negotiators. This tutorial looks at some of the key negotiation issues and considerations for bankers. The focus is on M&A deals, where negotiation skills are particularly crucial, but some of the material can be applied to other investment banking roles where negotiation with clients and/or other parties is involved.

Prerequisite Knowledge

Investment Banking – Commercial Awareness

Tutorial Level: Introductory

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Context for Negotiations

- Context for M&A Negotiations
- Differing Motivations
- Buyer Motivations (Strategic Purchases)
- Buyer Motivations (Financial Sponsor Purchases)
- Seller Motivations

Topic 2: Negotiation Strategies

- Negotiation Matrix
- Contextualizing the Negotiation Matrix
- Negotiating Value
- Negotiating Terms: Asset vs. Share Purchase
- Negotiating Terms: Method of Payment
- Making Concessions
- Walking Away

Topic 3: Negotiating Fees

- Negotiating Fees with Clients
- Fee Structures

Investment Banking – Personal Branding

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the critical successful factors involved in managing your personal brand
- Recognize the importance of communicating your success in order to promote your personal brand
- List the personal preferences, traits, and values that influence your personal brand

Tutorial Overview

It is often said that when it comes to your reputation, perception is reality. If this is true, then it is important to understand what the perception of you is, and to manage it carefully. For a successful investment banking career, it is very important that you develop and uphold your own brand. This tutorial provides an overview of personal branding for junior investment bankers.

Prerequisite Knowledge

Investment Banking – Backpack to Briefcase

Tutorial Level: Introductory

Tutorial Duration: 25 minutes

Tutorial Outline

Topic 1: Managing Your Brand

- Critical Success Factors

Topic 2: Communicating Your Successes

- Promoting Your Personal Brand
- Tips for Communicating Success

Topic 3: Personal Preferences, Traits, & Values

- Is Investment Banking For You?
- Differing Personalities
- What Do You Think?
- Personal Values
- Personal Social Media

Investment Banking – Pitch Books

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the purpose of a pitch book and the different types of pitch book that investment bankers create
- Recognize the difference between a pitch book and a confidential information memorandum (CIM)
- List and describe the key components of a typical pitch book
- Recognize how to make appropriate use of Microsoft PowerPoint when building pitch books

Tutorial Overview
A pitch book is a document used by investment banks when pitching to clients or investors. Junior analysts working at these banks spend a significant amount of their time creating and editing pitch books for senior bankers. This tutorial describes pitch books in detail, including their key components and the use of PowerPoint to build them.

Prerequisite Knowledge
Investment Banking – Backpack to Briefcase

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Pitch Book Basics
- What is a Pitch Book?
- Types of Pitch Book
- Pitch Book Structure & Components
- Evolution of Pitch Books
- Pitch books vs. CIMs

Topic 2: Pitch Book Components
- Introduction
- Credentials
- Market Update
- Executive Summary
- Company (Client) Background
- Industry Background
- Deal Analysis/Valuation
- Appendix

Topic 3: Powerpoint for Pitch Books
- Role of Powerpoint
- Formatting
- Importing Images & Other Information
- Reviewing & Checking Your Work
- Design

Investment Banking – The Deal Team

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the structure and composition of a typical investment banking deal team
- List the key members of the deal team and describe their role in the team

Tutorial Overview
The size and nature of an investment banking deal team depends on the type of deal in question. However, investment banking is structured in such a way that there is a broad consensus as to the tasks performed by different members of a deal team. This tutorial describes the role of analysts, associates, and more senior members of the team in detail.

Prerequisite Knowledge
Investment Banking – Backpack to Briefcase

Tutorial Level: Introductory
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: Deal Team Overview
- Deal Team Structure & Composition

Topic 2: Analyst
- Role of Analysts
- What Do You Think?

Topic 3: Associate
- Role of Associates

Topic 4: Vice-President (VP)
- Role of VPs
- Scenario: Junior vs. Senior VPs

Topic 5: Director/Executive Director
- Role of Directors/Executive Directors

Topic 6: Managing Director (MD)
- Role of MDs

Investment Banking – Time Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the role of investment bank staffers in scheduling junior bankers' time and how analysts can best navigate the staffing process
- Identify how analysts can the manage the expectations of managers/senior bankers that have requested their time
- Avoid the common time management mistakes that many junior bankers make
- Make use of some tips that can help analysts to stay on top of their time management

Tutorial Overview
Working hours for junior investment banking staff can be notoriously long, but the need for analysts to work long hours and pull all-nighters is sometimes compounded by poor time management and planning. This tutorial describes how an analyst's time is managed in a typical investment bank. It includes coverage of the role of "staffers," managing senior bankers' expectations, avoiding common pitfalls, and some time management tips.

Prerequisite Knowledge
Investment Banking – Backpack to Briefcase

Tutorial Level: Introductory
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: Time Management & Staffing Processes
- Time Management for Junior Bankers
- Role of Staffers
- Navigating the Staffing System
- Successful Staffing
- Scenario: Staffing for a Pitch Book

Topic 2: Managing Expectations
- Managing Expectations From Managers
- Tips for Managing Expectations
- Scenario: Managing Expectations

Topic 3: Time Management Pitfalls & Tips
- Common Pitfalls
- Tips for Staying on Top of Time Management
- Scenario: Managing Conflicts

Investment Policy Statements

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the purpose of investment policy statements in both an institutional and retail context
- Identify the key elements of a typical investment policy statement

Tutorial Overview
This tutorial describes the purpose of an investment policy statement and the core elements that comprise an IPS, such as provisions related to asset allocation, risk management and reporting, and performance monitoring. It also examines the delineation of duties both between and within investor and client organizations that must be described and specified by an IPS in order to promote accountability and responsibility.

Prerequisite Knowledge
Investment – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: Overview of Investment Policy Statements
- Overview of Investment Policy Statements
- What Is an Investment Policy Statement (IPS)?
- IPS: Retail vs. Institutional
- Purpose of an IPS

Topic 2: Key Elements of Investment Policy Statements
- Key Elements of Investment Policy Statements
- Scope & Governance
- Duties & Responsibilities
- Investment Objectives & Performance
- Risk Tolerance
- Asset Allocation
- Asset Allocation: Noninstitutional IPS
- Asset Allocation: Risk & Return Expectations
- Diversification
- Portfolio Rebalancing
- Portfolio Rebalancing: Parameters
- Portfolio Restrictions
- Risk Management
- Performance Monitoring
- Performance Monitoring: Purpose

Ireland Anti-Money Laundering (AML)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define money laundering and terrorist financing and recognise the similarities and differences between the two crimes
- Identify the laws and regulations in relation to money laundering and terrorist financing and your associated obligation
- Recognise the importance of a firm's systems and controls in relation to managing financial crime risks

Tutorial Overview
This tutorial is a guide to controlling money laundering and terrorist financing risks for financial services staff at all levels. It details the relevant laws and regulations that firms and individuals need to follow, as well as the systems and controls that are used to manage financial crime risks. The information is pitched so that the tutorial is relevant to those with no experience of the Irish anti-money laundering (AML) and counter-terrorist financing (CTF) regime, although there is sufficient detail to make the tutorial useful to more senior managers as well.

Prerequisite Knowledge
No prior knowledge is assumed

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Money Laundering
- Need for Laundering Money
- What is Money Laundering?
- Legislative Treatment of Participation in ML
- Case Study: Money Laundering
- Trade-Based Money Laundering
- TBML: Moving Funds
- Scenario: Opening an Account
- Scenario: Conclusion

Topic 2: Terrorist Financing
- Overview of Terrorist Financing
- What is Terrorist Financing?
- Case Study: Terrorist Financing
- Innovation in Terrorist Financing
- Scenario: Charitable Organisation

Topic 3: Global Frameworks
- Global Nature of AML & CFT
- Case Study: Stage 1 (UK)
- Case Study: Stage 2 (France)
- Case Study: Stage 3 (Belgium)
- Case Study: Final Stage (Dubai)
- Global Response
- Financial Action Task Force (FATF)
- International Monetary Fund (IMF)
- AML & CFT Frameworks
- Laws & Regulations
- Transnational Application
- Case Study: Transnational Application

Topic 4: Detecting & Preventing ML

- Primary & Secondary Offences
- Secondary Offences: Failing to Report
- Case Study: Failing to Report
- Secondary Offences: Tipping Off
- Case Study: Tipping Off
- Secondary Offences: Impeding an Investigation
- Case Study: Impeding an Investigation
- Suspicious Activity Reports (SARs)
- Whistleblowing
- Scenario: Secondary Offences
- Scenario: Conclusion

Topic 5: AML Responsibilities

- Who is Responsible?
- Senior Management Responsibilities
- MLRO Responsibilities
- Individual Responsibilities
- Case Study: Individual Accountability

Topic 6: Systems & Controls

- Fighting Financial Crime
- AML Regime Elements
- Customer Due Diligence
- Customer Risk
- Know Your Customer (KYC)
- Case Study: Know Your Customer (KYC)
- Due Diligence Procedures
- High-Risk Customers
- Case Study: PEPs
- Recordkeeping Procedures
- Staff Training
- Case Study: Inadequate Systems & Controls

Ireland Anti-Bribery & Corruption (ABC)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of corrupt behaviour and the need to legislate against such behaviour
- Describe the types of offence under the Irish anti-bribery regime – bribing another person, accepting a bribe, bribing a foreign public official, and the corporate offence of failing to prevent bribery – and the consequences of being found guilty of an offence under the Act
- Recognise the importance of a firm's systems and controls in relation to managing bribery and corruption risks

Tutorial Overview
This tutorial is a guide for financial services staff at all levels to help them avoid the risks of bribery and corruption. The tutorial details the relevant laws and regulations that firms and individuals need to follow, as well as the systems and controls that are used to manage the risks associated with bribery and corruption. The information is pitched so that the tutorial is relevant to those with no experience of the Irish anti-bribery regime, although there is sufficient detail to make the tutorial useful to more senior managers as well.

Prerequisite Knowledge
No prior knowledge is assumed

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Bribery & Corruption
- Overview of Bribery & Corruption
- A Perspective on Corruption
- Definition & Types of Corruption
- Costs of Corruption
- Focus of Corruption Legislation
- Your Obligations

Topic 2: Statutory Framework
- Statutory Framework
- Transnational Legislation
- Criminal Justice (Corruption Offences) Act 2018
- Criminal Justice (Corruption Offences) Act 2018 (Cont'd)
- Part 2: Corruption Offences
- Small Print in Corruption Offences
- Bribery Act Prosecutions: Case Study
- Gifts & Hospitality
- Part 3: Corruption Occurring Partly Inside or Outside the State
- Bribing of Foreign Public Officials
- Failure of Corporate Organisations to Prevent Bribery
- Failure to Prevent Bribery: Case Study 1
- Failure to Prevent Bribery: Case Study 2
- Penalties
- Scenario: Tickets to the Rugby

Topic 3: Systems & Controls
- Systems & Controls
- Managing Bribery & Corruption Risks
- Proportionate Procedures
- Top-Level Commitment
- Risk Assessment

- Due Diligence
- Gifts & Hospitality Controls
- Scenario: Hospitality in the Algarve
- Communication & Training
- Reporting
- Monitoring & Review
- Whistleblowing

Islamic Banking & Finance – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain the core precepts of shari'a (Islamic law)
- Describe the main principles of Islamic finance, including the prohibition of riba and gharar
- Outline the key components of Islamic banking and finance
- Discuss the historical development of Islamic finance and its future challenges

Tutorial Overview
Islamic banking and finance has emerged as a viable alternative to conventional banking in recent years. The commitment to shari'a – Islamic religious law – is the backbone of Islamic banking. The prohibition of interest and speculation, as well as the carrying on of banking business in accordance with shari'a, are the basic principles underlying Islamic banking and finance. The financial world has begun to acknowledge the huge growth potential offered by the market and financial institutions ignore this potential at their peril.

This tutorial provides an overview of the key principles of Islamic banking and finance and simplifies some of the terminology used in the market. The key components of the Islamic financial system and the main standard-setting bodies are also discussed.

Prerequisite Knowledge
A basic understanding of conventional (non-Islamic) banking products/markets would be useful.

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Islamic Concepts & Principles
- Islamic Finance & *Shari'a*
- Sources of *Shari'a*
    - Primary Sources
    - Secondary Sources
- *Shari'a* & *Fiqh*
- Islamic Schools of Thought
- Islamic Bodies of Interpretation

Topic 2: Key Principles in Islamic Finance
- Prohibition of *Riba*
- Prohibition of *Gharar*
- Other Key Principles in Islamic Finance

Topic 3: The Islamic Banking & Finance System
- Key Components of Islamic Banking and Finance
    - Islamic Banking
    - *Takaful*
    - Islamic Capital Markets
    - Islamic Nonbank Financial Institutions
- Islamic Standard Setting Bodies and Regulators

Topic 4: The Historical Development of Islamic Finance
- History of Islamic Finance
    - Founding Period
    - Formative Period
    - Development Period
    - The Future of Islamic Finance

Islamic Banking & Finance – Financial Instruments

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the types of contract used in Islamic finance
- Outline the main shari'a-compliant deposit and investment products
- Examine the key forms of Islamic financing
- Discuss the main challenges facing Islamic finance

Tutorial Overview
Islamic financial instruments are shari'a-compliant deposit and investment products that are based on classical nominate contracts. These contracts are sufficiently flexible to cover many contemporary requirements. The market for Islamic financing products is dominated by banks, who engage in transactions that are based on real economic activity. Products that are haram (forbidden in Islam) are not offered. This tutorial looks at the key types of deposit and investment product offered by Islamic banks and examines the challenges faced by these banks as the market matures.

Prerequisite Knowledge
Islamic Banking & Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Islamic Law of Contract
- Contracts in Islam
- Principles Governing Islamic Contracts
- Nominate Islamic Contracts
    - Participating Contracts
    - Trading / Exchange-Based Contracts
    - Supporting Contracts

Topic 2: Islamic Banking: Deposits & Investments
- Overview of Islamic Financial Products & Services
- Islamic Deposits & Investments
    - Current Accounts
    - Savings Accounts

Topic 3: Islamic Banking: Modes of Financing
- Islamic Banking & Financing Activities
- Key Financing Techniques
    - *Murabaha*
    - *Ijara*
    - *Bai' Salam*
    - *Istisna'*
    - *Mursharaka*
    - *Sukuk*

Topic 4: Islamic Banking: Issues & Challenges
- Challenges for the Islamic Finance Industry
    - Regulation
    - Standardization
    - Dispute Resolution
    - Risk Identification & Management
    - Untapped Potential
    - Other Issues

Islamic Banking & Finance – Wealth Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain the importance of prudential imperatives and financial planning in Islamic wealth management
- Discuss the different types of investment available to Islamic wealth management customers
- Outline the issues and challenges facing the Islamic wealth management industry

Tutorial Overview
In this tutorial, we look at the emerging niche market of shari'a-compliant wealth management. Although dwarfed by its conventional counterpart, and facing significant challenges, this industry is making significant inroads, especially in the GCC states.

Prerequisite Knowledge
Islamic Banking & Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Wealth Management & Financial Planning
- Overview of Islamic Wealth Management
- Prudential Imperatives
- Types of Financial Planning
    - Investment Planning
    - Retirement Planning
    - Risk Management (*Takaful*)
    - Tax Planning
    - Estate Planning

Topic 2: Islamic Wealth Management & Investment
- Overview of Islamic Wealth Management & Investment
- Wealth Accumulation
- Wealth Protection & Risk Management
- Wealth Distribution & Estate Management
- Wealth Purification
    - *Zakat*
    - *Sadaqah*
    - Purification of Non-*Shari'a* Income

Topic 3: Islamic Wealth Management: Issues & Challenges
- Overview of Issues & Challenges in Islamic Wealth Management
- Audit
- Liquidity
- Credibility
- Performance

Islamic Money & Capital Markets

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Describe the key types of money market instrument used in Islamic finance
- Explain the main products used in Islamic capital markets
- Examine the key forms of Islamic financing
- Discuss the main challenges facing Islamic finance

Tutorial Overview

The Islamic financial markets can be broadly divided into sharia'-compliant money markets and capital markets. Modern financial markets, including depository institutions, cannot function without efficient and robust money markets. This is a challenge for Islamic finance as interest (riba) is forbidden and money market instruments are difficult to structure on a profit-loss sharing (PLS) basis. However, the industry is gradually witnessing more innovation and sophistication in money markets and is starting to address these challenges.

The other strand of Islamic financial markets is capital markets. Islamic finance has had its greatest success here – especially in the area of sukuk, the Islamic equivalent of conventional bonds, and Islamic funds.

This tutorial covers Islamic money and capital markets in detail. It describes the underlying principles that affect these markets, introduces various market instruments, and discusses equity screening criteria as well as the issues and challenges specific to Islamic markets.

Prerequisite Knowledge

Islamic Banking & Finance – Financial Instruments

Tutorial Outline

Topic 1: Islamic Money Markets

- Overview of Islamic Money Markets
- Types of Instrument
    - Equity-Based Instrument
    - Debt-Based Instruments
    - Other Islamic Money Market Instruments

Topic 2: Islamic Capital Markets

- Overview of Islamic Capital Markets
    - Islamic Funds
    - Islamic Funds: Indices

IT Systems & Architecture

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key considerations when defining the purpose of a technology solution
- Compare different technology project management styles, including formal methods, plan-based methods, and value-based methods such as agile
- Distinguish between system and software architecture and name and define different approaches to these
- Define the technology stack
- Recognize the functions of libraries and application programming interfaces (APIs)
- Identify the components of popular technology stacks and name their functions

Tutorial Overview
Implementing a new technology solution is a complex process that involves multiple decision-making stages. Businesses must define the goals of the proposed solution, select an appropriate project management approach, and design suitable system and software architectures. Implementing a technology solution means building a stack of interoperable and complementary components that, together, deliver the necessary functionality. This process entails selecting different components and combining them in the most effective way. This tutorial provides an overview of the key decisions necessary when designing a new system and explores the various options available.

Prerequisite Knowledge
Information Technology (IT) In Business

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Technology Solution Purpose
- System Design Overview
- Defining The Technology Solution
- Scaling & Future Development
  - Volume of Data
  - Number of Simultaneous Interactions
  - Rate of Interactions
- Vertical Scaling
- Horizontal Scaling

Topic 2: Project Management Style
- Project Management Style Overview
- Formal Methods
- Plan-Based Methods
- Value-Based Methods

Topic 3: Software & System Architecture
- Technology Architecture Overview
- Software Architecture
  - Three-Layered Architectures
  - Service-Oriented Architectures
  - Representational State Transfer Architectures
- System Architectures
- Centralized: Client-Server Systems
- Decentralized: Peer-To-Peer Networks

Topic 4: Technology Stack Overview
- What is a Technology Stack?

- Libraries
- Application Programming Interfaces (APIs)
- Interaction Between Libraries & APIs

Topic 5: Building The Technology Stack

- System Components
- Lamp Stack
    - Linux Operating System
    - Apache Web Server
    - MySQL/MariaDB Database
    - Php/Python/Perl Scripting
- Front-End
- Other Stacks
    - WINS
    - MEAN
    - XAMPP
- Building The Stack

Japan Anti-Money Laundering (AML)

Tutorial Description
Objectives.
On completion of this tutorial, you will be able to:

- Define money laundering and list its stages.
- Define terrorist financing and list its stages.
- Describe the Japanese laws and regulations in relation to money laundering and terrorist financing.
- Identify the responsibilities of the various participants.
- List the systems and controls a firm should employ in relation to managing financial crime risks.

Tutorial Overview.
The growth in international crime and terrorism has seen greater efforts by criminals to unearth new ways of integrating their illicit funds into financial markets. Financial centres are the target of lucrative, highly skilled organised crime networks that range from small local gangs to large trans-regional operations with the sophistication, organisation and facilities of a major corporations. Identifying and bringing to justice those who help launder illicit funds is a priority for both governments and financial markets regulators. You have an important part to play in this work – ignorance is no longer a valid form of defence. The penalties for non-compliance can include a fine and/or a custodial sentence.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Money Laundering
- Why Do Criminals Launder Money?
- What is Money Laundering?
- Legislative Treatment of ML Stages
- Case Study: Money Laundering
- Trade-Based Money Laundering
- TBML: Moving Funds
- Scenario: Opening an Account
- Apply your Knowledge
- Apply your Knowledge
- Scenario: Conclusion

Topic 2: Terrorist Financing
- Overview of Terrorist Financing
- What is Terrorist Financing?
- Case Study: Terrorist Financing
- Innovation in Terrorist Financing
- Scenario: Charitable Organization
- Apply your Knowledge
- Apply your Knowledge
- Scenario: Conclusion

Topic 3: Global Frameworks
- Global Nature of AML & CFT
- Case Study: Stage 1 (UK)
- Case Study: Stage 2 (France)
- Case Study: Stage 3 (Belgium)
- Case Study: Final Stage (Dubai)
- Global Response
- Financial Action Task Force (FATF)

- International Monetary Fund (IMF)
- AML & CFT Frameworks
- Laws & Regulations
- Transnational Application
- Case Study: Transnational Application

Topic 4: Detecting & Preventing ML

- Primary & Secondary Offences
- Secondary Offences: Failing to Report
- Case Study: Failing to Report
- Secondary Offences: Tipping Off
- Case Study: Tipping Off
- Secondary Offences: Impeding an Investigation
- Case Study: Impeding an Investigation
- Suspicious Activity Reports (SARs)
- Whistleblowing
- Scenario: Secondary Offences
- Apply Your Knowledge
- Apply Your Knowledge
- Scenario: Conclusion

Topic 5: AML Responsibilities

- Who is Responsible?
- Senior Management Responsibilities
- MLRO Responsibilities
- Individual Responsibilities
- Case Study: Individual Accountability

Topic 6: Systems & Controls

- Fighting Financial Crime
- AML Regime Elements
- Customer Due Diligence
- Customer Risk
- Know Your Customer (KYC)
- Case Study: Know Your Customer (KYC)
- Due Diligence Procedures
- High-Risk Customers
- Case Study: PEPs
- Recordkeeping Procedures
- Staff Training
- Case Study: Inadequate Oversight

Japanese Bond Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the significance of the Japanese bond market
- List the relevant regulatory authorities of the Japanese bond market
- Recall the different bond types issued by the Japanese Government
- Identify the different corporate and other such bonds issued by private institutions
- Recognize the developments and challenges in the Japanese bond market

Tutorial Overview
This tutorial takes a look at the Japanese bond markets, one of the biggest in the world. The first section explains the composition of the market and how it is dominated by the government sector, while the second section provides an overview of the different regulators that are relevant for the bond market.

We then go on to talk about the government bond market and the corporate bond markets. Finally, we look at the recent developments in the market and its ongoing challenges.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview
- Significance of the Japanese Bond Market
- Brief History of Japanese Debt
- Sustainability of Japanese Debt
- Japanese Government Borrowing
- Fiscal Investment & Loan Program Bonds
- Breakdown of Government Expenditure
- Pricing

Topic 2: Regulatory Framework
- Financial Authorities
- Self-Regulatory Organizations
- SROs in the JGB & Corporate Bond Markets
- Foreign Investors
- Withholding Tax
- Clearing & Settlement

Topic 3: Public Bonds
- Overview of Public Bonds
- Japanese Government Bonds (JGBs)
- JGBs for Individual Investors
- Inflation-Indexed Bonds
- Treasury Bills
- Issuance of JGBs
- Composition of Outstanding JGBs
- Government Agency Bonds
- Local Government Bonds
- Other Japanese Government Bonds

Topic 4: Corporate Bonds
- Overview of the Corporate Bond Market

- Composition of Corporate Bond Market
- Straight Corporate Bonds
- Bank Debentures
- Asset-Backed (Securitized) Corporate Bonds
- Samurai Bonds

Topic 5: Developments

- Historical Developments
- Other Developments
- Challenges to the Japanese Bond Market

Japanese Equity Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the stock exchanges, market regulators, stock indexes, and types of security in the Japanese market
- Describe the listing, trading, and settlement procedures for equities in Japan

Tutorial Overview
This tutorial examines in detail not only the Japan Exchange Group, which includes the Tokyo Stock Exchange, but also the Japanese equity market as a whole. It provides a detailed introduction to various aspects of Japanese equity securities, including the history and development of the market, the various securities traded and trading locations, leading stock indexes, listing requirements and procedures, and trading operations.

Prerequisite Knowledge
Equities – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Overview of the Japanese Equity Market
- Size of the Japanese Equity Market
- Japanese Stock Exchanges
- Types of Stock
- Issuing Procedures
- Stock Exchange Listings
    - Listing Procedures
    - Listing Criteria
- Market Regulation

Topic 2: Trading Processes
- Trading Procedures
- Price Determination
- Trading Hours & Systems
- Clearing & Settlement
- Stock Indexes
- Charges, Fees, & Taxes

Kingdom of Bahrain Anti-Money Laundering (AML)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the purposes, methods and stages of the money laundering process
- Recognize high-risk transactions and best practices for countering money laundering
- Describe the roles played by the Kingdom of Bahrain's regulatory and enforcement agencies as well as international bodies in the fight against money laundering
- Be aware of your obligations under Bahraini laws and regulations
- Cite the penalties imposed for non-compliance
- Describe the challenges involved in recognizing terrorist financing

Tutorial Overview
The need to launder illicit funds is an ongoing problem for criminals. With electronic monetary transactions dominating the day-to-day functioning of the financial system, criminals are inventing increasingly sophisticated means of hiding dirty money. The Financial Action Task Force - a specialist anti-money laundering agency - has put financial institutions and their employees on the frontline of the battle against money laundering.

This course surveys the money laundering situation in the Kingdom of Bahrain and explains the stages and ways in which money is laundered. It describes the best practices and legislation that financial institutions and other designated bodies need to follow to counter money laundering. The course also looks at the problem of terrorist financing.

Prerequisite Knowledge
No prior knowledge is assumed for this tutorial.

Tutorial Level: Introductory
Tutorial Duration: 90 minutes

Tutorial Outline
Topic 1: Money Laundering Definition, Stages, Typologies & Detection
- What is Money Laundering?
- Stages of Money Laundering
- The Placement of Money in the Financial System
- Hiding Dirty Money (Layering)
- Businesses & Countries Typically Used for Money Laundering
- Money Laundering Typologies
- Detecting Money Laundering
- Money Laundering: Consider this Example

Topic 2: Customer Due Diligence Requirements
- Customer Due Diligence Requirements
- Enhanced Due Diligence (EDD) Measures
- Scenarios Requiring Enhanced Due Diligence (EDD)

Topic 3: Combating Terrorist Financing
- Funding Terrorism
- What Makes Terrorism Difficult to Detect?
- Sources of Funding
- Terrorism Financing in Action

Topic 4: Screening Measures
- Screening Measures

Topic 5: Money Laundering Reporting Officer (MLRO)
- Money Laundering Reporting Officer (MLRO)

Topic 6: Internal Money Laundering Suspicious Transaction Reporting
- Suspicious Transaction Reporting
- Scenario: Preventing Money Laundering in Practice: Deposits & Withdrawals
- Scenario: Account Closure
- Scenario: Foreign Exchange Transactions
- Scenario: Account Transfer
- Scenario: Finance Clearance
- Scenario: Customer Identification

Topic 7: Training & Record Keeping
- Training & Record Keeping

Topic 8: Departmental Checklist
- Departmental Checklist

Topic 9: Overview of Kingdom of Bahrain’s Legal & Regulatory Framework
- Overview of Bahrain’s Legal & Regulatory Framework

Topic 10: Non-Compliance Consequences
- Non-Compliance Consequences

Labor Market Indicators

Tutorial Description
Objectives

On completion of this tutorial, you will be able to:

- Define labor markets and recognize their importance
- Identify the key components of labor markets
- List key labor market indicators and what they measure
- Distinguish the impact labor market indicators may have on asset markets, including fixed-income, equity, and foreign exchange markets

Tutorial Overview
Labor market indicators provide important information about the state of the labor market. The labor market has important implications for the health of the economy and for inflation, and therefore market participants often pay close attention to labor market indicators. Large or unanticipated changes in labor market indicators have the potential to affect financial markets. This tutorial provides a high-level overview of labor markets and highlights key labor market indicators.

Prerequisite Knowledge
Employment & Unemployment – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Labor Market Overview
- What Is the Labor Market?
- Key Concepts

Topic 2: Labor Market Indicators
- Overview
- Labor Market Indicators & Business Cycles
- Labor Market Indicators & Inflation
- Unemployment Rate
- Employment Measures
- Labor Force Participation Rate
- Underemployment Measures
- Hours Worked
- Job Vacancies
- Labor Cost/Earnings Growth
- Other Labor Market Indicators
- Interpreting Labor Market Indicators
- Scenario: Interpreting Labor Market Indicators

Topic 3: Labor Market Indicators & Markets
- Labor Market Indicators & Stock Markets
- Labor Market Indicators & Bond Markets
- Labor Market Indicators & Currency Markets

LBO Model Building – Excel Interactive

Tutorial Description
Overview
This tutorial describes the structure and key components of a simple LBO model. This model is not designed to be exhaustive and cover every eventuality or scenario, but aims to explain the basic forecasts and calculations that analysts put together to determine whether a potential leveraged buyout would be viable.

Prerequisite Knowledge
Corporate Valuation – LBO Analysis

Level: Intermediate
Duration: 30 minutes

Letters of Credit – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define a letter of credit and recognize its role in facilitating payment for trade transactions
- Identify the steps involved in a typical letter of credit transaction
- Recognize the benefits and drawbacks of letters of credit from the point of view of buyers/importers, sellers/exporters, and the various banks involved in the process

Tutorial Overview
Letters of credits (L/Cs) are a long-established payment method used for trade transactions, particularly international trade. In essence, an L/C substitutes the credit risk of the buyer with that of the buyer's bank (issuing bank) for the purpose of facilitating trade. This tutorial provides an introduction to L/Cs, including coverage of their various features, the L/C lifecycle, and the parties involved in that lifecycle.

Prerequisite Knowledge
Trade Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline:
Topic 1: L/Cs Overview
- L/Cs Overview
- What is a Letter of Credit (L/C)?
- Parties to an L/C
    - Issuing Bank
    - Beneficiary
    - Applicant
    - Advising Bank
    - Confirming Bank
    - Negotiating Bank
    - Nominated Bank
    - Reimbursing Bank

Topic 2: L/C Types
- Clean vs. Documentary L/Cs
- Payment Terms For L/Cs
    - Sight
    - Usance
    - Deferred
- Revocable vs. Irrevocable L/Cs
- Transferable L/Cs
- Back-To-Back L/Cs
- Confirmed vs. Unconfirmed L/Cs
- Red & Green Clause L/Cs
- Standby L/Cs

Topic 3: L/Cs Process
- Lifecycle of an L/C
- Handling Discrepancies
- Full vs. Partial negotiations
- Revolving LC/s

Topic 4: L/Cs Benefits & Drawbacks

- Buyer's Perspective
- Seller's Perspective
- D/P vs. D/A Terms
    - Buyer Power
    - Market Conditions
    - Pricing
- Risks Associated With L/Cs: Buyers & Sellers
- Risks Associated With L/Cs: Banks
    - Credit Risk
    - Operational Risk
    - Country Risk
    - Market Risk
    - Reputational Risk
- Risk-Sharing L/Cs
    - Syndications
    - Club Deals
    - Risk-Sharing Agreements
- Risk-Sharing L/Cs: Considerations
    - Indemnities
    - Obtaining Agreements
    - Reimbursement
- Source of Income For Banks
    - Fee Income
    - Other Sources of Income
- Source of Income For Banks: Analysis

Letters of Credit in Practice

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the steps involved in the lifecycle of a standard letter of credit (L/C) and the role of the various participants
- Recognize the impact of amendments, discrepancies, and L/C variants on the lifecycle
- Recognize the accounting treatment of L/Cs from the issuing bank's perspective

Tutorial Overview
A trade transaction involving a letter of credit from issuance through to negotiation and payment can be a lengthy process. This tutorial describes that process in detail, including the impact of factors such as amendments, discrepancies, and variants of standard L/Cs.

Prerequisite Knowledge
Letters of Credit – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: L/C Lifecycle in Practice
- Lifecycle of a Trade Transaction
- Six Steps in Trade Transaction
- Step 1: Contract of Sale
    - New vs. Existing Relationship
    - One-Off vs. Ongoing Business
    - Complexity of the Transaction
- Step 2: L/C Issuance
    - Completeness & Accuracy
    - Security
    - Speed
    - Automated Processing
- L/C Issuance: Key Requirements
- Step 3: L/C Advising & Confirming
    - Branch/Subsidiary
    - Correspondent Bank
    - Nominated Bank
- Confirming an L/C
- Preshipment Period
- Step 4: Shipment
- Step 5: Negotiation
    - Not Negotiate
    - Negotiate
- Step 6: Payment
    - Issuing Bank
    - Reimbursing Bank
    - Confirming Bank
- Scenario: L/Cs for Coffee Transactions

Topic 2: Amendments & Discrepancies
- Problematic L/C Lifecycle Assumptions
- Amendments
- Making & Agreeing Amendments
    - Agreement of Buyer
    - Agreement of Issuing Bank
- Discrepancies

- Handling Discrepancies
    - Request Approval
    - Negotiate with Recourse
    - Refuse to Negotiate
- Full vs. Partial Negotiations
    - Full Negotiation
    - Partial Negotiation

Topic 3: L/C Variants

- Types of Variation
    - Red/Green Clause L/Cs
    - Standby L/Cs
- Revolving L/Cs
    - Cumulative
    - Noncumulative
- Transferable L/Cs
    - Impact on the L/C Lifecycle
- Back-to-Back L/Cs
    - Impact on the L/C Lifecycle
- Syndicated L/Cs
    - Impact on the L/C Lifecycle

Topic 4: Accounting for the L/C Lifecycle

- Accounting Treatment of L/Cs

Life of a Trade – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key stages of the trade lifecycle, including pre-trade, trade execution, trade clearing, trade settlement, and post-trade position management
- Recognize some of the major traded asset classes and different types of trade
- Identify the key participants in a trade, including the various intermediaries involved
- Recognize features of market evolution such as growing automation, the role of AI and machine learning, and efforts to shorten settlement cycles

Tutorial Overview
The life of a trade does not begin and end with the simple exchange of securities and cash between two counterparties. Instead, a trade's lifecycle is an involved multistage process requiring the participation of numerous entities and systems. This tutorial introduces the trade lifecycle, its various stages, and the key participants at each stage. The tutorial also describes some of the major traded asset classes, different types of trade such as long and short positions, and features such as straight-through processing (STP) that define modern trading.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Trade Lifecycle
- What is the Life of a Trade?
- Trade Lifecycle: Key stages
- Pre-Trade: Sell-Side vs. Buy-Side
- Pre-Trade: Client Onboarding
- Trade Execution
- Trade Clearing & Settlement
- Trade Clearing: Essential Steps
- Trade Settlement
- Post-Trade Position Management

Topic 2: Asset Classes & Traded Products
- Major Traded Asset Classes
- Single Positions vs. Indices/Baskets
- Cash vs. Derivatives
- Trading on Margin
- Securities Lending
- Long vs. Short Positions

Topic 3: Market Participants
- Buy-Side & Sell-Side
- Front, Middle, & Back Offices: Key Roles
- Front, Middle, & Back Office Segregation
- Key Intermediaries
- Key Intermediaries: Trade Execution
- Key Intermediaries: Clearing & Settlement
- Regulators

Topic 4: Market Evolution
- Automation
- Straight Through Processing (STP)

- Systematic Trading
- Toward Shorter Settlement Cycles

Life of a Trade – Pre-Trade

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the procedures that need to be completed before an institution can trade with a client
- Recognize various aspects of the pre-trade planning process from a client's perspective, and list some of the methods by which clients look to generate and monetize trade ideas

Tutorial Overview
Before an institution can trade with a client, several procedures need to be completed. This tutorial describes some of these procedures, such as client onboarding, including various regulatory and compliance checks to ensure that an institution is legally permitted to retain the client. The tutorial also explores the pre-trade planning process from a client perspective, including their motivations for trading, transaction cost analysis (TCA), and pre-trade risk controls, as well as different methods used by different clients to generate and monetize trading ideas.

Prerequisite Knowledge
Life of a Trade – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Client Onboarding
- Pre-Trade: Sell-Side Preparation
- What is Client Onboarding
- Onboarding Process
- Soliciting & Facilitating Request
- Performing Due Diligence
- Establishing Credit Terms
- Executing Legal Agreements
- Client Set-Up
- AML & CFT
- FATF: AML & CFT
- FATF: CDD
- FATF: PEPS
- KNOW YOUR CLIENT/CUSTOMER (KYC)
- Benefits of KYC

Topic 2: Pre-Trade Planning
- Client Perspective
- Pre-Trade: Client Motivations
- Client's Due Diligence Procedures
- Suitability
- Pre-Trade TCA
- TCA Process
- Pre-Trade Risk Controls
- Idea Monetization
- Idea Generation

Life of a Trade – Execution

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify key trading mechanisms and their distinguishing features
- Name some of the trading venues and systems that enable order routing and trade execution
- Define some of the more commonly used trade orders
- Recognize a typical trade flow process in today's markets and some of the key principles of execution

Tutorial Overview
While trade execution is usually the shortest stage of a trade's lifecycle, the infrastructure and processes that support it can be quite elaborate. This tutorial provides an overview of the execution stage of a trade's lifecycle, including trade execution in both quote-driven and order-driven mechanisms, and some of the venues and systems that handle trade execution in modern markets.

Prerequisite Knowledge
Life of a Trade – Pre-Trade

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Introduction to Trade Execution
- Trading Mechanisms: Key Types
- Trading Mechanisms: Further Distinctions
- Quote-Driven: Terminology
- Quote-Driven: How it Works
- Quote-Driven: Price Taker's POV
- Quote-Driven: Dealer's Risk
- Order-Driven: Key Features
- Order-Driven: Matching Buyers & Sellers

Topic 2: Trading Venues & Systems
- Trading Venues vs. Systems
- Exchanges
- OTC Markets
- Alternative Trading Venues
- Trade Order & Execution Systems
- Integrated Solutions

Topic 3: Order Placement
- Order Types
- Price-Related Instructions
- Time & Quantity-Related Instructions
- Multiple Instructions

Topic 4: Order Routing & Trade Execution
- Many Possibilities, One Common Feature
- Best Execution Principle
- High Touch vs. Low Touch Trading
- Typical Trade Order Flow

Life of a Trade – Clearing & Settlement

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the activities that take place after a trade is executed and the key participants in these activities
- Recognize the steps involved in the trade clearing process
- Identify the different trade settlement methods and the causes and consequences of settlement fails

Tutorial Overview
After a trade has been executed, several procedures are required before it can be viewed as complete. This tutorial explores these procedures, collectively referred to as clearing and settlement. The tutorial also lists some of the key participants and intermediaries in the process, describing the roles they play.

Prerequisite Knowledge
Life of a Trade – Execution

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Key Features & Participants
- Clearing & Settlement Overview
- Trade Date vs. Value Date
- Intermediaries: Trade Clearing
- CCP Intermediation
- Intermediaries: Trade Settlement
- CSD's Role
- Custodian's Role

Topic 2: Trade Clearing
- Trade Capture
- Trade Enrichment
- Trade Validation
- Trade Confirmation
- Trade Affirmation
- Trade Reporting
- Settlement Instructions
- Settlement Deadlines

Topic 3: Trade Settlement
- Settlement Methods: DVP & FOP
- Gross vs. Net Settlement
- Settlement Fails
- Settlement Fails: Risks & Consequences
- Settlement Fails: Buy-Ins & Sell-Outs

Life of a Trade – Post-Trade Position Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize different types of post-trade administration that holding securities requires
- Define post-trade TCA and list some of the methods used
- Name some of the key market events that investors monitor to manage their positions
- Recognize some of the methods used to track P&L and the P&L reporting requirements different institutions must fulfil
- Identify key sources of risk and some of the methods commonly used to measure and control risk

Tutorial Overview
Once a trade has been settled and has become a position on the books of a new owner, its lifecycle is not over. This tutorial describes some of the essential management required of a position in the post-trade environment, including asset servicing, ongoing monitoring of markets, post-trade transaction cost analysis (TCA), profit and loss (P&L) tracking and reporting, and risk management.

Prerequisite Knowledge
Life of a Trade – Clearing & Settlement

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Post-Trade Position Admin
- Overview of Post-Trade Position Management
- Post-Trade Reporting
- Post-Trade Reconciliation
- Asset Servicing Networks
- Corporate Actions: Categories
- Corporate Actions: Implications

Topic 2: Post-Trade TCA
- What is Post-Trade TCA
- TC Types
- TC Optimization

Topic 3: Position Monitoring
- Market Monitoring
- Market Developments

Topic 4: P&L Tracking
- Continuous Tracking
- P&L Reporting
- Other Considerations

Topic 5: Risk Management
- Risk Management Overview
- Sources of Risk
- Assessing Potential Losses
- VaR & Expected Shortfall: Example
- Sensitivity Measures
- Systematized Risk Management
- Controlling Risk

Life of a Trade – Scenario

Description
Overview
This scenario will follow a trade through its lifecycle, with a focus on the execution, clearing and settlement stages of the lifecycle. The trade takes place between a UK-based brokerage and US-based equity mutual fund that focuses on UK equities. The objective of this scenario is to provide an illustration of a typical trade that incorporates some (but not all) of the infrastructure, entities, and processes covered in the Life of a Trade tutorials.

Prerequisite Knowledge
A broad knowledge of the trade lifecycle and familiarity with the key personnel, systems, entities, and processes involved.

Tutorial Level: Intermediate
Tutorial Duration: 30 minutes

Liquid Alternatives

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the defining characteristics of liquid alternatives (liquid alts) and where they fit in the broader alternative investment complex
- List the main strategies employed by liquid alts
- Identify the key risks and regulatory concerns around liquid alts

Tutorial Overview
As publicly registered investment vehicles that employ alternative strategies, liquid alts are a niche market within the broader alternative assets/investments complex. This tutorial provides an overview of liquid alternatives, their key features, the strategies they use, and the risks they face.

Prerequisite Knowledge
Alternative Assets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Liquid Alts
- Liquid Alts Background
- What Are Liquid Alts?
- A Hedge Fund/Mutual Fund Hybrid?

Topic 2: Structures & Strategies
- Structures
- Strategies

Topic 3: Risks & Regulation
- Risks
- Regulation

Liquidity Risk – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the reasons why the nature of the banking business means that banks are particularly exposed to liquidity risk
- Identify the problems with liquidity risk management that were exposed by the global financial crisis and the regulatory response to this
- Recognize the relationship between asset-liability management and liquidity risk
- List the key components of a liquidity risk management framework

Tutorial Overview
Liquidity risk is the risk that a bank will be unable to fund an increase in its assets or meet its obligations as they fall due. Banks are particularly vulnerable to liquidity risk, as was proven during the financial crisis.

This tutorial examines why liquidity issues such as those experienced during the crisis can arise, and how both regulators and banks have changed their approach to assessing and managing liquidity risk since the crisis. The tutorial also introduces the concept of ALM and outlines how liquidity risk is managed as part of a bank's overall ALM strategy.

Prerequisite Knowledge
Risk Management – Risk Types & Measurement

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Liquidity Risk
- Overview of Liquidity Risk
- Vulnerability to Liquidity Risk
- Liquidity Risk: Case Study
- Factors Impacting Liquidity Risk

Topic 2: Regulatory Requirements
- Principles For Sound Liquidity Risk Management & Supervision
- Liquidity Risk Ratios
    - Liquidity Coverage Ratio (LCR)
    - Net Stable Funding Ratio (NSFR)
- Monitoring & Reporting Liquidity Risk
- Supervisory Oversight & Actions

Topic 3: Liquidity Risk Management
- Overview of Liquidity Risk Management
- Asset/Liability & Liquidity Risk Management
- Liquidity Management
- Liquidity Risk Management Framework (LRMF)
    - Resourcing
    - Policies
    - Committee Structures
    - Processes
    - Infrastructure
    - Authorities

Topic 4: Tools & Techniques for Managing Liquidity Risk
- Measuring Liquidity Risk
- Liquidity Risk Management Limits & Controls
    - Monitoring Current Values Against Limits

- Setting Limits
- Reporting

Liquidity Risk – Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the tools and techniques used to identify and address likely or potential funding needs and liquidity shortfalls
- Recognize the role of liquidity buffers and contingency funding plans (CFPs) should unexpected events occur
- Recall how assets and liabilities are managed by the bank as part of its funding and balance sheet management strategy
- Recognize how the management of liquidity risk can create other risks that need to be identified and effectively managed

Tutorial Overview
This tutorial focuses on some of the strategies that banks use to minimize liquidity risk and ensure they have adequate sources of funding in stress situations.

Prerequisite Knowledge
Liquidity Risk – Measurement

Tutorial Level: Intermediate
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Overview of Liquidity Risk Management
- Overview of Liquidity Risk Management
- Liquidity Risk Management Framework (LRMF)
    - Organizational Structure
    - Policies
    - Authorities
    - Committee Structures
    - Procedures
    - Infrastructure
- Liquidity Management

Topic 2: Managing Liquidity Risk
- Managing Intraday Liquidity
- Forward Planning
- Forward Planning: Factors
    - Peaks & Troughs
    - Holiday Periods
    - Internal & External Developments
- Funding Strategies
- Liquidity Buffers
- Stress Testing

Topic 3: CFPs
- Contingency Funding Plans (CFPs)
- CFPs: Central Bank Liquidity Support

Topic 4: Funding & Balance Sheet Management
- Funding & Balance Sheet Management
- Liability Management: Deposits
- Liability Management: External Borrowing
- Liability Management: Wholesale Funding
    - Interbank Loans
    - Repos

- Asset Management: Loans
- Asset Management: Liquid Assets
- Off-Balance Sheet Items

Topic 5: Risk Management & Reporting
- Liquidity & Other Risk Types
    - Operational Risk
    - Market Risk
    - Counterparty Credit Risk
    - Concentration Risk
- Liquidity Risk Reporting

Liquidity Risk – Measurement

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the role of liquidity gap analysis and cash flow forecasting in assessing liquidity risk
- Identify the various ratios that banks use to measure liquidity risk such as the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR)
- Recognize various key issues in liquidity risk measurement

Tutorial Overview
To ensure that a bank can meet all obligations on a daily basis, under both normal and stressed conditions, a variety of tools and techniques are used to assess, measure, and monitor liquidity risk. This tutorial describes many of these tools and techniques, including liquidity gap analysis, cash flow forecasting, and ratios such as the loan/deposit ratio, liquidity coverage ratio (LCR), and net stable funding ratio (NSFR).

Prerequisite Knowledge
Liquidity Risk – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Liquidity Gap Analysis & CF Forecasting
- Liquidity Gap Analysis
- Liquidity Gaps & Behavioral Aspects
    - On-Demand Deposits
    - Interbank Lending & Borrowing
    - Loan Repayments
    - Mortgages
- Cash Flow (CF) Forecasting
- Factors Impacting Cash Flows
    - Frequency
    - Know Events
    - Netting
    - Market Risk
    - Exchanges & Clearing Houses
    - Remaining Tenor
    - Competitor Actions
- Constructing Cash Flow Forecasts
- Constructing Cash Flow Forecasts: Volatility
- Managing Intraday Liquidity

Topic 2: Liquidity Coverage Ratio
- Liquidity Coverage Ratio (LCR)
- Liquidity Coverage Ratio (LCR): HQLAs
- HQLAs: Tiered Approach
    - Level 1
    - Level 2A
    - Level 2B
- HQLA Calculation: Example
- Net Cash Outflows

Topic 3: Net Stable Funding Ratio (NSFR)
- Net Stable Funding Ratio (NSFR)

Topic 4: Other Liquidity Measures

- Other Liquidity Measures
    - Liquid Assets Ratio
    - Loan/Deposit Ratio (LDR)
    - Other Ratios

Topic 5: Measurement Issues

- Measurement Issues

Loan Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall how traded loans have evolved into a distinct asset class
- Identify the major players in the loan market.
- Recognize the major players in the loan market and their motivations
- Identify the key elements of a secondary loan transaction

Tutorial Overview
This tutorial looks at the secondary market for loans, the key market participants, and the loan trading process from the trade date to final settlement.

Prerequisite Knowledge
Corporate Banking Products – Syndicated Lending

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: The Market for Loans

- Loans vs. High Yield Bonds
- Loans as an Asset Class
- Market Participants
- Lender Motivations

Topic 2: Features of the Loan Market

- Loan Prices & Yields
- Loan Indices & Derivatives

Topic 3: Loan Transfer

- Methods of Loan Transfer
- Novation
- Assignment
- Participation
- Documentation
- Transfer Issues

Topic 4: Trading Process

- Loan Trading Timeline
- Settlement Timeline: Summary
- Settlement Timeline: Impact of Technology

Logs – Excel Interactive

Tutorial Description
Overview
This tutorial uses video and interactive exercises to describe how log returns can be calculated using Microsoft Excel.

Prerequisite Knowledge
Indices, Exponents, Logarithms, & Geometric Series

Level: Introductory
Duration: 10 minutes

Lookup Functions – Excel Interactive

Tutorial Description
Overview
This tutorial is one of a series of tutorials that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and show how such functions can be used by financial market participants to increase the efficiency and effectiveness of their work. The focus here is on lookup functions.

Prerequisite Knowledge
Formulas & Calculation Functions (Part 2) – Excel Interactive

Level: Introductory
Duration: 40 minutes

Market Abuse (Europe)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognise the types of behaviour that constitute market abuse
- Identify the laws and regulations in relation to market abuse
- Recognise the importance of a firm’s systems and controls in relation to managing market abuse risks

Tutorial Overview
This tutorial is a guide for financial services staff at all levels to help them avoid the risks of:

- Breaching the standards of behaviour expected in relation to market abuse
- Becoming liable in civil law for breaches of these standards
- Committing criminal offences, such as insider trading and market manipulation

The tutorial details the relevant laws and regulations that firms and individuals need to follow, as well as the systems and controls that are used to manage market abuse risks. The information is pitched so that the tutorial is relevant to those with no experience of the Irish market abuse regime, although there is sufficient detail to make the tutorial useful to more senior managers as well.

Prerequisite Knowledge
No prior knowledge is assumed

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Market Abuse: Overview
- Definition of Market Abuse
- Types of Market Abuse
- Insider Dealing
- Insider Dealing: Case Study
- Improper Disclosure
- Market Manipulation
- Market Manipulation: Activities & Behaviours
- Market Manipulation: Abusive Practices
- Scenario: Identifying Abusive Practices
- Market Manipulation: Case Study

Topic 2: Statutory Framework
- Regulatory Background
- Key MAR Provisions
- Process Changes
- Market Soundings
- Communication of Information: Accepted Market Practices (AMPs)
- Investment Recommendations
- Insider Lists
- Insider Information: Case Study
- Issues Encountered by Firms

Topic 3: Systems & Controls
- Managing Market Abuse Risks
- Risk Assessment & Monitoring
- Funds or Assets Under Suspicion
- Record-Keeping
- Training & Awareness

- Whistleblowing
- Whistleblowing: Example Provisions
- Enforcement & Penalties
- Scenario: Funds Under Suspicion

Market Abuse (Ireland)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognise the types of behaviour that constitute market abuse
- Identify the laws and regulations in relation to market abuse
- Recognise the importance of a firm's systems and controls in relation to managing market abuse risks

Tutorial Overview
This tutorial is a guide for financial services staff at all levels to help them avoid the risks of:

- Breaching the standards of behaviour expected in relation to market abuse
- Becoming liable in civil law for breaches of these standards
- Committing criminal offences, such as insider trading and market manipulation

The tutorial details the relevant laws and regulations that firms and individuals need to follow, as well as the systems and controls that are used to manage market abuse risks. The information is pitched so that the tutorial is relevant to those with no experience of the Irish market abuse regime, although there is sufficient detail to make the tutorial useful to more senior managers as well.

Prerequisite Knowledge
No prior knowledge is assumed

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Market Abuse: Overview
- Definition of Market Abuse
- Types of Market Abuse
- Insider Dealing
- Insider Dealing: Case Study
- Improper Disclosure
- Market Manipulation
- Market Manipulation: Activities & Behaviours
- Market Manipulation: Abusive Practices
- Scenario: Identifying Abusive Practices
- Market Manipulation: Case Study

Topic 2: Statutory Framework
- Regulatory Background
- Key MAR Provisions
- Process Changes
- Market Soundings
- Investment Recommendations
- Insider Lists
- Insider Lists: Case Study
- Issues Encountered by Firms
- Market Abuse Legislation in Ireland
- Market Abuse Rules

Topic 3: Systems & Controls
- Managing Market Abuse Risks
- Risk Assessment & Monitoring
- Funds or Assets Under Suspicion
- Record-Keeping

- Whistleblowing
- Investigation & Settlement
- Scenario: Funds Under Suspicion
- Central Bank Enforcements: Case Study

Market Risk – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main types and sources of market risk
- Recognize the problems with market risk management that were exposed by the global financial crisis (GFC) and how regulators responded
- List the key components of a market risk management framework (MRMF) required for the effective identification, measurement, and management of market risk

Tutorial Overview
Market risk is the risk that the value of a position may rise/fall due to changes in the market prices or rates. This may take the form of gains/losses arising from traded or nontraded positions. There are many influences on market positions, but the key drivers are interest rates, equity prices, foreign exchange rates, and commodity prices.

This tutorial addresses some key issues associated with market risk: What is it? Where does it come from? How can it be managed effectively? And how has its management and regulation been influenced by market events such as the financial crisis and various rogue trader incidents?

Prerequisite Knowledge
Risk Management – Risk Types & Measurement

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Market Risk
- What Is Market Risk?
- Market Risk: Example
- Types of Market Risk
    - Interest Rate Risk
    - Equity Risk
    - FX Risk
    - Commodity Risk
- Sources of Market Risk
    - Trading Activities
    - Nontrading Activities

Topic 2: Regulatory Requirements
- Elements That Impact Market Risk Requirements
    - Trading Desks
    - Trading Book Vs. Banking Book
- Market Risk Models
    - Standardized Approach
    - Simplified Standardized Approach
    - Internal Models Approach

Topic 3: Overview of MRMF
- Overview of MRMF
- Organization Structure & Resourcing
    - Front Office
    - Middle Office
    - Back Office
- Infrastructure

- Policies
- Authorities
- Processes
- Committee Structures
- MRMFs & Rogue Trading Incidents

Market Risk – Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the impact of a bank's business strategy and risk appetitive on its exposure to market risk
- Identify the various strategies that banks can adopt to manage market risk
- Identify the limitations to market risk management, including those risks that are difficult to measure and manage
- Recognize why the Basel Committee on Banking Supervision (BCBS) was forced to make substantial revisions to the market risk regulatory framework, including the publication of revised rules for the Standardized Approach (SA) and Internal Models Approach (IMA) for calculating regulatory capital

Tutorial Overview
This tutorial looks at the strategies that banks can use to manage market risk and the limitations associated with market risk management. The tutorial also examines how regulators are continuously attempting to ensure that banks hold sufficient capital to cover market risk.

Prerequisite Knowledge
Market Risk – Measurement

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Managing Market Risk
- Business Strategy & Risk Appetite
- Strategies For Managing Market Risk
    - Diversification
    - Matched Trading
    - Hedging
- Limitations To Managing Market Risk
    - Limits to Diversification
    - Limits to Matching
    - Imperfect Hedges
    - Potential Illiquidity
    - Costs
    - Uncertainty
    - Other risks
- Market Risk: Measurement & Management Issues

Topic 2: Regulatory Requirements
- Regulatory Requirements for Market Risk
    - Standardized Approach
    - Simplified Standardized Approach
    - Internal Models Approach
- Market Risk Models
- Qualitative Requirements

Topic 3: Model Testing
- Backtesting
    - Firm-Wide Backtesting
    - Desk Level Backtesting
- Profit & Loss Attribution Testing

- Sensitivity Analysis & Stress Testing
- Stress Testing Framework

Market Risk – Measurement

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how the measurement of market risk has evolved from crude measures such as notional amounts in the early days to sophisticated modeling techniques
- Identify the various market risk measures and their limitations, including beta, duration, convexity, option Greeks, Value at Risk (VaR), and expected shortfall (ES)

Tutorial Overview
Accurate and reliable measurement of market risk enables banks to make decisions at a transactional, portfolio, and strategic level. It also provides evidence to regulators and other external stakeholders on the extent of a bank's risk exposures and how well they are being managed. But all market risk measures have their limitations. This tutorial describes these measures in detail and looks at the issues associated with their usage.

Prerequisite Knowledge
Market Risk – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Market Risk Measurement
- Overview of Market Risk Measurement
    - Transaction Approvals
    - Reporting
    - Risk Management
    - Backtesting
    - Stress Testing
    - Capital Requirements
- Evolution of Market Risk Measures
- Minimum Requirements for Measuring Market Risk
    - Data Quality
    - Timeliness
- Market Risk Measurement: Obtaining Market Prices
- Market Liquidity & Market Risk
    - Market Conditions
    - Ability to Trade at Reported Prices

Topic 2: Beta
- Overview of Beta
    - Choice of Time Period
    - Choice of Market Index
    - Choice of Data Set
- Portfolio Beta

Topic 3: Duration
- Calculating Duration
- Modified Duration
- Dollar Duration
- Portfolio Duration
- Some Properties of Duration

Topic 4: Convexity

- Convexity

Topic 5: The Greeks

- Overview of the Greeks
    - Delta
    - Gamma
    - Rho
    - Theta
    - Vega

Topic 6: VaR

- Calculating VaR
    - Tail Risks & Expected Shortfall (ES)
    - Historical Simulation
    - Variance-Covariance (Parametric) Approach
- VaR Breaks
- Tail Risks & Expected Shortfall (ES)

Markets Regulation – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify influential frameworks, bodies, and core principles of markets regulation
- Recognize key regulatory initiatives in the service of market transparency and investor protection

Tutorial Overview
As financial markets continually develop, and the number of tradable instruments and asset classes grows, markets regulation becomes increasingly complex and broad in scope. This tutorial introduces markets regulation, with a focus on the core objectives of transparency and investor protection and concrete measures designed to uphold those fulfill those objectives.

Prerequisite Knowledge
Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Markets Regulation Overview
- Activities Covered
    - Trading on Financial Markets
    - Asset Management
    - Investment Advice/Research
- Influential Frameworks
    - US
    - Europe

Topic 2: Market Transparency
- Asymmetries & Market Abuse
- Centralization & Automation
    - Trade Execution
    - Trade Clearing & Settlement
- High-Frequency Trading (HFT)
    - Spoofing
    - Layering
    - Front-Running
- Pre-Trade Disclosure Requirements
- Trade & Transaction Reporting

Topic 3: Investor Protection
- Suitability
- Asset Management
    - Liquidity
    - Disclosure/Transparency
    - Safeguarding
    - Diversification
- Investment Advice
    - Independence
    - Costs
    - Product/Service Packages
    - Sufficient Knowledge/Competence

Mathematical Operations – Excel Interactive

Tutorial Description
Overview
This tutorial is one of a series that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and show how they can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on mathematical operators.

Prerequisite Knowledge
Basic Operators – Excel Interactive

Level: Intermediate
Duration: 30 minutes

Mean, Median, & Mode – Excel Interactive

Tutorial Description
Overview
This tutorial uses video and interactive exercises to describe how measures of central tendency (mean, mode, and median) can be calculated using Microsoft Excel.

Prerequisite Knowledge
Distributions & Hypothesis Testing

Level: Introductory
Duration: 15 minutes

Menus & Shortcut Basics – Excel Interactive

Tutorial Description
Overview
This is the first in a series of tutorials that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and show they are used to increase the efficiency and effectiveness of work practices. The focus here is on Excel menus and keyboard shortcuts.

Prerequisite Knowledge
None

Level: Intermediate
Duration: 15 minutes

Merchant Services

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the competitive pressures on fees
- List the various initiatives acquirers do to take on clients
- Define the day-to-day operations of an acquirer
- Name the various add-on services provided by acquirers

Tutorial Overview
Merchant acquirers play a critical role in the cards and payments model. As intermediary between the merchant and the card issuer, they are central to card and payments acceptance.

Merchant acquirers primarily provide payment technology solutions to merchants. With the explosion of card not present (CNP) transactions on the back of strong internet penetration, the rise of e-commerce and mobile commerce and alternative payment types, payment solutions and their fee structures have had to adapt.

This tutorial provides a high-level overview of merchant services.

Prerequisite Knowledge
Payment Cards

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Merchant Acquirers
- Role of Merchant Acquirers

Topic 2: Merchant Acquiring
- Pricing & Revenue Model
- Shift to Fee-Based Revenue
- Types of Acquirer
- Segmentation of Customer Base
- Banks Relationships with Acquirers
- P&L Contribution of Acquiring Business
- Regulation & Merchant Acquiring

Topic 3: Merchant Acquiring Operations
- Merchant Acquisition & Onboarding
- Transaction Processing
- Risk Management & Fraud
- Anti-Fraud Measures
- Merchant Servicing & Relationship Management

Topic 4: Value-Added Services
- Acquiring in the Digital World
- E-commerce Services
- Data Services
- Dynamic Currency Conversion (DCC)
- Point of Sale (POS) Terminals
- POS Functionality

Mergers & Acquisitions (M&A) – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of M&A deal and the high-level process involved in such deals
- Recognize the methods that analysts use to value M&A deals (DCF analysis, trading comparables, and transaction comparables)
- Identify the key takeover defenses that target companies can use to repel hostile takeovers
- Recognize the different ways that companies can demerge or divest their assets
- Recognize the purpose behind special purpose acquisition companies (SPACs)

Tutorial Overview
Mergers and acquisitions (M&A) – also referred to as takeovers – are combinations of two or more companies. M&A transactions are part of everyday business life and some deals are quite high profile, running to many billions of dollars. This tutorial provides a high-level overview of the M&A world, including the role played by investment banking analysts in valuing such deals.

Prerequisite Knowledge
Corporate Finance – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of M&A
- Why Do We Have Mergers & Acquisitions (M&A)?
- Acquisition Process
- Friendly vs. Hostile Takeovers
- ESG Considerations in Mergers & Acquisitions
- Merger or Acquisition?

Topic 2: Integrating Companies
- How Companies Can Integrate
- Vertical Integration
- Horizontal Integration
- Conglomeration

Topic 3: Business Lifecycle
- M&A And The Business Lifecycle
- Scenario: Business Lifecycles

Topic 4: Deal Valuation
- Paying for a Target Company
- Target Company Valuation
- Determining an Appropriate Valuation Method
- Factors Affecting Valuation
- Scenario: Deal Valuation

Topic 5: Takeover Defenses
- Pre-Offer Defenses
- Post-Offer Defenses

Topic 6: Other Corporate Restructuring Events
- Restructuring Events

Topic 7: Special Purpose Acquisition Companies (SPACs)

- Overview of SPACs
- Lifecycle of a Special Purpose Acquisition Company (SPAC)
- Benefits of SPACs

Mergers & Acquisitions (M&A) – Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Determine whether a proposed M&A deal is EPS accretive or dilutive
- Identify the key strategic reasons and motivations for companies to make acquisitions
- Recognize the potential downsides of M&A deals

Tutorial Overview
One of the key reasons that companies make acquisitions is to realize the benefit of synergies. By combining together, the whole is expected to be stronger than the individual parts. But there are other motives for corporate acquisitions. This tutorial describes the financial and strategic motives for M&A deals and also examines the potential downsides of such deals.

Prerequisite Knowledge
Mergers & Acquisitions (M&A) – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Financial Motives for M&A

- EPS Accretion/Dilution Analysis
- Illustration of EPS Accretion
- Illustration of EPS Dilution
- EPS Bootstrapping

Topic 2: Strategic Motives for M&A

- Why do Companies Pursue an M&A Strategy?
- Synergies
- Product Diversification
- Product Lifecycle
- Scale
- Supply Chain Integration
- Other Motives

Topic 3: Downsides to M&A

- Potential Downsides

Merger Model Building – Excel Interactive

Tutorial Description
Overview
This tutorial describes the structure and key components of a simple merger analysis model. This model is not designed to be exhaustive and cover every eventuality or scenario, but it explains the key elements that an analyst tries to understand about a potential deal before commencing on a merger or acquisition assignment.

Prerequisite Knowledge
Corporate Valuation – Merger Analysis

Level: Intermediate
Duration: 30 minutes

MiFID II/MiFIR – Key Requirements

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the impact of the MiFID II regime on financial market participants and structures and par, including organized trading facilities (OTFs), systematic internalizers (SIs), derivative trading obligations, market access, and dark pools and broker crossing networks
- Identify how MiFID II aims to improve both pre- and post-trade transparency
- Recognize the importance of transaction reporting and governance under the MiFID II framework
- Quantify the impact of MiFID II on the various business lines of financial institutions

Tutorial Overview
MiFID II is a package of EU legislation that regulates firms who provide services to clients linked to financial instruments and the venues where those instruments are traded. This tutorial covers the main areas covered by the MiFID II regime, including market structure, market transparency, investor protection, and transaction reporting.

Prerequisite Knowledge
MiFID II/MiFIR – Primer

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Market Structure
- Organized Trading Facilities (OTFs)
- Systematic Internalizers (SIs)
- Changes to the SI Regime
- Derivative Trading Obligations
- Market Access
- Dark Pools & Broker Crossing Networks

Topic 2: Market Transparency
- Pre-Trade Transparency
- Post-Trade Transparency

Topic 3: Investor Protection
- Product Governance
- Investment Advice
- Suitability
- Suitability Reports
- Appropriateness
- Inducements
- Investment Research
- Best Execution
- Conduct of Business: Product Coverage

Topic 4: Transaction Reporting & Governance
- Transaction Reporting Requirements
- Commodity Derivatives: Limits & Trading Restrictions
- High Frequency Trading (HFT)
- High Frequency Trading: Controls
- Internal Control & Governance

Topic 5: Impact on Firms
- Impact on Firms
- High-Level Impact

- Buy-Side & Sell-Side Impact
- Third-Country Access
- Third-Country Access: Models

MiFID II/MiFIR – Primer

Description
Overview
This video provides a high level overview of the MiFID II/MiFIR regime in Europe. It covers topics such as the reasons why regulators decided to overhaul the original MiFID directive, the key areas addressed by the new regime, the affected parties, and the implementation timeline.

Prerequisite Knowledge
Financial Regulation – An Introduction

Level: Introductory
Duration: 9 minutes

Model Risk – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define a model and list the key stages of the model lifecycle
- Recognize why model risk is a concern for banks
- Identify the main regulatory requirements covering models
- Recognize the importance of model risk management
- Recall the role of AI and machine learning in model development

Tutorial Overview
Banks use models for a range of business and risk management objectives, such as credit decision making and the calculation of capital requirements. This tutorial looks at the lifecycle of a typical model, the management of model risk, regulatory requirements surrounding models, and the role of AI and machine learning in model development.

Prerequisite Knowledge
Risk Management – Risk Types & Measurement

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Models
- What Is a Model?
- Different Types of Model
    - Internal Models
    - Exposure Measurement Methodologies
    - Scorecards
- Model Lifecycle
- Developing a Robust Model
    - Clear Model Specifications
    - Adequate Data
    - Skilled Staff
    - Modeling Capabilities
    - Independence
    - Governance
    - Documentation
- Developing a Robust Model: Post-Approval

Topic 2: Model Risk
- What Is Model Risk?
- Why Is Model Risk a Concern?

Topic 3: Regulatory Requirements
- Regulatory Requirements for Models
    - Credit Risk Models
    - Market Risk Models
- Supervisory Oversight
    - Risk Management Frameworks
    - Capital Models
    - Other Models
- Supervisory Oversight: Actions

Topic 4: Model Risk Management
- Model Risk Management
- MRM Framework

- MRM Framework: Elements
    - Policy
    - Processes
    - Structure & Resourcing
    - Infrastructure
    - Authorities
- Minimizing Model Risk
- Minimizing Model Risk: Adjustments
    - Overrides
    - Post-Model Adjustments

Topic 5: Artificial Intelligence (AI) & Machine Learning (ML)

- Overview of AI & ML
- AI/ML & Model Risk
    - Biases
    - Overreaction
    - Lack of Oversight
    - Lack of Transparency
    - Data Quality
- Model Risk & Third-Party Suppliers

Model Risk – Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify regulatory approaches to model risk management (MRM)
- Recognize the importance of model identification, model risk rating, and model inventories
- Identify key model risk roles, responsibilities, policies, and procedures in MRM
- List the different stages of the model risk lifecycle and recall how risk is managed at each stage
- Recognize ongoing issues and challenges in MRM, such as data quality/quantity, technological challenges, fraud, and an ever-changing external environment

Tutorial Overview
Model risk is the potential for adverse consequences from model errors or the inappropriate use of modelled outputs to inform business decisions. This tutorial looks at how banks can manage model risk and keep it within risk appetite by putting a robust model risk management (MRM) and governance framework in place.

Prerequisite Knowledge
Model Risk – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Model Risk Management
- Model Risk Management (MRM)
- MRM Principles
    - Principle 1: Model Identification & Model Risk Classification
    - Principle 2: Governance
    - Principle 3: Model Development, Implementation, & Use
    - Principle 4: Independent Model Validation
    - Principle 5: Model Risk Mitigants

Topic 2: Model Identification & Risk Ratings
- Model Identification
- Model Risk Ratings
- Model Inventories

Topic 3: Model Risk Governance & Infrastructure
- Model Risk Management: Roles & Responsibilities
- Policies & Procedures
- Infrastructure & Resources

Topic 4: Risk Management & Model Lifecycle
- Model Development & Monitoring
- Model Implementation
- Performance Monitoring

Topic 5: Ongoing Issues & Developments
- MRM: Ongoing Issues
    - Data Quality/Quantity
    - Technological Challenges
    - Fraud
    - External Environment

Modern Slavery (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the scale of modern slavery
- Define the drivers of modern slavery
- List the forms that modern slavery can take
- Recognize the signs of modern slavery
- Compare international efforts to tackle the problem
- Determine how a business can conduct human rights due diligence to ensure there is no slave labor in its supply chain

Tutorial Overview
Modern slavery is one of the largest criminal activities in the world. It is estimated that global slavery generates as much as USD 150 billion in profits every year.

Around 50 million people worldwide are enslaved, more than at any other time in history.

This tutorial provides a high-level overview of modern slavery, discusses how to spot the signs of slavery, and presents a process to help ensure your business's supply chain is free of slave labor.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: What is Modern Slavery?
- The Problem of Modern Slavery
- Why Slavery Still Exists
- What Drives the Modern Slave Trade?
- Reluctance to Escape or Seek Help
- Case Study: Modern Slavery in Australia
- The Scale of the Problem

Topic 2: Types of Modern Slavery
- Modern Slavery: A Closer Look
- Types of Modern Slavery
- Case Study: Moderns Slavery in the UK
- Modern Slavery: Spot the Signs
- Case Study: Objective Evidence Requirement

Topic 3: Tackling Slavery
- International Organizations
- Modern Slavery in Supply Chains
- What Businesses Can Do
- Human Rights Due Diligence Process
- Five-Step Human Rights Due Diligence Process

Monetary Policy

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify key features and objectives of monetary policy
- Define some of the core monetary policy tools and recognize their role in the overall policy framework
- Recognize how monetary policy interacts with the real economy and some of the obstacles it faces

Tutorial Overview
Monetary policy is crucial to the smooth functioning of a modern economy, yet its role and implementation are not always well understood. This tutorial explores the fundamentals of monetary policy and why we need it, the authorities responsible for delivering it, the policy framework and tools used, and how monetary policy interacts with and is transmitted to the real economy.

Prerequisite Knowledge
Economic Indicators – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 90 minutes

Tutorial Outline
Topic 1: Monetary Policy Fundamentals
- When Money Fails
- Why We Need Monetary Policy
- Central Banks (CBs)
- Fighting Inflation & Deflation
- Money's Different Forms
- Broad, Base, & Narrow Money
- Monetary Aggregates
- Future Forms of Money
- CBDCs

Topic 2: Monetary Policy Tools
- Monetary Policy Framework
- Interest Rates: Base/Policy Rate
- Interest Rates: Floors & Corridors
- Open Market Operations (OMOs)
- QE Transaction: Balance Sheet Effects
- Standing Facilities
- Forward Guidance
- Reserve Requirements
- Monetary Policy Regimes

Topic 3: Monetary Policy & the Economy
- Monetary Policy: Basic Transmission Mechanism
- Key Drivers of Money Supply
- How Money is Created
- How Money is Destroyed
- Interest Rates & the Real Economy
- Interest Rates & Markets
- How Effective Is Monetary Policy
- Monetary Policy vs. Fiscal Policy
- Conclusion

Money Markets – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the money markets and how they differ from bond markets in terms of maturities and operations
- Identify the key role of interbank lending in the money market and how such lending was impacted by the global financial crisis
- Recognize the importance of the Fed funds market in the US
- Recall the main features of repurchase agreement (repos) and their key subtypes
- Identify other key money market instruments such as Treasury bills, commercial paper (CP), certificates of deposit, and FX swaps
- List the key risks associated with investment in money market instruments such as interest rate risk, credit risk, credit spread risk, counterparty risk, and liquidity risk

Tutorial Overview
This tutorial focuses on wholesale money markets, which are markets where the lending/borrowing or buying/selling of short-term funds and securities occurs between large institutions such as banks, institutional investors, corporations, and central banks. The tutorial discusses the main sectors and products of the money market and the key risks involved in trading and investing in money market instruments.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: What are Money Markets?
- What are Money Markets?
- Overview of Money Markets
- Secured vs. Unsecured Products

Topic 2: Interbank Lending
- Interbank Lending
- Overview of Interbank Lending
- Collapse of Liquidity in the Interbank Deposit Market
- Libor Replacement

Topic 3: Repurchase Agreements (Repos)
- Repurchase Agreements (Repos)
- Repo Structures
- Repos: Features
- Participants in the Repo Market
- Tri-Party Repos
- CCP Repos

Topic 4: Federal Reserve Requirements & Fed Funds
- Federal Reserve Requirements & Fed Funds
- Fed Funds & the Discount Window
- Asset-Liability Management (ALM)

Topic 5: Treasury Bills (T-Bills)
- Treasury Bills (T-Bills)

Topic 6: Certificates of Deposit & Commercial Paper
- Certificates of Deposit & Commercial Paper
- Certificates of Deposit
- Commercial Paper
- Asset-Backed Commercial Paper (ABCP)

Topic 7: Other Key Money Market Products
- Other Key Money Market Products
- Money Market Derivatives
- FX Swaps

Topic 8: Risks in Money Markets
- Risks in Money Markets
- Key Risks in Money Markets

Money Market Funds

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key features of MMFs and the influence of negative interest rates on them
- List the main types of money market fund, namely constant net asset value (CNAV), variable net asset value (VNAV), and low variable net asset value (LVNAV)
- Recognize the impact of share price rounding and accounting issues
- Recall US and European regulatory initiatives that impact MMFs

Tutorial Overview
This tutorial examines the important role played by money market funds (MMFs) in the wholesale money markets. It explores the difficulties that money market fund managers face in terms of counterparty credit risk and in identifying investment products that will deliver a better return than bank deposits. Key regulatory requirements in relation to issues such as credit quality, liquidity, diversification, and maturity are also discussed. Finally, the tutorial describes the accounting approach to the valuation of MMF assets and the use of net asset value (NAV) in this process.

Prerequisite Knowledge
Money Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Money Market Funds
- Overview of Money Market Funds
- Instruments in which MMFs Invest

Topic 2: Features of MMFs
- Key Features of MMFs
- Negative Interest Rates
- MMF Price Expectations

Topic 3: Types of MMF
- Key Types of MMF

Topic 4: Pricing & Accounting Issues
- Share Price Rounding
- Accounting Considerations

Topic 5: Regulatory Developments
- Key Regulatory Requirements
- EU Regulatory Initiatives
- First Mover Advantage
- US Regulatory Initiatives

Money Market Futures

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify key money market futures such as LIBOR and SOFR contracts
- Recall SOFR contract specifications and the calculation of the settlement rate
- Recognize the main uses of money market futures, such as hedging repos, replicating swaps and bonds, trading the collateralization spread, and transacting packs and bundles
- Identify the importance of convexity and convexity adjustments with regard to money market futures

Tutorial Overview
This tutorial discusses the main money market futures contracts such as LIBOR and SOFR futures, the main uses of these instruments, and the need for convexity adjustments when using rate information sourced from money market futures.

Prerequisite Knowledge
Forwards & Futures – Trading

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Key Money Market Futures
- Eurodollar vs. SOFR Futures
- Future of LIBOR/Eurodollar Contracts
- Other Benchmark Indices
- Futures vs. Cash Benchmarks

Topic 2: SOFR Futures
- SOFR Methodology
- Contract Specifications
- Forward vs. Backward-Looking Rates
- SOFR Futures Settlement Rate
- SOFR Futures Settlement Rate: Calculation

Topic 3: Applications of Money Market Futures
- Key Applications of Money Market Futures

Topic 4: Convexity
- Convexity of Eurodollar Futures
- The Value of Convexity
- Convexity Adjustments

Money Market – Scenario

Description
Overview
This scenario is based on discussions by three money market professionals attending a conference on their field of expertise. The main topic of discussion is the impact of regulatory changes on money market funds and repos.

Prerequisite Knowledge
A broad understanding of money markets and money market instruments is required.

Level: Intermediate
Duration: 20 minutes

Money Market Securities – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify an overnight index swap and list its features
- Recognize the key characteristics of treasury bills (t-bills) and how they carry the least risk of all money market instruments
- Recall what repos are and the reasons for their popularity
- Identify the fundamental features of commercial paper (CP) and the key characteristics of the asset-backed CP market
- Identify the key features of certificates of deposit (CDs) and how CDs are transacted
- Recognize the key features of bankers' acceptances

Tutorial Overview
Money market instruments are a very important subset of the credit markets offering liquidity and (usually) high credit quality to short-term investors. There are interest bearing and discount instruments to suit varied requirements.

This tutorial describes the essential features of t-bills, CDs, CP, and bankers' acceptances. It examines the nature of these products, their features, how they are used, and their usefulness in today's markets.

Prerequisite Knowledge
Money Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Money Markets Overview
- Money Market Securities: Overview
- Definition of a Money Market Security
- Types of Money Market Security

Topic 2: Overnight Index Swaps
- OIS: Overview
- Features of OIS
- Synthetic Swaps

Topic 3: Treasury Bills
- Interacting with Money Markets
- Types of Government Borrowing
- Treasury Bills
- Maturity Dates of Treasury Bills
- Auctioning T-Bills

Topic 4: Repos
- Repos Overview
- Demand for Repos

Topic 5: Commercial Paper
- Overview of CP
- Features of CP
- Asset-backed commercial paper (ABCP)
- Types of ABCP

Topic 6: Certificates of Deposit

- Overview of CDs
- Retail vs. Negotiable CDs
- Types of CDs
- Bid & Ask Prices on CDs
- Credit Issues

Topic 7: Bankers’ Acceptances

- Overview of Bankers’ Acceptances
- Need for Bankers' Acceptances
- Secondary Market for Bankers’ Acceptances
- Other Uses of Bankers' Acceptances

Money Market Securities – Pricing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to calculate the interest/discount, price, and yield for:

- Interest-bearing money market instruments such as standard deposits, certificates of deposit, and repos
- Discount instruments such as discount notes, commercial paper, and treasury bills

Tutorial Overview
Money market instruments are a very important subset of the credit markets offering liquidity and (usually) high credit quality to short-term investors. There are interest-bearing and discount instruments to suit varied requirements, but structural conventions in the market make straight comparisons difficult.

It is important to have a grasp of the structuring and pricing conventions in the money market to correctly evaluate investment alternatives. In addition, these markets are the foundation for more complex capital markets instruments and the construction of some yield curves. In the market, it is necessary to be comfortable relating one instrument to another to arrive at the best investment alternative. Therefore, a solid understanding of this tutorial is essential.

Prerequisite Knowledge
Money Market Securities – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Pricing Money Market Securities
- Choosing a Money Market Security
- Price of Risk
- Money Market Yield Curve
- Other Influences on Interest Rates
- Price of a Money Market Instrument

Topic 2: Interest-Bearing Instruments
- Deposits
- Other Interest-Bearing Instruments
- Negotiating Interest-Bearing Instruments
- Yields on Interest-Bearing Instruments

Topic 3: Discount Instruments
- Pricing Discount Instruments
- Yield on Discounted Instruments
- Negotiating Discount Instruments

Topic 4: Comparative Yields
- Factors
- Comparative Yields: Overview
- Calculating Comparative Yields

Municipal Bonds (US) – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define municipal bonds and other municipal debt securities
- Identify the primary features of municipal bonds
- Name and define the major types of municipal bonds, including general obligation bonds and revenue bonds
- Recall the key features of municipal bond regulation

Tutorial Overview
Municipal bonds and other municipal securities are an important part of the US bond market landscape. They offer municipal issuers a key funding option, enabling the financing of vital infrastructure in American states and cities. They also offer investors valuable, tax-friendly investment vehicles. This tutorial provides a high-level overview of municipal bonds and other municipal securities, describing the key types of securities available and their regulation.

Prerequisite Knowledge
US Bond Market

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Municipal Bonds Overview
- Definition
- Issuers
- Features
- Investors
- Municipal Bond Types
- Municipal Bond Market History

Topic 2: Municipal Security Types
- Overview
- Issue Structure
- GO Bond Types
- Analyzing GO Bonds
- Revenue Bond Types
- Analyzing Revenue Bonds
- Other Bond Types
- Municipal Notes
- Municipal Commercial Paper
- Exotic Bond Structures

Topic 3: Regulation
- Municipal Securities Rulemaking Board (MSRB)
- MSRB Rules
- Municipal Bonds & Securities Laws

Municipal Bonds (US) – Investing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Name and define the benefits of municipal bonds
- Name and define the risks of municipal bonds
- Identify important tax issues to consider when investing in municipal bonds
- Define the primary municipal bond market
- Define the secondary municipal bond market

Tutorial Overview
Investing in municipal bonds is attractive to a range of investors, including institutions and individuals. Municipal bonds offer investors important benefits, but there are also important risks associated with investing in these instruments. This tutorial provides a high-level overview of the process, advantages, and risks of investing in municipal bonds and describes the primary and secondary markets for municipal bonds.

Prerequisite Knowledge
Municipal Bonds (US) – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Municipal Bond Investing Overview
- Municipal Bond Investors
- Benefits of Municipal Bonds
- Key Municipal Bond Risks
- Other Municipal Bond Risks

Topic 2: Taxation
- Overview
- Taxation & Institutional Investors
- Taxation & Individual Investors
- Capital Gains & Losses
- Alternative Minimum Tax (AMT)
- Discount Bonds & Taxation
- Social Security Benefits
- Other Tax Considerations

Topic 3: Primary Market
- Overview
- Methods of Sale
- Role of Underwriters
- Role of Counsel

Topic 4: Secondary Market
- Overview
- MSRB Rules
- Market Information
- Municipal Bond Indices
- Municipal Bond Hedging

Mutual Funds (US) – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the role mutual funds have played and continue to play in the lives of the American investing public
- Identify key features regarding funds' legal structure, operations, pricing, distributions, and costs
- List some of the key federal securities laws and regulations that govern mutual funds

Tutorial Overview
Mutual funds are investment vehicles that pool money from large numbers of individual investors and invest it in stocks, bonds, and/or other securities. Offering investors a convenient means of accessing capital markets, mutual funds are the most popular investment vehicle in the US. This tutorial looks at their evolution and basic legal structure, as well as key features relating to regulation and pricing/valuation.

Prerequisite Knowledge
Investment – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 65 minutes

Tutorial Outline
Topic 1: Mutual Fund Overview

- A Brief History of Mutual Funds
-
- Mutual Funds in Context
- Retail-Heavy Investor Base
- Investor Motivations
  - Affordability
  - Liquidity
  - Professional Management
  - Diversification
  - Cash Management
- Fund Providers/Sponsors
- Fund Types & Subtypes
  - Equity Funds
  - Bond Funds
  - Money Market Funds
  - Hybrid Funds

Topic 2: Features of Mutual Funds

- Typical Fund Structure
- Open-End/Continuous Basis
- Trading/Exchanging Mutual Funds
- Calculating NAV & NAV/Share
- Distributions
  - Ordinary Dividends
  - Qualified Dividends
  - Return of Capital
  - Long-Term Capital Gains
- Diversification
- Fees & Expenses
  - Shareholder Fees
  - Operating Expenses
- Share Classes

Topic 3: Mutual Fund Regulation

- Key Regulatory Acts
    - Investment Company Act of 1940
    - Investment Advisors Act of 1940
    - Securities Act of 1933
    - Securities Exchange Act of 1934
- Purpose of Regulations
- Valuation & Pricing
    - Swing Pricing
    - Daily Valuation
    - Forward Pricing
- Spring Pricing in Action
- Liquidity Risk Management
- Diversification Rules
- Transparency
- Other Areas Covered
    - Custody Leverage
    - Cross-Trades
    - Liquidity
- Mutual Funds & Deposit Insurance

Mutual Funds (US) – Investing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify key considerations for mutual fund investors, such as compatibility with their investment goals and risk tolerance, essential fund data, and where to find it
- Recognize the various types of shareholder fees and annual operating expenses that are levied on mutual fund investors
- Identify the tax implications of a US mutual fund investment

Tutorial Overview
Planning a mutual fund investment can be an involved process, with many angles to consider. This tutorial describes some of the key considerations for investors, such as their investment goals, relevant fund data, risk, fees and expenses, and tax implications.

Prerequisite Knowledge
Mutual Funds– An Introduction

Tutorial Level: Introductory
Tutorial Duration: 65 minutes

Tutorial Outline
Topic 1: Investment Considerations
- Mutual Funds & US Retail Investing
- Why Mutual Funds?
    - Greater Bargaining Power
    - Diversification
    - Professional Management
    - Investor Protection
- Investment Goals
- Investment Risks
    - Market Risk
    - Liquidity Risk
    - Credit Risk
    - Concentration Risk
    - Operational Risk
    - Country Risk
- Risk Tolerance & Time Horizon
- Fund Information & Disclosure
    - Prospectus
    - Statement of Additional Information (SAI)
    - Registration Statement (Form N-1A)
    - Other Required Disclosures
- Investor Motivations
- Fund Providers/Sponsors
- Fund Types & Subtypes

Topic 2: Fees & Expenses
- Fees & Expenses: Overview
    - Rise of Passive Investing
    - Technological Disruption
    - Shift toward "No-Load" Funds
    - Economies of Scale
- Fees & Expenses: Disclosure Requirements
- Sales Loads
    - Front-End Loads
    - Deferred (Back-End) Loads

- Other Shareholder Fees
    - Redemption Fees
    - Exchange Fees
    - Account Fees
    - Purchase Fees
- Fund Operating Expenses
    - Management Fees
    - 12b-1 Fees
    - Other Expenses
    - Total Operating Expenses (Expense Ratio)
- Expense Ratios & Performance Drag
- Mutual Fund Share Classes

Topic 3: Taxation of Mutual Funds

- Fund Taxation
- Investor Taxation
    - Taxable Distributions
    - Taxable Shareholder Transactions
- Cost Basis
- Cost Basis Accounting Methods
    - Specific Identification
    - Average Basis
    - FIFO
- Tax-Advantaged Accounts
    - Tax-Exempt Funds
    - Tax-Deferred Accounts

Mutual Funds (US) – Types

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify key features of different mutual fund types, namely equity funds, bond funds, money market funds, and hybrid funds, as well as various subtypes within each category

Tutorial Overview
This tutorial looks at the many types of mutual fund available to investors, from equity funds (the highest-returning but also riskiest asset class), to income-generating bond funds, to more conservative money market funds, and, finally, hybrid funds. The tutorial explores aspects such as the risk/return profiles of each class and their various subtypes.

Prerequisite Knowledge
Mutual Funds – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Equity Funds
- Mutual Fund Breakdown
- The Broad Universe of Equity Funds
- Subtype Specifics
    - Active/Passive
    - Size
    - Region
    - Sector
    - Investment Style
- Equity Risk
    - What is Risk?
    - Depth/Variety as Counterbalance

Topic 2: Bond Funds
- Breaking Down Bond Funds
- Bond Fund Types
    - Treasury Bond Funds
    - Municipal (Tax-Exempt) Bond Funds
    - TIPS Funds
    - Agency (MBS) Bond Funds
    - Corporate Bond Funds
    - International/Global Bond Funds
- Key Risks
    - Prepayment/Call Risk
    - Credit Risk
    - Interest Rate Risk

Topic 3: Money Market Funds
- What is a Money Market Fund?
- Money Market Fund Types
- Key Requirements
    - Maturity
    - Credit Quality
    - Liquidity
    - Diversification
- Preventing Liquidity Shortages
    - Liquidity Fees

- Redemption Gates

Topic 4: Hybrid Funds

- What is a Hybrid Fund?
    - Balanced
    - Asset Allocation
    - Income Mixed
    - Target Date
    - Lifestyle
    - Flexible Portfolio
    - Alternative

Naming & Referencing Cells – Excel Interactive

Tutorial Description
Overview
This is the fourth in a series of tutorials that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and how they are used to increase the efficiency and effectiveness of work practices. The focus here is on cell naming and referencing.

Prerequisite Knowledge
Formulas & Calculation Functions (Part 2) – Excel Interactive

Level: Intermediate
Duration: 15 minutes

Net Zero

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- List the aims of the Paris Agreement
- Explain how net zero can be achieved
- Recognize the ways in which the financial sector can drive the decarbonization of the real economy

Tutorial Overview

Net zero refers to a situation where greenhouse gas (GHG) emissions into the atmosphere are balanced by their removal out of the atmosphere. This tutorial provides a high-level overview of net zero and how it can be achieved.

Prerequisite Knowledge

None

Tutorial Level: Introductory

Tutorial Duration: 12 minutes

Normal Distribution – Excel Interactive

Tutorial Description
Overview
This tutorial uses video and interactive exercises to explore the normal distribution using Microsoft Excel, examining in particular how Excel can be used to estimate z-scores, the standard normal distribution, and the inverse of the standard normal distribution.

Prerequisite Knowledge
Distributions & Hypothesis Testing

Level: Intermediate
Duration: 20 minutes

NPV & IRR

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of the NPV rule in identifying profitable investments
- Calculate the internal rate of return (IRR) on an investment and use this in conjunction with NPV to decide between investment alternatives

Tutorial Overview
This tutorial provides a framework for analyzing different investments using the fundamental concepts of present value and discounting, and the decision rules of NPV and IRR.

Prerequisite Knowledge
Present Value & Future Value

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Net Present Value (NPV)
- What is Net Present Value (NPV)?
- NPV Formula
- NPV: Example
- Scenario

Topic 2: Internal Rate of Return (IRR)
- What is IRR?
- IRR: Formula
- IRR: Example
- NPV Versus IRR Decision Rules
- NPV Versus IRR Decision Rules: Example
- IRR & Reinvestment Risk

NPV & IRR – Scenario

Description
Overview
This scenario explores how the net present value (NPV) and internal rate of return (IRR) are decision rules are used to evaluate investment projects.

Prerequisite Knowledge
NPV & IRR

Level: Intermediate
Duration: 20 minutes

Open Account Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the benefits and drawbacks of using open account terms in international trade
- Identify the risks associated with open account trading and how these can be mitigated, as well the options for exporters for obtaining finance when they provide open account terms to importers

Tutorial Overview
While traditional documentary instruments such as letters of credit and documentary collections continue to have a role in international trade, it is generally accepted that open account terms provide a more appropriate framework for facilitating a greater amount of cross-border trade. This tutorial looks at open account trading in detail, including the risks it creates for exporters and how they might go about reducing their exposure to those risks.

Prerequisite Knowledge
Trade Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Open Account Trading
- What Is Open Account Trading?
- Steps Involved in Open Account Trading
- Why Use Open Account Terms?
- Open Account vs. Other Payment Terms
- Risks of Open Account Trading
- When Is Open Account Trading Appropriate?
- Other Considerations

Topic 2: Risk Mitigation & Financing
- Risk Assessment
- ECA Cover
- ECA Cover: Making a Claim
- Credit Insurance
- FX Risk Management
- Export Finance
- Supplier Finance
- Supply Chain Finance (SCF)
- Electronic Solutions

Open Banking & Open Finance

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify how open banking works and how the model has evolved and developed in various jurisdictions around the world
- Recognize the key considerations relating to data privacy, data security, and the technology architecture used to facilitate open banking
- List the means by which open banking presents banks with the opportunity to monetize their data and capabilities
- Recognize how open banking is evolving into open finance and how ultimately this could be expanded into a much broader open economy concept

Tutorial Overview
Open banking – the sharing of customer financial data with third parties with customer consent – is a transformative initiative in banking, finance, and potentially beyond. With roots in the EU's second Payments Services Directive (PSD2), open banking has become something of a global phenomenon, promoting competition and innovation in the financial sector and disrupting legacy business models. This tutorial describes open banking in detail and how the depth of its influence is now being reflected in emerging open finance and open data/open economy initiatives.

Prerequisite Knowledge
Digital Banking – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Open Banking Overview

- What Is Open Banking?
- Open Banking Around the World
- Open Banking Ecosystem
- Use Cases
  - Account data
  - Regular payments data
  - Payments transactions data
  - Know your customer (KYC) data
- Open Banking "Rails"
  - Data Rails
  - Communication Rails
  - Payments Rails

Topic 2: Data & Technology Considerations

- Data Privacy & Consent
- Data Security
  - Authentication & Authorization
  - Consent Mechanisms
  - Audit Trails & Monitoring
  - Authorized & Verified Third-Party Providers
- Technological Challenges
- Collaboration Through APIs

Topic 3: Open Banking Business Cases

- Monetization of Open Banking
  - Premium APIs
  - BaaS APIs
  - BaaP

    - Value-Added Services

Topic 4: Open Finance & Open Economy

- From Open Banking to Open Finance
    - Definition
    - Scope
    - Compensation
    - Access
    - Control
- Open Data & Open Economy
    - Shareable Data
    - Risks

Operational Resilience

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define operational resilience
- Identify the key drivers of the need to address operational resilience
- List the regulatory approaches to addressing operational resilience
- Recognize how requirements to address operational resilience vary from jurisdiction to jurisdiction
- Recall how banks are required to demonstrate that they will be able to deliver critical services when unexpected events occur

Tutorial Overview
Operational resilience is the ability of a financial institution, and the financial services sector as a whole, to identify and prepare for, respond and adapt to, recover and learn from operational disruption. This tutorial defines OR and looks at regulatory initiatives in the area.

Prerequisite Knowledge
Operational Risk – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of OR
- What Is Operational Resilience (OR)?
- Key Factors Impacting OR
- Outsourcing & CTPs
- OR & BCP

Topic 2: Regulatory Approach
- Evolution of the Regulatory Approach
- BCBS Principles for Operational Resilience
- Regulatory Approaches to OR
- Operational Resilience: Regulatory Approaches

Topic 3: Meeting Regulatory Requirements
- Operational Resilience Requirements
- Implementation of OR Requirements
- Issues & Challenges

Topic 4: Issues & Developments in OR
- Critical Third Parties (CTPs)
- Cybersecurity

Operational Risk – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define operational risk and recognize the many sources of operational risk for a typical banking institution
- Recognize the key regulatory/supervisory requirements in relation to operational risk
- Identify the components of a bank's operational risk management framework (ORMF)
- Recognize the necessary requirements for the effective management of operational risk

Tutorial Overview
Operational risk is not new – it has existed ever since the first bank opened its doors for business. And while all types of organization are exposed to operational risk, the management of it is more challenging for the banking industry than for most other industries. This tutorial introduces the concept of operational risk, including the difficulties in defining it and distinguishing between the many categories and subcategories of operational risk. The tutorial also provides an overview of a bank's operational risk management framework (ORMF) and the key issues and considerations associated with managing operational risk.

Prerequisite Knowledge
Risk Management - Risk Types & Measurement

Tutorial Level: Intermediate
Tutorial Duration: 80 minutes

Tutorial Outline
Topic 1: Overview of Operational Risk
- What Is Operational Risk?
- Definition of Operational Risk: A Closer Look
- Operational Risk Categories
- Why Is Operational Risk Different For Banks?
- Interaction Of Operational Risk With Other Risk Types
- Lessons Learned From Control Failures

Topic 2: Regulatory Requirements
- Regulatory Background
- Principles For The Sound Management Of Operational Risk (PSMOR)
- Operational Resilience
- Regulatory Capital

Topic 3: Operational Risk Management Framework (OMRF)
- Components Of an OMRF
- Challenges In Implementing an OMRF
- Three Lines Of Defense (3LoD) Model
- Issues With The 3LoD Model
- 3LoD Model & Internal Control Failures

Topic 4: Managing Operational Risk
- Requirements For Effective Operational Risk Management
- Operational Risk Appetite & Tolerance
- Measuring Operational Risk
- Collating Loss Data
- Identifying & Assessing Operational Risk
- Approaches To Managing Operational Risk
- Monitoring & Reporting Operational Risk

Operational Risk Management – Developments & Emerging Risks

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main factors that led to the emergence and development of operational risk management in banking
- List the key regulatory requirements in relation to operational risk
- Recognize the key lessons to be learned from some high-profile operational risk failures
- Identify the main emerging risks that banks are facing and their potential impact

Tutorial Overview
Operational risk has always existed, both for banks and other organizations. But the size and nature of the operational risk exposures that banks must manage continue to evolve and change. This tutorial provides an overview of how and why operational risk management emerged as a separate risk discipline, how it has evolved subsequently, and how it could be affected by emerging risks. It also looks at some high-profile operational risk events that have resulted in bank failures, fines, and/or losses, as well as the lessons learned from these events.

Prerequisite Knowledge
Operational Risk Management – Tools & Techniques

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Evolution Of Operational Risk Management
- Origins Of Operational Risk
- Changing Nature Of Operational Risk Exposures
- Impact Of Changes In Operational Risk Exposures
- Emergence As A Separate Risk Discipline
- Drivers Of Change In Operational Risk Management

Topic 2: Regulatory Perspective
- Key Regulatory Requirements
- Operational Resilience

Topic 3: Operational Risk Management Failures
- Lessons Learned From Operational Risk Events
- Fraud
- Employment Practices & Workplace Safety
- Clients, Products, & Business Practices
- Damage To Physical Assets
- Business Disruption & Systems Failures
- Execution, Delivery, & Process Management
- Taking Action To Minimize Operational Failures

Topic 4: Emerging Risks
- What Is An Emerging Risk?
- Categories Of Emerging Risk
- Drivers Of Change
- Climate Change
- Impact Of Emerging Risks

Operational Risk Management – Tools & Techniques

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main tools and techniques used by banks at each stage of the operational risk management cycle – identify, assess, manage, and monitor
- Recognize the role of other tools and techniques such as business continuity planning (BCP) and insurance in operational risk management

Tutorial Overview
Historically, there was no real concept of operational risk or operational risk management. But as banks became larger and more complex, and the size and nature of their operational risk exposures changed, more sophisticated tools and techniques emerged for assessing and managing operational risk. This tutorial looks in detail at those tools and techniques.

Prerequisite Knowledge
Operational Risk – Measurement & Reporting

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Tools & Techniques For Identifying Operational Risk
- Overview Of Tools & Techniques Used For Operational Risk Management
- Risk Assessments
- Issues With Risk Assessments

Topic 2: Tools & Techniques For Assessing Operational Risk
- Risk Ratings
- Heat Maps

Topic 3: Tools & Techniques For Managing Operational Risk
- Approaches To Managing Operational Risk

Topic 4: Tools & Techniques For Monitoring Operational Risk
- Key Indicators (KIs)
- Risk Registers
- Issues With Risk Registers
- Loss Data
- Benefits Of Loss Data

Topic 5: Other Operational Risk Tools & Techniques
- Beyond The Risk Management Cycle
- Forward-Looking Tools & Techniques
- Eliminating/Avoiding Risk
- Reducing Risk Likelihood
- Reducing Impact: Business Continuity Planning (BCP)
- Reducing Impact: Insurance
- Factors Influencing The Choice Of Tools & Techniques

Operational Risk – Measurement & Reporting

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key issues associated with the measurement of operational risk
- Calculate regulatory capital for operational risk
- Recognize the importance of operational risk reporting and the different types of report that banks produce
- List the key operational risk disclosures under Pillar 3

Tutorial Overview
While some risks lend themselves naturally to quantitative measurement, it is not always clear whether operational risk exposures can be captured successfully using numerical methods. This tutorial looks at the various measures used to quantify operational risk, the challenges and issues associated with the measurement of operational risk, and the reporting of such measures.

Prerequisite Knowledge
Operational Risk – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Measuring Operational Risk
- Overview Of Operational Risk Measurement
- Measures Of Operational Risk
- Issues With Objective & Subjective Measures
- Collating Loss Data
- Operational Risk Measures & Risk Assessment
- Inherent (Gross) Risk Vs. Residual (Net) Risk
- Other Issues With Operational Risk Measures

Topic 2: Capital Calculations
- Standardized Approach (SA)
- Business Indicator (BI)
- Business Indicator Component (BIC)
- Internal Loss Multiplier (ILM)
- Minimum Standards For The Use Of Loss Data
- Removal Of Previous Approaches

Topic 3: Reporting Operational Risk
- Purpose Of Operational Risk Reporting
- Target Audience
- Contents Of Risk Reports
- Rag Status Reports
- Risk Assessment Reports
- Loss Data Reporting

Topic 4: Pillar 3 Disclosure Reports
- Pillar 3 Reporting Requirements
- Reporting Challenges & Other Issues

Option Greeks – Measuring Delta & Gamma

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of delta and gamma in option position management and hedging
- Calculate delta and gamma in Excel using the Black-Scholes formula, the binomial option pricing model, or Monte Carlo simulation

Tutorial Overview
Delta and gamma are key measures of option sensitivity that are crucial in option portfolio management and hedging. This tutorial provides an overview of the different approaches to measuring delta and gamma, including the Black-Scholes model, binomial option pricing model, and Monte Carlo simulation.

Prerequisite Knowledge
Option Valuation – American Options

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Sensitivities & Option Positions
- Delta Values
- Position Deltas vs. Product Deltas
- Gamma Values
- Gamma Ranges
- Visualizing Delta & Gamma
- Aggregate Positions

Topic 2: Calculating Delta & Gamma
- Calculating Delta from a Model
- Delta of Options on Income-Paying Assets
- Black-Scholes: Gamma
- Binomial Option Pricing Model: Delta & Gamma (European Option)
- Binomial Option Pricing Model: Delta & Gamma (American Option)
- Monte Carlo Methods: Delta & Gamma
- Finding Delta & Gamma in Monte Carlo Valuation
- Finding Delta & Gamma in Monte Carlo Valuation: Example

Option Greeks – Second-Order Sensitivities

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how vomma measures the sensitivity of vega to changes in implied volatility and can be positive or negative
- Recall how vanna measures the sensitivity of delta to changes in implied volatility and the sensitivity of vega to changes in the price of the underlying asset
- Identify other second-order option sensitivity measures such as charm, color, and speed

Tutorial Overview
This tutorial focuses on second-order option sensitivity measures vomma and vanna as these are the most important secondary Greeks from the point of view of most traders when constructing efficient delta hedges and engaging in volatility traders. Other second-order sensitivity measures are calculated in the spreadsheet that accompanies this tutorial.

Prerequisite Knowledge
Option Greeks – Vega, Theta, & Rho

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Vomma
- What Is Vomma?
- Calculating Vomma in Excel
- Vega & Vomma: Example
- Vomma & Moneyness
- Vomma & Implied Volatility
- Vomma: Positive & Negative
- Vomma & Option Trading

Topic 2: Vanna & Other Second-Order Sensitivities
- What Is Vanna?
- Vanna & Delta
- Vanna & Vega
- Uses of Vanna
- Other Second-Order Sensitivities

Option Greeks – Using Delta & Gamma

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how delta and gamma can be used to estimate the value of an option
- Identify the role of delta in hedging an option position
- Recognize how delta and gamma affect the profitability of straddle trades

Tutorial Overview
Delta and gamma are important concepts in option pricing, hedging, and trading. This tutorial looks at how delta and gamma are used to estimate option prices and to hedge option portfolios. The role of delta and gamma in straddle trades is also examined in detail.

Prerequisite Knowledge
Option Greeks – Measuring Delta & Gamma

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes.

Tutorial Outline
Topic 1: Approximating Option Values With Delta & Gamma
- Option Values & Delta-Gamma Approximation
- Delta-Gamma Approximation

Topic 2: Delta Hedging
- Delta Hedging an Options Portfolio
- Delta Hedged Portfolio: Example
- Delta Hedging & Movements in the Underlying Price
- Delta Hedging & Movements in the Underlying Price: Example

Topic 3: Delta & Gamma in Straddle Trades
- Straddle Trade
- Straddle Trade: Example

Option Greeks – Vega, Theta, & Rho

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how vega measures the sensitivity of an option price to changes in volatility
- Recall the role of theta in measuring an option's sensitivity to time to expiration
- Recognize how rho measures the sensitivity of an option to movements in the risk-free rate

Tutorial Overview
Vega, theta, and rho are three key option Greeks that measure the sensitivity of an option price to changes in volatility, time to maturity, and the risk-free rate. This tutorial looks at how these measures different for options with different strike prices, levels of volatility, time to maturity, and moneyness.

Prerequisite Knowledge
Option Greeks – Using Delta & Gamma

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Vega
- What Is Vega?
- Vega & Expectations
- Vega & Option Inputs

Topic 2: Theta
- Theta & Time Value
- Erosion of Time Value
- Convergence of Spot & Forward Prices
- Theta & Option Inputs

Topic 3: Rho
- What Is Rho?
- Rho for Calls, Puts, & Forwards

Option-Linked Securities

Tutorial Description
Objectives
On completion of this module, you should be able to:

- Identify the different issuer and investor options and their associated costs and benefits
- Recognize the problems valuing embedded option and illustrate how a binomial-tree may be used to price them

Tutorial Overview
Although the majority of bonds are simple debt securities with fixed or variable coupons, there are many option-related bonds. Although some have detachable warrants (options on specific securities), most have embedded options where option exercise affects the characteristics of the bond as a whole.

As the market evolves, embedded features become more intricate and practitioners have had to develop increasingly complex models to price them.

Prerequisite Knowledge
Fixed Income Analysis – An Introduction
Options – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Basics of Embedded Options
- Definition of Embedded Options
- Calls & Puts
- Calls & Puts: Benefits and Drawbacks
- Prepayments
- Capped & Floored FRNs
- Convertibles
- Complex Options
- Implicit & Explicit Options

Topic 2: Valuation of Option-Linked Securities
- What Can (& Cannot) Be Valued
- Make Whole Call: Example
- Bond Yields
- Problems Valuing Embedded Options
- Black-Derman-Toy Model: Binomial Framework
- Binomial Framework: Pricing an Option-Linked Security
- Putable Bonds
- Option Valuation
- Binomial Trees & Variable Volatility
- Option Adjusted Spread (OAS)
- Option Adjusted Spread (OAS): Example
- Where Does Volatility Come From?
- Extending the Model to Other Bonds
- Different Models
- Industrial Strength Models

Options – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the connection between optionality and uncertain economic outcomes
- List the key terminology associated with options, such as premium, calls and puts, option holder and writer, strike (exercise) price, expiration date, and underlying assets
- Recall how options are traded and settled
- Identify the key types of volatility in options markets, namely, realized volatility, implied volatility, and projected volatility
- List the key factors affecting the value of an option, including time to expiration, exercise style, implied volatility, and moneyness, and distinguish between an option's intrinsic value and its time value

Tutorial Overview
Options are one of the basic building blocks in finance. A combination of options with other products allows almost infinite customization possibilities for hedgers, investors, traders, and speculators. This tutorial outlines the basic structures and terminology associated with options, and looks at the ways in which they are used. The tutorial also discusses the main components of option value, namely intrinsic value and time value.

Prerequisite Knowledge
Derivatives – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Uncertainty, Choices, & Outcomes
- Uncertainty, Choices, & Outcomes

Topic 2: Option Terminology
- Key Option Terminology
- Option Terminology: Scenario

Topic 3: Trading & Settlement
- OTC & Exchange-Traded Options
- Cash & Physical Settlement

Topic 4: Volatility
- Uncertainty & Volatility in Options Markets
- Types of Volatility

Topic 5: Option Valuation
- Factors Affecting the Value of an Option
- Intrinsic Value & Time Value
- Time Value & American Options
- Trading Volatility

Option Trading – Combination Strategies

Tutorial Description
Objectives
On completion of this module, you should be able to:

- Recognize how options can be used to take views on both market direction and implied volatility
- Identify the main benefits and drawbacks of options as directional instruments
- Recall the main combination trades, such as straddles, strangles, and covered calls

Tutorial Overview
This tutorial discusses the use of options in directional and volatility trades. Key combination strategies such as covered call, strangles, straddles, are also dealt with in detail.

Prerequisite Knowledge
Option Greeks – Vega, Theta, & Rho

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Options in Directional & Volatility Trades
- Benefits of Options as Directional Trading Instruments
- Drawbacks of Options as Directional Trading Instruments
- Volatility Trading

Topic 2: Key Combination Strategies
- Straddles
- Strangles
- Targeted Delta Straddles & Strangles
- Covered Calls
- Covered Call: Example
- Classic Covered Calls: Equal Amounts of Stock & Options
- Covered Calls with Targeted Delta
- Covered Calls with Targeted Delta (cont'd)
- Option Strategy Matrix

Option Trading – Managing an Options Portfolio

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key sensitivities associated with managing an options portfolio and how these are managed using techniques such as the risk ladder
- Recognize how options dealers use static and dynamic hedging to manage risk exposure
- Recall how a risk report is generated and identify the key features of such a report

Tutorial Overview
Options dealers hold a wide range of options positions with different maturities and exercise prices. This tutorial looks at how such dealers manage the risk of their portfolios and how option position risk reports are generated in Excel.

Prerequisite Knowledge
Option Trading – Spread Strategies

Tutorial Level: Advanced
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Managing Option Sensitivities
- How Traders Manage Option Sensitivities
- The Problem of Illiquidity
- Static vs. Dynamic Management
- Risk Management
- Implied Volatility
- Uniform Shift in the Volatility Surface
- Implied Volatility Changes

Topic 2: Generating a Risk Report
- Risks in Groups of Positions
- Risks in Groups of Positions: Component Positions
- Risk Report Generation
- Risk Report Generation: Example
- Pin Risk
- Why is Dynamic Hedging Path Dependent?

Option Trading – Spread Strategies

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize how debt and credit spreads are used to exploit bullish and bearish market views
- Recall how participating forwards are used to hedge FX risk while still allowing the hedger to participate in any upside

Tutorial Overview

Option spread strategies involve buying and selling options on the same underlying but with different strike prices or expiration dates. The focus of this tutorial is vertical spreads, where the strike prices of the options are different. Participating forwards which involve opposite positions in calls and puts on different amounts but at the same strike are also covered in detail.

Prerequisite Knowledge

Option Trading – Combination Strategies

Tutorial Level: Intermediate

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Vertical Spreads

- What Is a Vertical Spread?
- Bear Call Spread
- Bear Call Spread: Example
- Bull Call Spread
- Bull Call Spread: Example
- Option Greeks & Spreads

Topic 2: Participating Forwards

- Participating Forwards
- What Is a Participating Forward?
- Participating Forward & Forward Outrights
- Participating Forward: Example
- Participating Forward: Pricing in Excel

Option Valuation – American Options

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how American options can be exercised any time before expiration
- Recall how time value may be lost if American options are exercised early
- Identify the circumstances in which it may be optimal to exercise an American option early

Tutorial Overview
American options different from European options in that they can be exercised any time up to expiration. In this tutorial we show the situations in which American options should be held to expiration or, in the case of an option on an income-yielding underlying asset, exercised early to capture dividend or interest income.

Prerequisite Knowledge
Option Valuation – Black-Scholes-Merton

Tutorial Level: Advanced
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of American Options
- What Are American Options?
- Argument Against Early Exercise

Topic 2: Exercising an American Option
- Situations in Which an American Option Is More Valuable
- Situations in Which an American Option Is More Valuable: Example
- When to Exercise an American Option
- American Options: Values
- Option Exercise: Scenario
- Circumstances that Warrant Early Exercise
- Bermudan Option

Option Valuation – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how the type and width of an option's payoff distribution affects its valuation
- Recall how to value an option using techniques such as binomial expansion, the Black-Scholes formula, and Monte Carlo simulation

Tutorial Overview
This tutorial looks at the key inputs into option valuation and the different techniques, such as binomial expansion, Black-Scholes, and Monte Carlo techniques that are used to value options.

Prerequisite Knowledge
Derivatives – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Basics of Option Valuation
- Binary, Discrete, & Continuous Outcomes
- Volatility
- Risk Neutrality & Discounting
- Discounting & Funding Curves
- Option Pricing vs. Valuation

Topic 2: Option Pricing Techniques
- Pricing Options
- Binomial Techniques
- Numerical Processes
- Simulation Techniques
- Simulation Techniques: Valuation

Option Valuation – Binomial Techniques

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how the binomial tree is built using up/down prices and risk-neutral probabilities
- Recall how to value an option by working backward through the binomial tree and adjusting nodes where necessary until the current option value is reached

Tutorial Overview
This tutorial looks at how the binomial technique is used to price derivatives such as American options where an equation such as Black-Scholes cannot be applied.

Prerequisite Knowledge
Option Valuation – American Options

Tutorial Level: Advanced
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Binomial Option Pricing
- Overview of Binomial Option Pricing
- Forward Prices & Risk-Neutral Probabilities
- Building a Stock Price Tree Using Risk-Neutral Probabilities
- Note on Risk-Neutral Probabilities

Topic 2: Building a Binomial Tree & Pricing an Option
- Building a Binomial Tree: Example
- Pricing a European Call Option: Example
- Binomial Option Pricing in Excel
- Binomial Option Pricing in Excel: Example
- Pricing Bermudan Options

Option Valuation – Black-Scholes-Merton

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the core elements of the Black-Scholes equation
- Recognize how the cost of replicating an option outcome can be used to determine the fair value of the option

Tutorial Overview
This tutorial looks at how the Black-Scholes equation for a call option can be broken down into the option delta times the stock price and the present value of the exercise price. The replicating portfolio approach to determining the fair value of an option is also examined in detail.

Prerequisite Knowledge
Option Valuation – An Introduction

Tutorial Level: Advanced
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: The Black-Scholes Model & Merton Validation
- The Black-Scholes Model
- Background to Black-Scholes
- Black-Scholes Formula
- Merton Validation
- Black Scholes & Volatility

Topic 2: Black-Scholes & The Replicating Portfolio
- Black-Scholes Model: Replication of Outcomes
- Black-Scholes & The Replicating Portfolio: Price Nodes
- The Replicating Portfolio: Borrowing
- The Replicating Portfolio: Option Valuation
- The Replicating Portfolio: Solving for the Borrowing Amount & Delta
- The Replicating Portfolio: Option Value
- Option Valuation & The Replicating Portfolio in Excel
- Option Valuation & The Replicating Portfolio in Excel: Example
- Excel Approximation

Option Valuation – Future Asset Prices & Volatility

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the different types of volatility and recall the process for calculating volatility in Excel
- Recognize the difference between asset prices and returns, and between normal and lognormal distributions
- Identify the different types of volatility pattern, including the volatility smile and volatility surface
- Recognize the importance of the term structure of volatility and its different shapes

Tutorial Overview
Volatility is a key input in the correct valuation of options. This tutorial looks at how volatility is calculated in Excel and issues such as fat tails, heteroscedasticity, and skew that affect its correct calculation. The different types of volatility shapes, such as the volatility surface and volatility smile, and the term structure of volatility are also examined in detail.

Prerequisite Knowledge
Option Valuation – Sensitivities & Outcomes

Tutorial Level: Advanced
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Volatility Terminology & Calculations
- Volatility Terminology
- Calculating Volatility in Excel
- Calculating Implied Volatility in Excel
- Annualization of Daily Standard Deviation

Topic 2: Asset Returns & The Normal Distribution
- Assumption of Normal Distribution of Asset Returns
- Random Walk vs. Mean Reversion

Topic 3: Volatility Patterns
- Volatility Smile/Volatility Smirk
- Volatility Smile: Explanation

Topic 4: Term Structure of Volatility
- Volatility Term Structure
- Steep & Flat Term Structure
- Inverted Term Structure
- Short-Term vs. Long-Term Implied Volatility
- Volatility Surface

Option Valuation – Key Concepts

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall how options that are in the money at expiration are automatically exercised while those that are out of the money lapse
- List the key inputs into option pricing, including the underlying stock price, the strike, time, volatility, risk-free rate, and dividends (or other asset income)
- Recognize the difference between realized volatility, implied volatility, and expected volatility
- Identify the main option pricing sensitivities, including delta, gamma, and theta
- Recognize the importance of put-call parity in identifying option arbitrage opportunities

Tutorial Overview
There are a number of key inputs into the valuation of options with many of these inputs also having an associated price sensitivity. This tutorial looks at these inputs and sensitivity measures and also looks at the importance of put-call parity in exploiting potential option mispricings through arbitrage.

Prerequisite Knowledge
Option Valuation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Moneyness
- Moneyness of an Option
- Moneyness: Features
- Moneyness & Option Price Sensitivity
- Delta: Example
- Intrinsic Value & Time Value

Topic 2: Option Pricing & Forwards
- Paying for an Asymmetrical Risk Exposure
- Option Pricing Using the Normal Distribution
- Forward Prices & Options
- Forward Prices & Options: Example
- Forward Pricing of a Dividend-Paying Stock

Option Valuation – Monte Carlo Methods

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how Monte Carlo methods allow analysts to price a range of different options by randomly generating paths of future stock prices
- Identify the key stages in performing a Monte Carlo simulation
- Recognize the main types of path dependent option that can be priced using Monte Carlo methods

Tutorial Overview
This tutorial looks at how Monte Carlo methods are used to price path dependent options, such as Asian options, barrier options, and lookback options, where a closed-form model such as Black-Scholes cannot be applied.

Prerequisite Knowledge
Option Valuation – Binomial Option Pricing

Tutorial Level: Advanced
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Monte Carlo Methods
- What Are Monte Carlo Methods?
- Monte Carlo Methods: Example
- Monte Carlo Methods & Option Types

Topic 2: Monte Carlo Process
- Monte Carlo Process: Stages
- Monte Carlo: Example

Topic 3: Pricing Path Dependent Options
- Concept of Path Dependency
- Monte Carlo Pricing in Excel: Example
- Pricing a Barrier Option
- Pricing an Asian Option
- Pricing a Lookback Option

Option Valuation – Sensitivities & Outcomes

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of moneyness and measures of option sensitivity such as delta
- Identify how forward prices are connected to option prices and how forwards are priced in Excel

Tutorial Overview
This tutorial looks at the basic dynamics of option values, exploring the relationship between option prices and forward prices, the concept of option moneyness, and the breakdown of option prices into time value and intrinsic value.

Prerequisite Knowledge
Option Valuation – An Introduction

Tutorial Level: Advanced
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Options Decision-Making & Outcomes
- Random & Not-So-Random Outcomes

Topic 2: Option Pricing Influences: Underlying Price & Strike
- Price of the Underlying Asset
- Measures of Sensitivity: Delta & Gamma
- Delta in Excel

Topic 3: Option Pricing Influences: Time & Volatility
- Time
- Volatility
- Changes in Volatility & Time: Excel
- Volatility: Key Features
- Types of Option Volatility

Topic 4: Option Pricing Inputs & Sensitivities
- Other Key Inputs & Sensitivities in Options

Topic 5: Put-Call Parity
- What Is Put-Call Parity?
- Put-Call Parity: Application
- Put-Call Parity in Excel
- Scenario: Put-Call Parity

Payments – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the key events in the evolution of money and payments
- Identify the different types of payments systems and networks
- Recognize the influential role played by EU regulation in shaping the digital payments landscape
- List the benefits and drawbacks of cash as a means of payment
- Define e-money and other forms of digital money
- Recognize the structure of the payments ecosystem and how the participants within it have evolved

Tutorial Overview
New technologies, changing consumer behavior, and the opening up of the payments market to nonbanks has given rise to a global PayTech industry. With traditional bank incumbents under pressure from a host of nonbank operators, an exciting but more complex payments marketplace has emerged. This tutorial provides a high-level overview of that marketplace.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Brief History of Money & Payments
- Brief History of Money & Payments

Topic 2: Payments Systems & Networks
- Payments Systems
- Card Networks
- National Networks
- Fast/Faster Payments

Topic 3: Key Regulatory Drivers
- Influence of Europe

Topic 4: Payments Media
- Cash vs. Cashless
- Card Payments
- Digital Money
- E-Money
- Mobile Money Schemes
- Mobile/Digital Wallets
- Importance of Prepaid
- Cryptocurrency & Stablecoin
- Central Bank Digital Currency (CBDC)

Topic 5: Payments Ecosystem
- Four-Party Model (Card Payments)
- New Entrants, New Models
- Mobile Payments & Convergence

Payments Cards

Tutorial Description
Objectives
On completion of the tutorial, you will be able to:

- Recall how payments cards evolved
- Recognize the roles that card schemes play
- List the different card types
- Identify the different players in the payments cards value chain
- Identify the main regulatory acts that recently influenced the payments cards industry

Tutorial Overview
The payments cards market has evolved greatly in recent decades, especially in later years where technological and regulatory developments have spurned new players in the market.

In this tutorial, we discuss payments cards and what attracts so many new participants into the market.

Prerequisite Knowledge
Payments – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Evolution of Payments Cards
- Evolution of the Payments Card

Topic 2: Card Schemes
- Major Card Schemes
- Card Schemes Are Not Issuers

Topic 3: Payment Card Types
- Main Product Types
- Competition

Topic 4: Payments Card Value Chain
- Two Party Model
- Three-Party Model
- Four-Party Model
- Roles in the Four-Party Model
- Anatomy of a Card Transaction
- Revenue Streams
- Flow of Funds
- Interchange Fees: Controversy

Topic 5: Regulatory Issues
- Regulatory Scrutiny
- European Interchange Fees Regulation (IFR)
- Fee Regulation
- Fee Transparency
- Co-Badging
- Promoting Competition
- US CARD ACT

Payments Systems

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize low- and large-value payment systems and their differences
- Interpret the different payment messages
- Define fast payments and list the benefits and range of services associated with fast payments
- Describe the clearing and settlement of fast payments
- List the different risks associated with fast payments

Overview
Traditionally, retail banks controlled the transfer of payments between customers. However, with the arrival of the Internet and e-commerce, combined with regulatory initiatives to open the payments markets to nonbanks, the payment landscape is changing greatly.

Further, technological advancements are allowing all participants to accelerate the clearing and settlement of payments, particularly with large payments where it is cost effective to do so.

This tutorial describes the different payments systems and how fast payments are becoming available in various forms.

Prerequisite Knowledge
Payments – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Payments Systems
- Payments Systems Overview
- Payments Systems User Groups
- Large-Value Payments Systems
- Processing Large-Value Payments Systems
- Low-Value Payments Systems
- Interoperability
- Payments Systems Risks

Topic 2: Payments Messaging
- SWIFT Messaging
- Bank Identifier Code (BIC)
- International Bank Account Number (IBAN)

Topic 3: Types of Payment
- Electronic Funds Transfer
- Credit Transfers
- Debit Transfers
- Standing Orders
- Payment Cards Networks

Topic 4: Fast Payments
- Defining Fast Payments
- Benefits of Fast Payments
- Range of Services
- Clearing & Settlement

- Fast Payments Clearing Process
- Real-time & Deferred Settlement
- Coverage & Interoperability
- Open & Closed Systems
- Risks of Fast Payment Systems

Pivot Tables – Excel Interactive

Tutorial Description
Overview
This is tutorial is one of a series of tutorials that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and show how Excel is used by financial market participants to increase the efficiency and effectiveness of their work. The focus here is on pivot tables.

Prerequisite Knowledge
Formulas & Calculation Functions (Part 2) – Excel Interactive

Level: Introductory
Duration: 30 minutes

Portfolio Management – Behavioral Theory

Tutorial Description
Objectives
On completion of this tutorial you will be able to:

- Identify the key behavioral biases that lead to suboptimal investment decisions
- Recognize the different explanations of markets given by behavioral finance and modern portfolio theory.

Tutorial Overview
Behavioral finance is a field of finance that proposes psychology-based theories to explain irrational investor decisions. Such decisions result from cognitive and emotional biases that can cause financial market values to drift substantially away from fundamental values.

This tutorial explains the different biases investors have in behavioral finance and how portfolio management suggests it should be dealt with.

Prerequisite Knowledge
Risk & Return – Efficient & Optimal Portfolios
Investment – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Key Tenets of Behavioral Finance
- Behavioral Finance: Example
- Influence of Loss Aversion on Decision Making
- Systematic Mistakes Based on Cognitive Biases
- The Rational Investor
- Prospect Theory
- Overview of Investor Biases
- Loss Aversion
- Regret Aversion
- "Get Evenitis" & Anchoring
- Mental Accounting
- Self-Attribution, Confirmation, & Familiarity
- Other Biases

Topic 2: Behavioral Portfolio Management in Practice
- Limitations of Modern Portfolio Theory
- The Emotional "Crowd"
- Active vs. Passive Investing
- Endowment Approach
- The Role of Benchmarking
- Restrictions on Profitable Investing
- Performance Inhibitors
- Fund Selection
- Fund Selection: Strategy
- Fund Selection: Strategy Consistency
- Conviction

Portfolio Management – Passive vs. Active Strategies

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the types and features of passive portfolio management
- Recognize the techniques used in active portfolio management
- Identify the investment strategies that are blurring the lines between passive and active portfolio management approaches

Tutorial Overview
A portfolio's objective is dependent upon an investor's future cash flow requirements and their tolerance for risk. Whatever the objective, there are two basic strategies to choose from – passive or active. This tutorial starts by taking a detailed look at indexing, a strategy adopted by the passive management community. We then move on to discuss the market timing mentality of active portfolio managers. We conclude by examining alternative approaches that are blurring the traditional distinctions.

Prerequisite Knowledge
Investment – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Passive Portfolio Management
- Passive Management Defined
- Types of Passive Strategy
- Index Fund Construction
- Exchange Traded Funds (ETFs)
- Benefits of Indexing
- Drawbacks of Indexing

Topic 2: Active Portfolio Management
- Active Management Defined
- Asset Allocation
- Security Analysis & Selection
- Market Timing
- Market Timing: Beating Market Returns
- Fundamental Analysis
- Technical Analysis
- Quantitative Analysis

Topic 3: Variations on Active/Passive Management
- The Active/Passive Spectrum
- Smart Beta
- Smart Beta vs. Traditional Beta
- Factor-Based Investing
- Focus Investing
- Questions of Definition

Portfolio Performance – Attribution Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the role of attribution analysis in total return decomposition
- Calculate the excess performance due to asset allocation and security selection

Tutorial Overview
Active fund managers are always trying to outperform the relevant benchmark while fund investors are always looking for ways of determining the fund manager contribution to the fund. Attribution analysis allows the investor to identify the sources of a fund's excess performance and in doing so, be able to make informed decisions on the fund manager's contribution. Further, this tutorial looks at the differences between arithmetic and geometric attribution and explains why performance attribution effects are typically calculated over several periods.

Prerequisite Knowledge
Portfolio Performance – Measures

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Performance Attribution Analysis
- Uses of Performance Attribution Analysis
- Allocation Effect
- Allocation Effect: Scenario
- Selection Effect
- Selection Effect: Scenario
- Interaction Effect
- Interaction Effect: Scenario
- Active Management Effect

Topic 2: Calculating Total Active Return
- Total Active Return
- Total Active Return: Decomposition
- Arithmetic vs. Geometric Attribution
- Single-Period vs. Multi-Period Analysis

Portfolio Performance – Measures

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the developments and innovations in this area of portfolio theory, beginning with the Sharpe ratio
- Recognize the limitations of the major performance assessments
- Measure portfolio performance based on the mechanisms provided by each of the methods discussed in the tutorial
- List the differences between each of the methods and identify the uses of each

Tutorial Overview
The purpose of this tutorial is to provide practical information and guidance on the measurement of portfolio performance.

Prerequisite Knowledge
Risk & Return – Efficient & Optimal Portfolios

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: The Sharpe Ratio
- Background to the Sharpe Ratio
- Interpretation of the Sharpe Ratio
- Sharpe Ratio: Correlation
- Generalized Sharpe Ratio & Correlation

Topic 2: The Treynor Ratio
- Background to the Treynor Ratio
- Calculating the Treynor Ratio
- Interpretation of the Treynor Ratio
- Treynor Ratio: Reliability
- Limitations of the Treynor Ratio

Topic 3: Jensen's Alpha
- Background to Jensen's Alpha
- Jensen's Alpha: Example
- Interpretation of Jensen's Alpha
- Reliability of Jensen's Alpha
- Jensen's Alpha & Market Timing
- Scenario: Portfolio Managers' Dilemma

Topic 4: Other Performance Measures
- Risk-Adjusted Return on Capital (RAROC)
- RAROC: Drawbacks
- Tracking Error
- Information Ratio
- Sortino Ratio

Present Value & Future Value

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the relationship between the present value, future value, and the discount factor
- Calculate the future value of an investment for a given present value and a given interest rate

Tutorial Overview
In financial markets, there are many examples of cash flows that occur at some point in the future but which need to be evaluated today. A cash flow in the future has a value today called the present value. This tutorial describes the concepts of present value and future value, and the relationship between them.

Prerequisite Knowledge
Interest Calculations

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Present Value
- What is Present Value (PV)?
- Present Value: Example
- Present Value of Multiple Future Cash Flows
- Present Value of Multiple Future Cash Flows: Example

Topic 2: Future Value
- What is Future Value (FV)?
- Calculating Future Value
- Calculating Future Value: Example
- Future Value & Compounding Frequency
- Future Value & Compounding Frequency: Example
- Calculating Present Value from Future Value
- Calculating Present Value from Future Value: Example
- Calculating the Discount Rate or Number of Periods

PRIIPs

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify PRIIPs regulations and list their major provisions
- Define the PRIIPs key information document (KID) and explain its purpose
- Name and define the core components of the KID
- Identify the challenges associated with the creation of the KID

Tutorial Overview
From a retail investor's perspective, the European investment landscape is complex and challenging. To support retail investors' decision-making, European authorities published a regulation on key information documents (KIDs) for packaged retail and insurance-based investment products (PRIIPs). Financial firms, including asset managers, banks, and insurance firms, must provide investors with a comprehensive KID for each PRIIP they manufacture. This tutorial provides a high-level overview of PRIIPs regulations and explains the components and purpose of the KID.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of PRIIPs
- PRIIPs Regulation: Overview
- Retail Investors
- Types of PRIIPs
- UCITS

Topic 2: Key Information Document (KID)
- KID Overview
- Section One: Purpose
- Section Two: General Information
- Section Three: Product Description
- Section Four: Risk & Return Profile
- Summary Risk Indicator (SRI)
- Market Risk Measure (MRM)
- Credit Risk Measure (CRM)
- SRI Score
- Performance Scenarios
- Performance Scenarios Calculation
- Section Five: Default
- Section Six: Costs
- Section Seven: Holding Period
- Section Eight: Complaints
- Section Nine: Other
- Multiple Investment Options KIDs
- Illustrative Trade KIDs
- Revising & Updating KIDs

Topic 3: PRIIPs Challenges
- PRIIPs Challenges
- PRIIPs Outlook

Prime Brokerage – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the development of the prime brokerage business and how hedge funds are the key clients of prime brokers
- Identify the key features of the prime brokerage industry, and the major risks and challenges faced by prime brokers.

Tutorial Overview
Prime brokerage is a bundled package of services offered by large investment banks to largely hedge fund clients. This tutorial provides a broad overview of prime brokerage, including the development of the business before and after the crisis, how hedge funds have come to be major clients, and the key features, risks and challenges faced by the prime brokerage industry.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Prime Brokerage
- Prime Brokers & Hedge Fund Clients
- Historical Development of Prime Brokerage
- Prime Brokerage Services
- Other Services

Topic 2: The Prime Brokerage Business
- Business Integration
- Networking
- Client Acceptance & Onboarding
- New Business Opportunities
- Risks & Challenges
- Sourcing a Prime Broker
- Multiple Prime Brokers
- Sourcing a Prime Broker: Key Considerations
- Risk Considerations

Prime Brokerage – Services

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key role played by prime brokers in clearing and settling trades and providing asset servicing for their institutional clients.
- Identify the key securities lending services offered by prime brokers.

Tutorial Overview
Prime brokers offer a range of services to institutional clients, particularly hedge funds. This tutorial looks at the main services provided by prime brokers in the clearing, settlement, asset servicing arena, and securities lending arena.

Prerequisite Knowledge
Prime Brokerage – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Trade Execution & Asset Servicing
- Trading Practices
- Client Accounts: Prime Broker
- Client Accounts: Executing Broker
- Prime Brokerage: Trade Processing
- Clearing & Settlement
- Non-Exchange Transactions
- Timeliness of Execution
- Asset Servicing

Topic 2: Securities Lending & Financing
- Prime Broker & Financing Transactions
- Prime Broker & Financing Transactions (cont'd)
- Securities Lending & Hedge Fund Strategies
- Short Selling
- Securities Lending Inventory
- Securities Lending Services
- Securities Lending Services: Issues
- Securities Lending: Additional Benefits

Private Debt

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the relationship between private debt and private equity
- Identify the key stages in the development of the private debt market, including the effects of quantitative easing, extreme market volatility, and illiquid interbank markets
- List the main features of private debt: covenants, leverage, and repayment
- Identify the key private debt fund strategies and the main skills of private debt fund managers

Tutorial Overview
This tutorial looks at the key characteristics of private debt and the strategies employed by private debt funds. The development of the private debt market and the current trends are also explored in detail.

Prerequisite Knowledge
Private Equity – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Private Debt
- Overview of Private Debt
- Private Debt as a Credit Risk Diversifier
- PE Leverage: Note

Topic 2: Market Development & Trends
- Market Development
- Market Trends

Topic 3: Features of Private Debt
- Private vs. Public Debt
- Key Features of Private Debt

Topic 4: Private Debt Funds
- Private Debt as a Fund Manager Strategy
- Private Debt Fund Strategies
- Fund Manager Skills & Characteristics
- Risk Management & Portfolio Construction
- Other Fund-Related Issues

Private Equity – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key features of private equity
- Recognize the investment process and the key participants in that process
- Define the key private equity performance measurement metrics
- Recall the main regulations that affect the PE market

Tutorial Overview
Private equity (PE) is a generic term used for capital investments outside of the public markets. It represents a different way of "owning" companies compared with the more familiar stock market investment. This tutorial describes the key features of the modern PE industry, focusing in particular on the private equity lifecycle, the different forms of private equity, the methods of measuring private equity performance, and regulatory and disclosure requirements in the PE market.

Prerequisite Knowledge
Investment – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Private Equity
- What is Private Equity?
- PE Lifecycle

Topic 2: Investing in Private Equity
- Methods of Investing
- Types of PE Fund
- Secondary Funds
- Role of General Partners
- Use of Leverage
- Fundraising & Capital Commitments
- Dry Powder
- The J-Curve
- Fees

Topic 3: Measures of Return
- Internal Measures
- Public Market Equivalent (PME)
- Other Issues

Topic 4: Regulation & Disclosure
- Regulatory Scrutiny of the PE Industry
- Performance Metrics & Governance
- Private Equity & ESG

Private Equity – Investing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the qualities of an ideal investment target
- Define the various stages in investing in a target company
- Recognize the importance of target valuation and achieving an optimal capital structure when structuring a deal
- Identify the typical holding period for a PE investment and the exit mechanisms available to the PE firm

Tutorial Overview
This tutorial looks at the how a PE firm identifies an ideal target company and the stages it needs to go through to realize its investment. The structuring of the transaction and the exit mechanisms available to the private equity firm are also examined in detail.

Prerequisite Knowledge
Private Equity – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Investment Targets
- Overview of Private Equity Investing
- Private Equity Returns
- What Makes a Good PE Investment?

Topic 2: Investing in a Target Company
- Types of PE Investment
- Other Types of PE Investment

Topic 3: PE Investment Process
- Key Stages in the PE Investment Process
- Initial Stage
- Auctions
- Auctions: Due Diligence

Topic 4: Target Valuation & Deal Structuring
- Company Valuation
- EV/EBITDA
- Structuring the Deal
- Debt
- Equity
- Mezzanine Finance
- Achieving an Optimal Capital Structure
- Structuring a Deal: Example

Topic 5: Holding Periods & Exits
- Holding Period
- Exits

Private Wealth Management – Alternative Investments

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the attractions and drawbacks of alternative investments for private wealth clients
- Identify the importance of hedge funds and identify their key sub-types
- Recognize the benefits and drawbacks of private markets and private equity
- Define the real asset class and list its key subtypes

Tutorial Overview
Alternative investments are those that are not included in the traditional investment classes and typically include investments such as private equity, hedge funds, and real assets. This tutorial looks at the benefits and risks of alternative investments and associated strategies for private wealth clients and describes the main sub-classes in this category.

Prerequisite Knowledge
Private Wealth Management – Investment Services

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Alternative Investments for Private Wealth Clients
- Overview of Alternative Investments
- Alternative Investment Strategies
- Alternative Investments: Challenges for Private Wealth Clients
- Benefits & Drawbacks of Alternative Investments

Topic 2: Hedge Funds
- Overview of Hedge Funds
- Evolution of Hedge Funds
- Types of Hedge Fund
    - Long-Short
    - Event Driven
        - Distressed Debt
        - Merger Arbitrage
        - Special Situations (Activist)
    - Relative Value
        - Convertible Arbitrage
        - Asset-Backed Securities Arbitrage
        - Statistical Arbitrage
        - Credit Arbitrage
        - Fixed Income Arbitrage
    - Directional
        - Global Macro
        - Short Bias
        - Emerging Markets
    - Fund of Funds

Topic 3: Private Equity
- Overview of Private Markets
- Investing in Private Equity
- Types of Private Equity
    - Direct Investment
    - Private Equity Fund
    - Fund of (Private Equity) Funds

Topic 4: Real Assets

- Overview of Real Assets
- Types of Real Asset
    - Commodities
    - Real Estate
    - Collectables
    - Infrastructure

Private Wealth Management – Banking & Deposit Services

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key deposit-based products offered by private banks and wealth management firms
- List the key transaction banking services required by private wealth clients
- Recognize the importance of international banking services for high net worth clients who live and work abroad

Tutorial Overview
This tutorial looks at the key services provided by private banks and wealth management firms in the areas of deposit-taking and transaction banking. It also explores the range of banking and other wealth services to high net worth clients who live and work abroad or have substantial business dealings overseas.

Prerequisite Knowledge
Business of Wealth Management

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Deposit-Taking Services
- Overview of Deposit Products
  - Call Deposit Accounts
  - Term Deposits
  - Savings Accounts
- Capital Market Instruments
  - Government Bonds & Notes
  - Bank Bills of Exchange
  - Negotiable Certificates of Deposit (NCDs)
  - Commercial Paper (CP)
  - Bespoke Products
- Cash Broking & Other Services

Topic 2: Transaction Banking & Payment Services
- Overview of Transaction Banking & Payment Services
- Checking Accounts
- Overdraft Facilities
- Cash Management Accounts (CMAs)
- Internet Banking
- Telephone Banking

Topic 3: International Banking & Wealth Services
- Overview of International Banking Services
- International Transaction Services
- Domestic & Foreign Deposit Services
- Other International Banking Services

Private Wealth Management – Becoming a Trusted Advisor

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the role of trust in wealth management relationships and the various stages of the trust spectrum from the perspective of both the client and the wealth manager
- Recognize the key skills and traits required of wealth managers in order to gain and maintain the trust of their clients

Tutorial Overview
The key to success in managing private wealth clients goes well beyond technical knowledge or skills. Today, it is more about the ability to earn the trust and confidence of these clients. All private client advisors rely on trust – if this is not there, the relationship between client and advisor will almost certainly break down. This tutorial looks at the importance of trust between wealth managers and their clients and the benefits of trust for both parties. The key skills and traits involved in becoming a trusted advisor are also described in detail.

Prerequisite Knowledge
Private Wealth Management – Relationship Management

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Building Client Trust
- What is Trust?
- Trust in a Wealth Management Context
- Benefits of a Relationship of Trust
- Emotional Considerations
- Trust Development Process

Topic 2: Trusted Advisor Skills & Traits
- Key Skills
- Behavioral Traits & Actions
- What Do You Think?

Private Wealth Management – Client Acquisition & Pitching

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of new client acquisition for a private wealth management business
- Identify the main methods of sourcing new clients namely to-face, through direct referrals, networking events, and hosting seminars, and online through social media, forums, the business website, and emails
- Recall the process of prospecting, qualifying, and winning new clients, and overcoming client objections
- Identify the main types of pitch book, namely general and deal pitch books, and pitch book components, such as firm details, asset management credentials, fee structure, and ancillary services

Tutorial Overview
Traditional private banking business development relied heavily on referrals and personal contacts. Today's approach to client acquisition in wealth management is a far less passive affair and much more systematic. This tutorial emphasizes the importance of a methodical, structured approach to client acquisition, the techniques used and the skills needed to develop effective pitch books in chasing new business.

Prerequisite Knowledge
Private Wealth Management – Client Profiling

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Overview of Client Acquisition
- Overview of Client Acquisition
- Client Value Matrix
- Competitive Analysis
- Client Relationships & Time Management

Topic 2: Sourcing New Clients
- Methods of Sourcing New Clients
- Sourcing New Clients: Face-To-Face
- Sourcing New Clients: Online

Topic 3: Client Acquisition Process
- Prospecting, Qualifying, & Winning New Clients
- Overcoming Client Objections

Topic 4: Pitching & Pitch Books
- Pitch Books
- Pitch Book Components
- Powerpoint Skills
- Formatting Tips

Private Wealth Management – Client Investment Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the typical hierarchy of private client needs in the context of managing a client's investment portfolio
- Identify the weaknesses of modern portfolio theory (MPT) in relation to a private client's portfolio
- Recognize why a client's attitude to their investment portfolio is strongly influenced by their stage in life
- Identify the importance of a goals-based investing approach in managing a client's portfolio in today's world
- List the key risks that need to be considered as part of the appropriate management of a client's portfolio
- Recognize the importance of efficient tax management in relation to a client's portfolio

Tutorial Overview
Modern portfolio theory (MPT) – though a long-standing, fundamental tenet of client portfolio management – is an intentional generalization of the reality of investment markets. Today, the effective management of a private client's portfolio extends beyond that outlined by MPT and takes into account approaches such as goals-based investing. This tutorial describes how wealth managers are required to have not just the quantitative skills associated with traditional portfolio theory but also the qualitative skills to bring to bear when advising clients on portfolio management.

Prerequisite Knowledge
Private Wealth Management – Functions & Roles

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Understanding Client Needs
- Beyond Modern Portfolio Theory (MPT)
- Hierarchy of Client Needs
- Funding Client Needs

Topic 2: Client Lifecycle Considerations
- Early Stage
- Lifecycle Investing
- Later Stage
- Tailoring Advice to Client Lifecycle

Topic 3: Modern Portfolio Theory & Private Client Needs
- What is Modern Portfolio Theory (MPT)?
- MPT Challenges in Wealth Management

Topic 4: Goals-Based Investing
- What is Goals-Based Investing?
- Goals-Based Investing Framework
- Asset Allocation & Lifestyle Matching
- Performance Measurement

Topic 5: Risk Considerations
- Risk Terminology
- Investment Risks
- Asset-Liability Matching

Topic 6: Tax Considerations

- Client Tax Management

Private Wealth Management – Client Profiling

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the rationale for classifying and grouping wealth management clients
- Recognize the spectrum of client types based on profession and source of wealth
- Identify the different client styles and attitudes to wealth management and the impact of these differing approaches

Tutorial Overview
The ultimate challenge for wealth management firms/private banks is to match each client with the ideal set of products and services. In this respect, the prerequisite for success is an intimate knowledge of the client. This tutorial describes how wealth managers need to be adept at identifying and servicing many areas in arriving at a representative client profile.

Prerequisite Knowledge
Private Wealth Management – Functions & Roles

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Client Segmentation
- What is Client Segmentation?
- Client Segmentation Rationale
- Segmentation & Industry Disruption
- Limitations of Segmentation Models
- Segmentation by Value
- Client Wealth Classification Pyramid
- Wealth Categories
- Segmentation by Nonvalue Criteria

Topic 2: Client Types
- Client Professions & Sources of Wealth
- Executives
- Business Owners & Entrepreneurs
- Professional Athletes
- Entertainers
- Medical & Legal Practitioners
- Expatriates
- Inheritors
- Gatekeepers, Influencers, & Referrers

Topic 3: Client Attitudes to Wealth Management
- Spectrum of Client Attitudes

Private Wealth Management – Commercial Awareness

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify areas where commercial awareness can be demonstrated by staying up-to-date with financial news and being aware of economic and political issues
- Recognize awareness of the competitive environment in which the wealth management firm operates
- Identify sources of revenue, balance sheet strength, and fee structures
- Recognize the importance of the wealth management's firm's reputation as well as its handling of client ESG and philanthropic issues

Tutorial Overview
Commercial awareness refers to the knowledge and skills needed to bring a deep understanding of a wealth management firm's commercial objectives and how these are affected by the broader business context. This tutorial will help you develop your commercial awareness skills in order to best align your role and responsibilities in pursuit of the firm's commercial objectives.

Prerequisite Knowledge
Private Wealth Management – Functions & Roles

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Commercial Awareness
- Commercial Awareness for Wealth Managers
- Demonstrating Commercial Awareness
- Improving Commercial Awareness

Topic 2: Competitive Environment
- Wealth Management Opportunities
- Wealth Management Markets
- Industry Disruption
- Wealth Management Competitors
- Organizations in Wealth Management

Topic 3: Revenue Sources & Financial Metrics
- Sources of Revenue
- Balance Sheet Strength
- Fee Structures

Topic 4: Reputation & Other Qualitative Factors
- Importance of Reputation in Private Wealth Management
- ESG & Philanthropy

Private Wealth Management – Credit & Lending Services

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the general, environment for lending to private wealth clients, and regulatory and compliance issues related to such lending
- Identify the key types of personal loan to HNW clients
- Recognize the main commercial lending structures used in the private wealth management industry
- Identify other types of credit extended to private wealth clients

Tutorial Overview
This tutorial provides an overview of the key loan types and structures used to extend credit to private wealth clients. The tutorial also explores the general lending environment in the private wealth management industry and regulatory and compliance issues associated with such lending.

Prerequisite Knowledge
Business of Wealth Management

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Extending Credit to Private Clients
- Overview of Private Wealth Credit
- General Environment for Lending to Private Clients
- Legal & Compliance Environment
- Loan Processing & Structuring
- Client Issues

Topic 2: Personal Lending
- Overview of Personal Loans
- Home Loans
- Personal Loans
- Credit Cards
- Other Types of Personal Loan
    - Low Document (Low Doc) Loans
    - Specialist Residential Loans
    - Self-Employed Mortgages (Contractor Loans)
        - Relocation & Bridging Loans
        - Building & Renovation Loans
        - Reverse Mortgages
        - Nonresident Lending/Overseas Mortgages
        - Collateral Loans (Lombard Loans)

Topic 3: Commercial Lending
- Overview of Commercial Lending to Private Clients
- Structuring Commercial Lending Applications
- Real Estate & Development Finance
- Trade & Receivables Financing
    - Equipment Finance
    - Motor Vehicle Finance & Secured Transactions
    - Hire Purchase (HP)
    - Leasing
        - Operating Lease
        - Finance Lease
- Cross-Selling Opportunities
    - Risk Management Issues

Topic 4: Other Types of Lending

- Other Types of Private Client Lending
- Mezzanine Finance
- Venture Capital (VC)
    - Providers
- Capital Markets
- Indemnity Guarantees
- Exotic Finance
- Alternative Financing Techniques

Private Wealth Management – Estate Planning

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key benefits of an estate plan for private wealth clients and the role of the wealth manager in estate planning
- List the key steps in the estate planning process
- Recognize the importance of regulatory compliance, taxation, and trusts in estate planning

Tutorial Overview
Estate planning is a key phase of a client's wealth journey and centers on the transfer of wealth to the next generation of heirs and valued beneficiaries, or to philanthropic purposes. This tutorial looks at the benefits and risks of estate planning, the main steps in the estate planning process, and other key estate planning issues such as regulatory compliance and taxation.

Prerequisite Knowledge
Business of Wealth Management

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic One: Estate Planning & Wealth Management
- Overview of Estate Planning
- Estate Planning Concepts
- Trusts
- Benefits of Estate Planning
- Estate Planning & the Wealth Manager
- Risks for the Wealth Manager

Topic Two: The Estate Planning Process
- Overview of the Estate Planning Process
- Steps in the Estate Planning Process

Topic Three: Other Issues in Estate Planning
- Compliance & Wealth Relationship Issues
- Estate Taxation

Private Wealth Management – Family Advisory

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the various features of family offices, including the reasons why they are founded and the functions and services they provide
- Identify the key ownership and governance issues associated with family offices

Tutorial Overview
Wealth management for high net worth (HNW) families has grown increasingly complex. While the concept of a family office has existed for centuries, the family office landscape is undergoing significant changes as a new population of ultra-UHNWIs emerges and wealthy families seek contemporary, more agile ways of managing and preserving their assets and wealth. This tutorial examines the family office model in detail and the specific challenges associated the managing the vast wealth of UHNW families.

Prerequisite Knowledge
Private Wealth Management – Managing Ultra-HNWIs

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Overview of Family Offices
- What Is a Family Office?
- Reasons To Set Up a Family Office
- Functions Of a Family Office
- Types of Family Office
- Family Office Cost Factors

Topic 2: Family Office Ownership & Governance
- Types of Owner
- Taking Over a Family Office
- Governance Issues
- Management vs. Ownership
- Governance Challenges
- Family Development Programs

Private Wealth Management – Financial Planning

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of financial planning for private wealth clients
- Identify the key steps in the financial planning process
- Recognize the regulatory and industry developments in HNW financial planning at a global level

Tutorial Overview
This tutorial provides an overview of financial planning for high net worth clients. We examine in detail the steps in the financial planning process and examine regulatory and industry developments in financial planning for private clients worldwide.

Prerequisite Knowledge
Business of Wealth Management

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Financial Planning for Private Clients
- Overview of Financial Planning
- Financial Planning from the Private Client Perspective
- The Role of the Financial Planner
- Knowing the Client
- Product- Vs. Goals-Based Advice
- Financial Planning Qualifications

Topic 2: The Financial Planning Process
- Overview of the Financial Planning Process
- Key Elements of the Financial Planning Process
- Steps in the Financial Planning Process
- The Financial Planning Process: Back-End Issues

Topic 3: Regulatory & Industry Developments
- Future Challenges for Financial Planning & Advice
- Evolving Community & Regulatory Expectations
- The MIFID II Framework
- Foreign Account Tax Compliance Act (FATCA)
- Common Reporting Standard (CRS)
- CRS Requirements
- Robo-Advice
    - Criticisms
- Global Trends in Financial Planning

Private Wealth Management – Functions & Roles

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the structure and organization of a typical wealth management firm
- Identify the main wealth management functions and associated roles, namely sales and client relations, investment management, wealth planning, banking, and risk and compliance

Tutorial Overview
Every wealth management firm has an overriding duty to its clients. For this reason, scope of operations – and the associated functions and roles within the firm – is important. This tutorial looks at this in the context a typical fully-integrated wealth management operation offering the full suite of services a private client might reasonably expect.

Prerequisite Knowledge
Business of Wealth Management

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Wealth Management Functions & Roles
- Functions & Roles
- Wealth Management Organization

Topic 2: Sales & Client Relations
- Relationship Managers
- RM Skills
- Marketing & Communications

Topic 3: Investment Management
- Investment Mandate & Platform
- Investment Management Governance
- Investment Strategy
- Portfolio Managers
- Manager Research
- Product Development & Distribution

Topic 4: Wealth Planning
- Tax & Legal
- Family Advisory & Philanthropy

Topic 5: Banking
- Banking Services

Topic 6: Risk & Compliance
- Risk Management
- The Compliance Function
- Compliance: Areas of Concern

Private Wealth Management – Investment Services

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of portfolio management and investment support for high net worth clients
- Identify the key fiduciary and custody services provided by wealth management businesses
- Define the core specialist investment services provided to private clients

Tutorial Overview
This tutorial provides an overview of investment services for private wealth clients. It examines the importance of investment support and portfolio management as well as fiduciary and custody, and specialist investment services.

Prerequisite Knowledge
Business of Wealth Management

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Portfolio Management & Investment Support
- Overview of Investment Services
- Strategic Advice & Research
    - Investment Architecture
- Portfolio Management & Investment Selection
- Discretionary Portfolio Management
- Nondiscretionary Portfolio Management
- Investment Vehicles & Products
- Other Investment Support Services

Topic 2: Fiduciary & Custody Services
- Overview of Fiduciary Services
- Benefits of Fiduciary Services for Clients
- Trustee Services
    - Estate Planning
- Custody Services

Topic 3: Specialist Investment Services
- Overview of Specialist Investment Services
- Corporate Advisory Solutions
- Bespoke Investment Services
- Family Office Advice
- Immigrant Investor Programs

Private Wealth Management – Manager Selection

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the rationale and key principles behind the manager selection process
- List the key stages of the selection process
- Recognize the importance of ongoing manager monitoring, including the role of buy lists and watchlists

Tutorial Overview
The overriding fiduciary duty of a wealth management operation is to provide clients with the best possible investment solution that aligns with their risk preferences. This may be achievable through the firm's internal products and competencies, but often it is necessary to source external investment managers to deliver superior outcomes for clients. This manager selection process is focused on identifying and performing due diligence on investment managers that are considered capable of delivering outperformance. The process, along with the skills and knowledge required of manager selection teams, is described in detail in this tutorial.

Prerequisite Knowledge
Private Wealth Management – Functions & Roles

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Rationale & Principles
- Sourcing Investment Talent
- Outperformance (Alpha)
- Process Over Performance
- Cost Factors & Fee Structures
- Alpha & Alternative Investments
- Implementation

Topic 2: The Selection Process
- Overview of Manager Selection Process
- Stage 1: Quantitative Screening
- Stage 2: Suitability Analysis
- Stage 3: Desk Research
- Stage 4: Manager Meetings/Interviews
- Stage 5: Manager Selection
- ESG considerations

Topic 3: Manager Monitoring
- Consistent Monitoring
- Buy List & Watchlist
- Sell Discipline

Private Wealth Management – Managing Compliance Risks

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the scope and framework of compliance in wealth management operations and recognize the importance of mitigating the consequences of noncompliance
- Identify the key compliance themes that apply specifically to wealth management firms, particularly the importance of the client due diligence and related processes

Tutorial Overview
All financial institutions, including private banks and wealth management firms, are required to comply with the relevant rules, regulations, and standards of conduct applicable to their field of business. The consequences of noncompliance for firms and their employees can be very significant, up to and including prison sentences for the most serious breaches. This tutorial looks at the key compliance issues that concern the private wealth industry and the responsibilities of wealth management professionals in relation to this.

Prerequisite Knowledge
Private Wealth Management – Functions & Roles

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: The Compliance Function
- Compliance & The Wealth Management Firm
- Compliance Framework

Topic 2: Managing Key Compliance Risks
- Employee Due Diligence
- Customer Due Diligence (CDD)
- Know Your Customer/Client (KYC)
- Managing AML & CFT
- Scenario: AML
- Managing Fraud Risks
- Managing Conflicts of Interest
- Managing Conduct Risk
- Professional Conduct & Competency
- Suitability
- Data Privacy
- Data Security
- Scenario: Data Privacy & Security

Private Wealth Management – Managing Ultra-HNWIs

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key characteristics of UHNW clients and their families
- Identify the key wealth management needs and objectives of UHNW clients and how wealth managers can tailor offerings to meet these requirements
- Recognize the personal skills required of wealth managers to negotiate the political dynamics that govern client relationships

Tutorial Overview
Ultra-high net worth individuals (ultra-HNWIs or UHNWIs), though relatively small in number, account for a very significant portion of overall HNWI wealth. UHNW clients have needs and expectations that differ from those of mass affluent and lower high net worth investors. This tutorial examines in detail the characteristics of the ultra-HNW segment of the private wealth business and the key considerations for wealth managers when it comes to managing such clients.

Prerequisite Knowledge
Private Wealth Management – Client Profiling

Tutorial Level: Introductory
Tutorial Duration: 35 minutes

Tutorial Outline
Topic 1: Ultra-HNW Client Characteristics
- What are UHNW Clients?
- Time Horizon & Risk/Return Objectives
- Tax Management
- Control & Oversight
- Tailored Solutions

Topic 2: UHNW Client Needs
- Wealth Management Services For UHNW Clients
- UHNW Client Objectives & Expectations
- UHNW Client Cost Pressures
- UHNW Client Cost Pressures: Inflation
- Endowments, Trusts, & Philanthropy

Topic 3: Dealing With UHNW Clients
- Generational Attitudes to Wealth
- Estate & Succession Planning
- Relationship Management Considerations
- Circle of Influence
- Strengthening The UHNW Client Relationship

Private Wealth Management – Negotiation Skills

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify key principles of negotiations such as distributive versus integrative negotiations, the compromise approach, negotiating with nonclients, and the negotiation matrix
- Recognize the importance of negotiation planning and strategy
- List the main negotiation techniques such as managing emotions, learning to compromise, making concessions and, where necessary, walking away

Tutorial Overview
The ability to initiate and maintain harmonious, long-term relationships with satisfied clients on commercially attractive terms is dependent on mastering effective negotiation skills. This tutorial looks at the main negotiation styles, the importance of negotiation planning and strategy, and the key techniques involved in negotiation.

Prerequisite Knowledge
Private Wealth Management – Commercial Awareness

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Negotiation Principles
- Fee Negotiation
- Distributive vs. Integrative Negotiations
- Compromise Approach
- Negotiations With Nonclients
- The Negotiation Matrix

Topic 2: Negotiation Planning & Strategy
- Deal Outline
- Negotiation Strategy

Topic 3: Negotiation Techniques
- Managing Emotions During Negotiations
- Don't Get Personal
- Learn to Compromise
- Making Concessions
- Win-Lose Situations
- Walking Away

Private Wealth Management – Relationship Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Outline the importance of the relationship management role in the wealth management business and the use of various media and formats in managing client relationships
- Identify the key skills, traits, and attributes expected of relationship managers
- Recognize the purpose of both prospecting and positioning in a relationship manager's role
- Identify the key factors required to consolidate and improve client relationships

Tutorial Overview
As the primary client-facing role in the wealth management industry, relationship managers (RMs) are better placed than most to identify and meet client needs. This tutorial focuses on the key skills and attributes required of successful RMs and the specific challenges associated with managing the relationships in a client portfolio, including winning new clients while simultaneously retaining and growing business from existing clients.

Prerequisite Knowledge
Private Wealth Management – Client Acquisition & Pitching

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Overview of Relationship Management
- Role of Relationship Managers
- Client Contact & Communications
- Relationship Management in a Digital World
- Robo-Advice

Topic 2: RM Skills & Attributes
- Key Traits & Habits
- Personal Skills & Attributes

Topic 3: Managing Clients
- Identifying Client Needs (Prospecting)
- Positioning

Topic 4: Consolidating The Relationship
- Continuous Improvement
- Self-Criticism & Transparency
- Requesting Client Feedback
- Achieving Client Acceptance
- Cross-Selling

Private Wealth Management – Scenario

Description

Overview

This scenario explores how various private wealth management concepts are used in practice. You will observe a situation where a private banker manages a relationship with a client, with support from other personnel. The client is interviewed by the private banker as part of a regular portfolio review and you will follow the line of discussion around needs analysis, risk and reward, due diligence, and the concerns of the client.

Prerequisite Knowledge

A basic understanding of wealth management products and services as well as the key aspects of client relationship management is assumed.

Level: Intermediate

Duration: 45 minutes

Private Wealth Management – Suitability

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the need for wealth management firms to conduct suitability assessments and their key obligations in that regard
- Recognize the role of client questionnaires when undertaking client profiling as part of a suitability assessment
- Identify the key considerations when attempting to match clients with suitable investments
- List the key elements of the full disclosure process whereby clients are provided with all relevant investment product documentation during the sales process
- Outline why suitability considerations are still relevant for firms when employing a robo-advisory platform

Tutorial Overview
Determining investment suitability for a client requires wealth managers to develop a number of skills – not least in designing and executing the process around suitability assessment. This tutorial sets out essential best practice in making such assessments in line with various regulatory requirements.

Prerequisite Knowledge
Private Wealth Management – Client Investment Management

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Investment Suitability
- The Need for Suitability Assessments
- Suitability Obligations
- Selling Practices & Suitability

Topic 2: Client Profiling
- Client Questionnaires
- Assessing Client Knowledge
- Proportionality of Information Requested
- Nature of the Client
- ESG/Sustainability Considerations
- Reliability of Client Information
- Updating Client Information
- Suitability Assessments for Legal Entities & Groups

Topic 3: Product Classification & Matching
- Product Evaluation
- Nature of the Service
- Matching Clients With Products
- Equivalent Products & Switching Products
- What Do You Think?

Topic 4: Full Disclosure
- Elements of Disclosure

Topic 5: Robo-Advice & Suitability
- Use of Robo-Advice in Suitability Assessments

Private Wealth Management – Understanding Behavioral Biases

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of behavioral finance in understanding the motives and actions of private clients
- Identify the key behavioral biases that lead to clients making suboptimal investment decisions
- Recognize how wealth managers should discuss behavioral biases and the concept of risk with clients

Tutorial Overview
An understanding of behavioral finance is a major component of a wealth manager's advisory toolkit as it enables them to identify and eliminate wealth-destroying behavioral biases in both themselves and their clients. Uncovering such biases and alerting clients to them can offer a substantial advantage and result in increased product acceptance and greater client trust. This tutorial looks at some of the key investor behavioral biases and how they can influence client wealth discussions.

Prerequisite Knowledge
Private Wealth Management – Client Investment Management

Tutorial Level: Introductory
Tutorial Duration: 55 minutes

Tutorial Outline
Topic 1: Overview of Behavioral Finance
- What is Behavioral Finance?
- Conventional Theory vs. Behavioral Theory
- Prospect Theory

Topic 2: Behavioral Biases
- Key Investor Biases
- Loss Aversion
- Regret Aversion
- Get Evenitis & Anchoring
- Mental Accounting
- Self-Attribution & Confirmation Bias
- Overconfidence
- Familiarity
- Herd Mentality
- Other Biases

Topic 3: Applying Behavioral Finance to Client Wealth Management
- Client Behavior & The Role of The Wealth Manager
- Helping Clients Overcome Behavioral Biases
- Risk Discussions
- Coping with Losses
- Limitations of Behavioral Finance

Problem Credit Management – Accounting for Problem Credits

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the accounting treatment for customer obligations and problem credits
- Recognize the differences between individually-assessed and collectively-assessed provision methodologies, and the process for calculating both
- Differentiate between incurred and expected loss approaches

Tutorial Overview
This tutorial covers the accounting treatment for problem credits, particularly those customers classified as nonperforming. It describes basic problem credit accounting requirements, key concepts such as days past due (DPD) and default, and the issues that arise when calculating provisions. It also provides detailed coverage of individually-assessed and collective provisions. Finally, the tutorial looks at the issues arising from the use of the incurred loss approach and provides details of the expected loss approach under IFRS 9.

Prerequisite Knowledge
Problem Credit Management – Late Stage Problem Credits

Tutorial Level: Advanced
Tutorial Duration: 75 minutes

Tutorial Outline
Topic One: Accounting Treatment for Problem Credits
- Accounting Treatment of Customer Obligations
- Accounting for Problem Credits
    - Example
- Issues with Provisioning
- Default
- Days Past Due (DPD)
    - Time-Based vs. Value-Based Approach
- Problem Credit Risk Reporting

Topic Two: Provisioning Methodologies
- Basics of Provisioning
- Individually-Assessed Provisions
    - Example
- Collective Provisions
    - Determining Modeled Values
        - Step 1: Portfolio Segmentation
        - Step 2: Collection & Analysis of Historical Loss Data
        - Step 3: Adjust for Current or Future Conditions
        - Step 4: Backtesting
    - Modeled Values & Required Provisions
        - Probability of Default (PD)
        - Emergence Period
        - Recovery Rate
- Collective Provisions Example
- Managing Collective Provisions
- Coverage Ratio

Topic Three: Incurred Loss vs. Expected Loss Approaches
- Evolution of Approaches to Provisioning
    - Specific vs. General Provisions
    - Incurred Loss Approach (IAS 39)
    - Expected Loss Approach (IFRS 9)
- IFRS 9 Three-Stage Model

- Expected Credit Losses
- Increases in Credit Risk
- Implementation & Challenges
- Comparison with US GAAP CECL Methodology

Problem Credit Management – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the customer classifications applied to performing and problem customers and how to minimize losses from problem credits
- Recognize the processes for identifying and managing problem customers, including use of the various early warning indicators
- Identify the account management process for recovery unit customer accounts

Tutorial Overview
This tutorial provides an overview of problem credit identification and management. The first topic outlines the problem credit lifecycle and problem account classifications as well as the different management approaches that can be adopted as customer situations change. The second topic offers more detailed coverage on the identification and management of customers showing early warning signs, while the last topic covers the management of customers experiencing more significant problems.

Prerequisite Knowledge
Credit Risk Management – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic One: Overview of Problem Credit Management

- Customer Classifications
  - Performing
  - Potential Problem
  - Problem (Early Stage)
  - Problem (Late Stage)
  - Nonperforming
  - Write-Off
- Minimizing Losses from Problem Credits
- Managing Problem Credit Customers
- Accounting for Problem Credits
  - Interest in Suspense
  - Provisions

Topic Two: Managing Potential Problem Credits

- Early Warning Signs & Early Warning Indicators (EWIs)
- Identifying Potential Problem Customers
- Initial Assessment
- The Watchlist Process
- Account Strategies
- Ongoing Monitoring
- Likely Outcomes

Topic Three: Managing Problem & Nonperforming Credits

- The Need for Independent Management
- Transfer of Ownership
- Account Strategies
- Account Management Process
- Default
- Provisioning & Write-Off

Problem Credit Management – Early Stage Problem Credits

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the process for identifying potential problem credits and the importance of data collection, collation, and interpretation in assessing such customers
- Identify the high level approaches that can be adopted for managing early state problem credits and the various elements that might be included in an account plan
- Differentiate between the customer-level and portfolio-level processes for managing problem credits and identify the role of recovery management

Tutorial Overview
This tutorial focuses on early stage problem credit management, which encompasses customers classified as potential problem customers and problem (early stage) customers. It covers the identification and assessment of customers showing cause for concern as a result of them exhibiting one or more early warning signs and describes the high level approaches that can be adopted for such customers. This is followed by more detailed coverage of account strategies and plans and their implementation. Finally, the tutorial looks at the management processes applied at customer and portfolio level as well as the requirements for the transfer of customers to the recovery team if they are not rehabilitated or exited.

Prerequisite Knowledge
Problem Credit Management – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic One: Identifying Potential Problem Credits
- Role of the Relationship Manager
  - Conflicts of Interest
- Data
  - Collection
  - Collation
  - Interpretation
- Assessing Potential Problem Customers

Topic Two: Account Strategy & Planning
- High Level Approach
  - Influencing Factors
- Account Strategy & Management
- Account Plans
- Forbearance
- Customer Engagement
- Implementing Account Plans

Topic Three: Managing Early Stage Problem Credits
- Customer-Level vs. Portfolio-Level Requirements
- Customer-Level Management Process
  - Documentation Deficiencies
- Portfolio-Level Management Process
- Role of Recovery Management
- Rehabilitation or Exit?
- Transfer of Ownership to Recovery Team

Problem Credit Management – Late Stage Problem Credits

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the advantages of transferring ownership of late stage problem credits to the recovery team and the actions required immediately following transfer
- Identify the account strategies that may be adopted for managing late stage problem credit customers
- Recognize the types of decision that may need to be made by recovery staff

Tutorial Overview
This tutorial focuses on late stage problem credit management. This encompasses customers classified as problem (late stage) and nonperforming as well as defaulted customers. The first topic covers the actions to be taken following transfer of ownership to the recovery team, possible account strategies and the factors that influence the assessment, and the account planning and implementation process. The second topic describes the various account strategies – including providing support, restructuring, and debt forgiveness – in more detail. The final topic sets out some of the decisions, credit and noncredit, that must be made during the recovery process and the factors that influence decision-making.

Prerequisite Knowledge
Problem Credit Management – Early Stage Problem Credits

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic One: Overview of Late Stage Problem Credit Management
- Transfer to the Recovery Team
- Immediate Actions
- Customer Assessment & Decision-Making
- Possibility of Loss
  - When Is a Loss Less Likely?
  - When Is a Loss More Likely?
- Account Strategies
- Account Planning Process

Topic Two: Account Strategies
- Customer Actions
- Providing Support
- Restructuring
  - Rescheduling Existing Loans
  - Terming Out Revolving Exposures
  - Conversion to Interest-Only
- Debt Forgiveness
- Debt-for-Equity Swap
- Realizing Mitigation
- Administration/Chapter 11
- Liquidation/Chapter 7

Topic Three: Decision-Making for Problem Credits
- Decision-Making for Noncredit Risks
- Financial Decisions
- Decision-Making when Realizing Mitigation
- Multiple Lender Situations
  - Multi-Banked Corporates
  - Syndicated Loans

Probability

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the concept of probability
- Identify the different types of probability
- Calculate the expected value of a random variable based on the probability of its possible outcomes, and explain how different risk preferences are combined with expected values to make investment decisions

Tutorial Overview
This tutorial outlines the fundamentals of probability, and covers the key terminology associated with probability theory. It describes the different types of probability and their calculation, and explains how probability theory facilitates investor decisions.

Prerequisite Knowledge
A reasonable level of mathematical and statistical knowledge is assumed.

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Principles of Probability
- Principles of Probability
- Probability of an Event
- Probability Calculations

Topic 2: Types of Probability
- Subjective & Objective Probability
- Relative Frequency
- Basic Probability Rules
- Joint Probability
- Conditional Probability
- Conditional Probability: Example
- General Addition Rule

Topic 3: Expected Value of a Random Variable
- Expected Value of a Random Variable
- Expected Value of a Random Variable: Example
- Scenario
- Risk Appetite
- Probability & Insurance

PSD2 & Open Banking

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the background to PSD2
- Define the role played by TPPs, PISPs, and AISPs
- Recognize the importance of data protection under PSD2
- Identify common and secure communication methods, and SCA
- Recognize the impact of PSD2 on open banking and new business models
- Identify the impact of PSD2 on other key banking activities

Tutorial Overview
This tutorial looks at the background and key objectives of PSD2, together with the changes it is bringing to bank products and services as well as their business models.

Prerequisite Knowledge
Payments – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: PSD2 Overview
- Background to PSD2

Topic 2: Third Parties, PISPs, & AISPs
- Third-Party Providers (TPP)
- PISPs & AISPs
- PISPs & AISPs in Practice
- Third-Party Account Access

Topic 3: Data Protection
- Protection of PSU Data

Topic 4: Communication & Authentication
- Common & Secure Communication
- Secure Customer Authentication (SCA)

Topic 5: Open Banking & New Business Models
- Open Banking
- Growth of Open Banking
- New Business Models

Topic 6: Other Impacts of PSD2
- Other Key Impacts of PSD2

Quantitative Trading – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize and define the key terminology associated with quantitative trading
- Identify the quantitative trading techniques used by both buy-side and sell-side firms and how differing business models and needs influence the use of different techniques
- List some general quantitative trading techniques that are independent of the buy-side and sell-side distinction

Tutorial Overview
Quantitative trading is a subset of the broader topic of quantitative finance, and covers all aspects of using mathematical methods in trading markets. In today's world, this generally means using computers to perform the necessary calculations. This tutorial provides a high-level overview of the field of quantitative trading, looking at it from the perspective of both buy-side and sell-side firms.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Key Definitions & Terminology
- Definitions
- Algorithms & Algorithmic Trading
- Buy-Side & Sell-Side Quantitative Trading

Topic 2: Sell-Side Quantitative Trading
- Sell-Side Business Model
- Sell-Side Functions & Personnel
- Sell-Side Functions & Quantitative Techniques

Topic 3: Buy-Side Quantitative Trading
- Buy-Side Business Model
- Business Model: Buy-Side vs. Sell-Side
- Buy-Side Functions
- Key Asset Management Personnel
- Buy-Side Quantitative Trading Techniques

Topic 4: General Quantitative Trading Techniques
- General Techniques

Quantitative Trading – Algorithmic Trading

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the key objectives of trade execution desks and the importance of transaction cost analysis (TCA) in assessing the performance of execution strategies
- Identify the key events in the evolution and development of algo trading
- Recognize some of the more popular trading algos used in the market

Tutorial Overview
This tutorial looks at algo trading in detail, with particular emphasis on how buy-side firms try to minimize market impact when executing orders and some of the execution algorithms used in that regard.

Prerequisite Knowledge
Quantitative Trading – Buy-Side

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Execution Desks & Technology
- Arms Race
- Execution Desks
- Execution Costs
- Transaction Cost Analysis (TCA)
- Relationships with Market Counterparties

Topic 2: Evolution & Development of Algo Trading
- Key Events
- Growth of Execution Algos
- Connectivity Technology & The FIX Protocol

Topic 3: Execution Algorithms
- Objective of Execution Algos
- Types of Algo
- Volume-Weighted Average Price (VWAP)
- Review Question
- Time-Weighted Average Price (TWAP)
- VWAP vs. TWAP
- Implementation Shortfall (IS)
- Liquidity-Seeking Algos
- Sniffing Algos
- Dark Pools

Quantitative Trading – Arbitrage & HFT

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of arbitrage strategy and the role of technology in implementing these strategies
- Recognize the difference between arbitrage and high frequency trading (HFT), as well as some of the strategies used by the HFT community

Tutorial Overview
Many forms of arbitrage are reliant on speed, but arbitrage is – at heart – a fundamentally different activity to HFT. This tutorial focuses on the role of arbitrageurs and high frequency traders in today's markets, examining how they use quantitative techniques and technology to interact with, influence, and profit from the market's activities.

Prerequisite Knowledge
Quantitative Trading – Algorithmic Trading

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Arbitrage
- What Is Arbitrage?
- Return Arbitrage
- Arbitrage & Risk
- Triangular (Multi-Party) Arbitrage
- Arbitrage Pre-Conditions
- Mathematics & Algorithms
- Technology Employed in Capturing Arbitrages
- More Advanced Mathematical Arbitrages
- Statistical Arbitrage (StatArb)
- Index Arbitrage
- Arbitrage & Trading Business

Topic 2: High Frequency Trading (HFT)
- Arbitrage vs. HFT
- HFT Strategies
- Front-Running
- Front-Running Technology
- Spoofing
- Influence & Impact of HFT

Quantitative Trading – Buy-Side

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the buy-side business model and its key revenue generators, along with the importance of good signal generation for buy-side firms
- Identify some of the quantitative strategies used by the buy-side

Tutorial Overview
Buy-side firms generate revenue from taking positions in assets and the subsequent movements in the prices of those assets. As a result, they have very different quantitative trading requirements than the sell-side. This tutorial examines buy-side quantitative trading in detail, with particular emphasis on building and testing models for signal generation as well as strategies such as factor investing used by the buy-side.

Prerequisite Knowledge
Quantitative Trading – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Buy-Side Business Model
- Revenue Generators
- Business Objectives
- Asset Manager Deliverables
- Signal Generation
- Backtesting
- Modeling & Backtesting: Conclusions

Topic 2: Trading Strategies
- Fundamental vs. Quant Trading
- Quant Strategies Based on Fundamental Data
- Pure Quant Strategies
- Technical Analysis (TA)
- Factor-Based Strategies
- Types of Factor
- Factor Calculations
- Factor Calculations: Example
- Factor Investing & ETFs
- Volatility Trading

Quantitative Trading – Case Studies

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the variety of issues that can cause significant losses and other problems for quantitative trading business, including cases related to fat finger trades, inappropriate pricing models, and unsuitable infrastructure
- Identify the key lessons that can be learned from these and other cases

Tutorial Overview
Trading firms use quantitative techniques to take risk, service clients, build portfolios, and manage their businesses. This tutorial examines some cases where they went wrong, and draws some conclusions as to what can go awry with quantitative techniques. Some of these cases are well-known and the subject of much public scrutiny, while others are smaller scale and based on less public information. For both types, the focus is on the real issues that caused the problem rather than news accounts aimed at a broader audience.

Prerequisite Knowledge
Quantitative Trading – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Market-Making: Fat Fingers & Poor Operations
- The Need for Speed
- Case Study: Armin S.

Topic 2: Pricing: Inappropriate Models
- The Black-Scholes Revolution
- Some Option Pricing Theory
- Application to Interest Rate Options
- The Case of NatWest Markets

Topic 3: Hedging: Unsuitable Infrastructure
- A Brief Primer on Barrier Options
- Case Study: US Bank in London

Topic 4: Rules-Based Risk Management: AAA-Rated Securities
- Rules-Based vs. Principles-Based Approaches
- Risk Capital & AAA-Rated Securities
- Case Study: US MBS Trading Desk

Topic 5: Asset Management: Hedge Fund Collapse
- Case Study: LTCM
- LTCM's Trading Strategy
- LTCM Collapse

Topic 6: Lessons Learned
- Lessons Learned

Quantitative Trading – Data & Machine Learning

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of alternative data, including big data and expert data
- Recall how biases, bad data, and model inaccuracies can all affect the handling of data
- Identify the key features of both supervised and unsupervised machine learning (ML)
- Recognize how dimension reduction reduces the dimension of a data set and how data clustering groups large amounts of multi-dimensional data

Tutorial Overview
Analysts developing data models face a number of key data challenges, including biases – such as confirmation and availability biases – bad data, and model inaccuracies. One key type of data model, known as machine learning, allows the user to query the model for answers to simple questions. This tutorial provides an overview of major pitfalls in developing data models and discusses the importance of ML in detail.

Prerequisite Knowledge
Quantitative Trading – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview
- Overview of Data & Machine Learning

Topic 2: Alternative Data
- Alternative Data
- Signal Generation & Alternative Data
- Alternative Data vs. Standard Quantitative Models

Topic 3: Big Data & Expert Data
- What Is Big Data?
- Expert Data
- Expert Data: Issues

Topic 4: Biases
- Biases & Data Science
- Confirmation Bias
- Confirmation Bias: Pitfalls

Topic 5: Machine Learning (ML)
- Overview
- ML: Example

Topic 6: Supervised & Unsupervised ML
- Supervised ML
- Supervised ML: Signal Generation & NLP
- Supervised ML: Turing Test & Blended ML
- Unsupervised ML

Topic 7: Dimension Reduction
- Dimension Reduction

Topic 8: Data Clustering

- Data Clustering

Quantitative Trading – Portfolio Construction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of risk in portfolio construction
- Recall the development of modern portfolio theory (MPT)
- Recognize how the Sharpe ratio measures return per unit of risk taken
- List the key assumptions behind MPT
- Identify the main constraints in portfolio construction and how optimization can be used
- Recognize the challenges in portfolio construction and the cost of getting it wrong
- List other key issues and concepts associated with portfolio management

Tutorial Overview
This tutorial looks at the key concepts and issues associated with constructing a portfolio of assets, particularly the crucial role of MPT and correlation among portfolio assets.

Prerequisite Knowledge
Quantitative Trading – Risk Management

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Risk & Portfolio Construction
- Understanding Risk Numbers

Topic 2: Modern Portfolio Theory (MPT)
- Overview of MPT
- MPT: Return & Volatility
- Two-Asset Portfolio: 30% Correlation
- Two-Asset Portfolio: 90% Correlation
- Two-Asset Portfolio: -50% Correlation
- Correlation & Portfolio Volatility
- Portfolio Return & Volatility: Example

Topic 3: Sharpe Ratio
- Calculating the Sharpe Ratio

Topic 4: MPT Assumptions
- Assumptions of MPT
- Questioning MPT Assumptions

Topic 5: Portfolio Constraints
- Portfolio Constraints
- Optimization

Topic 6: Portfolio Construction Challenges
- Practical Problems with Portfolio Construction
- Portfolio Construction: Cost of Getting it Wrong
- Portfolio Construction: Solutions

Topic 7: Other Portfolio Management Concepts
- Strategic & Tactical Asset Allocation (SAA & TAA)
- Other Key Concepts

Quantitative Trading – Risk Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the concepts of risk and risk management
- Recognize the importance of defining what exactly a "risk number" is measuring
- Calculate risk using techniques such as value at risk (VaR) and expected shortfall (ES), and apply these measurement techniques to a multi-asset portfolio
- Identify some common uses of risk numbers and the issues/considerations associated with using such numbers for risk management purposes

Tutorial Overview
Financial trading businesses take decisions and apply them to market trading. The goal of these decisions is always to generate a profit, either directly through price changes or over a longer term by servicing a customer and creating a relationship that will be profitable at a later stage. A common element in all these decisions is the taking of risk – and this risk must be measured and managed. This tutorial describes how trading businesses do this.

Prerequisite Knowledge
Quantitative Trading – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Risk & Risk Management in Trading Businesses
- Risk & Risk Management
- Risks for Trading Businesses

Topic 2: Risk Numbers
- Understanding Risk Numbers

Topic 3: Risk Calculations
- Value at Risk
- VaR Calculations
- Time Horizon (Holding Period)
- Confidence Level
- Historical Data Period
- Calculating the Risk Number (Value At Risk)
- Contextualizing the Risk Number
- Predictive Power of Risk Numbers
- CVaR/Expected Shortfall
- Converting Risk Numbers to Different Time Horizons
- Scenario: Investing in a Foreign Stock

Topic 4: Portfolio Risk
- From a Single Asset to a Multi-Asset Portfolio
- Portfolio VaR
- Portfolio Rebalancing
- Portfolio CVaR
- Asset Correlation

Topic 5: Using Risk Numbers
- Common Uses for Risk Numbers

- Issues & Considerations When Using Risk Numbers
- Improving on Risk Numbers

Quantitative Trading – Sell-Side

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the sell-side market-making business model and key elements of this model
- Identify the need for sell-side firms to use on- and off-exchange observation pricing as well as replication pricing models in their business

Tutorial Overview
Sell-side firms are primarily concerned with attracting as much deal flow as possible through making prices to their clients. As such, most of their quantitative efforts relate to improving client access and assessing market liquidity to best differentiate good flow from predatory flow. This tutorial examines the sell-side market-making business in detail, with particular emphasis on the quantitative and technological requirements and challenges.

Prerequisite Knowledge
Quantitative Trading – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Sell-Side Business Model
- Key Requirements: Capital, Infrastructure, & People
- OTC vs. Exchanges
- Profit Generation
- Capturing the Spread
- Other Sources of Profit
- Business Generation
- Market-Making Losses
- Other Risks
- Market-Making Business: Conclusions

Topic 2: Pricing
- Price & Size Matter
- Observation Pricing
- On-Exchange Observation Pricing
- Order Book Visibility
- Data & Liquidity
- Speed
- Dark Pools
- Off-Exchange Observation Pricing
- Problems with Pricing Algorithms
- Replication Pricing
- Replication Pricing Models
- Scenario: Arbitrage Profit
- Model Limitations
- Other Considerations
- Sell-Side Quantitative Trading: Conclusions

Real Estate – An Introduction

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the characteristics of real estate and the role of the key players in real estate markets
- Distinguish between the two real estate sectors – residential and commercial – and their subsectors
- Recognize the main features of real estate as an asset class

Tutorial Overview

This tutorial describes the fundamentals of real estate and distinguishes between the residential and commercial real estate sectors (and subsectors). The characteristics of real estate as an asset class are discussed in detail, including a comparison with other asset classes. This tutorial also looks at the phenomenon of real estate cycles and the features of such cycles.

Prerequisite Knowledge

Investment – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Overview Of Real Estate

- What is Real Estate?
- Types of Ownership
- Mortgages & Security
- Market Players

Topic 2: Residential Real Estate

- Residential Real Estate

Topic 3: Commercial Real Estate

- Commercial Real Estate

Topic 4: Real Estate Income & Growth

- Rental Income
- Capital Appreciation
- Residential vs. Commercial Real Estate

Topic 5: Real Estate Investment & Valuation

- Real Estate Investment & Valuation

Topic 6: Real Estate Risks & Cycles

- Risks of Investing in Real Estate
- Real Estate Cycles

Real Estate – Investing

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Distinguish between direct and indirect investment in real estate, and recognize the key dynamics of the residential and commercial sectors
- Identify the main considerations for investors looking to invest directly in physical properties as well as the impact of leverage on investment returns
- Recognize the various methods of indirect investment in real estate and the differences between these methods

Tutorial Overview

This tutorial describes the different means by which investors can obtain exposure to real estate as an asset class. Two key investment methods are examined: direct investment in physical property and indirect investment through instruments such as real estate stocks and bonds, derivatives, real estate investment trusts (REITs), real estate operating companies (REOCs), and real estate limited partnerships (RELPs).

Prerequisite Knowledge

Real Estate – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 30 minutes

Tutorial Outline

Topic 1: Overview of Real Estate Investment

- Overview of Real Estate Investment

Topic 2: Direct Investment

- Direct Investment in Real Estate
- Use of Leverage in Real Estate Investment
- Direct Investment: Issues

Topic 3: Indirect Investment

- Indirect Investment

Real Estate – Valuation

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main factors that determine real estate prices
- Recall how individual properties can be valued
- List the methods used to value real estate, namely the replacement cost approach, direct sales comparison approach, and income approach
- Recognize how property values can be compared using measures such as the house price to net rental ratio, yield, and house price to income ratio

Tutorial Overview
Real estate is generally considered to be an "alternative asset," complementary in a portfolio context given its low correlation with stock, bond, and money markets. Fund managers need to determine how much real estate to add to a portfolio and at what price. In this tutorial, we learn about how investors can value real estate.

Prerequisite Knowledge
Real Estate – Investing

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Basics of Real Estate Valuation
- Basics of Real Estate Valuation
- Determinants of Property Value

Topic 2: Valuation of Individual Properties
- Valuation Indicators
- Transaction Prices vs. Market Valuation

Topic 3: Valuation Methods
- Replacement Cost Approach
- Direct Sales Comparison Approach
- Income Approach
- Income Approach: Direct Capitalization Method

Topic 4: Relative Valuation Measures
- House Price to Net Rental Ratio
- Yield
- House Price to Income (or Earnings) Ratio
- Other Ratios

Regression Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the concept of regression analysis
- Calculate the relationships between variables using regression analysis

Tutorial Overview
Regression analysis is a branch of statistics, which uses modeling and analytical techniques to assess the relationship between dependent and independent variables. This tutorial outlines the purpose and uses of regression analysis and provides practical instruction on ordinary least squares (OLS), its properties, derivation, and calculation.

Prerequisite Knowledge
A reasonable level of mathematical and statistical knowledge is assumed.

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Uses of Regression Analysis
- Definition of Regression Analysis
- Purpose of Regression Analysis
- Regression Analysis
- Types of Linear Regression
- Scenario: Two-Variable Linear Regression

Topic 2: Regression Analysis Calculations
- Ordinary Least Squares (OLS) Regression Analysis
- Least Squares Estimators
- Computing the Least Squares Estimators Manually – Example
- Generalization of Ordinary Least Squares (OLS)
- Assumptions for Regression Analysis
- Properties of the OLS Estimator
- Best Linear Unbiased Estimator (BLUE)

Regression Analysis – Excel Interactive

Tutorial Description
Overview
This tutorial uses video and interactive exercises to show how a regression analysis can be undertaken using Microsoft Excel.

Prerequisite Knowledge
Correlation & Regression Analysis

Level: Intermediate
Duration: 30 minutes

Regulation – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify key features, influential acts, and important standards of financial regulation
- Recognize bodies responsible for – and initiatives aimed at enhancing – supervision
- Identify principles of conduct regulation and concrete measures used to enforce it
- Identify both some of the challenges and solutions that technology represents for regulators
- Recognize other key challenges faced by regulators

Tutorial Overview
It is no exaggeration to say that the survival of the financial system depends on a sound and robust regulatory framework. This tutorial provides an overview of some of the key features of financial regulation, covering supervision, conduct regulation, the solutions and challenges technology brings, and other common challenges that regulation faces.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Key Features Regulation
- Why We Need Regulation
- Defining Features
    - Nonlinear Evolution
    - Staying Power
    - Global Scope
    - Territorial Reach
- Influential Frameworks
    - Basel III
    - Dodd-Frank Act
    - European Frameworks
    - Depression-Era Acts
- Core Principles

Topic 2: Supervision
- Who's in Charge of Supervision?
- Systemic Risk & TBTF

Topic 3: Conduct Regulation
- Prioritization of Conduct
- Key Requirements
    - Honesty/Integrity
    - Due Skill/Diligence
    - Fair Treatment
    - Cooperation with Regulators
- Role of Compliance
    - Fostering Compliance Culture
    - Advising on Regulatory Matters
    - Communication
    - Handling Issues

Topic 4: Technology

- Challenges
    - Crypto Assets
    - ETFs
    - HFT
- Solutions
    - RegTech

Topic 5: Other Challenges

- Balancing Act
- March 2023 Mini-Banking Crisis
    - TBTF Revisited
    - New Outlets for Systemic Risk
    - Regulatory Rollback
    - Containment vs. Moral Hazard

Reinforcement Machine Learning & Neural Nets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define deep learning and compare it to supervised and unsupervised machine learning
- Identify the key characteristics of artificial neural networks (ANNs) and compare them to the human brain
- List the limitations of ANNs and recall how these are overcome by recurring neural networks (RNNs) and convolutional neural networks (CNNs)
- Define reinforcement learning (RL) and its approach to problem-solving

Tutorial Overview
Supervised and unsupervised machine learning (ML) use simple mathematical and statistical tools to process data and produce outputs that can help guide decision-making. However, they are relatively modest tools compared to the range of human intelligence. To develop more complex forms of artificial intelligence (AI), computer scientists and programmers have created artificial neural networks (neural nets) intended to mimic the functioning of the human brain. These neural nets have led to major advances in deep learning and reinforcement learning, enabling the creation of ever-more sophisticated AI tools. This tutorial provides an overview of neural nets, deep learning, and reinforcement learning.

Prerequisite Knowledge
Unsupervised Machine Learning

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Advanced AI Overview
- The Search for True AI
- Better Tools, Better AI

Topic 2: Deep Learning & Neural Nets
- Biology & Neurons
- Artificial Neural Nets (ANNs)
- Weighting Schemes
- Deep Learning vs. Other Machine Learning
- ANN, RNN, & CNN
- ANN Limitations
- Case Study: Natural Language Processing (NLP)

Topic 3: Reinforcement Learning (RL)
- Reinforcement Learning (RL) Overview
- Beyond The Basics

REITs

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the size and nature of the REIT market
- List the key types of REIT, namely, equity REITs, mortgage REITs, and hybrid REITs
- Recognize the main considerations for investors looking to invest directly in physical properties
- Identify the methods used to value REITs, namely the NAV, fund of funds, (adjusted) funds from operations, dividend yield, and dividend cash flow models.

Tutorial Overview
This tutorial describes looks at the market for real estate investment trusts (REITs), describing their different types, how investors invest in them, and how the different methods used in their valuation.

Prerequisite Knowledge
Real Estate – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: Overview of REITs
- What is a REIT?

Topic 2: Types of REIT
- Types of REIT

Topic 3: Investing in REITs
- Investing in REITs

Topic 4: Valuation of REITs
- REIT Valuation

Relative Value Trading

Tutorial Description
Objectives
On completion of this tutorial you will be able to:

- Define a relative value (RV) trade and differentiate it from arbitrage and directional trades
- Identify the methods used to identify RV trading opportunities and the instruments used by RV trader
- Recognize the role of yield curve analysis in RV trading

Tutorial Overview
RV trading involves being neutral to moves up/down in the overall market while taking advantage of price differentials between individual assets. It is an attempt to benefit from the relative prices of assets that are seen as being out of line. This tutorial defines RV trading and differentiates it from arbitrage and directional trading. The tutorial also takes a detailed look at the methods used to identify RV trade opportunities and the instruments employed by the RV trader.

Prerequisite Knowledge
Fixed Income Strategies – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Relative Value Trading
- Seeking Relative Value
- Drivers of Secondary Market Prices
- Drivers of Secondary Market Prices: Distortions
- Relative Value vs. View-Driven Trading
- Duration Weighting
- Duration-Weighted Relative Value Trades
- Relative Value Trading: Issues
- Relative Value Trading: Notes
- Trading Anomalies in Government Securities Markets
- Relative Value Trading & Government Bond Futures
- Relative Value Trading in Nongovernment Markets

Topic 2: Relative Value Trading & Yield Curve Analysis
- Comparing Bonds for Relative Value on the Basis of Yield
- Yield Curves & Bond Pricing
- Zero-Coupon-Based Relative Value Framework for Bonds
- Selecting a Zero-Coupon Curve
- Comparing Z-spreads Using the SOFR Strip Curve

Repos

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define a repurchase transaction and its key features
- Calculate repo interest, haircuts, and margins
- List the key variants of standard repurchase transactions
- Recognize trading strategies involving repos, such as shorting bonds and trading bond price anomalies
- Recall the main clearing and settlement processes with repos

Tutorial Overview
A repurchase agreement (or repo) is a money market instrument whereby a borrower sells securities (or some other asset) to another party at a fixed price and agrees to repurchase the securities at an agreed future date and dirty price. Repos are a form of collateralized borrowing.

The tutorial shows how the repo process works, how repo interest is calculated, and how haircuts and margins are applied to these transactions.

Prerequisite Knowledge
Money Market Securities – An Introduction

Tutorial Duration: 60 minutes
Tutorial Level: Intermediate

Tutorial Outline
Topic 1: Overview of Repos
- Overview of Repo Markets
- Overcollateralization & Temporary Sale
- Types of Repo Collateral

Topic 2: Repo Interest, Haircuts, & Margin
- Repo Interest
- Repo Haircuts
- Margin
- Margin: Variation Margin
- Repo Calculations

Topic 3: Repo Variations
- Key Variations of Repos
- Market Participants
- Onshore & Offshore Markets

Topic 4: Trading Strategies
- Trading Bond Price Anomalies
- Shorting Bonds
- Finding Securities by Reverse Repo
- Pricing Bond Trades for Forward Settlement

Topic 5: Repo Clearing
- Repo Clearing
- Repo Clearing: Features

Risk – Primer

Description

Overview
The very business of banking involves managing risk – risk goes hand-in-hand with reward, although not necessarily in some easily-defined mathematical relationship. This video provides a high level overview of the concept of risk, looking at how to define it to accurately in the context of banking, the distinction between risk and uncertainty, and the importance of examining all possible outcomes and the probabilities associated with them.

Prerequisite Knowledge
Financial Markets – An Introduction

Level: Introductory
Duration: 6 minutes

Risk Management – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define some key risk concepts and the major risk types
- Identify the types of activity that give rise to risk in banking and the factors that influence risk exposure and risk profiles
- Recognize the main criteria for successful risk management and distinguish between top-down and bottom-up risk management

Tutorial Overview
Banks must accept risk in order to achieve their business objectives. Over time, performance should be monitored and managed to ensure that risks that have been accepted remain within risk appetite and that new or unexpected risks do not emerge. This tutorial provides a high-level overview of risk management practices in banking today.

Prerequisite Knowledge
Risk – Primer

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Key Risk Concepts & Types
- Risk Management: A Challenging Environment
- Risk Management & Decision-Making
- Automated Decision-Making
- Key Risk Concepts
- Risk Types
- Why Categorize Risk Types?
- Scenario: Risk Exposure
- Apply Your Knowledge
- Scenario: Risk Types
- Apply Your Knowledge
- Scenario: Other Risks
- Risk Measurement

Topic 2: Risk & Banking
- Sources Of Risk (Upside)
- Sources Of Risk (Downside)
- Risk Exposure
- Risk Profile
- Influences On Risk Exposures & Profiles
- Risk & Reward
- Costs Of Taking Risks

Topic 3: Managing Risk
- Risk Management Success Criteria
- Top-Down Vs. Bottom-Up Risk Management
- Risk Appetite
- Risk Management Framework (RMF)
- Risk Culture
- Risk Controls

Risk Management – Business Strategy & Risk Decision-Making

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the relationship between business strategy and risk and the importance of aligning risk appetite with strategy
- Identify the stages in the risk decisioning process and how such decisions can impact risk exposure

Tutorial Overview
This tutorial describes how banks take risk into account when setting business strategy and how risk appetite is aligned with business objectives once the strategy is determined. It also explains the importance of a risk management framework and how the various elements of the framework work together when setting and implementing risk appetite. Finally, the tutorial examines the risk decision process in detail and outlines the factors, including the human element, that can affect decision-making.

Prerequisite Knowledge
Risk Management – Risk Types & Measurement

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Business Strategy & Risk
- Business Strategy & Risk
- Banking & Risk
- Business Strategy & Risk
- Business Strategy & Operating Environment: Internal Factors
- Business Strategy & Operating Environment: External Factors
- Risk-Reward & Regulatory Compliance
- Risk-Reward & Regulatory Compliance: Key Aspects
- Risk Appetite
- Setting & Maintaining Risk Appetite
- Risk Appetite Statements
- Implementing Effective Risk Appetite Statements
- Risk Management Framework (RMF)
- Top-Down vs. Bottom-Up Risk Management
- Risk Appetite Setting & RMFs
- Risk Culture
- Risk Culture & Controls

Topic 2: Risk Decision-Making
- Risk Decision-Making
- The Risk Decision Process
- Examples of Risk Decisions
- Risk Decisions & Approvals
- Factors Influencing the Risk Decision Process
- Human Element in the Risk Decision Process

Risk Management – Reporting

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the importance of risk reporting and the key internal and external stakeholders
- Recognize the problems with risk reporting that were exposed by the financial crisis and the response by both regulators and banks to these problems
- Identify the key stages in the risk reporting process and the challenges that reporting teams face

Tutorial Overview
Risk reporting provides information on a regular basis relating to the size and nature of risks a bank is currently exposed to, as well as trends in key risk measures and potential or actual loss performance. This tutorial looks in detail at risk reporting, covering it from the perspective of both internal reports and external/regulatory reports.

Prerequisite Knowledge
Risk Management – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Risk Reporting

- Risk Reporting Formats
- Risk Reporting Formats: Level of Detail
- Risk Reporting Formats: Sample Regulatory Report
- Internal Stakeholders
- Internal Stakeholders: Diagrammatic Representation
- External Stakeholders
- External Stakeholders: Key Differences
- Internal & External Reporting: Key Differences
- Risk Reporting & Financial Reporting: Key Differences

Topic 2: Evolution & Development of Risk Reporting

- Pre-Financial Crisis
- What Went Wrong With Risk Reporting?
- Why Did This Happen?
- Regulatory Response
- Post-Crisis
- What Has Changed in Risk Reporting?
- One-Off Reporting
- Stress Testing & Scenario Analysis
- Stress Testing & Scenario Analysis: Example
- Ongoing Issues with Reporting Requirements: Comparability
- Ongoing Issues with Reporting Requirements: Other Issues
- Regulatory Expectations

Topic 3: Risk Reporting Process & Challenges

- The Risk Reporting Process
- Internal Reporting Challenges
- External Reporting Challenges
- Dealing With Change
- Outlook for Reporting

Risk Management – Risk Types & Measurement

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main risk types and how they influence a bank's risk management
- framework
- Recognize the main risk measures as well as the benefits and issues associated with their use

Tutorial Overview
Banks must manage numerous types of risk that arise from their day-to-day activities. But their ability to measure – and therefore manage – risk varies considerably by risk type. Some, such as credit and market risk, are relatively easy to measure but others, such as operational risk, are far more difficult. This tutorial covers the main risk types, such as those mentioned, and the measurement of these and other types of risk that banks face.

Prerequisite Knowledge
Risk Management – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Risk Types
- Common Risk Types
- Allocating Individual Risks To Different Risk Types
- Interrelated Risks
- Risk Types & Risk Organization
- Enterprise Risk Management (ERM)
- Advantages & Disadvantages Of Risk Types
- Risk Types & Regulatory Requirements

Topic 2: Risk Measurement
- Why Measure Risk?
- Risk Types & Risk Measurement
- What Should Be Measured?
- Examples Of Risk Measures
- Aggregating Risk Measures
- Monetary Values
- Calculating & Reporting Monetary Values: Example
- Other Risk Measures

Risk Management – Tools & Techniques

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the different approaches that banks can take to risk management
- Identify the various tools and techniques that can be used to manage or mitigate risk

Tutorial Overview
This tutorial examines the difference between "originate-to-hold" and "proactive" approaches to managing risk as well the various tools and techniques available for managing risk. These include tools and techniques for assessing risk and make risk decisions, reducing the likelihood of a risk event occurring, reducing the impact of a risk event, and managing risk exposure. The tutorial also outlines the many factors to be taken into account when selecting a risk management tool or technique for a particular situation.

Prerequisite Knowledge
Risk Management – Business Strategy & Risk Decision-Making

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Approaches to Managing Risk
- Approaches to Managing Risk
- Originate-to-Hold
- Proactive Risk Management
- Proactive Risk Management: Pros & Cons
- Blended Approach
- Blended Approach: A Visual Representation
- Risk Exposure & Risk Types

Topic 2: Tools & Techniques
- Tools & Techniques
- Using Tools & Techniques to Assess & Manage Risk
- Credit Grades
- Automated Decisioning Systems
- Automated Decisioning Systems: Pros & Cons
- Capacity Planning
- Systems Redundancy
- Netting
- Scenario: Netting
- Matching
- Simultaneous Exchange (DVP)
- Insurance
- Insurance Claims
- Credit Insurance
- Credit Insurance as Risk Mitigation
- Mitigation (Collateral/Security)
- Common Forms of Mitigation
- Securitization
- Derivatives Hedging
- Derivatives Hedging: Example
- Other Ways to Manage Exposure
- Factors Influencing the Choice of Tool or Technique

Risk Management for Asset Managers – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define risk management
- Identify the key aspects of the asset management business that influence the risks it faces
- List the major risk types that asset managers face, including investment and operational risk
- Recognize the importance of good governance for the effective oversight and management of risk

Tutorial Overview
While asset managers are not subject to the onerous regulations that apply to banks, they are nevertheless a key part of the financial system. As such, they are expected to contribute to the stability of the financial system by managing their risks appropriately. This tutorial provides a high-level introduction to risk management in an asset management context.

Prerequisite Knowledge
Business of Asset Management

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Asset Management
- Overview
- Sell Side vs. Buy Side
- Asset Managers vs. Banks

Topic 2: Asset Management Risks
- Overview
- Investment Risk Overview
- Types of Investment Risk
- Investment Risk Priorities
- Investment Risk Analysis
- Operational Risk Overview
- Categories of Operational Risk
- Other Risks

Topic 3: Risk Management and Governance
- Key Aspects of Risk Management
- Stated Risk Appetite
- Risk Appetite, Risk Tolerance, & Risk Exposure
- Risk Management Framework (RMF)
- Risk Culture
- Top-Down vs. Bottom-Up Risk Management
- Risk Controls
- Proprietary Investment Management
- Risk Management in Proprietary Investment Management

Risk Modeling

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of risk model that banks use and the development process for such models
- Recognize the main sources of model risk and how banks manage this risk
- List the reasons why data quality is a challenge for banks and the potential impact of poor data quality

Tutorial Overview
Banks use models for numerous purposes, from internal risk measurement and management needs to meeting a variety of regulatory and financial reporting requirements. While these models are very useful and many banks have come to rely on them, they also come with various risks and challenges. This tutorial provides a high-level overview of risk models in banking, including the management of model risk and data quality issues that arises out of their usage.

Prerequisite Knowledge
Risk Management – Risk Types & Measurement

Tutorial Level: Intermediate
Tutorial Duration: 35 minutes

Tutorial Outline
Topic 1: Risk Models
- Overview Of Risk Modeling
- Components Of A Risk Model
- Types Of Risk Model
- Model Development & Validation

Topic 2: Model Risk
- What Is Model Risk?
- Sources Of Model Risk
- Consequences Of Model Risk
- Managing Model Risk

Topic 3: Data Issues
- Data Quality Challenges
- Causes Of Data Quality Issues
- Impact Of Data Quality Issues
- Addressing Data Quality Issues
- Ongoing Challenges

Risk & Return – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Calculate the expected return for an individual security
- Calculate the risk of an individual security

Tutorial Overview
The decision to choose one security over another is a two-stage approach. The first stage requires the expected return to be calculated while the second stage requires the volatility of that expected return to be calculated.

This tutorial shows how investors can pick the combination of expected return and risk (variance/standard deviation) that best matches their risk preference.

Prerequisite Knowledge
Investment – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Calculating the Expected Return
- Calculating the Expected Return
- Percentage Changes
- Percentage Changes: Example
- Average Price Changes
- Average Price Changes (Using Excel)
- Average Price Changes (Using Matrices)
- Average Price Changes (Using Matrices): Example

Topic 2: Calculating Volatility (Risk)
- Calculating Volatility (Risk)
- Volatility of Stock Returns
- Calculating Variance
- Calculating Variance: Example
- Calculating Variance (Using Excel)
- Calculating Variance (Using Matrices)
- Calculating Variance (Using Matrices): Example
- Standard Deviation: Overview
- Calculating Standard Deviation: Example
- Calculating Standard Deviation (Using Excel)
- Calculating Standard Deviation (Using Matrices)
- Analyzing Price Movements – Volatility

Risk & Return – Efficient & Optimal Portfolios

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain how investors can find a portfolio that minimizes their risk exposure
- Recognize the significance of the efficient frontier in terms of portfolio selection
- Choose the optimal portfolio along an efficient frontier curve

Tutorial Overview
While there are almost endless possibilities of portfolio composition, we show how given a specific set of stocks, the optimal portfolio composition can be calculated. This tutorial is the same portfolio for all, irrespective of risk preferences. This tutorial shows how we arrive at the optimal portfolio and why it is the same tutorial that every rational investor will choose.

Prerequisite Knowledge
Risk & Return – Portfolios

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Minimum Variance Portfolio
- Minimum Variance Portfolio
- Diversification
- Effect of Diversification
- Minimum Variance Portfolio
- Correlation Coefficient
- Calculating the Correlation Coefficient in Excel
- Correlation Coefficient: Values
- Calculating the Minimum Variance Portfolio: Multi Asset Portfolio
- Calculating the Minimum Variance Portfolio: Example
- Scenario: Minimum Variance Portfolio

Topic 2: Efficient Frontier
- Efficient Frontier
- Efficient Portfolios
- Efficient Frontier
- Constructing the Efficient Frontier
- Constructing the Efficient Frontier: An Example

Topic 3: The Optimal Portfolio
- The Optimal Portfolio
- Risk/Return Trade-off
- Sharpe Ratio
- Calculating the Optimal Portfolio
- Calculating the Optimal Portfolio: An Example

Topic 4: The Complete Portfolio
- The Complete Portfolio
- Introducing the Risk-Free Asset
- Capital Market Line (CML)
- Riskless Borrowing & Lending

Risk & Return – Portfolios

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Explain how the portfolio expected returns are calculated
- Explain covariance and the part it plays in the calculation of portfolio risk
- Analyze the effectiveness of diversification for different degrees of correlation amongst securities in a portfolio
- Calculate the semi-variance of a portfolio

Tutorial Overview
In a world where people's finances are finite, choices must be made in relation what to include in their investment portfolios. Investor's must know how to estimate the risk and return of their portfolio each time they select different variations of securities.

This tutorial shows how investors can work out the portfolio risk and return so they can choose the portfolio weighting that that best matches their risk preference.

Prerequisite Knowledge
Risk & Return – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Calculating the Risk/Return of a Portfolio

- Calculating the Risk/Return of a Portfolio
- Expected Returns: Overview
- Calculating Expected Returns: Long-Hand Method
- Calculating Expected Returns: Sumproduct Function
- Calculating Expected Returns: Matrices

Topic 2: Portfolio Covariance
- Portfolio Covariance
- Covariance: Overview
- Covariance Values
- Calculating Covariance: Example
- Calculating Covariance (in Excel)
- Calculating Covariance (Using Matrices)

Topic 3: Portfolio Variance & Standard Deviation
- Portfolio Variance & Standard Deviation
- Calculating Variance
- Calculating Variance: Example
- Calculating Variance (Matrices)
- Calculating the Standard Deviation
- Standard Deviation (In Excel)

Topic 4: Semivariance
- Semivariance
- Symmetric Returns
- Asymmetric Risk Profiles
- Calculating Semivariance
- Calculating Semivariance: Example

Sanctions (2024)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the reasons for sanctions
- List the types of sanction
- Define a sanctions list and the penalties associated with noncompliance
- Interpret the name and target match procedure
- Recall the challenges in identifying ownership and control in entities

Tutorial Overview
Sanctions restrict and prohibit dealings with certain countries, entities, or individuals which are involved – or suspected of being involved – in illegal activities. This helps uphold peacekeeping and conflict resolution, and combat violations of international law and terrorism.

Sanctions do this by applying pressure to encourage a change in behavior of a target country or regime, or to prevent and suppress the financing of terrorist activity. Everyone who works within financial services should have a good understanding of what sanctions are, how they work, and why they are used.

In this tutorial, we look at who imposes sanctions, the laws, and penalties for breaches of said sanctions, and the reporting obligations surrounding sanctions.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Sanctions Overview
- Need for Sanctions
- Purposes of Sanctions
- Types of Sanction
- Case Study: Targeted Sanctions
- Collateral Damage
- Who Imposes Sanctions?

Topic 2: Sanctions Lists
- Sanctions Lists
- Using Sanctions Lists
- Who Maintains Sanctions Lists?
- Case Study: Sanctions Breaches
- Enforcement around the World
- Tougher Penalties

Topic 3: Sanctions Monitoring
- Sanctions Monitoring
- Name & Target Match
- Reporting Obligations
- Case Study: Obstructing an Investigation
- Impact of Technology
- Scenario: Bank Cashier
- Scenario: Monitoring

Topic 4: Sanctions on Countries
- Country-Related Sanctions
- Sanctions on Russia

- Case Study: Breaching Sanctions on Sudan
- Ownership & Control
- Case Study: Ownership & Control
- Unilateral Sanctions
- Case Study: Unilateral Sanctions against Iran
- Extraterritorial Sanctions
- Scenario: International Transfers
- Your Responsibilities

Sapin II

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of corrupt behaviour and the need to legislate against such behaviour
- Describe the key provisions of Sapin II
- Recognize the importance of a company's systems and controls in relation to managing corruption risks

Tutorial Overview
This tutorial is a guide for staff at all levels to help them avoid the risks of bribery and other forms of corruption. The tutorial details the relevant laws and regulations that individuals and companies need to follow, as well as the systems and controls that are used to manage the risks associated with corruption. The information is pitched so that the tutorial is relevant to those with no experience of the French anticorruption regime, though there is sufficient detail to make the tutorial useful to more senior staff as well.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Corruption
- A Perspective on Corruption
- Costs of Corruption
- Focus of Corruption Legislation
- Transnational Legislation
- Your Obligations

Topic 2: Statutory Framework
- Background to Sapin II
- Objectives of Sapin II
- Key Provisions of Sapin II
- Types of Corrupt Behaviour
- Corruption Offences
- Anticorruption Agency (AFA)
- Anticorruption Compliance Programmes
- Convention Judiciaire D'Intérêt Public (CJIP)
- Case Study: CJIP
- Whistleblowing
- Whistleblowers' Rights
- Extraterritorial Reach
- Penalties
- Scenario: Tickets to the Football

Topic 3: Systems & Controls
- Managing Corruption Risks
- Top-Level Commitment
- Top-Level Commitment: Anticorruption Code of Conduct
- Risk Identification & Assessment (Risk Mapping)
- Risk Identification & Assessment: Gifts & Hospitality Controls
- Scenario: Hospitality in the South of France
- Due Diligence

- Communication & Training
- Monitoring & Assessment
- Whistleblowing: Collecting Alerts
- Whistleblowing: Other Requirements
- Self-Reporting

Securities Lending – An Introduction

Tutorial Description
On completion of this tutorial, you will be able to:

- Recognize the key elements of a securities lending transaction
- Identify the key participants in the securities lending market and some of the key market practices

Tutorial Overview
A securities loan involves the temporary transfer of securities by one party, the lender, to another, the borrower. Securities lending is a global business that is important not only in its own right, but also provides liquidity and serves to improve the functioning of securities markets as a whole.

This tutorial looks at the fundamental principles of securities lending, including the basic structure of both cash and noncash collateral transactions and the various parties involved in a typical securities loan.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Securities Lending
- Overview of Securities Lending
- Basic Structure of a Securities Lending Transaction
- Rental Fees & Rebate Interest
- Securities Loaned
- Collateral
- Cash vs. Noncash Collateral
- Securities Loan: Example
- Legal Ownership of Securities
- Securities Loans vs. Repos

Topic 2: Market Participants & Practices
- Market Participants & Practices
- Securities Lenders
- Securities Lending Strategies
- Lending Revenue
- Securities Lending Agents
- Securities Lending Agents: Custodians vs. Third-Party Agents
- Role of a Securities Lending Agent
- Securities Borrowers
- Drivers of Borrower Demand
- The Securities Lending Process
- Impact of the Financial Crisis

Securities Lending – Collateral & Risk Management

Tutorial Description
On completion of this tutorial, you will be able to:

- Recognize the importance of collateral management in the context of a securities lending program
- Identify the key risks to participants in the securities lending market and how these risks can be mitigated or managed

Tutorial Overview
Securities loans are collateralized transactions, with borrowers permitted to post cash or noncash collateral to secure the loans. This tutorial looks at collateralization practices in the securities lending market. It also describes the main risks associated with securities lending and some of the tools and techniques used to mitigate or manage these risks.

Prerequisite Knowledge
Securities Lending – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Collateralization Practices
- Collateralization Practices
- Role of Collateral in Securities Loans
- Collateral & Margining Arrangements
- Collateral Management

Topic 2: Risks of Securities Lending
- Risks of Securities Lending
- Main Risks
- Counterparty Credit Risk (CCR)
- Managing CCR
- Collateral Reinvestment Risk
- Managing Collateral Reinvestment Risk
- Collateral Risk: Noncash Collateral
- Operational Risk
- Managing Operational Risk
- Legal Risk
- Managing Legal Risk
- Master Agreements
- Disclosure (Securities Financing Transaction Regulation)

Securitization – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define securitization and identify the qualities that make certain assets suitable for securitization
- Recognize the main elements of the securitization process, including the transfer of assets to a bankruptcy remote special purpose vehicle (SPV), and the tranching, rating, and issuance of asset-backed securities
- Identify the main risks transferred in a securitization and the motivations for doing so Recognize the key features of the US agency MBS mortgage market, including the role of government-sponsored entities (GSEs) such as the GNMA and FNMA

Tutorial Overview
This tutorial examines the importance of securitization in transferring risk and reducing regulatory capital requirements. The securitization process is described in detail and the US agency MBS market is also explored.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Basics of Securitization
- What Is Securitization?
- What Can Be Securitized?

Topic 2: Securitization Process
- Securitizing Assets Using an SPV
- Rating Agency Process for Securitizations
- Tranching
- Bankruptcy Remoteness

Topic 3: Risk Transfer
- Transferring Risk in a Securitization
- Motivations for Risk Transfer
- Types of Risk Transferred

Topic 4: Agency Securitization
- US Agency MBS Market
- Prepayment Risk & Duration
- Nature of US Agency MBS Risk Transfer

Securitization – CDOs

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how CDOs can be backed by portfolios of fixed income securities (collateralized bond obligations/CBOs) or loans (collateralized loan obligations/CLOs)
- Recall how credit risk is transferred in CDOs and apportioned via the tranching structure and cash flow waterfall
- Identify the main categories of CDO such as cash vs. synthetic CDOs, static vs. managed CDOs, cashflow vs. market value CDOs, and balance sheet vs. arbitrage CDOs

Tutorial Overview
A CDO is a security backed by a pool of loans, bonds, or other securities. A CDO deal is broken into multiple tranches, each with separate maturity and credit risk, appealing to different classes of investors. This tutorial looks at the key characteristics of CDO transactions, the main types of CDO, and the key issuer motivations with these instruments.

Prerequisite Knowledge
Securitization – Pricing & Analysis

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Collateralized Instruments
- Collateralized Debt Obligations (CDOs)
- CDO: Purpose
- Tranching & Ratings
- Analysis of CDOs
- Market Development

Topic 2: Types of CDO
- Static vs. Managed CDOs
- Managed CDOs: Phases
- Cash Flow vs. Market Value CDOs
- Balance Sheet vs. Arbitrage CDOs
- Arbitrage CDO: Excel
- Arbitrage CDO: Optimizing Risk/Return in a Portfolio
- Cash CDOs vs. Synthetic CDOs
- Synthetic CDOs
- Synthetic CDOs: Arbitrage Deals
- CDOs: CDS Basis
- Leveraged Synthetic CDOs
- CDO-Squared Transactions

Securitization – Credit Risk & Ratings

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main motivations for transferring credit risk in an ABS securitization including, reducing regulatory capital, working capital management, and collateral management
- Recognize the importance of true sale and SPV bankruptcy remoteness in a securitization
- Recall how investors, analysts, and ratings agencies analyze the underlying portfolio in a securitization and assess its cash flows

Tutorial Overview
This tutorial looks at the key motives for financial institutions to transfer credit risk in an ABS securitization. The crucial concept of true sale and bankruptcy remoteness, and the process by which market participants analyze ABS securitizations are also examined in detail.

Prerequisite Knowledge
Securitization – US Non-MBS

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Transfer of Credit Risk
- Credit Risk Transfer in Securitizations
- Credit Risk Transfer Through Tranching
- Retention of the Equity Class
- Transfer of Other Risks in a Securitization

Topic 2: True Sale & Bankruptcy Remoteness
- Importance of True Sale & Bankruptcy Remoteness
- True Sale
- Bankruptcy Remoteness

Topic 3: Credit Risk Analysis
- Analysis of Credit Risk in a Securitization
- Assessment of Underlying Cash Flows
- Analysis of the Underlying Portfolio
- The Global Financial Crisis & Securitization Risks

Securitization – MBS Types & Risks

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key sectors of the US residential mortgage-backed security (RMBS) market, including agency securities issued by government-sponsored entities (GSEs) and non-agency securities backed by jumbo, Alt-A, and subprime loan assets
- Identify the key risks affecting the MBS securitization, such as correlation risk, default risk, and credit spread risk

Tutorial Overview
This tutorial looks at the key structures and loan types used in the MBS market, with a particular focus on the US RMBS market. The key risks that affect MBS structures, such as, correlation risk, default risk, and credit spread risk are also discussed in detail. The tutorial also provides a worked example in Excel illustrating the economics of holding the junior/equity tranche in a securitization.

Prerequisite Knowledge
Securitization – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Types of Securitization

- Types of Securitization Product
- Mortgage-Backed Securities (MBS)
- Agency RMBS
- Agency RMBS: Development
- Agency MBS: Features
- Non-Agency RMBS
- Jumbo Loans
- Jumbo Loans: Risk & Spreads
- Jumbo MBS: Risk Transmission
- Alt-A
- Subprime

Topic 2: Risks of Securitization

- Correlation & Tranche Risks: Correlation
- Correlation & Tranche Risks
- Correlation & Tranche Risks: Pricing
- Testing of Tranched Class Sizes with Stressed Defaults
- Testing of Tranched Class Sizes with Stressed Defaults: Excel
- Default Risk & Credit Spread risk

Securitization – Prepayment Risk

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key factors behind borrower prepayment, including interest-based and noninterest-based motivations
- Recognize the key methods used to measure prepayment sensitivities

Tutorial Overview
This tutorial looks at the main reasons why borrowers prepay mortgage loans, including interest rate and noninterest rate-related factors. The measurement of prepayment sensitivities through effective duration, option-adjusted spread (OAS), and Monte Carlo simulation is also discussed in detail.

Prerequisite Knowledge
Securitization – US MBS

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Prepayment Motives
- Mortgage Prepayment
- Mortgage Prepayment: Optionality
- Noninterest Rate Prepayment Motivations
- Lack of Prepayment
- MBS & Callable Bonds

Topic 2: Measuring Prepayment Sensitivities
- Measuring Prepayment Sensitivities
- Effective Duration
- Effective Duration: Example
- Option Adjusted Spread (OAS) Sensitivities
- OAS Duration
- Sensitivities Under Live & Burnout Scenarios
- PO & IO Strips: Prepayment Risk

Securitization – Pricing & Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify traditional fixed income metrics, such as yield-to-maturity and modified duration, as well as price sensitivity metrics used with securitized bonds, such as option-adjusted spread (OAS)
- Recognize how securitized bonds prices are expressed as spreads and how different risks affect such prices

Tutorial Overview
This tutorial looks at traditional bond metrics such as YTM and modified duration, and compares them with methods used to measure the sensitivity of securitized bond prices such as OAS duration. The use of spreads to quote prices, the different risks involved in pricing securitization transactions, and the pricing of different securitization tranches are also examined in detail.

Prerequisite Knowledge
Securitization – Credit Risk & Ratings

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Bond Analysis
- Bond Analysis & Cash Flow Certainty
- YTM vs. IRR
- Total Return & Horizon Period
- Effective Spread/Margin
- Discount Margin
- Analysis of an Amortizing Bond
- Analysis of an Amortizing Bond: Excel
- Duration
- Parallel Yield Curve Shift Analysis

Topic 2: Pricing
- Pricing & Spreads
- Pricing & Risk
- Tranche Pricing

Securitization – US MBS

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the main characteristics of agency MBS and the trading methodologies, including to be announced (TBA) trading and specified pool trading
- Identify the key features of collateralized mortgage obligations (CMOs), including protected tranches, planned amortization class (PAC) and target amortization class (TAC), securities, floaters, and strips

Tutorial Overview
This tutorial looks at the market for MBS issued by quasi-governmental agencies. The main types of trading, such as TBA and specified pool trading, and the key tranches of CMOs, such as PACs, TACs, floaters, principal only and interest only classes, are also examined in detail.

Prerequisite Knowledge
Securitization – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: US Agency MBS Market
- US Agency MBS Market
- Conforming Loans
- Agency MBS Trading
- To Be Announced (TBA) Trading
- Specified Pools Trading

Topic 2: Collateralized Mortgage Obligations (CMOs)
- Overview of CMOs
- CMOs: Reverse Engineering
- Prepayment Protected Tranches
- Prepayment Protected Tranches: Busted Tranches
- Analysis of Prepayment Speed
- Analysis of Prepayment Speed: Calculations
- Analysis of Prepayment Speed: PSA Model
- MBS Sensitivities: Excel
- MBS Sensitivities: Example
- Protecting Tranches
- Protecting Classes: Companion Bonds
- Floaters & Inverse FRN CMOs
- Floaters & Inverse FRN CMOs: Risks
- Stripped MBS

Securitization – US Non-MBS

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key features credit card ABS, including average life, revolving and amortizing periods, and forms of credit enhancement
- Recognize the process of securitizing auto loans and leases
- Recall the main risks, triggers, and terminology associated with ABS
- Identify the main characteristics of commercial mortgage-backed securities (CMBS) and recall how this market developed

Tutorial Overview
This tutorial looks at the main types of non-RMBS securities issued in the US, with a particular focus on credit card, auto loan, and commercial mortgage-backed securities. The key features and risks of these instruments and their associated market terminology are also dealt with in detail.

Prerequisite Knowledge
Securitization – US MBS

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Credit Card ABS
- Credit Card ABS
- Life of a Credit Card ABS
- Revolving Period
- Amortizing Period
- Credit Enhancement
- Credit Enhancement: Spread Account

Topic 2: Auto Loan ABS
- Overview
- Auto Loan Collateral
- Pro Rata & Sequential Amortization

Topic 3: ABS Risks, Triggers, & Terminology
- ABS Risks
- ABS Triggers
- ABS Terminology

Topic 4: Commercial Mortgage-Backed Securities (CMBS)
- CMBS Features
- CMS Market Development

Senior Managers & Individual Accountability (SM&CR)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Understand the key failings of Approved Person Regime (APR) and the need for individual accountability and a new regime
- Explain the three key elements of the SM&CR and understand how it impacts everyone within an organisation
- Understand the key changes and practical implications of SM&CR

Tutorial Overview
The course reviews the previous approved persons regime and its flaws in being able to identify individual accountability in conduct failures. It looks in detail at the SM&CR which was rolled out to banks and large investment firms in 2016 and which has now been extended, in modified form, to cover implementation in all other financial services businesses.

It then explores how under the SM&CR, senior managers are approved by the regulator, employers are required to certify their own employees and regularly assess their fitness and propriety, and conduct rules are applied to all employees.

Finally, we look at how the new regime significantly increases the number of people subject to regulatory rules and enforcement, and its importance for all those working in financial services to fully understand what is expected of them.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Individual Accountability Regime
- Need for Accountability
- Approved Persons Regime (APR)
- Enforcement
- Shortcomings in the APR & the Need for a New Regime
- Regime Change
- Scope

Topic 2: Certification Regime
- Senior Managers Regime (SMR) – Overview
- Senior Managers Regime (SMR) – Key Requirements
- Enforcement under SMR
- Certification Regime (CR) – Overview
- Role of Certification – Fitness and Proper
- Role of Certification – Training
- Criminal Checks
- Regulatory References
- Penalties

Topic 3: Conduct Rules
- Conduct Rules
- Exceptions – Ancillary Personnel
- Conduct Rules – Individual Persons
- Conduct Rules – Senior Managers
- Firms' Obligations

Shadow Banking

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize shadow banking and how it differs to other types of nonbank financing
- Discuss the bank-like risks associated with shadow banking and be able to illustrate the Financial Stability Board's policy framework
- Discuss the implementation of policy for dealing with shadow banking

Tutorial Overview
This tutorial provides an introduction to shadow banking. The first section explains shadow banking, its importance, the bank-like risks and the approaches used to assess them. The second section provides an overview of the Financial Stability Board's policy framework supported by a more detailed explanation of each of its key elements.

Finally, we look at how the policy framework has been implemented, the emerging issues, and the size and nature of shadow banking exposures.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Shadow Banking
- Threat from Shadow Banking
- Shadow Banking & Financial Crisis
- Regular Banking System: Overview
- Shadow Banks & Bank-Like Risks
- Shadow Banking Classifications
- Shadow Banking vs. Market-Based Finance
- Shadow Banking vs. Fintech

Topic 2: Regulatory Approach to Shadow Banking
- Narrow Measure
- FSB Policy Framework: Overview
- Assessments Based on Economic Functions
- Typical Entity Types & Economic Functions
- Overarching Principles
- Policy Toolkit
- Information Sharing Process

Topic 3: Policy Implementation & the Future of Shadow Banking
- Implementation of the Policy Framework
- Monitoring Implementation
- Size & Nature of Shadow Banking
- Future of Shadow Banking

Shareholder Servicing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify actions that fall under the remit of shareholder services
- Recognize transfer agency and the duties of transfer agents
- Recognize the function of the registrar
- Identify the differences between paying agents, calculation agents, and determination agents
- Identify depository receipt services

Tutorial Overview
The purpose of this tutorial is to explore the different individual facets of shareholder servicing in order to provide a holistic breakdown of what is and is not involved in it.

Prerequisite Knowledge
Custody – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Securities Registration
- Securities Registration
- Transfer Agency Services
- Transfer Agency Services: Custodians:
- Transfer Agent: Responsibilities
- Transfer Agent & Registrar
- Registered Securities
- Registered Securities: Maintaining Securities Registration
- Bearer Securities
- Nominee Registration
- Nominee Name vs. Beneficial Name
- Types of Nominee
- Immobilization of Securities
- Immobilization of Securities and the Function of Depositaries – Example
- Functions of Immobilization
- Dematerialization vs. Immobilization
- Registration Requirements

Topic 2: Miscellaneous Services
- Miscellaneous Services
- The Paying Agent
- Determination Agents & Calculation Agents
- Corporate Actions
- Depositary Receipts (DRs)
- Depositary Receipts (DRs): Arbitrage
- DRs: Conversion Process
- DRs: Transfer & Servicing
- Potential Concerns for Custodians

Singapore Anti-Money Laundering (AML) (2024)

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define money laundering and list its stages
- Define terrorist financing
- Recognise the laws and regulations in relation to money laundering and terrorist financing
- Identify your responsibilities and those of key personnel in your organisation
- List the systems and controls a firm should employ in relation to managing financial crime risks

Tutorial Overview:

The growth in international crime and terrorism has seen greater efforts by criminals to unearth new ways of integrating their illicit funds into financial markets.

Identifying and bringing to justice those who help launder illicit funds is a priority for both governments and financial markets regulators. You have an important part to play in this work – ignorance is no longer a valid form of defense. The penalties for noncompliance are severe and can include a fine and/or a custodial sentence, so understanding your obligations in relation to anti-money laundering (AML) and counter terrorist financing (CTF) is vital.

Prerequisite Knowledge:

None

Tutorial Level: Introductory

Tutorial Duration: 70 minutes

Tutorial Outline

Topic 1: Money Laundering

- Need for Money Laundering Regulations
- What is Money Laundering?
- Legislative Treatment of ML Stages
- Case Study: Money Laundering
- Trade-Based Money Laundering
- TBML: Moving Funds
- Scenario: Opening an Account

Topic 2: Terrorist Financing

- Need to Counter Terrorist Financing
- What is Terrorist Financing?
- Case Study: Terrorist Financing
- Innovation in Terrorist Financing
- Scenario: Charitable Organisation

Topic 3: Global Frameworks

- Global Nature of AML & CFT
- Global Response
- Financial Action Task Force (FATF)
- International Monetary Fund (IMF)
- AML & CFT Frameworks
- Laws & Regulations
- Transnational Application

Topic 4: Detecting & Preventing ML & TF

- AML/CFT Legislation in Singapore
- ML & TF Offences
- Obligation to Report: CDSA & TSOFA
- Tipping Off

- Obstructing an Investigation
- Suspicious Transaction Reports
- Whistleblowing
- Case Study: Money Laundering in Singapore
- Scenario: Suspicious Activity

Topic 5: AML Responsibilities
- Regulatory Authority
- Regulated Entities
- Who is Responsible?
- Senior Management Responsibilities
- STRO Responsibilities
- Individual Responsibilities
- Case Study: Senior Manager Accountability

Topic 6: Systems & Controls
- Fighting Financial Crime
- AML Regime Elements
- Customer Due Diligence
- Customer Risk
- Know Your Customer (KYC)
- Due Diligence Procedures
- High-Risk Customers
- Record-Keeping Procedures
- Staff Training

Singapore Bond Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the historical development of the Singapore bond market
- Identify the key types of Singapore government security and how they are issued
- Recognize the different types of corporate bond traded in the Singapore bond market

Tutorial Overview
This tutorial describes the development of the Singapore bond market and its various sectors, including Singapore government securities (SGS) and corporate bonds. The issuance process for SGS is also described in detail.
Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Development of the Singapore Bond Market
- Singapore Bond Market History
- Establishment of the Asian Dollar Market (ADM)
- Non-Internationalization of SGD Policy
- Development of the Singapore Bond Market
- Market Size
- Sector Breakdown
- Bond Pricing
- Investor Protection

Topic 2: Government Securities
- Singapore Government Securities (SGS)
- Other Types of SGS
- Singapore Government Securities (SGS): Issuance
- SGS Investors

Topic 3: Corporate Bonds
- Singapore Corporate Bonds
- Corporate Bonds: Listing Requirements
- Corporate Bonds & Financial Guarantee Institutions
- Corporate Bonds: Trading
- Other Types of Singapore Corporate Bond

Topic 4: Market Challenges & Opportunities
- Singapore Bond Market: Opportunities
- Singapore Bond Market: Challenges

Singapore Equity Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the stock exchanges, market regulators, stock indices, and types of security in the Singapore equity market
- Describe the listing, trading, and settlement procedures for equities in Singapore

Tutorial Overview
Located at the heart of Southeast Asia, Singapore is strategically well placed to serve the fast-growing markets of the Asia-Pacific region. Leading financial institutions and other market participants regard Singapore as a springboard to capture regional opportunities. This tutorial provides a detailed introduction to the various aspects of equity securities traded in Singapore, including the history and development of the market, the different types of securities traded, leading stock indices, listing requirements and procedures, and trading operations.

Prerequisite Knowledge
Equity Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Market Overview

- History of the Singapore Equity Market
- Market Capitalization
- SGX Markets
- Securities Traded
- Key Equity Indices
- Market Regulation

Topic 2: Listing

- Listing Sponsors
- Mainboard: General Listing Requirements
- Mainboard: Shareholding Spread Listing Requirements
- Catalist: General Listing Requirements

Topic 3: Trading

- Charges, Fees, & Taxes
- Trading Hours
- Trading Lots
- Suspensions of Trading
- Clearing & Settlement

Singapore Personal Data Protection Act (PDPA)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the material and territorial scope of the PDPA as well as fundamental concepts such as "personal data" and "processing"
- Recognize the key responsibilities of organisations in relation to the processing of personal data as described by the PDPA's data protection obligations
- Identify the rights of individuals under the PDPA
- Describe the Do Not Call Provision and obligations on organisations

Tutorial Overview
Data protection legislation is concerned with upholding the privacy rights of individuals in relation to their personal data. This tutorial provides a high-level overview of the Singapore Personal Data Protection Act (PDPA) and its significance in terms of protecting an individual's privacy in today's world.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Overview
Topic 1: Scope & Purpose of PDPA
- Background
- Personal Data Protection Commission
- Purpose
- Scope

Topic 2: PDPA Obligations
- Obligations of the PDPA
- Consent
- Withdrawal of Consent
- Consent: Case Scenario
- Purpose Limitation
- Purpose Limitation: Case Scenario
- Notification
- Notification: Case Scenario
- Access
- Access Obligation: Case Scenario
- Correction
- Correction Obligation: Case Scenario
- Data Protection Officer (DPO)
- Accuracy Obligation
- Protection
- Protection Obligation: Case Scenario
- Retention
- Retention: Case Scenario
- Transfer
- Openness
- PDPA Penalties

Topic 3: Do Not Call (DNC) Provision

- Overview
- Do Not Call Obligation: Case Scenario
- DNC Registry
- DNC Penalties

Skewness & Kurtosis – Excel Interactive

Tutorial Description
Overview
This tutorial uses video and interactive exercises to describe how a distribution's skewness and kurtosis can estimated using Microsoft Excel.

Prerequisite Knowledge
Distributions & Hypothesis Testing

Level: Intermediate
Duration: 15 minutes

Smart Beta – Primer

Description

Overview
This video provides a high level overview of smart beta investing, describing how this form of investing blurs the distinction between active and passive investing. The video also outlines the different types of smart beta products in the market and the variety of alternative indices that they focus on.

Prerequisite Knowledge
Exchange-Traded Funds (ETFs) – Types

Level: Introductory
Duration: 9 minutes

Social Bonds & Sustainable Instruments

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define social bonds and other sustainable instruments and list their key characteristics
- Name and compare important social bond and sustainable asset standards

Tutorial Overview
As interest in environmental, social, and governance (ESG) issues has grown, the market for social bonds and other sustainable instruments has expanded rapidly. However, a lack of clear global standards for defining and categorizing these assets poses a challenge for investors and various efforts are underway to enhance standards and reporting. This tutorial provides an overview of social bonds and other sustainable instruments and discusses emerging global standards.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Intermediate
Tutorial Duration: 20 minutes

Tutorial Outline
Topic 1: Social Bonds Overview
- Social Bonds Landscape
- Types of Social & Sustainable Assets

Topic 2: Standards & Guidelines
- ICMA Social Bond Principles (SBP)
- Social projects
- Components & review
- ICMA Sustainability Bond Guidelines (SBG)
- LMA Sustainability Linked Loan Principles (SLLP)
- ICMA Sustainability-Linked Bond Principles (SLBP)

Solvency II

Tutorial Description
On completion of this tutorial, you will be able to:

- Recall the development of the Solvency II regime and recognize its three-pillar structure
- Define the quantitative requirements of Pillar I
- Identify the governance and supervision requirements of Pillar II
- Recognize the disclosure and transparency requirements of Pillar III

Tutorial Overview
Solvency II introduced a new, harmonized EU-wide insurance regulatory regime. This tutorial looks at the key requirements of the Solvency II regime and details the different rules under its three pillars.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Solvency II
- Background to Solvency II
- Weaknesses of Solvency I
- Development of Solvency II
- Solvency II: Regulatory Authorities
    - European Banking Authority (EBA)
    - European Securities & Markets Authority (ESMA)
    - European Insurance & Occupational Pensions Authority (EIOPA)
- The Three Pillars of Solvency II
- Solvency II: Concerns

Topic 2: Pillar 1 (Quantitative Requirements)
- Capital Requirements
    - Solvency Capital Requirement (SCR)
        - Standard Formula
        - Internal Models
        - Using an Internal Model
        - SCR: Valuation Method
    - Minimum Capital Requirement (MCR)
- Assets
- Technical Provisions

Topic 3: Pillar 2 (Governance & Supervision)
- Overview of Pillar 2
- Pillar II Compliance: Key Steps
    - Risk Management
    - Internal Controls & Compliance
    - Internal Audit
    - Actuarial Function
    - Outsourcing
    - Fit and Proper
- Own Risk and Solvency Assessment (ORSA)
    - ORSA: Requirements
    - Why Is an ORSA Required?
    - ORSA: Ongoing Requirements
    - Lloyd's Guidance
    - Differences Between ORSA & SCR

    - ORSA Deficiencies & Regulatory Action

- Internal Model Approval Process
    - Catastrophe Modeling
    - Documentation Requirements
    - Documentation Issues

Topic 4: Pillar 3 (Disclosure & Transparency)
- Reporting & Disclosure Requirements
- Information That Must Be Disclosed
- Advantages of Disclosure

Solver – Excel Interactive

Tutorial Description
Overview
This is one in a series of tutorials that provide an introduction to Microsoft Excel for financial services participants. The aim of this series is to demonstrate some of the key functions in Excel and show how they can be used to increase the efficiency and effectiveness of their work. The focus here is on Solver.

Prerequisite Knowledge
Goal Seek & Scenario Manager – Excel Interactive

Level: Intermediate
Duration: 20 minutes

Statement of Cash Flows – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of cash to a business
- Identify the three main sections in the statement of cash flows
- Calculate cash from operating activities using the indirect method
- Determine cash flow from investing activities
- Calculate cash flow from financing activities

Tutorial Overview
Using balance sheets and income statements, accountants are able to draw up statements of cash flows that detail the areas where cash is being generated and "burned" by a business.

This tutorial explains the importance of the statement of cash flows in assessing a company's performance and future prospects. This depends not so much on earnings for the period, but more realistically on cash flow. The tutorial identifies the key elements of the statement of cash flows and how these statements are prepared.

Prerequisite Knowledge
Income Statement – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of The Statement of Cash Flows
- Overview of The Statement of Cash Flows
- Cash vs. Accruals
- Uses of the Statement of Cash Flows

Topic 2: Format of The Statement of Cash Flows
- Overview of Statement of Cash Flows Formats

Topic 3: Cash Flow From Operating Activities
- Cash Flow From Operating Activities
- Indirect Method: Example
- Indirect Method: Depreciation & Provisions
- Indirect Method: Working Capital Changes
- Indirect method: Working Capital Changes (Inventory)

Topic 4: Cash Flow From Investing Activities
- Cash Flow From Investing Activities

Topic 5: Cash Flow From Financing Activities
- Cash Flow From Financing Activities

Statement of Cash Flows – Analysis

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recall the importance of cash flow to lenders and investors in a business
- Interpret cash flow from operating, investing, and financing activities
- Recognize the importance of cash flow performance and solvency metrics in assessing the strength of a company's cash flow

Tutorial Overview
This tutorial looks at the three main sections of the statement of cash flows – operating cash flows, investing cash flows, and financing cash flows and uses real life examples of companies statements of cash flows to explore these areas. The tutorial also examines the metrics used by analysts to assess a company's cash flow performance.

Prerequisite Knowledge
Statement of Cash Flows – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Analysis of The Statement of Cash Flows
- Analysis of The Statement of Cash Flows

Topic 2: Analysis of Cash Flow From Operating Activities
- Analysis of Cash Flow From Operating Activities

Topic 3: Analysis of Cash Flow From Investing Activities
- Analysis of Cash Flow From Investing Activities

Topic 4: Analysis of Cash Flow From Financing Activities
- Analysis of Cash Flow From Financing Activities

Topic 5: Cash Flow Performance Metrics
- Cash Flow Performance Metrics
- Free Cash Flow (FCF)

Topic 6: Cash Flow Solvency Metrics
- Cash Flow Solvency Metrics
- Cash Flow Metrics: Example

Stranded Assets

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe what stranded assets are
- List the reasons why assets become stranded
- Explain how stranded assets represent a significant risk for the financial sector

Tutorial Overview
Changes associated with the transition to a low-carbon economy can significantly lower the value of assets, leaving them "stranded." This tutorial provides a high-level overview of stranded assets and the ways in which they can affect the financial sector.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 13 minutes

Strategic Asset Allocation (SAA)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of strategic asset allocation (SAA) in the investment process
- Identify the various approaches to rebalancing a portfolio and the considerations that influence rebalancing
- List some of the methods used to evaluate SAA

Tutorial Overview
Strategic asset allocation (SAA) refers to the long-term allocation of a portfolio to various asset classes based on an investor's objectives and tolerance for risk. This tutorial looks in detail at the factors that inform the SAA decision, generally recognized as the most important decision in the investment process and the key determinant of long-term portfolio performance. It also looks at the process of rebalancing a portfolio to its base policy mix and the various considerations around such rebalancing.

Prerequisite Knowledge:
Asset Allocation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: SAA Overview
- What is SAA?
- Factors Shaping SAA Decision
- Asset Class Weightings
- Asset Class Ranges

Topic 2: Portfolio Rebalancing
- Portfolio Drift
- Portfolio Drift Example
- SAA Approaches
- Buy-and-Hold
- Buy-and-Hold: Key Drawback
- Importance of Rebalancing
- Constant Mix
- CPPI
- CPPI: Example
- CPPI: Analysis
- OBPI
- OBPI: Analysis

Topic 3: Evaluating SAA
- Evaluating Rebalancing Strategies
- Investment Time Horizon
- Timing of Rebalancing
- Characteristics of Portfolio Assets
- Characteristics of Asset Markets
- Rebalancing Costs: Direct Costs
- Rebalancing Costs: Indirect Costs
- Optimal Rebalancing Strategy
- Optimal Rebalancing: Practical Considerations

Stress Testing – An Introduction

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define the key concepts associated with stress testing, including the difference between stress testing and sensitivity analysis
- Identify the key elements of a bank's stress testing framework, including the testing process itself
- Recognize the benefits of regulatory macro stress tests for the banking industry

Tutorial Overview

The global financial crisis damaged the reputation of some risk measurement techniques, including stress testing. But the response by banks and regulators was not to abandon stress testing, but instead to strengthen and extend it.

This tutorial describes how the practice of stress testing has developed within banking risk management in recent times and highlights its importance today. It also addresses the different types of stress test in terms of both institutional and regulatory contexts.

Prerequisite Knowledge

Risk Management – Tools & Techniques

Tutorial Level: Intermediate

Tutorial Duration: 75 minutes

Tutorial Outline

Topic 1: Overview of Stress Testing

- What Is Stress Testing?
- Stress Testing: Simple Example
- Broader View of Stress Testing
- Internal vs. External Stress Testing
- Stress Testing vs. Sensitivity Analysis
- Value of Stress Testing
- Limitations of Stress Testing
- Regulatory Viewpoint: Weaknesses Discovered
- Regulatory Viewpoint: Principles
- Bank Viewpoint

Topic 2: Stress Testing Framework

- Key Elements of a Stress Testing Framework
- Stress Testing Process
- Types of Scenario
- Developing Scenarios
- Risk Factors
- Relationship Between Risk Factors
- Parameterization
- Executing Stress Tests
- Reverse Stress Testing
- Reverse Stress Testing Process
- Governance & Stress Testing

Topic 3: Regulatory Stress Testing

- Developments in Macro Stress Testing
- Macro Stress Testing Approaches
- Impact of Macro Stress Testing

Stress Testing in Practice

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the issues and challenges that banks face when conducting stress tests
- Identify the different types of stress test that banks undertake for different risk types
- Recognize the difference between macro and micro stress tests that are undertaken for regulatory purposes

Tutorial Overview

While stress testing is a valuable risk management tool, it presents many challenges for banks. This tutorial focuses on these challenges as well as the different types of stress test based on risk type. The tutorial also looks at regulatory stress testing and provides examples of macro and micro stress tests that regulators have conducted.

Prerequisite Knowledge

Stress Testing – An Introduction

Tutorial Level: Intermediate

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Stress Testing Issues & Challenges

- Why Is Stress Testing Challenging for Banks?
- Models & Stress Testing
- Assumptions
- Data Quality & Quantity
- Data Challenges
- Assessing Stress Test Outputs
- Management Review & Decision-Making

Topic 2: Bank-Specific Stress Tests

- Internal vs. External Stress Tests
- Internal Stress Testing Levels
- Risk Type-Specific Stress Tests
- Credit Risk Stress Testing
- Using Credit Risk Stress Test Outputs
- Industry-Specific Stress Tests
- Market Risk Stress Testing
- Interest Rate Risk Stress Testing
- Liquidity Risk Stress Testing
- Operational Risk Stress Testing

Topic 3: Regulatory Stress Tests

- Key Features of Regulatory Stress Testing
- Regulatory Stress Test Examples
- Stress Testing Spectrum

Structured Products – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key features of structured products, including upside participation and downside protection
- Recognize the main issuer and investor motivations with these products
- Identify the key risks associated with investing in structured products including, credit risk, market risk, currency risk, interest rate risk, default risk, liquidity risk, and volatility risk

Tutorial Overview
This tutorial looks at the main features of structured products and the risks associated with investing in them.
Prerequisite Knowledge
Options – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Structured Products

- What Is a Structured Product?
- Issuer & Investor Motivations
- Guaranteed Investment Contract (GIC)
- GIC: Costs & Benefits
- GIC: Payoff
- Changing the Level of Participation in a Structured Product
- Other Methods for Changing the Cost/Value of a Structured Product
- Note on Forward Pricing & Moneyness

Topic 2: Risks of Structured Products

- Key Risks of Structured Products

Structured Products – Components & Types

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the key risks and outcomes associated with structured products
- Identify the key types of structured product, including equity, FX, interest rate and credit-related products and their key features
- Recognize the main investor and issuer motives with the different types of structured product

Tutorial Overview
This tutorial looks at the key types of structured product, the risks associated with investing in them and the motives behind their issuance. These products include equity basket products, reverse convertibles, dual-currency bonds, quantos, range-index binary (RIB) notes, and credit-linked notes (CLNs).

Prerequisite Knowledge
Structured Products – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Overview of Structured Products
- Overview of Structured Products

Topic 2: Structured Products Risks & Outcomes
- Structured Products Risks & Outcomes

Topic 3: Equity-Related Products
- Equity-Related Products
- Basket Products
- "Best of" Products
- Reverse Convertibles

Topic 3: Interest Rate-Related Products
- Range Index Binary (RIB) Notes

Topic 4: FX-Related Products
- Dual-Currency Bonds
- NDF Arbitrage Bonds
- Quanto Products
- Quanto Products: Example

Topic 5: Credit-Related Products
- Credit-Linked Notes (CLNs)

Structured Products – Examples & Cases

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the difference between arbitrage-driven and view-driven investor strategies with structured products
- Identify the key issuer and investor motivations with various types of structured product such as range index binary notes, dual-currency bonds, credit-linked notes, reversible convertibles, inverse FRNs, and step-up and call products
- Recall how Monte Carlo Analysis of a RIB note is performed in Excel

Tutorial Overview

This tutorial looks at various types of structured product, highlighting the main issuer and investor motivations behind each. The Excel-based valuation of one structured product – the RIB note – is also shown.

Prerequisite Knowledge

Structured Products – Risks & Sensitivities

Tutorial Level: Advanced

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Uses of Structured Products

- Uses of Structured Products

Topic 2: Arbitrage & View-Driven Trades

- Arbitrage-Driven Trades
- View-Driven Trades

Topic 3: Investor & Issuer Motivations

- Corporate Products and Motivations
- Range Index Binary (RIB) Note
- Monte Carlo Analysis of a Range Index Product
- Dual-Currency Bond
- Pricing a Dual-Currency Bond: Example
- Power Reverse Dual-Currency Bond (PRDC)
- Credit-Linked Note (CLN)
- CLN: Coupons & Pricing
- Reverse Convertible
- Inverse FRN
- Hybrid Capital Security
- Step-Up Bond
- Step-Up Bond: Advantages & Disadvantages for Investors
- Legacy Products

Structured Products – Risks & Sensitivities

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the key measures of sensitivity for structured products, namely, delta, gamma, theta, rho, and vega
- Recall the importance of stress testing and credit spread for structured products
- Recognize the main sensitivities for an equity-linked note

Tutorial Overview

Structured products have various sensitivities – known as the Greeks – to pricing factors such as the underlying index/price, time to maturity, and interest rates. This tutorial describes these sensitivities in detail and provides a worked example of how sensitivities affect the value of an equity-linked note.

Prerequisite Knowledge

Structured Products – Valuation & Analysis

Tutorial Level: Advanced

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Sensitivity Measures with Structured Products

- Sensitivities & Risk
- Key Structured Product Sensitivities (Greeks)
- Key Structured Product Sensitivities: Example
- OAS Duration: Callable Bond

Topic 2: Stress Testing & Liquidity Risk

- Stress Tests & Stress Combinations

Topic 3: Sensitivities of an Equity-Linked Note

- Sensitivities of an Equity-Linked Note: Excel
- Sensitivities of an Equity-Linked Note: Example

Structured Products – Valuation & Analysis

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the risks of structured products and how such risk is measured by option-adjusted spread (OAS)
- Identify the main methods used to analyze returns on structured products such as total return and horizon analysis
- Recognize the process of pricing a callable bond using OAS analysis

Tutorial Overview

This tutorial looks at the valuation and return analysis of structured products with a particular focus on the valuation of callable bonds. A worked example of the pricing of a callable bond in Excel is also provided.

Prerequisite Knowledge

Structured Products – Components & Types

Tutorial Level: Advanced

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Risks & Yield Analysis

- Risks to Principal & Coupons
- Yield to Maturity
- Zero Volatility Spread (Z-Spread)

Topic 2: Total Return & Horizon Analysis

- Total Return & Horizon Analysis of Structured Products
- Total Return
- Horizon Analysis
- Horizon Analysis: Limitations
- Risk Evolution Over Time

Topic 3: OAS Analysis & Callable Bonds

- What Is a Callable Bond?
- Callable Bond: Modelling the Spread
- OAS Analysis: Callable Bond
- Callable Bond: Example

Structured Trade & Commodity Finance

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the concept of structured trade finance and how it differs from traditional trade finance
- Recognize the different solutions offered by structured trade finance providers
- Identify the lifecycle of commodity transactions, the underlying products and how they can be used in structured trade finance products

Tutorial Overview

The nature and complexity of international trade has changed dramatically over the past generation or so. Emerging markets now play the most dynamic role in international trade and are the focus of global supply chain development. As large-scale projects and global supply chains reach deeper into emerging markets, the risk of nonperformance and nonpayment increases. These prevailing trends in international trade have created the need for financing solutions that are more robust and can mitigate most of the risks associated with complex trade initiatives involving riskier emerging markets. Structured trade finance has emerged to support these initiatives by addressing risks related to the performance or completion of a transaction, rather than more traditional reliance on the financial soundness of the parties to a transaction. This tutorial describes the concept of structured trade finance in detail and how it differs from traditional trade finance. You will also learn about the different types of structured trade finance solutions and the role of the different lending institutions involved.

Prerequisite Knowledge

Export Credit Agencies (ECAs)

Tutorial Level: Intermediate

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Structured Trade Finance (STF)

- Structured Trade Finance: Overview
- Participants in STF
- Demand for STF
- Risks in STF Transactions
- Downsides to STF Transactions
- Risk Mitigation Techniques for STF Transactions
- Other Protective Techniques for STF Transactions
- STF vs. Traditional Trade Finance (TTF)

Topic 2: STF Transactions in Practice

- Products & Solutions Used in STF Packages
- STF Deals Comprising Traditional Finance & Deal-Specific Solutions
- Off-Balance Sheet Structures
- Syndications
- Role of Export Credit Agencies (ECAs)
- Development Banks
- An Example of A Tailored Solution

Topic 3: Commodity Finance

- Commodity Finance
- Characteristics of Commodities
- Lifecycle of Commodity Transactions
- Commodity Finance Products
- Islamic Finance & Commodity Transactions
- Risk Mitigation for Commodity Finance
- Insufficient Risk Mitigation
- Structure Commodity Trade Finance (SCTF)

Sukuk Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe the key features of sukuks, how they originated and the current state of the sukuk market
- Outline the main types and structures of sukuk
- Discuss the key issues and challenges faced by the sukuk industry today

Tutorial Overview
Sukuks are the Islamic financial market's equivalent of conventional bonds or notes. However, sukuks are very different from conventional bonds, which are subject to interest or coupon payments - both prohibited under shari'a. This tutorial looks at the origins of the sukuk market and presents an overview of the current state of play in the market. Various types of sukuk and sukuk are introduced and the tutorial also looks at the current issues and challenges faced by the sukuk industry.

Prerequisite Knowledge
Islamic Banking & Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Sukuks: Features
- Overview of Sukuks
- Sukuks & Conventional Bonds
- Advantages & Disadvantages of Sukuks
- Market for Sukuks
    - Issuers
    - Investors

Topic 2: Sukuk Structures & Types
- Basic Sukuk Structure
- Types of Sukuk
    - *Ijara* Sukuk
    - *Mudharaba* Sukuk
    - *Musharaka* Sukuk
    - *Murabaha* Sukuk
    - *Salam* Sukuk
    - Hybrid Sukuk
    - Other Sukuk Types

Topic 3: Issuing Sukuks
- Issuing Process
- Costs of Issuance
- *Shari'a* & Regulatory Compliance
- Credit Enhancement

Topic 4: Sukuk Market: Issues & Challenges
- Overview of Issues & Challenges for the Sukuk Market
- Capital Guarantees
- Liquidity & Convertibility
- Ratings
- Product Complexity & Regulatory Challenges

Supervised Machine Learning – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Distinguish between supervised and unsupervised machine learning
- Define supervised machine learning and identify its limitations and use cases

Tutorial Overview
Artificial intelligence systems can help solve business problems by answering questions and facilitating data-informed decisions. Machine learning (ML) programs – which fall into two categories, supervised and unsupervised – use raw data to develop models that can produce actionable business intelligence. Both supervised and unsupervised ML systems can thus support business processes and inform both day-to-day and strategic decisions. This tutorial provides an overview of supervised machine learning, including its advantages, limitations, and appropriate use cases.

Prerequisite Knowledge
Big Data

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Machine Learning Overview
- Machine Learning Overview
- What is Machine Learning?
- Supervised & Unsupervised ML
- Apply Your Knowledge

Topic 2: Supervised Machine Learning (S-ML)
- Supervised Machine Learning (S-ML)
- S-ML Models
- Case Study: Loans
- Assessing Applicants
- Limitations of Traditional Approach
- ML Approach
- ML Approach in Practice
- Data Limitations
- Approach to Modeling
- Supervised ML Use Cases

Supervised Machine Learning In Practice

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- List the key factors to consider when using a supervised machine learning system to solve a problem
- Identify the types of data required to train a supervised machine learning system
- Recall the process used to train a supervised machine learning system, including the mathematical techniques used

Tutorial Overview

Supervised machine learning (S-ML) systems are widely used across business sectors. While they can help facilitate faster and better decision-making, however, there are pitfalls associated with their use. It is, therefore, important to understand their limitations before deploying such systems. It is also necessary to understand what types of data are needed to build effective S-ML systems and how such systems use data to achieve their outputs. This tutorial explores the use of S-ML systems in practice and the data and mathematics that underpin their outputs.

Prerequisite Knowledge

Supervised Machine Learning – An Introduction

Tutorial Level: Intermediate

Tutorial Duration: 50 minutes

Tutorial Outline

Topic 1: Overview of Practical S-ML

- Purpose of S-ML
- Practical S-ML: Key Considerations
- Scientific Method

Topic 2: Data & Methodology

- Data Types
- Apply Your Knowledge
- Appropriate Data for Training ML Systems

Topic 3: Training an S-ML System

- Overview
- Appropriate Data
- Standardizing the Data
- Find the Function
- Simplified Example
- Finding P
- Testing
- Problem Data Application
- S-ML & Technology
- Beyond Binary Logistic Regression

Sustainability & Sustainable Development

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define sustainability
- Identify the three pillars, or dimensions, of sustainable development
- Recognize the sustainability challenges the financial sector faces
- List some financial products and services that are consistent with the principles of sustainable development

Tutorial Overview
Sustainability – and the associated concept of sustainable development – may be the most pressing challenge of our time. This tutorial provides a high-level overview of these concepts and their importance.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 12 minutes

Sustainable & Responsible Investing – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify how ESG investors comprise of sustainable, responsible, and impact investors
- List the factors driving the growth in ESG investing
- Identify the characteristics of ESG investors
- Recognize the advantages and disadvantages of passive approaches to ESG investing
- Compare the risk-adjusted performance of ESG and traditional investment strategies

Tutorial Overview
ESG investing – comprising sustainable, responsible, and impact investing – is any investment strategy that goes beyond simple financial considerations to incorporate environmental, social, and governance (ESG) factors. Sustainable investing and responsible investing are very similar and often used interchangeably and ESG investing. Impact investing is a more extreme form of ESG investing and is not usually used interchangeably with ESG investing.

ESG investing has experienced explosive growth in recent years, with both institutional and retail investors turning to this form of investing to enhance returns and reduce risk. Passive investment instruments have accelerated the shift to this form of investment, and a growing body of evidence supports the efficacy of incorporating ESG into the investment decision-making process. This tutorial discusses the three forms of ESG investing, identifying the key drivers of the uptake of ESG investing and exploring the characteristics of ESG investors.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Investing Landscape
- Forms of ESG Investing: An Overview
- Terminology
- Responsible Investing in Practice

Topic 2: ESG Growth Drivers
- Emerging Global Risks
- Sustainable Development
- Consumer & Investor Pressure
- Improved Data
- ESG Investment Theories
- Regulatory Drivers
- Regulation Example

Topic 3: ESG Investors
- Institutional Investors
- Case Study: GPFG
- Case Study: Blackrock
- Retail Investors

Topic 4: ESG & Passive Investing
- Passive Investing Growth
- Passive ESG Investments
- Limitations of Passive ESG Investing

Topic 5: ESG Investing Performance
- Performance Expectations

- Performance: Evidence

Sustainable & Responsible Investing – Strategies

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define the different strategies for incorporating ESG and list their uses and limitations
- Identify the practical application of these strategies to investment portfolios
- Recall the process for selecting an ESG approach

Tutorial Overview

ESG investing – comprising sustainable, responsible, and impact investing – is any investment strategy that goes beyond simple financial considerations to incorporate environmental, social, and governance (ESG) factors. Sustainable investing and responsible investing are both very similar and so are often used interchangeably with each other as well as with ESG investing. Impact investing is a more extreme form of ESG and so would rarely be used interchangeably with ESG investing.

Today, a growing number of investors are seeking to pursue investing strategies that incorporate ESG into the decision-making process. Investors may select from various strategies, including ESG integration, active ownership, negative or exclusionary screening, norms-based screening, positive and best-in-class screening, thematic investing, and impact investing. This tutorial defines these strategies and discusses their selection and implementation.

Prerequisite Knowledge

ESG – Primer

Tutorial Level: Intermediate

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Strategies Overview

- Strategies of Incorporating ESG factors

Topic 2: Core Strategies

- Core Strategies Overview
- What is ESG Integration?
- Gathering & Analyzing Data
- Securities Analysis
- Portfolio Analysis
- Barriers
- What is Shareholder Action?
- Shareholder Action Policy
- Corporate Engagement
- Types of Corporate Engagement
- Proxy Voting
- Barriers

Topic 3: Screening Strategies

- Screening Strategies Overview
- What is Norms-Based Screening?
- Relevant Norms & Standards
- Limitations
- What is Negative Screening?
- Implementing Negative Screening
- Limitations
- What is Positive Screening?
- Implementing Positive Screening
- Limitations

Topic 4: Advanced Strategies

- Advanced Strategies Overview
- What is Sustainability Themed Investing?
- Implementing Sustainability Themed Investing
- Limitations
- What is Impact Investing & Community Investing?
- Impact Investing in Practice
- Limitations

Topic 5:Strategies in Action

- Hybrid Strategies
- Active vs. Passive

Topic 6: Selecting an Approach

- What Investments should Incorporate ESG?
- Define Investment Goals
- Identify Options
- Develop a Plan
- Monitor & Evaluate

Sustainable Development Goals (SDGs) – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the 17 SDGs and identify the reasons why they were created by the UN
- Apply the SDGs to some real-world situations, with an emphasis on the financial sector
- Recognize how governments and regulators have responded to the SDGs
- List some of the main criticisms of the SDGs

Tutorial Overview
The UN Sustainable Development Goals (SDGs), and the regulations they have spawned, have a direct impact on all countries, governments, companies, and individuals. This tutorial provides a broad overview of the SDGs and examines the recent developments in this space.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of the SDGs
- Background to the SDGs
- Sustainability Agenda & SDGs Timeline
- From MDGs to SDGs
- What are the SDGs?
- Monitoring & Reviewing the SDGs
- Impact of Covid-19

Topic 2: Relating SDGs to the Real World
- How do SDGs Relate to the Real World?
- Delivering the SDGs

Topic 3: Government & Regulatory Response
- Response of Governments & Regulators to the SDGs
- Future Regulatory Developments

Topic 4: Criticisms of the SDGs
- Key Criticisms

Sustainable Development Goals (SDGs) – Impact on the Financial Sector

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the challenges SDGs present for the private sector
- Identify the relationship between the SDGs, ESG, & sustainable finance
- Recognize the opportunities SDGs present for the financial sector, and the importance SDGs will play in future investments

Tutorial Overview

The SDGs have huge implications for the financial sector. While the SDG framework was not developed specifically with business in mind, companies are increasingly assessed on their progress in achieving the SDGs, both positive and negative. This requires understanding the impact of businesses on delivering the SDGs and managing the associated risks, including assessing investment opportunities to ensure they align with the SDGs and a company's sustainability agenda.

This tutorial describes how the SDGs are shaping the private sector – with particular focus on the financial industry – and changing the way business is transacted and investments are made.

Prerequisite Knowledge

Sustainable Development Goals (SDGs) – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 25 minutes

Tutorial Outline

Topic 1: SDGs & The Private Sector

- Challenges & Guidelines for the Private Sector

Topic 2: SDGs, ESG, & Sustainable Finance

- Relationship between the SDGs, ESG, & Sustainable Finance
- Universal Ownership

Topic 3: SDGs & The Financial Sector

- SDGs Are a Business Opportunity
- How Will The Financial Sector Need to Change?
- Impact of Sustainability Requirements on Business Lines
- Conclusion

Sustainable Finance – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define sustainable finance
- List the key drivers of sustainable finance at lending institutions
- Identify the major challenges facing lending institutions attempting to pursue a sustainable finance approach
- Recognize the role sustainable finance can play in building a sustainable economy

Tutorial Overview
Increasingly, financial institutions are expected to incorporate environmental, social, and governance (ESG) or sustainability issues in their decision-making. For lenders, this means incorporating ESG analysis in their lending operations and monitoring ESG risks in their loan portfolios – an approach known as sustainable finance. This tutorial provides an overview of sustainable finance, analyzing its key drivers and the challenges lenders face in implementing it.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Sustainable Finance Overview
- What is Sustainable Finance?
- Sustainable Finance Drivers
- Risk Management
- Civil Society Pressure
- Client Demand
- Regulation
- Internal Roadblocks
- Other Barriers

Topic 2: Role of Sustainable Finance
- Financial Institutions
- Lending Activities
- Increasing Lending Capacity
- Funding Innovation
- Capital Markets Activities
- Sustainable Finance Outlook

Sustainable Finance in Practice

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key drivers of sustainable finance
- Identify the role financial institutions can play in supporting sustainable finance across the various business lines

Tutorial Overview
The global market for sustainable finance is recognizing the benefits of mitigating risks stemming from environmental, social and governance (ESG) factors, as well as seeking to contribute to the sustainable development goals (SDGs). This has led to very strong growth in sustainable bonds, sustainability-linked loans, and sustainable equity in recent years. In this tutorial, we will look at how financial institutions can integrate ESG across the different business units.

Prerequisite Knowledge:
Sustainable Finance – Principles & Frameworks

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Practical Sustainable Finance
- Drivers of Sustainable Finance
- Role of Financial Institutions
- Interconnected Key ESG Issues

Topic 2: General Banking
- Reducing a Financial Institution's Emissions

Topic 3: Motor Vehicles
- Reducing Customers' Motor Vehicle Emissions

Topic 4: Real Estate Market
- Reducing Customers' Emissions From Buildings

Topic 5: Borrowing & Lending
- Reducing Customers' Emissions Through Borrowing & Lending

Topic 6: Pensions
- Reducing Customers' Emissions Through Pension Funds

Sustainable Finance – Principles & Frameworks

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify and define key international principles for sustainable finance and name their major elements
- List important sustainable finance disclosure frameworks and identify their scope
- List important sustainable finance assessment frameworks and define their uses

Tutorial Overview
As financial institutions embrace sustainable finance, it is becoming ever more important to establish global principles and guidelines for the practice of sustainable finance in different contexts. In addition, financial institutions need practical frameworks for environmental, social, and governance (ESG) risk disclosure and assessment if they are to implement sustainable finance effectively and monitor its impacts. This tutorial provides an overview of global efforts to establish sustainable finance principles and guidelines and to develop relevant disclosure and assessment frameworks.

Prerequisite Knowledge
Sustainable Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: Sustainable Finance Principles & Guidelines

- Principles & Guidelines Overview
- Principles for Responsible Banking (PRB)
- Principles for Positive Impact Finance (PPI)
- Principles for Mainstreaming Climate Action
- Net-Zero Banking Alliance

Topic 2: Sustainable Finance Frameworks

- Overview
- Disclosure Frameworks
- Assessment Frameworks

Sustainable Finance Disclosure Regulation (SFDR)

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define the SFDR and its role within the broader EU regulatory framework
- List the key objectives of the SFDR and its scope
- Identify the core disclosure requirements of the SFDR and their applicability to different firms and product types

Tutorial Overview

In March 2021, the European Union's Sustainable Finance Disclosure Regulation (SFDR) came into force. The SFDR is designed to help institutional asset owners and retail clients understand, compare, and monitor the sustainability characteristics of investment funds by standardizing sustainability disclosures. Under the SFDR, firms must make both firm- and product-level disclosures about the integration of sustainability risks, the consideration of adverse sustainability impacts, the promotion of environmental or social factors, and sustainable investment objectives. This tutorial provides an overview of the SFDR and its implications for financial firms.

Prerequisite Knowledge

ESG – An introduction

Tutorial Level: Introductory

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: SFDR Overview

- SFDR Background
    - Sustainable products
    - Sustainability disclosures
- SFDR Objectives
- SFDR in Context
    - Definitions
    - Disclosures
    - Duties
- SFDR Scope
- Outside the EU
    - China
    - Hong Kong
    - Singapore
    - UK
    - US

Topic 2: SFDR Disclosures

- Core Building Blocks
    - Levels of disclosure
    - Disclosure fields
    - Degrees of sustainability impacts
- SFDR Disclosures Overview
- Principal Adverse Impacts (PAIs)
- PAI Challenges
- Firm-Level Disclosures
    - Sustainability risk policies
    - Principal adverse impacts
    - Remuneration policies & sustainability risk
- Product-Level Disclosures
    - Article 8 & Article 9 Products
    - Article 8 & Article 9 Product Disclosures

Topic 3: SFDR Scenarios

- Greenfields Asset Management
- AA Investments
- Brighter Day

Sustainability Reporting

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the uses and importance of sustainability reporting
- List and compare key reporting guidelines and standards
- Recall the process for selecting an approach to sustainability reporting

Tutorial Overview
Investors wishing to pursue strategies that incorporate ESG into the decision-making process – need reliable, accurate, comparable, and timely information about relevant ESG factors. Increasingly, they are demanding that companies provide this information in a regular and structured manner. In response, many businesses are producing sustainability reports, often using global guidelines and standards to guide their data provision. This tutorial provides an overview of sustainability reporting and key global reporting guidelines and standards.

Prerequisite Knowledge
ESG – Primer

Tutorial Level: Intermediate
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Reporting Overview

- Reporting Basics
- Sustainability Reporting Today
- Why Pursue Sustainability Reporting?
- Target Audience
- Where Will Data be Reported?
- What Should be Reported?
- Reporting Format
- External Verification

Topic 2: Guidelines & Standards

- General Approach
- GRI
- GRI Standards
- GRI Reporting Principles
- TCFD
- TCFD Recommendations
- CSRD
- ISSB
- ISSB's Sustainability Disclosure Standards
- SASB Standards
- CDSB
- CDSB's Guiding Principles
- CDSB's Reporting Requirements
- GHG Protocol
- CDP

Topic 3: ESG Report Example

- Sustainability Report Example

Swap Futures

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- List the key features of market adjusted coupon (MAC) and Eris swap futures, including pricing, margining, and settlement mechanisms, and the main benefits of these instruments
- Recall the regulatory background to the development of swap futures
- Recognize how traders use forward rates top identify pricing anomalies and trading opportunities

Tutorial Overview

This tutorial looks at the main features of swap futures, including how they are priced, traded, and settled. The historical and regulatory development of these instruments is also examined in detail.

Prerequisite Knowledge

Bond Futures

Tutorial Level: Intermediate

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Overview of Swap Futures

- What Are Swap Futures?
- MAC Futures: Key Features
- Eris Swap Futures
- Eris Futures: Position Management
- Building a Swap Curve from Eris Futures
- Benefits of Swap Futures
- Maturities & Margin Rates
- Dodd-Frank, OTC Swaps, & Swap Futures

Topic 2: Forward Swap Rates

- Calculating Forward Swap Rates
- An Exploration of Forward Swap Rates
- Using Forward Swap Rates: Identifying Trading Opportunities

Swaps – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key characteristics of swap contracts
- Compare the main types of swap
- Recognize the scale and spread of the major swap markets
- Recall how the largest market, the interest rate swap (IRS) market, operates and how it and other swap markets have been affected by regulatory change

Tutorial Overview
Originating in the 1970s, swaps were once small, heavily structured, transactions. Today, they have developed into commoditized products that dominate derivatives markets around the globe.

This tutorial outlines the basic structure of a swap and the different swap types. It also describes how market participants can use swaps to transform existing asset or liability positions, or speculate on underlying market movements. Finally, the significant changes in the regulatory environment, particularly as regards clearing and trading, are discussed.

Prerequisite Knowledge
Derivatives – Markets

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Basics of Swaps
- Swaps: An Overview
- Swaps: Pricing
- Notional Principal

Topic 2: Swap Types
- Vanilla Swaps with Slight Adjustments
- Basis Swaps
- Cross-Currency Swaps
- Equity, Commodity, and Index Swaps
- Credit Derivatives
- Diff (Quanto) Swaps

Topic 3: Markets Overview
- Comparative Advantage in Borrowing
- How Swaps Benefit Those with a Comparative Advantage
- Intermediation
- Key Players
- What Is the Price?
- Differing Standards
- Documentation
- Counterparty Credit Risk
- Collateral
- Compression
- G20 Commitments
- Legislative Changes
- OTC or Exchange-Traded?

Swaps – Applications

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how interest rate risk can be managed using interest rate swaps
- Identify the key features of an asset swap

Tutorial Overview
A typical interest rate swap allows an entity to transform fixed rate cash flows into floating rate or vice versa. This tutorial looks at how a typical corporate IRS is structured and shows how the cash flows on a bond can be restructured using an asset swap.

Prerequisite Knowledge
Swaps – An Introduction

Tutorial Level: Advanced
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Interest Rate Risk & Swap Transactions
- Interest Rate Risk
- Bond-Swap Equivalence
- Bond-Swap Equivalence: Net Cash Flows
- Swap Structures: Corporate & Institutional Applications
- Corporate Swap Transaction
- Corporate Swap Transaction: Spread
- Corporate Swap Transaction: Calculations
- Corporate Swap Transaction: Swap Rate
- Corporate Swap Transaction: SOFR Futures

Topic 2: Asset Swaps
- What Is an Asset Swap?
- Par-Priced Swaps Vs. Market Value Swaps
- Asset Swap: Example
- Asset Swap: Motivations
- Asset Swaps & Credit Default Swaps (CDS)
- Scenario: Asset Swap

Swaps Applications for Corporates – Scenario

Description
This realistic scenario explores how various interest rate risk management concepts are used in practice. You will observe a situation where an Australian corporate treasurer manages a set of liabilities and their consequent interest rate exposures.

Prerequisite Knowledge
Swaps – Applications

Level: Advanced
Duration: 40 minutes

Swaps Applications for Institutional Investors – Scenario

Description
This realistic scenario explores how a par-priced asset swap can be used to transform a fixed rate bond into a synthetic FRN.

Prerequisite Knowledge
Swaps – Applications

Level: Intermediate
Duration: 40 minutes

Swaps – Asset Swaps

Tutorial Description

Objectives

On completion of this tutorial you will be able to:

- Identify the key features of asset swaps
- Recognize the main motivations for investors to engage in asset swaps and the risks involved
- Recall how to price an asset swap in Excel

Tutorial Overview

An asset swap is an instrument that converts a fixed rate bond into a synthetic FRN. This tutorial looks at the structure of both single-currency and cross-currency asset swaps, the opportunities these instruments offer investors and the risks involved, and how an asset swap can be priced, using a worked example in Excel.

Prerequisite Knowledge

Swaps – Currency Swaps

Tutorial Level: Advanced

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Features of Asset Swaps

- What Is an Asset Swap?
- Asset Swap: Example
- Other Types of Asset Swap
- Asset Swap Spreads & Notionals

Topic 2: Investor Motivations & Risks

- Investor Motivations: Leverage & Target Credit Spread
- Investor Motivations: Arbitrage Opportunities
- Investor Risks

Topic 3: Pricing an Asset Swap

- Fair Pricing of an Asset Swap
- Fair Pricing of an Asset Swap: Example

Swaps – Basis Swaps

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the main types of basis swap, namely, cross-currency basis swaps, cross-index basis swaps, and tenor basis swaps
- List the key applications of basis swaps
- Recognize the importance of covered interest parity to basis swaps

Tutorial Overview
A basis swap is a swap where both parties make floating rate payments referenced to different bases. This tutorial looks at the key types of basis swap – cross-currency basis swaps, cross-index basis swaps, and tenor basis swaps – and their main uses.

Prerequisite Knowledge
Swaps – Sensitivities & Risk Management

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Basis Swaps
- Overview of Basis Swaps

Topic 2: Cross-Currency Basis Swap
- Cross-Currency Basis Swap
- Cross-Currency Basis Spread

Topic 3: Cross-Index Basis Swap
- Cross-Index Basis Swap
- Cross-Index Basis Swap: Rate Movements

Topic 4: Tenor Basis Swap
- Tenor Basis Swap
- Tenor Basis Risk
- Tenor Basis Swaps: Composition

Topic 5: Basis Swaps & Covered Interest Parity (CIP)
- Basis Swaps & Covered Interest Parity (CIP)

Swaps – Book Management

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recall the practice of swap book management in the pre-crisis era
- Identify the different types of post-crisis swap book management techniques, including macros and micro hedges, stack hedging and strip hedging

Tutorial Overview

This tutorial looks at developments in swap book management before and after the global financial crisis. Different types of hedging technique such as stack and strip hedging are discussed and an example of hedging multiple swap positions using Euribor futures in Excel is also provided.

Prerequisite Knowledge

Swaps – Overnight Index Swaps (OIS)

Tutorial Level: Advanced

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Developments in Swap Book Management

- Swap Book Management: Pre-Crisis
- Swap Book Management: Pre-Crisis
- Swap Book Management: Post-Crisis

Topic 2: Hedging Strategies

- Market Risk Management
- Macro & Micro Hedging
- Stack Hedging vs. Strip Hedging
- Strip Hedge: Replication & Hedging
- Strip Hedge: Hedging the Floating Legs
- Strip Hedge: Excel
- Strip Hedge: Example
- Uses of the Implied Zero Curve

Swaps – Bootstrapping Zero Curves

Tutorial Description

Objectives

On completion of this module, you should be able to:

- Recall how bootstrapping is used to generate zero-coupon curves
- Recognize the main uses of zero-coupon curves
- Identify the key sources of zero-coupon information for existing and new interest rate benchmarks
- Recall how a convexity adjustment is made to rates implied by interest rate futures prices when building a swap zero curve
- Recognize the key features of single and multi-curve environments
- Compare backward-looking rates, such as SOFR, and forward-looking rates, such as LIBOR

Tutorial Overview

A number of key changes to the swaps market since the global financial crisis has meant that a multi-curve approach is required for swap pricing. This tutorial looks at the curve bootstrapping process in such an environment.

Prerequisite Knowledge

Swaps – Pricing

Tutorial Level: Advanced

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Overview of Bootstrapping
- Overview of Bootstrapping

Topic 2: Zero-Coupon Curves
- Uses of Zero-Coupon Curves
- Impact of LIBOR Cessation
- Sourcing the Zero-Coupon Curve for New Benchmarks
- Overnight Index Swaps
- RFR Futures Contracts

Topic 3: Convexity Adjustment
- Convexity Adjustment

Topic 4: Overnight Index Swaps (OIS)
- Medium & Long Maturity OIS
- Bootstrapping: Example

Topic 5: Curve Environments
- Single Curve & Multi-Curve Environments
- Pre-Crisis Single Curve Environment
- Differential Discounting & Multiple Curves

Topic 6: Forward vs. Backward-Looking Rates
- Forward vs. Backward-Looking Rates
- Forward vs. Backward-Looking Rates: Example
- Development & Use of Forward-Looking Rates

Swaps – Cash Flows & Structures

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the day count conventions used in the swaps market, including 30/360, Actual/360, Actual/Actual, and Actual/365, and payment date conventions such as following business day and modified following
- Recall how principal may be exchanged and collateralized and marked to the marked under a cross-currency swap
- Recognize the relevance of upfront amounts and the treatment of negative interest rates

Tutorial Overview

This tutorial looks at how payments under an interest rate swap are adjusted for day count conventions and business days. The exchange and collateralization of principal under a cross-currency swap, upfront payments, and the treatment of negative interest rates are also dealt with in detail.

Prerequisite Knowledge

Swaps – Key Valuation Concepts

Tutorial Level: Intermediate

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Payment Dates & Day Count Conventions

- Swap Payment Dates
- Swap Payment Dates: Weekends & Holidays
- Day Count Conventions
- Floating Payment Day Count Conventions
- Fair Value Floating Payments: Estimation
- Calculation of Swap Cash Flows: Example

Topic 2: Swap Principal

- Notional Principal
- Actual Principal
- Collateralization of Principal
- Scenario
- Mark-to-Market Swaps
- Basis Adjustments

Topic 3: Upfront Amounts & Negative Interest Rates

- Upfront Amounts
- Negative Interest Rates

Swaps – Clearing

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the key role played by central clearing counterparties (CCPs) in clearing swap trades
- Identify the techniques used to reduce the risk of clearing member shortfalls, including margining and the default waterfall
- Recognize the main methods of reducing counterparty credit risk such as trade netting and compression and position limits

Tutorial Overview
Central clearing of swaps transactions is designed to standardize certain swaps, promote transparency, and allow market participants to mitigate their counterparty credit risk to dealers. This tutorial looks at the role of the CCP and the techniques used to reduce address the default risk of clearing members such as margining and the default waterfall.

Prerequisite Knowledge
Swaps – Market Developments

Tutorial Level: Advanced
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Clearing of Swap Transactions
- Overview of Swaps Clearing
- What is a CCP?
- Selection of Clearing Members
- Clearing for Nonclearing Members

Topic 2: Impact of Clearing
- Swaps Clearing Pre- & Post-Crisis
- Impact of Mandatory Clearing
- Uncleared Swaps

Topic 3: Margining
- Margining

Topic 4: Default Waterfall
- Default Waterfall: Example

Topic 5: Reducing Credit Risk With Clearing
- Trade Netting & Compression
- Other Risk Reduction Issues

Topic 6: Regulatory Issues in Swaps Clearing
- Key Regulatory Requirements for Swaps Clearing
- End-User Exemption From Clearing Requirements
- Responsibilities For Swap Dealer Firms

Swaps – CSAs & Collateral

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define what a CSA is and how it mitigates counterparty credit risks
- Recognize how CSAs have been standardized by ISDA through the SCSA
- Recall various regulatory initiatives in the area of swaps clearing and collateralization

Tutorial Overview

This tutorial looks at how swap counterparties mitigate credit risk through the CSA and its standardized version, the SCSA. Other regulatory initiatives in the area of clearing and collateralization of swaps are also covered in detail.

Prerequisite Knowledge

Swaps – Overnight Index Swaps (OIS)

Tutorial Level: Advanced

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Credit Support Annex (CSA)

- What Is a CSA?
- Main Sections of a CSA

Topic 2: Standardized CSA (SCSA)

- What Is the Standardized CSA?
- Legacy CSA vs. Standardized CSA
- SCSA: Related Documentation
- SCSA: Implied Swap Adjustment Methodology
- Collateral Choice Optionality: Example

Topic 3: Swaps Clearing & Collateralization

- Clearing of Swaps
- Credit Value Adjustments (CVAs)
- Modeling & Maintaining a Multiplicity of Curves
- Clearing: Other Regulatory Initiatives
- Clearing: Documentation
- ISDA Recommendations for Collateral

Swaps – Currency Swaps

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the main structures used with currency swaps, including the initial exchange of principal amount in different currencies and their re-exchange at maturity
- Recognize how swap principal is market to marked as FX rates change
- Identify the key applications of currency swaps, including the conversion of borrowing amounts, foreign currency revenues, and returns on synthetic assets to the desired currency

Tutorial Overview

A currency swap is a transaction that involves the exchange of principal and interest payments based on two different currencies. This tutorial looks at the main structures used with currency swaps and provides realistic examples of the uses of these instruments.

Prerequisite Knowledge

Swaps – Basis Swaps

Tutorial Level: Intermediate

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Overview of Currency Swaps
- What is a Currency Swap?

Topic 2: Features of Currency Swaps
- Key Features of Currency Swaps
- Currency Swaps & CIP

Topic 3: Currency Swap Pricing
- Valuing a Cross-Currency Basis Swap
- Valuing a Cross-Currency Basis Swap: Example

Topic 4: Currency Swap Applications
- Converting Foreign Borrowing to Domestic Currency
- Domestic Currency Borrowing to Fund Nondomestic Activities
- Creation of Synthetic Foreign Currency Fixed Income Assets
- Currency Swap: Scenario

Swaps – Documentation

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of the ISDA Master agreement in standardizing swaps (and other derivatives) transactions
- Identify the key elements of the ISDA Schedule, confirmations, and definitions
- Recall how credit support annexes (CSAs) are used to mitigate or eliminate the mutual potential for counterparty risk in derivatives transactions
- Identify the key documentation required for cleared swaps

Tutorial Overview
Documentation is crucial to maintaining the efficiency of the swaps market and reducing counterparty credit risk. This tutorial looks at the importance of the ISDA Master Agreement and other documentation relevant to cleared and noncleared swaps.

Prerequisite Knowledge
Swaps – Clearing

Tutorial Level: Advanced
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: ISDA Master Agreement
- What is the ISDA Master Agreement?
- 2002 ISDA Master Agreement
- Potential Credit Losses Without ISDAs & CCPs
- Potential Credit Losses Without ISDAs & CCPs: Example
- Netting

Topic 2: ISDA Schedule, Confirmations, & Definitions
- ISDA Schedule
- Confirmations
- ISDA Definitions

Topic 3: Credit Support Documentation
- Credit Support Annex (CSA) For Initial & Variation Margin
- CSAs for Noncleared Swaps

Topic 4: Documentation of Cleared Swaps
- Key Documentation of Cleared Swaps

Swaps – Exotic Structures

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define the main types of exotic swap structure, including swaps with a variable principal, swaps with option-like features, inflation swaps, zero-coupon swaps, and legacy products
- Recognize some of the legacy exotic swap structures, such as diff swaps

Tutorial Overview

This tutorial looks at the key variants of generic interest rate swaps, covering swap structures which have a variable notional principal or embedded optionality, inflation and zero-coupons, as well as legacy products which are no longer traded.

Prerequisite Knowledge

Swaps – Pricing

Tutorial Level: Advanced

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Swaps With a Variable Notional Principal

- Swaps with a Variable Notional Principal
- Amortizing Swap: Example
- Swaps with a Variable Notional Principal: Fair Fixed Coupon
- Swaps with a Variable Notional Principal: Fair Fixed Coupon in Excel

Topic 2: Zero-Coupon & Inflation Swaps

- Zero-Coupon Swaps
- Inflation Swaps

Topic 3: Swaps with Optionality

- Swaps with Optionality
- Cancelable (Callable) Swap
- Cancelable (Callable) Swap: Cost
- Barrier Swaps
- Barrier Swaps: Path Dependency

Topic 4: Other Exotic Structures

- Funded Structured Notes
- Legacy Products

Swaps – Indices & Curves

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how a swap curve represents market swap rates for each maturity
- Recall how the credit risk reflected by the swap curve can be compared to that of the treasury yield curve to determine a swap spread
- Identify the process by which a swap zero curve can be derived from a swap curve using interbank deposit and futures rates and the bootstrapping methodology

Tutorial Overview
This tutorial looks at how a swap curve represents fixed coupon rates of different maturities existing in the market, which when applied to newly initiated fixed-for-floating swaps generate a swap NPV of zero. The tutorial also shows how the bootstrap method is used to derive zero-coupon interest rates from the swap par rates.

Prerequisite Knowledge
Swaps – Cash Flows & Structures

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Swap Curves
- What Is a Swap Curve?
- Swap Curve as a Par Yield Curve
- Swap Curve & Treasury Yield Curve
- Swap Spreads
- Swap Spreads: Quotation
- Swap Zero Curve

Topic 2: Sourcing Zero Curves for Swaps
- Sources of Zero Curve Rates
- SOFR & Other Risk-Free Rates
- SOFR Futures Prices: Example
- SOFR Futures Prices: Convexity Bias
- Bootstrapping the Swap Zero Curve: Example
- Overnight Index Swap (OIS) Zero Curve

Swaps – Key Valuation Concepts

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize that a fair value swap is one where the two sets of cash flows produce an overall swap NPV of zero.
- Identify the role of the forward curve and discounting curve in determining the fair fixed rate on a swap
- Recognize the key sources of forward rates, including SOFR OIS, SOFR futures, and SOFR interest rate swap rates

Tutorial Overview
This tutorial looks at how the forward index curve and discounting curve are used to determine the fair value of a swap. It also examines the key sources of forward rates used to build the forward curve.

Prerequisite Knowledge
Swaps – Applications

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Fair Valuation of Swaps
- Fixed & Floating Cash Flows on a Swap
- Fair Value Swap
- Initial NPVs of Swaps Post Dodd-Frank
- Concepts of Return
- Cleared Swaps

Topic 2: Swap Valuation Curves
- Forward Index & Discounting Curves
- Potential Exposure
- Potential Exposure: Example
- Using Forward Rate Information

Topic 3: Forward Rates & Swap Valuation
- Sources of Forward Rates
- Discount Curve

Swaps – Market Developments

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize how counterparty credit risk became a major issue during the financial crisis and led to a shutdown in the interbank market
- Identify the post-crisis regulatory changes that have impacted the risks and economics of swaps
- Recall how swaps are cleared and collateralized
- Recognize the move away from LIBOR discounting based on SOFR and other benchmark indices

Tutorial Overview

The purpose of this tutorial is to examine the changes to the swaps market that resulted from the financial crisis of 2007-8, in particular, the changes to the way swaps are cleared and collateralized like other derivatives and the current state of play in the LIBOR interbank market.

Prerequisite Knowledge

Swaps – Applications

Tutorial Level: Advanced

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Swaps Market Pre-Crisis

- Overview of The Swaps Market Pre- & Post-Crisis
- Swaps Marketplace
- Libor & The Financial Crisis
- Counterparty Credit Risk
- Single Curve Framework

Topic 2: Swaps Market Post-Crisis

- Aftermath of The Crisis
- Regulatory Changes to The Swaps Market
- Impact of Swap Standardization
- Multiple Curves & Differential Discounting
- LIBOR- & SOFR-Based Discounting
- LIBOR- & SOFR-Based Discounting: Example
- Negative Rates & ISDA
- Negative Swap Spreads

Swaps – Overnight Index Swaps (OIS)

Tutorial Description

Objectives

On completion of this tutorial you will be able to:

- Recall how the OIS market has boomed in the post-crisis world as interbank deposit transactions have been concentrated into the shortest tenors Identify the key features of OIS transactions including the indices used, how cash flows are settled, and typical maturities and coupon structures
- Calculate OIS cash flow in Excel
- Identify the key steps in building an OIS zero curve
- Recognize how interest rate risk can be managed using OIS

Tutorial Overview

An OIS is an interest rate swap whose floating leg is tied to an overnight rate. The tutorial describes the key features of these instruments and the development of the market since the global financial crisis.

Prerequisite Knowledge

Swaps – Indices & Curves

Tutorial Level: Advanced

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Overview of OIS

- Overview of Overnight Index Swaps (OIS)
- OIS Market Developments

Topic 2: OIS Features & Indices

- OIS Features
- OIS Indices

Topic 3: OIS Calculations

- OIS Calculations
- OIS Calculations: Example

Topic 4: OIS Zero Curves

- Building an OIS Zero Curve

Topic 5: OIS & Hedging

- Hedging Using an OIS
- Hedging Interest Rate Risk with OIS: Example

Swaps – Pricing

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the key changes to the market infrastructure for swaps that have impacted the pricing of swaps products
- Recognize how exchange-traded swap futures prices can be used to determine the fair rate on a swap

Tutorial Overview

This tutorial looks at how regulatory-driven changes to the swap market infrastructure – such as centralized clearing and standardization of swap products – have affected the pricing of swaps. The use of swap futures to build a swap zero curve is also examined in detail.

Prerequisite Knowledge

Swaps – Indices & Curves

Tutorial Level: Intermediate

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Pricing & Standardization of Swap Products

- Swap Pricing: Prices & Rates
- Swap Pricing: Change in Swap Market Infrastructure
- Standardization of Swaps
- Early Termination & Total Return
- Exchange-Traded Swap Futures
- Swap Futures & Par Swap Data
- Swap Futures & Par Swap Rate

Topic 2: Finding a Fair Swap Rate

- Valuing an Existing Swap
- Determining the Fair Coupon on a Par Swap
- Determining the Fair Coupon on an Existing (Nonpar) Swap
- Determining the Swap Rate on a Nonpar Swap: Example

Swaps – Sensitivities & Risk Management

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how the fixed and floating side of a swap have separate interest rate sensitivities
- Measure interest rate sensitivity through dollar duration, DV01, and convexity
- Identify interest rate sensitivities for index and discounting curves

Tutorial Overview
The fixed and floating side of an interest rate swap have separate sensitivities to movements in interest rates. This tutorial looks at key sensitivity measures such as dollar duration and DV01 and also looks at the sensitivities of index and discounting curves to rate movements.

Prerequisite Knowledge
Swaps – Bootstrapping Zero Curves

Tutorial Level: Advanced
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Swap Sensitivities
- Overview of Swap Sensitivities
- Post-LIBOR Swaps & Sensitivities

Topic 2: Floating Side Sensitivities
- Floating Side Sensitivities
- Interest Rate Sensitivity of a Generic IRS
- Interest Rate Sensitivity on the Floating Leg of a Multi-Year OIS
- Floating Payment Calculations: Example

Topic 3: Fixed Side Sensitivities
- Fixed Side Sensitivities
- Interest Rate Sensitivity on the Fixed Leg

Topic 4: Swap DV01 Calculations
- Swap DV01 Calculations
- Swap DV01: Excel
- Swap DV01
- Swap DV01: Illustration

Topic 5: Index & Discounting Curve Sensitivities
- Index & Discounting Curve Sensitivities
- Index Curve Sensitivities
- Discounting Curve Sensitivities

Tactical Asset Allocation (TAA)

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define tactical asset allocation (TAA) in the broader context of asset allocation and portfolio construction
- Recognize the key objectives of TAA and some of the tools used in the pursuit of these objectives
- List some of the techniques that can be used to evaluate the success or otherwise of a TAA strategy

Tutorial Overview

TAA is a dynamic investment strategy that involves deviating from a portfolio's strategic asset allocation (long-term asset mix) to exploit short-term opportunities for generating excess returns (alpha). This tutorial describes the basics of TAA, including the elements required to build a reliable and durable forecasting model on which tactical decisions may be based, as well as the signals that indicate when such decisions should be triggered.

Prerequisite Knowledge:
Asset Allocation – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 55 minutes

Tutorial Outline

Topic 1: Overview of TAA

- What is TAA?
- TAA Evolution
- Interplay with SAA
- TAA Parameters
- Making a TAA switch
- TAA & Asset Correlation

Topic 2: Key Objectives & Tools of TAA

- Excess returns (alpha)
- TAA tools
- Fundamental Analysis
- Fundamental Analysis: Asset Valuation
- Fundamental Analysis: Risk Premiums
- Other tools
- TAA signals

Topic 3: Evaluating SAA

- TAA & Excess Returns
- Alpha, Tracking Error, & the Information Ratio
- Quantitative Evaluation Criteria
- Key Ingredients for Successful TAA

Taxonomy Regulation (Europe)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the purpose of the Taxonomy Regulation and list its six climate/environmental objectives as well as the conditions for an economic activity to qualify as environmentally sustainable
- Identify the scope and key elements of the technical screening criteria set out by the Delegated Acts that support the Taxonomy Regulation's objectives
- Outline the step-by-step process for using the taxonomy to determine if an economic activity is taxonomy-aligned
- Recognize the key taxonomy-relayed disclosure requirements for both financial and nonfinancial companies

Tutorial Overview
The EU's Taxonomy Regulation created the world's first-ever regulatory-driven “green list” – a classification system for environmentally sustainable economic activities. It provides transparency to investors and other financial market actors such as banks, asset managers, and insurance companies by defining the criteria under which a financial product or activity can be described as environmentally sustainable. This tutorial provides an overview of the Taxonomy Regulation and its key provisions.

Prerequisite Knowledge
ESG – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: Overview of the Taxonomy Regulation
- Background to the Taxonomy Regulation
- Purpose of the Taxonomy
- Climate/Environmental Objectives
- Environmentally Sustainable Economic Activities

Topic 2: Technical Screening Criteria (TSC)
- Climate Delegated Act
- Climate Change Mitigation
- Climate Change Adaptation
- Classification of Natural Gas & Nuclear Energy
- Environmental Delegated Act
- TSC Example: Cement Manufacturing

Topic 3: Using the Taxonomy
- Process for Using the Taxonomy
- Scenario: Using the Taxonomy

Topic 4: Disclosure Requirements
- Disclosure Obligations
- What Should be Reported?
- Data Requirements

Technical Analysis – An Introduction

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize some of the key ideas behind technical analysis and how it differs from fundamental analysis
- Identify the different types of chart used in technical analysis
- Use trendlines to decide whether a market is moving higher, lower, or sideways

Tutorial Overview

The use of various technical analysis techniques to predict market movements and forecast the direction of prices has been commonplace for centuries. This tutorial provides an introduction to technical analysis, focusing in particular on chart construction and trend analysis.

Prerequisite Knowledge

Financial Markets – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 50 minutes

Tutorial Outline

Topic 1: Overview of Technical Analysis
- What Is Technical Analysis?
- Technical Analysis vs. Fundamental Analysis
- History & Development
- Criticisms of Technical Analysis

Topic 2: Chart Construction
- Types of Chart
- Line Charts
- Bar Charts
- Bar Charts: Example
- Candlestick Charts
- Candlestick Charts: Example
- Candlestick Charts & Pattern Recognition
- Doji Patterns
- Point & Figure Charts

Topic 3: Trend Lines & Trend Channels
- Trends & Waves
- Resistance
- Resistance: Example
- Support
- Support: Example
- Converging Trend Lines
- Trend Channels
- Factors Impacting the Strength of a Trend Line
- Trading Around a Trend Line
- Breaking of a Trend Line
- Entering the Market After the Breaking of a Trend Line

Technical Analysis – Fibonacci Analysis & Elliot Wave Theory

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the Fibonacci sequence of numbers and its relevance to technical analysis
- Identify a basic Elliot wave formation and how it used by technical analysts

Tutorial Overview
This tutorial describes Fibonacci analysis and Elliot wave theory, two historically important elements of a chartist's toolkit. It covers topics such as the key Fibonacci retracement levels and market behavior around these retracement levels, as well as the basic premise of Elliot wave theory that prices move in a 5-wave advance before a 3-wave retracement.

Prerequisite Knowledge
Technical Analysis – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 40 minutes

Tutorial Outline
Topic 1: Fibonacci Analysis
- Fibonacci Ratios
- Fibonacci Retracement Levels
- Applying the Retracement Levels
- Market Behavior Around Retracement Levels

Topic 2: Elliot Wave Theory
- Background
- Elliot Wave Formation
- Corrective Wave Structures
- Characteristics of Each Wave
- Elliot Wave Rules
- Other Elliot Wave Indications

Technical Analysis – Mean-Reverting Strategies

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the key types of mean-reverting strategy
- Recognize the role of oscillators in measuring the rate of price change
- Recall how Bollinger bands highlight where prices are overextended
- Identify reversal patterns such as double tops/bottoms, head and shoulders, spikes, and saucers

Tutorial Overview
Mean-reverting strategies involve trading against the general trend in prices. This tutorial covers the main techniques used to effect such strategies including oscillators, Bollinger bands, and other reversal patterns.

Prerequisite Knowledge
Technical Analysis – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of Mean-Reverting Strategies
- What Are Mean-Reverting Strategies?

Topic 2: Oscillators
- What Are Oscillators?
- Relative Strength Index (RSI)
- RSI: Example
- RSI: Interpretation
- Rate of Change (ROC)
- Moving Average Convergence Divergence (MACD)
- Interpreting MACD signals
- Stochastics
- Stochastics: Example
- Oscillators as Trade Signals

Topic 3: Bollinger Bands
- Overview of Bollinger Bands
- Bollinger Bands: Trading Signals
- Bollinger Bands: Example
- Band Formation
- Trading with Bollinger Bands
- Banding Strategies

Topic 4: Reversal Patterns
- Overview of Reversal Patterns
- Double Top
- Double Top: Example
- Double Bottom
- Head & Shoulders
- Head & Shoulders: Characteristics
- Triple Top
- Saucers
- Spikes
- Spikes: Example

- Candlestick Chart Patterns

Technical Analysis – Other Strategies

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how stop-loss orders and position sizing are used to contain potential trading losses
- Identify key algorithmic trading strategies and how they are used to overcome trader biases

Tutorial Overview
This tutorial focuses on the crucial role of risk management in limiting oversized trading losses. Other key trading strategies such as automated trading and high frequency trading are also examined in detail.

Prerequisite Knowledge
Technical Analysis – Mean-Reverting Strategies

Tutorial Level: Intermediate
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Risk Management
- Risk Management & Trading
- Stop-Loss Levels & Taking Profit
- Measuring Risk
- Value at Risk (VaR)
- Position Sizing: Kelly Criterion
- Position Sizing: Trader Psychology
- Trading Risk Management: General Rules

Topic 2: Algorithmic Trading & Backtesting
- What is Algorithmic Trading?
- Automated Trading
- Automated Trading: Process
- Automated Trading: Backtesting
- Automated Trading: Issues in Backtesting
- Automated Trading: Volatility
- Automated Trading: Approaches to Estimating Volatility
- High Frequency Trading (HFT)
- Other Algorithmic Models

Technical Analysis – Trend-Following Strategies

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the role of moving averages in determining price trends
- Identify continuation patterns such as wedges, triangles, and pennants
- Recognize the role of gap patterns in identifying one-sided buying or selling
- Determine support, resistance and trend signals using Ichimoku charts

Tutorial Overview
This tutorial looks at the key techniques used in trend-following strategies, including moving averages, continuation patterns, gaps, and Ichimoku charts.

Prerequisite Knowledge
Technical Analysis – Fibonacci Analysis & Elliot Wave Theory

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Moving Averages
- What Are Moving Averages?
- Use of Moving Averages
- Moving Averages: Example
- Entry & Exit Points
- Entry & Exit Points: Behavior Finance Aspects
- Moving Averages & Trend Reversal

Topic 2: Continuation Patterns
- What Are Continuation Patterns?
- Triangles
- Symmetrical Triangle
- Symmetrical Triangle: Example
- Triangles: Descending & Ascending Triangles
- Wedges
- Flags
- Flags: Example
- Pennants
- Candlestick Chart Patterns
- Volume & Open Interest
- Four-Week Rule

Topic 3: Gaps
- What Are Gaps?
- Gaps: Example

Topic 4: Ichimoku Charts
- What are Ichimoku Charts?
- Ichimoku Charting Technique
- Components of Ichimoku Charts
- Ichimoku Charts: Trading Strategies
- Ichimoku Cloud Chart

The Foreign Exchange Business

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the significance of the FX market in terms of size and the describe the key market players
- Explain the typical structure by which a bank might organize its FX business

Tutorial Overview
Against the backdrop of the global financial crisis and its ensuing fallout, the foreign exchange market has continued to grow. This tutorial looks at the reasons behind this growth and performance, while examining the redistribution that is happening within the market. The tutorial also describes consequences for the market of recent events such as the investigations into the WM/Reuters fix.

In addition, the tutorial outlines the typical structure by which a bank organizes its FX business and the different roles played by the various players within that structure. Finally, the tutorial looks at some of the key risks generated by FX businesses and the solutions employed by banks to mitigate these risks.

Prerequisite Knowledge
Foreign Exchange (FX) Market – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of FX Market
- Overview Of FX Market

Topic 2: Market Data & Analysis
- Size of FX Market
- Leading FX Trading Centers
- Most Popular Currencies Traded

Topic 3: Key Market Participants
- Market Players
- Market Players: Growth

Topic 4: Market Developments
- Evolving Market Structure
- Other Significant Changes & Developments
- Market Liquidity

Topic 5: Structure of a Bank's FX Business
- Typical Organization of a Bank's FX Business
- Front Office: Organization
- Middle Office: Organization
- Back Office: Organization
- Segregation of Duties

Topic 6: Settlement Risk
- Overview of Settlement Risk
- CLS
- Objective of CLS
- Participation in CLS
- CLS Settlement

Three-Statement Modeling

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the importance of the three-stage model in company financial analysis
- Identify the key steps in the model in generating forecast financial statements for a company

Tutorial Overview

The three-statement model is a key tool used by equity analysts to generate forecast financial statements. This tutorial looks at the steps involved in setting up a three-statement model, including defining objectives, data input and organization, generating forecast financial statements, outputs, and scenario analysis.

Prerequisite Knowledge

Balance Sheet – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Overview of Three-Statement Modeling

- Overview of The Three-Statement Model
- Steps in The Three-Statement Model

Topic 2: Defining Model Objectives

- Defining The Objectives of The Model

Topic 3: Designing The Model Layout & Format

- Designing The Model Layout & Format

Topic 4: Data Input & Organization

- Inputting Historical data
- Organization of Data

Topic 5: Forecasting

- Forecast Assumptions
- Forecast Income Statement
- Forecast Balance Sheet
- Forecast Statement of Cash Flows
- Forecast Debt & Interest expense

Topic 6: Outputs & Scenario Analysis

- Outputs
- Scenario Analysis

Time Value of Money – Scenario

Description
Overview
This scenario explores how the time value of money and its related concepts of present value and future value impacts investment decision making.

Prerequisite Knowledge
Present Value & Future Value

Level: Intermediate
Duration: 20 minutes

Time Value of Money – Excel Interactive

Tutorial Description

Overview

This tutorial is one of a series that provide an introduction to Microsoft Excel for financial market participants. The aim of this series is to demonstrate some of the key functions in Excel and show how they can be used by market participants to increase the efficiency and effectiveness of their work. The focus here is on functions related to the time value of money.

Prerequisite Knowledge

Present Value & Future Value

Level: Intermediate

Duration: 25 minutes

Trade Finance – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the need for trade finance products and the different types of product providers
- Identify the main methods of payment used for trade transactions and the forms of finance and other support that can be used by exporters and importers for an individual transaction
- Recognize the importance of trade documentation and the role of the various rules/guidelines published by the International Chamber of Commerce (ICC)

Tutorial Overview
Trade transactions present a number of potential difficulties for the parties – buyers (importers) and sellers (exporters) – involved in such transactions. These challenges include ascertaining a method of payment that is acceptable to both parties and obtaining access to appropriate products in order to finance transactions. This tutorial addresses these issues in detail as well as looking at various other aspects of trade finance.

Prerequisite Knowledge
Corporate Banking Products – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of Trade Finance
- Trade Finance Overview
- What is Trade Finance?
- Role of Third Parties in Trade Finance
- Trade Finance Providers
- Domestic vs. International Trade Risks
    - Timeframe
    - Cultural nuances
    - Languages barriers
    - Country differences
- Key Trade-Related Risks
    - Credit Risk
    - Country Risk
    - Market Risk
    - Operational Risk
    - Performance Risk
- Trade Transaction Lifecycle
    - Negotiation
    - Order placement
    - Preshipment
    - Shipment
    - Post-shipment
    - Delivery
    - Post-delivery
- Methods of Payment for Trade Transactions
- Business Needs & Trade Finance
    - Protecting business interests
    - Obtaining finance
    - Obtaining payment protection
    - Obtaining country risk protection

Topic 2: Trade Finance Products
- Methods of Payment

    - Open Account Trading
    - Documentary Collection
    - Letters of Credit
    - Advance Payment
- Finance Products
- Bank Credit Facilities
- Pre- & Post-Shipment Loans
- Invoice Discounting
- Factoring
    - Recourse vs. Nonrecourse
- Forfaiting
- Supply Chain Finance (SCF)
    - Supplier Finance
    - Buyer Finance
- Import Loans
- Structured Trade Finance (STF)
- Commodity Finance
- Bonds & Guarantees
    - Bid/Tender Guarantees
    - Advance Payment & Performance Bonds
    - Shipping Guarantees
    - Customs Guarantees
- Export Credit Insurance
    - Commercial Insurers
    - ECAs
- Products For Mitigating Market Risks
- Other Forms of Support
    - Development Banks
    - ECAs
    - Islamic Banks
    - Governments

Topic 3: Trade Documentation
- Types of Trade Documentation
    - Financial Documents
    - Commercial Documents
    - Transport Documents
- Importance of Trade Documentation

Topic 4: Uniform Customs & Rules
- Role of the ICC
- Uniform Customs & Rules
    - Limitations
- Incoterms
    - Delivery
    - Risk
    - Freight Charges
    - Costs

Trade Finance Documentation & Incoterms

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the different types of trade documentation and their uses
- Describe the different Incoterms and the implications each one carries for importers and exporters

Tutorial Overview
This tutorial deals with the tools available to importers and exporters to ensure that trades are conducted with certainty and that disputes do not easily arise. We will explore the different trade documents that assist in this regard and the application of Incoterms 2020, which are the most recent set of international trading rules prescribed by the International Chamber of Commerce.

Prerequisite Knowledge
Trade Finance – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Trade Documentation
- Need for Trade Documentation
- What Is Trade Documentation?
- Role of Trade Documentation

Topic 2: Financial Documents
- Financial Documents
- Bills of Exchange
- Trust Receipts

Topic 3: Commercial Documents
- Commercial Documents
- Commercial Invoices
- Customs Invoices
- Consular Invoices
- Packing List
- Certificates of Origin
    - Preferential
    - Nonpreferential
- Inspection Certificates
    - Basic Checks
    - Product Testing
    - Health
    - Phytosanitary
    - Fumigation
- Insurance Policy/Certificate
- Import/Export License
    - Nature of the Goods
    - Expected Use of Goods
    - Country-Specific Regulations

Topic 4: Transport Documents
- Transport Documents
- Bill of Lading (B/L)
- Air Waybill

- Rail Waybill
- Multimodal Transport Documents

Topic 5: Other Documents
- Other Documents
- Paper-Based vs. Electronic Documentation
- Future of Electronic Trading

Topic 6: Incoterms
- What Are Incoterms?
- Why Are Incoterms Used?
- What Do Incoterms Not Address?
- Incoterms Groups
- Incoterms: Group 1
- Incoterms: Group 2
- Incoterms – Summary
- Factors Used to Agree Applicable Incoterms
    - Mode of Transport
    - Destination
    - Accepted Practice
    - Rules and Regulations
    - Licensing Requirements
    - Commercial Considerations
    - Competition
- Issues When Applying Incoterms
    - Ownership
    - Place of Delivery
    - Incorrect Application
    - Multiple Parties
    - Payment Delays
- Incoterms & Sustainability

Trade Indicators

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define the balance of payments and how it measures the global flow of goods, services and capital
- Identify the components of the balance of payments account
- Define trade imbalances and their role in balance of payments crises
- List key international trade indicators

Tutorial Overview

All countries engage in trade with other countries. Trade and international financial flows play an important role in the global economy. Nations record trade and international financial inflows and outflows in their balance of payments accounts. This tutorial provides a high-level overview of the balance of payments account and the role of trade in the global economy.

Prerequisite Knowledge

Business Cycles – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Balance of Payments Fundamentals

- What Is The BOP?
- BOP Components
- Current Account Components
- International Trade
- Current Account: Trade Balance
- Current Account: Income
- Current Account: Unilateral Current Transfers
- Current Account: Balance
- Capital & Financial Account: Capital Account
- Capital & Financial Account: Financial Account

Topic 2: Balancing Act

- Balancing The BOP
- BOP Example
- BOP Identity
- Scenario: Surpluses vs Deficits
- BOP Crises
- Rebalancing the BOP

Topic 3: Trade Indicators

- Trade & The Economy
- Domestic Trade Indicators
- Global Trade Indicators
- Leading Global Trade Indicators
- Lagging Global Trade Indicators

Transaction Banking – An Introduction

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the importance of transaction banking to the modern, global economy
- Identify the crucial role played by transaction banks in facilitating global supply chains
- List the different products and services provided by transaction bank

Tutorial Overview

Transaction banking – the provision of payments, cash management, trade finance, and other services to (mostly) corporate customers – is a changing landscape. Factors such as shifting global trade flows, geopolitics, digitalization, and sustainability are disrupting traditional business models, both from a bank perspective and a customer perspective. This tutorial provides a high-level overview of a modern-day transaction banking operation and the solutions it offers to meet its customers' needs.

Prerequisite Knowledge

Banking – Primer

Tutorial Level: Introductory

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Transaction Banking Overview

- What Is Transaction Banking?
- Transaction Banking Solutions
- Transaction Banking Business Model
- Organizational Challenges
- Bank-Customer Integration
  - Payments Hub
  - Shared Services Center
  - In-House Bank (IHB)

Topic 2: Transaction Banking & Global Supply Chains

- Transaction Banking & The Global Economy
- Supply Chain Considerations
  - Deconstructed Processes
  - ESG & SCF
- Serving the Supply Chain
- Fintech Partnerships

Topic 3: Other Services

- Payments
- Cash Management
- Trade Finance
- Other Services
  - Securities/Custody Services
  - Escrow Services
  - APIs & Banking-As-A-Service (BaaS)
  - Customer Portals

Transaction Banking – Cash Management Services

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the interconnection between cash management, the treasury function, and organizational structure, as well as regulatory initiatives in the cash management area
- Identify the key elements of bank account management, including managing banking relationships, virtual account management, cash sweeping, and notional pooling
- Recall the importance of effective liquidity management, especially working capital management, for a business
- Identify key elements of the cash conversion cycle, namely, days sales outstanding, days sales in inventory, and days payables outstanding

Tutorial Overview
Effective cash management is essential to the survival of any business enterprise. This tutorial looks at the importance of good cash management, including bank account management and liquidity management and examines the main cash management metrics used.

Prerequisite Knowledge
Transaction Banking – Payments Services

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Cash Management
- Importance of Cash Management
- Cash Management & the Treasury Function
- Cash Management & Organizational Structure
- Regulation & Cash Management
- Limits on Capital Mobility

Topic 2: Bank Account Management
- Managing Banking Relationships
- Virtual Account Management (VAM)
- Bank Account Types
  - Payments-Only Service
  - Demand Deposit Account
  - For Benefit of (FBO) Deposit Account
  - Multi-Currency Accounts
- Cash Concentration
- Cash Sweeping & Notional Pooling
- Investing Cash

Topic 3: Liquidity Management
- Liquidity Management Objectives
- Working Capital Management
- Working Capital Management: Receivables & Collections

Topic 4: Cash Management Metrics
- Systems Supporting Performance
- Cash Conversion Cycle (CCC)
- Cash Conversion Cycle: Components
  - Days Sales Outstanding (DSO)

    - Days Inventory Outstanding (DIO)
    - Days Payable Outstanding (DPO)
- Earnings on Invested Funds

Transaction Banking – Payments Services

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the key features of payment processing systems and the main risks involved in payment processing
- Identify the key types of payment, namely credit/debit transfers, standing orders, cross-border-payments, and checks
- Recognize the key features and stages in the payments processing cycle, namely, payment type selection, payment initiation, and payment processing and execution

Tutorial Overview
Payments and payments systems/rails are critical to the global economy. And while banks for many years enjoyed exclusivity as suppliers of payments services, this was seen as relatively unattractive part of the business. But payments act as the gateway to cash management services and consolidate the corporate customer relationship. This tutorial describes how banks support corporate customers by effecting payments of all types across a range of platforms and systems against a background of a rapidly changing global payments environment.

Prerequisite Knowledge
Transaction Banking – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Payments
- Transaction Banking Payments Services
- Payment Systems/Rails
- Gross vs. Net Settlement

Topic 2: Payments Systems & Risks
- Payments Systems & Risks
    - Credit Risk
    - Settlement Risk
    - Liquidity Risk
    - Systemic Risk
    - Legal Risk
    - Operational Risk

Topic 3: Payments Workflows & Stages
- Overview of Payments Workflows
- Stages in Payments Services
- Selection of Payment Type
- Payment Types: Credit & Debit Transfers
- Payment Types: Other Methods
    - Checks
    - Standing Orders
    - Cross-Border Payments
- Payment Initiation
- Payment Processing & Execution
    - SWIFT
    - ISO 20022 Message Formats

Transaction Banking – Other Services

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the role of transaction banks in international trade, the key risk factors and methods of payment in trading transactions, document management, and compliance requirements in the trade finance area
- Define transaction-based FX Services, settlement risk, and CLS
- List the main trade finance-based securities services, such as custody, agency securities lending, trade processing, and collateral management
- Recognize the role of escrow agency services
- Identify the main open banking models and platforms, namely, banking-as-a-service and banking-as-a-platform

Tutorial Overview

Although payments and cash management are the mainstay of transaction banks, they also offer a range of other services, such as FX, escrow, open banking, and security services. This tutorial explores these other transaction banking services in detail.

Prerequisite Knowledge

Transaction Banking – An Introduction

Tutorial Level: Intermediate

Tutorial Duration: 50 minutes

Tutorial Outline

Topic 1: Trade Finance

- Transaction Banks & International Trade
- Risk Factors for International Trade
  - Credit Risk
  - Country Risk
  - Market Risk
  - Operational Risk
  - Product Risk
  - Performance Risk
  - Transport Risk
  - Legal Risk
  - Climate/ESG Risk
- Methods of Payment
- Open Account Trading
  - Documentary Collections
  - Letters of Credit (Documentary Credits)
  - Advance Payment
- Finance Products
  - Bank Credit Facilities
  - Pre-Shipment Finance
  - Post-Shipment Finance
  - Supply Chain Finance (SCF)
  - Invoice Discounting
  - Factoring & Forfaiting

    - Forfaiting
    - Structured Trade Finance (STF)
    - Commodity Finance
- Document Management
- KYC & Compliance
- Digitalization

Topic 2: FX Services
- Transaction-Based FX Services
- Settlement Risk & CLS

Topic 3: Securities Services
- Custody Services
- Other Securities Services

Topic 4: Escrow Services
- Escrow Agency Services

Topic 5: Open Banking Services
- BaaS & BaaP

Treasury Cash Management – Scenario

Description
In this scenario, which is set in the head office of a moderately sized bank, the focus is on intraday cash management but will touch on aspects of preplanning and the need to address potential funding shortfalls. This is done by walking through a day in the life of a treasury manager responsible for the bank's cash management.

The figures used in the scenario are realistic but have been simplified and only cover local currency inflows and outflows in order to focus on the key learning points.

Prerequisite Knowledge
A broad understanding of asset liability and treasury management is required.

Level: Intermediate
Duration: 45 minutes

UAE Anti-Money Laundering (AML)

Tutorial Description
On completion of this tutorial, you will be able to:

- Identify the purposes, methods and stages of the money laundering process
- Recognize high-risk transactions and best practices for countering money laundering
- Identify the roles played by the UAE's regulatory and enforcement agencies as well as international bodies in the fight against money laundering
- Be aware of your obligations under Emirati laws and regulations
- Cite the penalties imposed for non-compliance
- Describe the challenges involved in recognizing terrorist financing

Tutorial Overview
The need to launder illicit funds is an ongoing problem for criminals. With electronic monetary transactions dominating the day-to-day functioning of the financial system, criminals continue to devise increasingly sophisticated means of laundering funds. The Financial Action Task Force – a specialist anti-money laundering agency – has put financial institutions and their employees on the frontline of the battle against money laundering. This tutorial surveys the money laundering situation in the United Arab Emirates (UAE) and explains the stages and ways in which money is laundered. It describes the best practices and legislation that financial institutions and other designated bodies need to follow to counter money laundering. The tutorial also looks at the growing problem of terrorist financing.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 90 minutes

Tutorial Outline
Topic 1: Money Laundering & How It is Detected
- What is Money Laundering?
- Stages of Money Laundering
    - Placement
    - Layering
    - Integration
- The Placement of Money in the Financial System
- Hiding Dirty Money (Layering)
- Business & Countries Typically Used for Money Laundering
- Detecting Money Laundering
- Money Laundering: A Fictional Example

Topic 2: Legal & Regulatory Obligations
- Safeguarding the UAE's Financial System
- The UAE'S Legal and Regulatory Framework
- Money-Laundering – the Fundamentals
- The UAE's AML Regime
- The Central Bank
- Money Laundering: A Fictional Example
- Underlying Principles of Circular 24/2000 and Notice 2922/2008
    - Transactions to Scrutinize for ML
    - Politically Exposed Persons (PEPs)
    - Correspondent Banking
    - Identifying Customers Who Open Accounts
    - Identifying Customers for Other Banking Transactions
    - Enabling Financial Institutions to Address Money Laundering
    - Customer Due Diligence (CDD) Measures

    - Departmental Checklist

Topic 3: Curbing Terrorist Financing
- Funding Terrorism
- Why Terrorism Funding is Difficult to Detect
- Sources of Funding
    - Charities & Non-profit Organizations (NPOs)
    - Illegal Activities
    - Collection of Monetary Gifts
    - Fundraising Activities
    - Legitimate Businesses
- Terrorism Financing in Action
- Laws Governing & Penalties for Terrorism Financing

Topic 4: Preventing Money Laundering in Practice
- Customer Due Diligence (CDD)
- Deposits & Withdrawals
- Account Closure
- Foreign Exchange Transactions
- Account Transfer
- Loan Clearance
- Customer Identification

UCITS

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Describe how the key provisions of the UCITS Directive have evolved through the years since the first directive in 1985
- Outline the attractions of UCITS as an investment vehicle from the point of view of both investors and fund managers

Tutorial Overview
In simple terms, UCITS are investment funds regulated at a European level. The broad aim of the UCITS regulatory regime is to allow collective investment schemes to operate freely throughout the EU on the basis of a single authorization or "passport."

Since their introduction in the mid-1980s, UCITS have become a phenomenal success with well over 8 trillion euro in assets under management today. The UCITS brand is now considered to represent one of the highest standards in the fund management industry.

This tutorial describes the key provisions of the UCITS Directive and how it has evolved from the original UCITS Directive to the existing UCITS V (and UCITS VI) requirements. The tutorial also looks at the main attractions of UCITS funds from the point of view of both investors and fund managers.

Prerequisite Knowledge
Financial Regulation – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: UCITS – The Directive

- Key Definitions
- Authorization
- Territorial Scope
- Evolution of the UCITS Directive
- UCITS IV
- Management Company Passport
- Key Investor Information Document (KIID)
- Harmonized Legal Framework for Fund Mergers
- Framework for Master-Feeder Structures
- Notification Procedure
- National Regulator Cooperation
- UCITS V
- Depositaries
- Eligibility Criteria
- Delegation of Custody
- Liability
- Remuneration
- Remuneration Principles
- Sanctions

Topic 2: UCITS – The Product

- Attractions of UCITS for Investors
- Eligible Assets
- Eligible Assets: Investment Restrictions
- Investment Restrictions: Group Companies, CIS, Index Trackers
- Investment Restrictions: Management Influence
- Investment Restrictions: Ineligible Assets
- Borrowing Restrictions

- Taxation
- Attractions of UCITS for Fund Managers

UK Anti-Bribery & Corruption (ABC)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the different types of corrupt behavior and the need to legislate against such behavior
- Describe the four types of offence under the UK Bribery Act – bribing another person, being bribed, bribing a foreign public official and the corporate offence of failing to prevent bribery – and the consequences of being found guilty of an offence under the Act
- Recognize the importance of a firm's systems and controls in relation to managing bribery and corruption risks

Tutorial Overview
This tutorial is a guide for financial services staff at all levels to help them avoid the risks of bribery and corruption. The tutorial details the relevant laws and regulations that firms and individuals need to follow, as well as the systems and controls that are used to manage the risks associated with bribery and corruption. The information is pitched so that the tutorial is relevant to those with no experience of the UK anti-bribery regime, although there is sufficient detail to make the tutorial useful to more senior managers as well.

Prerequisite Knowledge
No prior knowledge is assumed

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline

Topic One: Overview of Bribery & Corruption
- A Perspective on Corruption
- Definition & Types of Corruption
  - Bribery
  - Corruption
  - Grease Payments
  - Graft
- Costs of Corruption
- Grand Corruption: Case Study
- Focus of Corruption Legislation
  - Jurisdictional Differences
- Your Obligations

Topic Two: Statutory Framework
- Transnational Legislation
- UK Bribery Act 2010
- Key Provisions of the Bribery Act
- Bribery Act Offences
  - Offences of Bribing Another Person
    - Definition of Financial or Other Advantage
    - Definition of Improper Performance
    - Definition of Relevant Function or Activity
  - Offences Relating to Being Bribed
  - Bribery Act Prosecutions: Case Study
  - Bribery of Foreign Public Officials
    - Definition of Foreign Public Official
  - Failure of Commercial Organisations to Prevent Bribery
    - Definition of Associated Person
    - Failure to Prevent Bribery: Case Study
- Gifts & Hospitality
- Liability of Senior Officers
- Scope & Territorial Reach
  - Definition of Close Connection

- Exceptions & Defenses
- Role of Guidance
    - Governmental Guidance
    - Independent Guidance
- Penalties
- Comparison with US Foreign Corrupt Practices Act (FCPA)
- Scenario: Tickets to the Football

Topic Three: Systems & Controls

- Managing Bribery & Corruption Risks
- Proportionate Procedures
- Top-Level Commitment
- Risk Assessment
- Due Diligence
- Gifts & Hospitality Controls
    - Scenario: Hospitality in the Algarve
- Communication & Training
- Reporting
- Monitoring & Review
- Whistleblowing
    - The Whistleblower: Case Study

UK Anti-Money Laundering (AML) (2024)

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define money laundering and list its stages
- Define terrorist financing
- Recognise the laws and regulations in relation to money laundering and terrorist financing
- Identify your responsibilities as well as those of key personnel in your organization
- List the systems and controls a firm should employ in relation to managing financial crime risks

Tutorial Overview

The growth in international crime and terrorism has seen greater efforts by criminals to unearth new ways of integrating their illicit funds into financial markets.

Identifying and bringing to justice those who help launder illicit funds is a priority for both governments and financial markets regulators. You have an important part to play in this work – ignorance is no longer a valid form of defence. The penalties for noncompliance can include a fine and/or a custodial sentence, so understanding your obligations in relation to anti-money laundering (AML) and counter terrorist financing (CTF) is vital.

Prerequisite Knowledge

None

Tutorial Level: Introductory

Tutorial Duration: 70 minutes

Tutorial Outline

Topic 1: Money Laundering

- Need for Money Laundering Regulations
- What Is Money Laundering?
- Case Study: Charan Singh's OCG
- Legislative Treatment of ML Stages
- Case Study: Money Laundering
- Trade-Based Money Laundering
- TBML: Moving Funds
- Scenario: Opening an Account

Topic 2: Terrorist Financing

- Need to Counter Terrorist Financing
- What is Terrorist Financing?
- Innovation in Terrorist Financing
- Scenario: Charitable Organisation

Topic 3: Global Frameworks

- Global Nature of AML & CFT
- Case Study: Smuggling Dirty Cash
- Global Response
- Financial Action Task Force (FATF)
- International Monetary Fund (IMF)
- AML & CFT Frameworks
- Laws & Regulations
- Transnational Application

Topic 4: Detecting & Preventing ML & TF

- ML & TF Legislation in the UK

- ML & TF Offences
- Obligation to Report: POCA & TACT
- Case Study: Failing to Report
- Tipping Off
- Case Study: Tipping Off
- Obstructing an Investigation
- Prejudicing an Investigation
- Suspicious Activity Reports
- Whistleblowing
- Scenario: Suspicious Activity

Topic 5: AML Responsibilities
- Regulatory Authorities
- Regulated Entities
- Penalties Under the Regulations
- Who is Responsible?
- Senior Management Responsibilities
- MLRO Responsibilities
- Individual Responsibilities

Topic 6: Systems & Controls
- Fighting Financial Crime
- AML Regime Elements
- Customer Due Diligence
- Customer Risk
- Know Your Customer (KYC)
- Due Diligence Procedures
- High-Risk Customers
- Case Study: PEPs
- Record-Keeping Procedures
- Staff Training

UK Bond Market

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the features of gilts
- Distinguish between the different types of gilt
- Recognize the different types of nongilt bond available in the UK
- Identify the different features of the nongilt market that have risen to prominence in the relatively recent past

Tutorial Overview

This tutorial describes the various sectors of the UK bond market, beginning with the two main types of gilt (conventional and index-linked gilts). Gilt issuing and trading procedures are covered in detail, before the tutorial moves on to the non-gilt sector to describe the market for bank bonds, corporate bonds, and listed retail bonds.

Prerequisite Knowledge

Bond Markets – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 75 minutes

Tutorial Outline

Topic 1: Overview of The UK Bond Market
- Overview of The UK Bond Market

Topic 2: Gilts
- Overview Of Gilts
- Types Of Gilt
- Conventional Gilts
- Index-Linked Gilts
- Index-Linked Gilts: Coupon Payments On 3-Month Lag Gilts
- Other Types of Gilt
- Gilt Futures

Topic 3: Nongilts
- Corporate Bonds
- High Yield Bonds
- Covered Bonds
- Regulated Covered Bond (RCB) Regulations
- Securitization
- Retail Bonds
- Retail Bonds: OFIS
- Sukuk
- International Bonds
- Green Bonds

Topic 4: Market Operations
- Market Operations
- Gilt Investors
- Trading In Nongilts
- Credit Pricing in UK Bond Markets

UK CASS Regime

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the events that gave rise to the need to reform the CASS regime
- Describe the key elements of the CASS sourcebook
- Recognise the importance of a firm's systems and controls in meeting the CASS requirements

Tutorial Overview
This tutorial is a guide to handling client money and holding assets in safe custody for financial services staff at all levels. The tutorial details the key requirements of the FCA's CASS sourcebook as well as the systems and controls that firms should have in place. The tutorial has been designed so that it can be used by someone who has no experience of safe custody issues. However, there is sufficient detail in the tutorial to make it useful to more senior managers, particularly those who may be contemplating a role that involves CASS responsibilities.

Prerequisite Knowledge
No prior knowledge is assumed

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Overview of the CASS Regime
- Background to the CASS Regime: Market Events
    - Market Events: Case Study
- FCA Response
- CASS & The FCA's Principles for Businesses
- Impact of Insolvency: Case Study

Topic 2: CASS Sourcebook
- Structure of the CASS Sourcebook
- Complying with the CASS Sourcebook
- Firm Classification
- CASS Operation Oversight Function (CF10a)
- Organisational Arrangements
- Information Requirements
- CASS Resolution Pack
- Audit Requirements
- Client Assets (CASS 6)
- Client Money (CASS 7)
- Scenario: CASS Resolution Pack

Topic 3: Systems & Controls
- Governing & Operating Structures
- Integrating CASS Governance into Firm Systems
- Account Opening
- Oversight & Monitoring
- CASS Reporting
- Whistleblowing
- Systems & Controls: Case Study

UK Conduct Regime

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognise why there is a need for an enhanced conduct risk regime in the UK, and how conduct and culture are intrinsically linked
- Understand how Conduct Risk is defined and what the key drivers are
- Understand the key controls in place to monitor and measure conduct performance
- Recognize the key features of the individual accountability regime and how they affect individuals

Tutorial Overview
This tutorial provides an introduction to the UK conduct regime for financial services staff at all levels. It details who is responsible for conduct regulation and how those responsibilities are divided. Conduct is examined in terms of the key controls a firm must have in place to monitor and measure its performance as well as how both the PRA and the FCA approach the individual accountability regime. The information is pitched so that the tutorial is relevant to those with no experience of the UK conduct regime, although there is sufficient detail on product governance to make the tutorial useful to more senior managers as well.

Prerequisite Knowledge
None

Tutorial Level: Introductory
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: The Need for Conduct Regulation
- UK's Focus on Conduct
- Objectives of the FCA
- Why the Focus on Conduct Regulation?
- A Question of Leadership?
- Changes in Conduct Require a Cultural Change

Topic 2: Conduct Regulation
- How Regulators Enforce Conduct: "Twin Peaks" Regulation
- Conduct Risk
- Conduct Risk: Definition
- Conduct Risk: Composition
- Conduct Risk: Drivers
- Information Asymmetries
- Information Asymmetries: Case Study
- Conflicts of Interest
- Technological Developments

Topic 3: Controlling Conduct
- Conduct Risk Frameworks
- What does Good Conduct Look Like?
- A Focus on Culture & Behaviours
- "Speak-Up" Culture
- Product Governance
- Scenario: Product Marketing
- Scenario: Product Selling

Topic 4: Individual Accountability
- Senior Managers & Certification Regime (SM&CR)
- Conduct Rules

UK Equity Market

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- List key developments in the growth and development of equity trading in the UK, from its roots in the 16th and 17th centuries to its operations today
- Quantify the impact of the MiFID regime on equity trading in the UK
- Name the different types of alternative trading venue that are now available to investors
- List the changes brought about in the field of equity trading in recent years by technological development, such as high frequency trading

Tutorial Overview

This tutorial explores the history of the UK equity market, from its historic foundations to the recent changes brought about by the MiFID regime. The structure of the London Stock Exchange is closely detailed. The growth in off-exchange venues such as dark pools is also discussed, as well as automated and high frequency trading (HFT) and the potential problems that such trading activity can have in the equity markets.

Prerequisite Knowledge

Equity Markets – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: History & Development of Equity Trading in the UK

- Overview
- Early Days
- 20th Century
- 2000 – Present

Topic 2: London Stock Exchange

- Markets on the London Stock Exchange
- Main Market
- Main Market: Listing
- Other Markets
- Market Indices

Topic 3: Market Structure & Development

- Impact of MiFID & MiFID II
- Trading Systems Under MiFID II
- Dark Pools
- Automated Trading

UK Market Abuse

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Recognize the types of behavior that constitute market abuse
- Identify the laws and regulations in relation to market abuse, particularly the Market Abuse Regulation (MAR)
- Recognize the importance of a firm's systems and controls in relation to managing market abuse risks

Tutorial Overview

This tutorial is a guide for financial services staff at all levels to help them avoid the risks of:

- Breaching the standards of behavior expected in relation to market abuse
- Becoming liable in civil law for breaches of these standards
- Committing criminal offences, such as insider trading and market manipulation

The tutorial details the relevant laws and regulations that firms and individuals need to follow, as well as the systems and controls that are used to manage market abuse risks. The information is pitched so that the tutorial is relevant to those with no experience of the UK market abuse regime, although there is sufficient detail to make the tutorial useful to more senior managers as well.

Prerequisite Knowledge

No prior knowledge is assumed

Tutorial Level: Introductory

Tutorial Duration: 75 minutes

Tutorial Outline

Topic 1: UK Market Abuse

- Regulatory Background
- Types of Market Abuse
  - Insider Dealing
  - Improper Disclosure
  - Manipulating Transactions or Devices
  - Dissemination, Distortion & Misleading Behaviour
- Abusive Practices
  - Front-Running
  - Cornering
  - Churning
  - Layering & Spoofing
  - Marking the Close
  - Painting the Tape
  - Pump & Dump
  - Trash & Cash
  - Wash Trading
  - Pooling
- Scenario: Identifying Abusive Practices

Topic 2: Statutory Framework

- European vs. UK Framework
  - Directive on Criminal Sanctions for Market Abuse (CSMAD)
  - Market Abuse Regulation (MAR)
- Key MAR Provisions
  - Suspicious Order & Transaction Reports (STORs)

    - Reporting Delayed Disclosure
    - Reporting by PDMRs
    - Revised Market Abuse Definitions
    - Extended Scope
        - New Classes of Financial Instrument & Extending Jurisdiction
        - Manipulation of Benchmarks
- Process Changes
    - Market Soundings
    - Investment Recommendations
    - Insider Lists
- Issues Encountered by Firms
    - STORs
    - Investment Recommendations
    - Insider Lists

Topic 3: Systems & Controls

- Managing Market Abuse Risks
- Risk Assessment & Monitoring
- Funds or Assets Under Suspicion
- Record-Keeping
- Whistleblowing
- Scenario: Funds Under Suspicion

Uniform Customs & UCP 600

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- List the functions of uniform customs
- Recall the different requirements that are set out by UCP 600

Tutorial Overview
The International Chamber of Commerce (ICC) has established guidelines in order to mitigate risks arising from discrepancies in the definitions, obligations, and roles of the different parties involved in letters of credit. These guidelines are known as the Uniform Customs and Practice for Documentary Credits (UCP). The current version of these guidelines is UCP 600. This tutorial provides the background to the development of UCP 600 and describes how documentary credits are structured according to the ICC guidelines. The basic principles and processes are covered, as are the roles of the parties involved in documentary credit transactions.

Prerequisite Knowledge
Letters of Credit – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Uniform Customs & Rules
- International Chamber of Commerce (ICC)
- ICC – Other Roles
- What Uniform Customs & Rules Do Not Cover

Topic 2: UCP 600
- What are Uniform Customs for Documentary Credits?
- What is UCP 600?
- General Provisions (Articles 1 – 5)
- Definitions (Articles 1 – 5)
- Key Undefined Terms
- Other Points
- Liabilities & Responsibilities (Main Bank Types) Articles 6 – 13
- Liabilities & Responsibilities (Other Provisions) (Articles 6 – 13)
- Examination of Documents (Articles 14 – 17)
- Examination of Documents (Refusal to Honor a Presentation) (Articles 14 – 17)
- Documents (Articles 18 – 28)
- Miscellaneous Provisions (Articles 29 – 33)
- Disclaimers (Articles 34 – 37)
- Transferable Credits & Assignment (Articles 38 – 39)
- ISBP 745
- Incoterms

Topic 3: URC 522
- What Is URC 522?
- URC 522: Articles
- General Provisions & Definitions (Articles 1 – 3)
- Other Articles & Provisions from URC 522
- Form & Structure of Collections (Article 4)
- Form of Presentation (Articles 5 – 8)
- Liabilities & Responsibilities (Articles 9 – 15)
- Payment (Articles 16–20)
- Interest, Charges & Expenses (Articles 20 – 21)

- Other Provisions (Articles 22–26)

Unit Investment Trusts (US)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Identify the basic characteristics of closed-end funds
- Identify the different types of unit investment trust
- Recognize where UITs fit within the broader investment company market
- Perform a calculation of expected returns on a UIT investment
- Identify the conventions surrounding the purchase and sale of UITs
- Recognize the practical implications of a UIT investment, such as earnings distributions, tax liability and so on

Tutorial Overview
This tutorial explores UITs in detail, explaining the features that distinguish them from other types of investment company and providing an outline of the relevant considerations for UIT investors.

Prerequisite Knowledge
Mutual Funds – Investing

Tutorial Level: Introductory
Tutorial Duration: 30 minutes

Tutorial Outline
Topic 1: UITs Overview
- What is a UIT?
- Popularity

Topic 2: UITs Key Features
- Purchase & Sale of UITs
- Distributions
- Returns
    - Estimated Current Return
    - Estimated Long-Term Return
    - Total Return
- Management
- Fees & Expenses
    - Creation & Development Fees
    - Sales Charges
    - Operating Expenses
- Taxation
- Regulation

Unsupervised Machine Learning

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define unsupervised machine learning and recall the best approach to using it effectively
- Define cluster analysis and compare the processes, uses, and limitations of hierarchical and non-hierarchical clustering
- Define dimension reduction and identify its uses and limitations

Tutorial Overview
When faced with large, unstructured, and unlabeled datasets, many companies use unsupervised machine learning (U-ML) to discover patterns and identify previously unknown factors that may drive business outcomes. While U-ML is a potentially powerful tool, it is important to understand its limitations and the relative advantages of different approaches to it. This tutorial provides a high-level overview of unsupervised machine learning and highlights key factors to consider when using U-ML to solve business problems.

Prerequisite Knowledge
Supervised Machine Learning In Practice

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Unsupervised ML Overview
- What Is U-ML?
- Types Of U-ML
- Unsupervised ML Approach

Topic 2: Cluster Analysis
- Cluster Analysis Overview
- Hierarchical Clustering
- Limitations
- Non-Hierarchical Clustering
- Limitations
- N dimensions
- Hierarchical vs. Non-Hierarchical Clusters
- Testing U-ML results

Topic 3: Dimension Reduction
- Dimension Reduction Overview
- Yield Curve Example
- Reducing the Dimensions
- Apply Your Knowledge
- U-ML in Action

US Anti-Money Laundering (AML)

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define money laundering and terrorist financing and recognize the similarities and differences between the two crimes
- Identify the laws and regulations in relation to money laundering and terrorist financing and your associated obligations
- Recognize the importance of a firm's systems and controls in relation to managing financial crime risks

Tutorial Overview
This tutorial is a guide to controlling money laundering and terrorist financing risks for financial services staff at all levels. It details the relevant laws and regulations that firms and individuals need to follow, as well as the systems and controls that are used to manage financial crime risks.

The information is pitched so that the tutorial is relevant to those with no experience of the US anti-money laundering (AML) and counter-terrorist financing (CTF) regime, although there is sufficient detail to make the tutorial useful to more senior managers as well.

Prerequisite Knowledge
Financial Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 75 minutes

Tutorial Outline
Topic 1: Basics of Money Laundering & Terrorist Financing
- What Is Money Laundering?
- Placement, Layering & Integration
- Case Study: Foreign Transactions
- Trade-Based Money Laundering
- What Is Terrorist Financing?
- Value Transfer in Terrorist Financing
- Money Laundering vs. Terrorist Financing
- How Does the Global Movement of Money Affect You?
- Case Study: Dealing with Sanctioned Countries

Topic 2: Statutory Framework
- Legislation
- Bank Secrecy Act (BSA) 1970 (As Amended)
- Case Study: Failing to Maintain an Effective AML Program
- USA Patriot Act
- USA Patriot Act: Obligations of Regulated Entities
- US Terrorism & Financial Intelligence Community
- Financial Crimes Enforcement Network (FinCEN)
- Financial Crimes Enforcement Network (FinCEN): Tools
- FinCEN 314_a list
- Customer Identification Program (CIP)
- Due Diligence
- Red Flags
- Enhanced Due Diligence
- Currency Transaction Report (CTR)
- Knowledge, Reasonable Suspicion & Money Laundering Suspicion
- Suspicious Activity Report (SAR)
- Case Study: Ignoring Red Flags
- Correspondent Banking

- Consequences of Noncompliance
- Consequences of Noncompliance: Civil Penalties
- Case Study: Individual Culpability

Topic 3: Systems & Controls

- Managing Financial Crime Risks
- Risk Assessment
- Firm-Wide Risks
- Transaction-Based Risks
- Case Study: High-Risk Transactions
- Risk-Based Due Diligence
- High-Risk Customers & Situations
- Case Study: High-Risk Customers

US Bond Market

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define the US bond market and identify its composition
- Define the US Treasury market and list the categories of treasury securities
- Recall the Treasury auction process
- Define the US corporate bond market and name the typical features of corporate bonds
- Define the US municipal bond market and identify the types of municipal bonds
- List and define other important US bond market sectors

Tutorial Overview
The US bond market is the world's largest and most liquid debt market. Comprised of markets for Treasury securities, corporate bonds, municipal bonds, agency bonds, mortgage-related securities, and asset-backed securities, the US bond market plays a critical role in the US economy. This tutorial provides a high-level overview of the US bond market and defines and explains each of its key sectors.

Prerequisite Knowledge
Bond Markets – An Introduction

Tutorial Level: Introductory
Tutorial Duration: 70 minutes

Tutorial Outline
Topic 1: US Bond Market Overview

- US Bond Market Overview
- Bond Markets & Public Debt

Topic 2: Government Securities

- Overview Of US Treasuries
- US Treasuries
- Yield Curves & Taxation
- Taxation
- Pricing
- Treasury Auctions

Topic 3: Corporate Bonds

- Overview Of US Corporate Bonds
- Market Size & Key Features

Topic 4: Municipal Bonds

- Overview Of Municipal Bonds

Topic 5: Agency Securities

- Agency Securities
- US Securitization Market

US Equity Market

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define the US equity market and identify its size and components
- List the key laws that govern US equity markets
- Define primary markets and recall the securities listing process
- Define secondary markets and categorize exchange and off-exchange trading venues
- Determine the role of regulation in shaping the structure of the US equity market

Tutorial Overview

The US equity market is the world's largest and most liquid stock market. It performs two core functions – it enables firms to raise capital by issuing new securities and it allows investors to trade existing securities. The market is complex and highly regulated, and technology has driven several significant changes in recent years. This tutorial provides a high-level overview of the US equity market and explores how it fulfils its core functions.

Prerequisite Knowledge

Equity Markets – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 75 minutes

Tutorial Outline

Topic 1: US Equity Market Overview
- What Is the US Equity Market?
- Market Structure: Equity Types
- Market Size: Companies
- Market Size: Market Capitalization
- Market Size: Trading Volumes
- US Equity Market Indices
- Key US Equity Market Laws

Topic 2: Primary Market
- Primary Market: Overview
- IPO Process
- Direct Listing
- Regulation D Offerings
- Listing Venues

Topic 3: Secondary Market
- Secondary Market: Overview
- Trading Venues: National Securities Exchanges
- Trading Venues: NYSE vs. Nasdaq
- Trading Venues: Off-Exchange Trading
- Trading Venues: Dark Pools
- US Equity Trading & Regulation
- High-Frequency Trading
- Market Disruptions
- Emerging Regulation
- OTC Trading Overview
- OTC Trading: OTC Link ATS
- OTC Trading: Other platforms

VaR & Expected Shortfall – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Define VaR and list its advantages and disadvantages
- Recall the building blocks for calculating VaR, such as confidence levels and correlations
- List the approaches that can be used to calculate VaR
- Recognize tail risks and how expected shortfall (ES) can help measure to them
- Define backtesting
- List the regulatory requirements relating to VaR and ES

Tutorial Overview
Value at risk (VaR) is the key measure that risk managers use to measure, report, and manage market risk. This tutorial focuses mainly on VaR, but also covers why the events of the global financial crisis led to regulators replacing VaR with expected shortfall (ES) as part of the revised capital requirements for market risk.

Prerequisite Knowledge
Market Risk – Management

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: Overview of VaR
- Overview of VaR
- Definition of VaR
- Interpreting VaR Values
- Advantages & Disadvantages of Using VaR
- VaR as a Risk Management Tool
- Regulatory Requirements
    - Capital Requirements
    - Backtesting

Topic 2: Calculating VaR
- Calculation of VaR
- Influences on VaR Calculations
    - Time Horizon
    - Confidence Levels
    - Other Factors
- Probability Distribution
- Fat Tails
- Correlation
- Volatility
- Approaches to Calculating VaR
- Model Risk

Topic 3: VaR Breaks & Backtesting
- VaR Breaks
- Backtesting
- Regulatory Requirements for Firm-Wide Backtesting
    - Firm-Wide Backtesting
    - Desk Level Backtesting

Topic 4: Tail Risks & ES
- Tail Risks
- Expected Shortfall

VaR & Expected Shortfall – Measurement

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Calculate VaR using the three different models/methodologies – historical simulation, variance/covariance, and Monte Carlo simulation
- List the advantages and disadvantages of each measurement approach
- Calculate expected shortfall (ES)

Tutorial Overview
This tutorial describes the three different approaches that banks use for calculating VaR and the advantages/disadvantages of each. The tutorial also looks at the measurement of expected shortfall and the associated regulatory requirements.

Prerequisite Knowledge
VaR & Expected Shortfall – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 60 minutes

Tutorial Outline
Topic 1: VaR Measurement Approaches
- Calculating VaR Using Historical Simulation
- Historical Simulation: Example
- Advantages of Historical Simulation
- Disadvantages of Historical Simulation
- Reliability of Historical Simulation

Topic 2: Variance-Covariance
- Calculating VaR Using Variance-Covariance
- Variance-Covariance
  - Single-Asset Portfolio
  - Two-Asset Portfolio
  - Multi-Asset Portfolio
- Variance-Covariance: Scenario
- Advantages & Disadvantages of Variance-Covariance Approach

Topic 3: Monte Carlo Simulation
- Calculating VaR Using Monte Carlo Simulation
- Monte Carlo Simulation: Example
- Monte Carlo Simulation: Solution
- Advantages of Monte Carlo Simulation

Topic 4: Expected Shortfall (ES)
- Overview of ES

Volatility Estimation

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the significance of market volatility
- Identify the main methods for estimating volatility

Tutorial Overview
In simple terms, the concept of volatility refers to an asset's degree of unpredictable price change over a specified period of time. The more volatile an asset, the more difficult it is to predict where its price might be on a future date, and hence the greater the risk associated with the asset. This tutorial looks at the concept of volatility and how it is assessed and estimated

Prerequisite Knowledge
Options – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Introduction to Volatility
- Importance of Volatility
- Volatility in Different Markets
- Simple Historical Volatility
- Considerations in Using Historical Volatility

Topic 2: Approaches to Volatility Estimation
- Exponentially Weighted Moving Average (EWMA) Model
- EWMA Model: Example
- Volatility Modeling
- ARCH Model
- Estimation of ARCH Model
- Types of ARCH Model
- GARCH Model
- Estimation of GARCH Model
- GARCH – Assumptions & Drawbacks
- Implied Volatility
- Calculating Implied Volatility
- Calculating Implied Volatility: Example
- Considerations in Using Implied Volatility

Volatility – Excel Interactive

Tutorial Description
Overview
This tutorial uses video and interactive exercises to describe the calculation of variance and standard deviation using Microsoft Excel.

Prerequisite Knowledge
Estimating Volatility

Level: Intermediate
Duration: 20 minutes

Volcker Rule

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define the Volcker Rule's prohibition on proprietary trading and list its limitations and exclusions
- Define the Volcker Rule's prohibition on covered fund ownership and sponsorship and name its limitations and exclusions
- Recall the compliance requirements of the Volcker Rule and their application to different types of institutions

Tutorial Overview

Born of the global financial crisis, the Volcker Rule places limits on banks' ability to engage in proprietary trading and to invest in and sponsor private equity and hedge funds. However, since the Rule was first written in 2013, it has undergone several changes and evolutions. Today, the Volcker Rule has a range of complex implications for banks and many nonbank financial companies. This tutorial provides a high-level overview of the Volcker Rule and its applications to different types of financial institutions.

Prerequisite Knowledge

Dodd-Frank Act

Tutorial Level: Introductory

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Volcker Rule Overview

- Purpose
- Application
- Development

Topic 2: Proprietary Trading

- Overview
- Key Definitions
- Prohibited Activities
- Permitted Activities

Topic 3: Covered Funds

- Overview
- Key Definitions
- Permitted Activities

Topic 4: Compliance

- Financial Institution Categories
- Six-Pillar Compliance Regime
- Other Requirements

Working Capital Management

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Define and calculate working capital
- Identify the components of working capital
- Define and calculate the cash conversion cycle
- List strategies for effective working capital management

Tutorial Overview

Working capital is the cash available to fund a company's day-to-day operations. As such, effective working capital management is essential to ensure that a company is able to pay its debts and remain operational. Effective working capital management requires an understanding of the cash conversion cycle and familiarity with strategies for managing this cycle. This tutorial provides a high-level overview of working capital and highlights strategies for effective working capital management.

Prerequisite Knowledge

Accounting – An Introduction

Tutorial Level: Introductory

Tutorial Duration: 60 minutes

Tutorial Outline

Topic 1: Working Capital Overview

- What Is Working Capital?
- Case Study
- Working Capital Components
- Operating Cycle
- Estimating the Working Capital Cycle
- Working Capital Management

Topic 2: Measuring Working Capital

- Overview
- Current Assets
- Current Liabilities
- Calculating Working Capital
- Current Ratio
- Quick Ratio

Topic 3: Cash Conversion Cycle

- Overview
- Receivables Days
- Inventory Days
- Payables Days
- Calculating the Cash Conversion Cycle
- Scenario: Cash Conversion Cycle
- Scenario: Solution

Topic 4: Working Capital Management

- Overview
- Accounts Payable
- Accounts Receivable
- Inventor

Yield Curves – An Introduction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize how a yield curve shows the term structure of interest rates
- List the different yield curve shapes and variants
- Recall the major theories underlying interest rate term structures

Tutorial Overview
A yield curve (or term structure) compares bond yields with their maturities – yields move upward and downward as maturities increase. However, the heterogeneous nature of various interest rate sensitive instruments complicates simple comparisons. Differing yield curves are used to describe differing instruments. This tutorial covers the major forms of yield curve and outlines the key theories that seek to explain how term structures arise.

Prerequisite Knowledge
Fixed Income Analysis – An Introduction

Tutorial Level: Intermediate
Tutorial Duration: 45 minutes

Tutorial Outline
Topic 1: Overview of Yield Curves
- Overview of Yield Curves
- Selection of Bonds
- Risk Factors in Yield Curves

Topic 2: Yield Curve Shape
- Yield Curve Shape

Topic 3: Benchmark Yield Curves
- Benchmark Yield Curves

Topic 4: Yield Curve Shifts
- Yield Curve Shifts
- Predictive Power of the Yield Curve

Topic 5: Inverted Yield Curves
- Inverted Yield Curves
- Inverted Yield Curves: Explanation

Topic 6: Theories Regarding Yield Curve Shape
- Theories Regarding Yield Curve Shape

Yield Curves – Construction

Tutorial Description
Objectives
On completion of this tutorial, you will be able to:

- Recognize the importance of accurate yield curves in the pricing and valuation of fixed income and derivative instruments
- Identify the key stages involved in yield curve construction
- Determine simple spot and forward yield curves using the bootstrapping methodology
- Recognize the challenges involved in calculating interpolated values

Tutorial Overview
This tutorial looks at how we generate theoretical spot curves from the observable prices of market instruments. We outline the problems associated with rate interpolation and describe some of the solutions.

Prerequisite Knowledge
Yield Curves – An Introduction

Tutorial Level: Advanced
Tutorial Duration: 50 minutes

Tutorial Outline
Topic 1: Yield Curve Construction Overview
- Yield Curve Construction Overview
- Zero-Coupon Yield Curves
- Attributes of a Good Yield Curve
- Benchmark & Nonbenchmark Yield Curves

Topic 2: Yield Curve Construction Process
- Constructing a Yield Curve
- Constructing a Yield Curve Using Futures
- Discount Factors
- Discount Factors & Compounding Frequencies
- Calculating DFs: Example

Topic 3: Zero-Coupon Yield Curve Construction
- Zero-Coupon Yield Curves
- Zero-Coupon Instruments
- Yields & Coupons
- Implications for Compiling a Yield Curve
- Implications for Compiling a Yield Curve: Effects

Topic 4: Par Yield Curve Construction
- Par Yield Curves
- Calculation of Par Yields
- Uses of Par Yield Curves

Topic 5: Yield Curve Interpolation
- Overview of Interpolation
- Piecewise Models: Linear Interpolation
- Piecewise Models: Spline Models
- Parametric Models: Best-fit
- Combining Bootstrapping with Interpolation

Yield Curves – Excel Interactive

Description
Overview
Microsoft Excel provides a way to extrapolate yield curves from the quoted rates of particular financial instruments. This tutorial demonstrates how to use Excel to calculate the zero (spot) rates for a coupon-paying bond and how to determine both short-dated and long-dated discount factors given the zero (spot) rates.

Prerequisite Knowledge
Yield Curves – Construction

Level: Advanced
Duration: 30 minutes

Zero-Coupon Securities

Tutorial Description

Objectives

On completion of this tutorial, you will be able to:

- Identify the key features of zero-coupon bonds, their benefits and risks
- Recognize how coupon-paying bonds can be stripped to create zero-coupon securities
- Recall how to construct zero-coupon curves
- Perform price and yield calculations with zero-coupon securities

Tutorial Overview

Zero-coupon bonds are securities that are issued at a deep discount to par and pay no interim interest before maturity. This tutorial looks at the key features of these instruments, how they are priced and traded, the main issuers and investors in these instruments, and their key variants.

Prerequisite Knowledge

Yield Curves – An Introduction

Tutorial Level: Intermediate

Tutorial Duration: 45 minutes

Tutorial Outline

Topic 1: Basics of Zero-Coupon Securities

- Overview of Zero-Coupon Securities
- Building Blocks of Zero-Coupon Securities
- Benefits of Zero-Coupon Securities
- Risks of Zero-Coupon Securities

Topic 2: Strips & Other Zero-Coupon Securities

- Stripped Securities
- Market for Strips
- Stripped Securities: Example
- Stripped Securities: Pricing Dysfunctionalities
- Corporate & Municipal Zero-Coupon Bonds

Topic 3: Price & Yield Dynamics

- Duration & Continuously Compounding Yields
- Zero-Coupon Bond Calculations: Example
- Yield & Price Calculations for Zero-Coupon Bonds

Topic 4: Zero-Coupon Curves

- Zero-Coupon Curves
- Swap Zero Curve
- Bootstrapping the Zero-Coupon Curve