# Table of Contents

Alternative Assets – An Introduction .................................................. 4  
Analysis of the Balance Sheet .......................................................... 5  
Analysis of the Income Statement .................................................... 6  
Basel II .................................................................................. 7  
Basel III .................................................................................. 8  
Bonds – An Introduction ................................................................. 9  
Bonds Strategies – Fundamentals ...................................................... 10  
Bond Future Basis ........................................................................ 11  
Calculus .................................................................................. 12  
Cash Management .......................................................................... 13  
Commodities – An Introduction ...................................................... 14  
Convertibles – An Introduction ....................................................... 15  
Convertibles – Introduction to Convertible Valuation ....................... 16  
Corporate Finance – Capital Budgeting ............................................ 17  
Credit Analysis – An Introduction .................................................. 18  
Green Investing – Introduction ...................................................... 19  
Corporate Finance – Measuring Business Performance – Free Cash Flow ......................................................... 20  
Corporate Finance – Measuring Business Performance – Economic Profit ................................................................. 21  
Corporate Finance – Acquisition Analysis ....................................... 22  
Corporate Governance – An Introduction ....................................... 23  
Corporate Valuation – An Overview ............................................... 24  
Corporate Valuation – Public Comparables Analysis ....................... 25  
Corporate Valuation – Acquisition Comparables Analysis ............. 26  
Corporate Valuation – Discounted Cash Flow (DCF) Analysis ........ 27  
Corporate Valuation – Merger Consequences Analysis .................. 28  
Corporate Valuation – Leveraged Buyout (LBO) Analysis .............. 29  
Corporate Social Responsibility (CSR) – An Introduction .............. 30  
Credit Derivatives – An Introduction ............................................. 31  
Credit Derivatives – Basket Default Swaps .................................... 32  
Credit Derivatives – Credit Default Swap Valuation ....................... 33  
Credit Derivatives – Types ......................................................... 34  
Credit Derivatives – Synthetic CDOs ............................................. 35  
Credit Management ..................................................................... 36  
Credit Risk Modeling – An Introduction ........................................ 37  
Credit Risk Modeling – CreditMetrics™ ....................................... 38  
Credit Risk Modeling – CreditRisk+ ............................................ 39  
Credit Risk Modeling – KMV & Comparison Models ..................... 40  
Derivatives – An Overview ............................................................ 41  
Duration & Convexity .................................................................. 42  
Equities – An Introduction ............................................................ 43  
Equities – Issuing ......................................................................... 44  
Equities – Returns-Based Valuation ............................................... 45  
Equities – Research & Valuation .................................................... 46  
Equity Derivatives – An Introduction ............................................ 47  
Equity Derivatives – Equity Index Swaps ....................................... 48  
Equity Derivatives – Types ............................................................ 49  
Estimating Volatility .................................................................... 50  
Exchange-Traded Funds (ETFs) ....................................................... 51  
Financial Markets – An Introduction ............................................. 52  
Financial Planning ....................................................................... 53  
Fixed Income – Credit Risk ............................................................ 54  
Forwards & Futures – An Introduction ......................................... 55  
Forwards & Futures – Hedging (Part I) ......................................... 56  
Forwards & Futures – Hedging (Part II) ........................................ 57  
Hong Kong Equity Market ............................................................. 58  
Hong Kong Anti Money Laundering ............................................... 59  
Interest Rate Risk – Identification & Measurement ....................... 60  
Interest Rate Risk – Management ................................................ 61
Islamic Banking & Finance – Key Principles .................................................................62
Money Markets – Interest Rates .............................................................................63
Money Markets – Repurchase (Repo) Agreements ..................................................64
Money Markets Calculations – Short-term Instruments ..........................................65
NPV & IRR ..................................................................................................................66
Options – Exotic Options .........................................................................................67
Options – An Introduction .......................................................................................68
Options – Barrier Options .......................................................................................69
Options – Beyond Black-Scholes ............................................................................70
Options – Introduction to Option Valuation .............................................................71
Options – Replication, Risk-Neutrality, & Black-Scholes .........................................72
Project Finance – An Introduction ..........................................................................73
Project Finance – Deal Structuring ..........................................................................74
Risk Management – An Introduction .....................................................................75
Risk Management for Senior Executives .................................................................76
Risk – Measurement & Management ....................................................................77
Securitization – An Introduction ..........................................................................78
Securitization – Asset-backed Securities (ABS) ......................................................79
Securitization – CDOs – An Introduction .................................................................80
Securitization – Commercial Mortgage-Backed Securities .....................................81
Securitization – Mortgage Backed Securities (MBS) .............................................82
Singapore Equity Market .........................................................................................83
Structured Products – An Introduction ..................................................................84
Structured Products – Major Types .......................................................................85
Swaps – Applications ..............................................................................................86
Swaps – Applications for Corporates .....................................................................87
Swaps – Asset Swaps – An Introduction ................................................................88
Swaps – Constant Maturity Swaps .........................................................................89
Swaps – Credit Exposure .......................................................................................90
Swaps – Currency Swaps ......................................................................................91
Swaps – Differential Swaps ...................................................................................92
Swaps – In-Arrears Swaps .....................................................................................93
Swaps – Forward, Amortizing, & Zero Coupon Swaps ...........................................94
Swaps – An Introduction ......................................................................................95
Swaps – Overnight Indexed Swaps .........................................................................96
The Lending Cycle ....................................................................................................97
Trade Finance – An Introduction ............................................................................98
Syndicated Lending ................................................................................................99
Time Value of Money .............................................................................................100
Understanding Financial Reports .........................................................................101
US Equity Market ..................................................................................................102
Warrants – An Introduction ..................................................................................103
### Description

Alternative assets are those that are not included in the traditional (or ‘mainstream’) investment classes of equities, fixed income, and cash. ‘Alternatives’ typically include assets such as real estate, private equity, hedge funds, structured products, and commodities, although in practice this investment category is fluid with new products coming to market on a fairly regular basis. Many alternative assets exhibit a low (or negative) correlation with traditional asset classes, thus providing investors with opportunities for improved portfolio diversification and enhanced returns. This tutorial looks at the defining characteristics of alternative assets and describes the main sub-classes in this asset category.

### Objectives

On completion of this tutorial you will be able to:
- describe the main characteristics of alternative assets
- outline the different types of alternative asset

### Target Audience

- New or recent recruits to banking and financial organizations
- Operations and support staff
- Finance and accounting staff
- Dealers and Traders

### Prerequisites

- Asset Allocation – An Introduction

### Estimated Completion Time

60 minutes

### Program Level

Introductory

### Advanced Preparation

None required

### Delivery Method

Self-study

### Field of Study

Specialized Knowledge and Applications
Analysis of the Balance Sheet

Description
The balance sheet provides a 'snapshot' of an organization at a particular point in time. It indicates the organization's financial strength, providing information about what it owns (assets), what it owes (liabilities), and the 'book value' of the business. Ratio analysis can also be performed on the balance sheet in order to gain valuable insight into the organization's performance.

This tutorial introduces the various elements that make up a balance sheet and shows where these are positioned on the balance sheet itself. It also discusses consolidated balance sheets (the balance sheet of a group of businesses), before concluding with balance sheet ratio analysis.

Objectives
On completion of this tutorial you will be able to:
- identify the different types of asset and liability and the components of shareholders' equity
- consolidate a company's balance sheet
- perform ratio analysis of balance sheet items

Program Content
Lesson(s):
Analysis of the Balance Sheet
Topics:
- Elements of the Balance Sheet
- Consolidation Balance Sheets
- Balance Sheet Ratio Analysis

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites
Accounting – An Introduction

Estimated Completion Time
75 minutes

Program Level  Introductory
Advanced Preparation  None required
Delivery Method  Self-study
Field of Study  Specialized Knowledge and Applications
## Analysis of the Income Statement

### Description

Users of financial statements attach great importance to the income statement (or P&L) statement. It's easy to see why; the income statement shows a company's revenue, its expenditure incurred in earning that revenue, and, finally, its net income or profit. A company's net income is an important indicator of its long-term prosperity and ability to create shareholder value.

Investors, analysts, and other interested parties should not focus on income exclusively, however. Depending on accounting policies employed, the effect on reported income in the financial statements can be significant. This tutorial introduces the various elements of the income statement, enabling you to look behind the key figures. With this knowledge, you should be able to make an informed judgment on a company's performance.

### Objectives

What you can expect to learn

- identify the key elements of the income statement
- calculate key ratios associated with the income statement

### Program Content

**Lesson(s):**

- Analysis of the Income Statement

**Topics:**

- Elements of the Income Statement
- Ratio Analysis of the Income Statement

### Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Prerequisites

- Accounting – An Introduction

### Estimated Completion Time

- 75 minutes

### Program Level

- Introductory

### Advanced Preparation

- None required

### Delivery Method

- Self-study

### Field of Study

- Specialized Knowledge and Applications
## Basel II

### Description

Regulatory capital requirements have evolved over time in an attempt to adequately guard against various risks generated by financial institutions. From simple beginnings in the 1980s, the regulations have become ever more sophisticated in an attempt to capture the increasing subtleties of credit, market, and operational risk. Yet it would seem that such developments were insufficient to deal with an event on the scale of the global financial crisis.

This tutorial describes the concept of capital adequacy and looks at how the Basel requirements have progressed from the simplicity of the original Basel Capital Accord (Basel I) in 1988 to the more sophisticated requirements of Basel II. A subsequent tutorial will look at Basel III, which is the response from authorities to the issues thrown up by the financial crisis.

### Objectives

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

- outline the evolution of regulatory capital requirements from the 1988 Basel Capital Accord (Basel I) to the 'three pillars' approach of Basel II
- describe the minimum capital requirements as set out by Pillar 1 of Basel II
- explain the purpose of the supervisory review process as outlined by Pillar 2
- outline the disclosure requirements mandated by Pillar 3

### Program Content

**Lesson(s):** Basel II

**Topics:**
- The Evolution of Basel II
- Pillar 1 (Minimum Capital Requirements)
- Pillar 2 (Supervisory Review)
- Pillar 3 (Market Discipline)

### Target Audience

New or recent recruits to banking and financial institutions
Compliance and regulatory staff
Operations and support staff
Finance and accounting staff

### Prerequisites

Banking Regulation – An Introduction

### Estimated Completion Time

75 minutes

### Program Level

Introductory

### Advanced Preparation

None required

### Delivery Method

Self-study

### Field of Study

Specialized Knowledge and Applications
### Basel III

#### Description
In recent years, the business of banking has been subject to not so much a landscape change as a seismic shift. The unexpected way in which failings in a particular sector of the US property market led ultimately to a major global financial sector failure meant that banking authorities were forced to reassess their regulatory codes. Basel III is designed as a centerpiece response to the difficulties experienced in the banking sector during the financial crisis. Its goal is to make financial institutions safer, particularly by increasing capital adequacy requirements.

The tutorial describes how Basel III significantly changes the nature of previous capital adequacy regimes. It also examines other areas addressed by Basel III, such as new liquidity standards, leverage rules, and systemic risk.

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

- outline some of the reasons why major changes to the Basel II recommendations were deemed to be necessary
- describe the most important changes made by Basel III to key banking regulations such as capital adequacy, leverage, and liquidity
- summarize some of the key implementation issues in relation to Basel III

#### Program Content

<table>
<thead>
<tr>
<th>Lesson(s):</th>
<th>Basel III</th>
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<tbody>
<tr>
<td>Topics:</td>
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<tr>
<td></td>
<td>The Need for Basel III</td>
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<td>Key Components of Basel III</td>
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<td>Implementation of Basel III</td>
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</table>

#### Target Audience
New or recent recruits to banking and financial institutions  
Compliance and regulatory staff  
Operations and support staff  
Finance and accounting staff

#### Prerequisites
Basel II

#### Estimated Completion Time
60 minutes

#### Program Level
Introductory

#### Advanced Preparation
None required

#### Delivery Method
Self-study

#### Field of Study
Specialized Knowledge and Applications
Bonds – An Introduction

Description
Bond markets are a critical source of finance for governments and corporations, and offer investors a practically unlimited array of risk and reward profiles. The global bond market is enormous, and growing - most surveys estimate the market to be just under USD 50 trillion in size. The market has become progressively more sophisticated with new instrument variations and a widening range of issuers.

This tutorial will introduce you to the fundamentals of bonds as a fixed income investment, covering the key terminology associated with these instruments in addition to describing many of the different structures now issued in the market.

Objectives
On completion of this tutorial you will be able to:
- describe the basic features of a bond
- explain the functions of the primary and secondary markets for bonds
- identify the different types of bonds issued in the market

Program Content
Lesson(s):
Bonds – An Introduction

Topics:
- Bond Basics
- Bond Issuing & Investing
- Types of Bond

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites
Financial Markets – An Introduction

Estimated Completion Time
60 minutes

Program Level
Introductory

Advanced Preparation
None required

Delivery Method
Self-study

Field of Study
Specialized Knowledge and Applications
Bonds Strategies – Fundamentals

Description
Before investors begin to build their bond portfolio they must ask themselves what the portfolio objective is and what strategy should be chosen to achieve this objective. One critical assumption when addressing these two key questions is diversification. This tried-and-trusted tactic protects the bond portfolio so that if one bond class is underperforming, the rising value of other bond classes compensates for the negative impact. This tutorial examines the fundamental aspects of bond strategies, providing comprehensive analysis and practical examples.

Objectives
On completion of this tutorial, you will be able to:
• understand the concept of passive and active bond portfolio management
• develop the strategies needed to manage a bond portfolio

Program Content
Lesson(s):
Bonds Strategies – Fundamentals

Topics:
• The Investment Management Process
• Passive Bond Strategies
• Active Bond Strategies

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and traders

Prerequisites
Bonds - An Introduction

Estimated Completion Time
50 minutes

Program Level
Intermediate

Advanced Preparation
None required

Delivery Method
Self-study

Field of Study
Specialized Knowledge and Applications
### Bond Future Basis

#### Description

Futures contracts are often used in fixed income markets as a risk management tool. To know how to use these instruments correctly, it is essential to understand the concept of bond futures basis. This is the difference between the futures and the cash price for an underlying government bond.

This tutorial defines bond futures basis and identifies its sources. It also describes how basis evolves over time and analyzes the changes in the cheapest-to-deliver bond.

#### Objectives

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

- define bond futures basis and identify its sources
- recognize how basis evolves over time
- analyze how the cheapest-to-deliver (CTD) bond changes over time

#### Program Content

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<td>Bond Future Basis</td>
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<th>Topics:</th>
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<tbody>
<tr>
<td>Basics of Bond Futures Basis</td>
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<tr>
<td>Evolution of Basis Over the Life of a Contract</td>
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<tr>
<td>Cheapest-to-Deliver Bonds</td>
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</table>

#### Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and traders

#### Prerequisites

Forwards & Futures - An Introduction
Forwards & Futures - Hedging (Part I)
Forwards & Futures - Hedging (Part II)

#### Estimated Completion Time

60 minutes

#### Program Level

Intermediate

#### Advanced Preparation

None required

#### Delivery Method

Self-study

#### Field of Study

Specialized Knowledge and Applications
Calculus

**Description**
An important topic in finance and economics is the study of the speed of change of different economic quantities over time, such as GDP, unemployment, investment, and so on. Further, risk management instruments rely heavily on the speed of change of the underlying assets' values and prices. The mathematical concept that deals with these issues is the rate of change, otherwise known as the derivative.

This tutorial introduces the concept of differentiation and its counterpart, integration. Simple economic applications of the two concepts are also described.

**Objectives**
On completion of this tutorial you will be able to:
- Determine the derivatives of various functions by applying different calculation rules
- Apply some basic rules to calculate the integral of a function and understand that integration is the reverse of differentiation

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Program Content**
Lesson(s):
Calculus
Topics:
- Differentiation
- Integration

**Prerequisites**
No prior knowledge is assumed for this tutorial.

**Estimated Completion Time**
90 minutes

**Program Level**
Introductory

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
### Cash Management

**Description**

It is essential to the profitability of a business that it manages its cash efficiently and cost-effectively. This tutorial explains the process of cash collection and disbursement and shows how a firm can determine the cash balance that will minimize opportunity costs and trading costs. The use of money market instruments in cash management is also explored.

**Objectives**

On completion of this tutorial you will be able to:
- Define ‘cash’ and explain why firms hold cash
- Describe the mechanisms firms use to disburse and collect cash
- Calculate the target cash balance
- List the major money market instruments and their features

**Program Content**

**Lesson(s):**
- Cash Management

**Topics:**
- Cash Management
- Cash Collection and Disbursement
- Determining the Adequate Cash Balance
- Cash Management and the Money Market

**Target Audience**

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**

Corporate Finance - An Introduction

**Estimated Completion Time**

75 minutes

**Program Level**

Introductory

**Advanced Preparation**

None required

**Delivery Method**

Self-study

**Field of Study**

Specialized Knowledge and Applications
## Commodities – An Introduction

<table>
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<th>Description</th>
<th>Program Content</th>
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<tr>
<td>Commodities are raw or partly refined materials that are used to make the products that we use every day. Examples include oil, metals, and agricultural commodities. Some commodities, such as wheat and cotton, are essential to life, while others, such as gold and oil, support the quality of life. The commodities market is huge, with billions of dollars being traded daily on the world's commodity markets. This tutorial takes a detailed look at all the primary commodity types and the exchanges where they are traded. It identifies the main participants in the commodities market and explains the fundamentals of commodities trading.</td>
<td>Lesson(s): Commodities – An Introduction</td>
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<tr>
<th>Objectives</th>
<th>Topics:</th>
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<tbody>
<tr>
<td>On completion of this tutorial, you will be able to:</td>
<td>Types of Commodity</td>
</tr>
<tr>
<td>• describe the different types of commodity</td>
<td>• Participants in the Commodity Market</td>
</tr>
<tr>
<td>• identify the main participants in the commodities market</td>
<td>• How are Commodities Traded?</td>
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<tr>
<td>• explain the fundamentals of commodities trading</td>
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<tr>
<th>Target Audience</th>
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<tr>
<td>New or recent recruits to banking and financial organizations</td>
<td>Financial Markets - An Introduction</td>
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<tr>
<td>Operations and support staff</td>
<td>Estimated Completion Time</td>
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<tr>
<td>Finance and accounting staff</td>
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<tr>
<td>Dealers and traders</td>
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<thead>
<tr>
<th>Program Level</th>
<th>Advanced Preparation</th>
<th>Delivery Method</th>
<th>Field of Study</th>
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<tbody>
<tr>
<td>Introductory</td>
<td>None required</td>
<td>Self-study</td>
<td>Specialized Knowledge and Applications</td>
</tr>
</tbody>
</table>
### Description
Convertible bonds are interest-bearing securities that give the holder the option of surrendering (converting) the bond for a pre-determined amount of stock (usually the issuer's). Convertibles permit issuers to raise finance at a lower financing cost, yet offer investors a higher income than dividends on the underlying stock, as well as offering a conversion privilege.

The size of the global convertible market is estimated at USD 550bn with over 2,500 individual issues. Growth has been particularly strong in Europe where the market has tripled since the late 1990s.

This tutorial looks at the most common types of convertible bonds and the motivations for issuing and investing in them. The mathematics of convertible bonds and their special provisions are also presented.

### Objectives
On completion of this tutorial you will be able to:
- Define a convertible bond
- Explain the mathematical terms associated with convertibles
- Outline the special provisions that can be included in the terms of a convertible
- List and describe the different convertible variants

### Program Content

**Lesson(s):**
- Convertibles – An Introduction

**Topics:**
- What is a Convertible?
- The Mathematics of Convertibles
- Provisions of Convertible Bonds
- Convertible Bond Variations

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Prerequisites
- Bonds - An Introduction
- Bonds – Primary & Secondary Markets
- Equity Derivatives - An Introduction

### Estimated Completion Time
90 minutes

### Program Level
Intermediate

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
## Convertibles – Introduction to Convertible Valuation

### Description
Convertible bonds are hybrid instruments with characteristics of both traditional bonds and equities. Valuation of convertibles reflects this dual nature.

A convertible can be seen as a combination of a non-convertible bond and a call option. When this option is out-of-the-money, that is, the bond is unlikely to be converted, the convertible trades (and is valued) as a non-convertible bond. When the option is deep-in-the-money, that is, conversion is likely, the convertible will trade and be priced as the underlying stock. Pricing a convertible that is at-the-money is more complex and requires the use of sophisticated option pricing methods.

This tutorial outlines how convertibles are priced and also the factors that influence their prices.

### Objectives
On completion of this tutorial you will be able to:
- Understand the factors that affect convertible prices
- Outline the basic concepts in the valuation of convertible bonds

### Program Content
**Lesson(s):** Convertibles – Introduction to Convertible Valuation

**Topics:**
- Factors that Influence the Price of a Convertible
- Valuation of a Convertible
- Convertible Price Sensitivity: Parity Delta and Gamma

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Prerequisites
Convertibles - An Introduction
Options - Introduction to Option Valuation

### Estimated Completion Time
60 minutes

### Program Level
Intermediate

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
# Corporate Finance – Capital Budgeting

<table>
<thead>
<tr>
<th>Description</th>
<th>Prerequisites</th>
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<tr>
<td>One of the most important decisions a company can make is where to invest its scarce capital resources in order to maximize shareholder value. These capital budgeting decisions need to be supported by rigorous analyses that have a firm economic underpinning. The best way to quantify the costs and benefits of a capital budgeting opportunity is to use either a free cash flow or economic profit approach. The advantage of using these measures is that they both consider the economic flows/cash flows (operating flows and investment flows) associated with capital budgeting, and also take into account the return on investment that is expected by the capital contributors of a company. This tutorial will provide you with the quantitative tools needed to properly evaluate capital budgeting opportunities for the purpose of maximizing the value of a firm.</td>
<td>Corporate Finance – Measuring Business Performance – Free Cash Flow Corporate Finance – Measuring Business Performance – Economic Profit NPV &amp; IRR</td>
</tr>
</tbody>
</table>

## Objectives

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

- Use a free cash flow (FCF) analysis to quantify a capital budgeting opportunity
- Use an economic profit approach to quantify a capital budgeting opportunity, and outline the similarities and differences between this approach and the FCF approach
- Calculate the terminal value of a project using two simplified quantitative approaches and a more sophisticated approach
- Describe the various qualitative issues to be addressed when conducting a capital budgeting analysis, and adopt an approach for dealing with 'strategic' investments

## Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and traders

## Estimated Completion Time

75 minutes

## Program Level

Intermediate

## Advanced Preparation

None required

## Delivery Method

Self-study

## Field of Study

Specialized Knowledge and Applications
Credit Analysis – An Introduction

<table>
<thead>
<tr>
<th>Description</th>
<th>Program Content</th>
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| The foundations of modern credit analysis can be traced back to the 19th century when the debt markets began to issue and trade bonds in greater numbers. However, despite the passing of time, the basic challenge for a credit analyst remains the same today – assessing the risk that an obligor will have sufficient cash to pay back an obligation on a timely basis. | **Lesson(s):** Credit Analysis – An Introduction  
**Topics:**  
• Goals & Nature of Credit Analysis  
• Foundations of Credit Analysis: Capital Structure & Debt Capacity |

<table>
<thead>
<tr>
<th>Objectives</th>
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| On completion of this tutorial, you will be able to:  
• Understand the fundamental question that credit analysts must ask and the framework for answering that question  
• Describe why assessing the appropriate ratio of debt to equity in a company’s capital structure is one of the key tasks of credit analysis | |

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Prerequisites</th>
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| New or recent recruits to banking and financial organizations  
Operations and support staff  
Finance and accounting staff  
Dealers and traders | **Credit Risk – An Introduction** |

<table>
<thead>
<tr>
<th>Estimated Completion Time</th>
<th>Program Level</th>
<th>Advanced Preparation</th>
<th>Delivery Method</th>
<th>Field of Study</th>
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<tbody>
<tr>
<td>60 minutes</td>
<td>Introductory</td>
<td>None required</td>
<td>Self-study</td>
<td>Specialized Knowledge and Applications</td>
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</table>
Green Investing – Introduction

<table>
<thead>
<tr>
<th>Description</th>
<th>Program Content</th>
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| Green investing is a form of socially responsible investing (SRI) that focuses on investing in businesses and technologies that are considered to be good for the environment. It encompasses sustainable (or clean) technologies that are less polluting and more energy-efficient, and can help reduce dependence on fossil fuels. This tutorial provides a broad overview of the green investment universe, including the different types of clean technology, green investment vehicles, market indexes, and global green initiatives. | **Lesson(s):** Green Investing – An Introduction  
Topics:  
• Overview of Green Investing  
• Types of Green Investment |

<table>
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<tr>
<td>On completion of this tutorial, you will be able to:</td>
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</table>
| • explain the concept of green investing and how it originated  
• describe the various types of green investment | |

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Prerequisites</th>
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</thead>
</table>
| New or recent recruits to banking and financial organizations  
Operations and support staff  
Finance and accounting staff  
Dealers and traders | Socially Responsible Investment (SRI) – An Introduction |

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<thead>
<tr>
<th>Estimated Completion Time</th>
<th>60 minutes</th>
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<thead>
<tr>
<th>Program Level</th>
<th>Introductory</th>
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<tbody>
<tr>
<td>Advanced Preparation</td>
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</tr>
<tr>
<td>Delivery Method</td>
<td>Self-study</td>
</tr>
<tr>
<td>Field of Study</td>
<td>Specialized Knowledge and Applications</td>
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</tbody>
</table>
Description
The ultimate goal of any business is the creation of value for the owners of that business, whether that business is privately held by one owner or is publicly held with a multitude of owners/shareholders. Free cash flow (FCF) is an economically valid business performance measurement tool that can help view value creation within a company. This tutorial will provide you with a firm understanding of how to properly and effectively measure business performance using FCF, thereby providing you with tools to make better business decisions.

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

- Address the shortcomings of net income and some of the more widely used cash flow metrics as measures of business performance
- Describe the use of free cash flow (FCF) as an economically valid business performance measurement tool and how it can help view value creation within a company
- Recast the income and balance sheet statements in order to create a NOPAT statement that reflects the economic operating inflows and outflows and an invested capital statement that represents the economic investment made by the capital contributors

Program Content
Lesson(s):
Corporate Finance – Measuring Business Performance – Free Cash Flow

Topics:
- Overview of Performance Measurement
- Free Cash Flow
- Financial Statement Adjustments

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites
Prior to studying this tutorial, you should have a basic knowledge of financial statements as described in the following tutorials:

Accounting – An Introduction
Analysis of the Balance Sheet
Analysis of the Income Statement
Analysis of Cash Flow Statement

Estimated Completion Time
75 minutes

Program Level Intermediate
Advanced Preparation None required
Delivery Method Self-study
Field of Study Specialized Knowledge and Applications
**Corporate Finance – Measuring Business Performance – Economic Profit**

**Description**
The ultimate goal of any business is the creation of value for the owners of that business, whether that business is privately held by one owner or is publicly held with a multitude of owners/shareholders. This tutorial will show in detail how economic profit can be used to make value-creating business decisions, and why it is a superior metric to more traditional business performance measures. A comparison will also be made between economic profit and free cash flow (FCF) to show the relevant differences between these two concepts.

**Objectives**
On completion of this tutorial you will be able to:
- Describe the use of economic profit as an economically valid business performance measurement tool and how it can help view value creation within a company
- Recast the income and balance sheet statements in order to create a NOPAT statement that reflects the economic operating inflows and outflows and an invested capital statement that represents the economic investment made by the capital contributors
- Compare the economic profit and FCF approaches in order to show the relevant differences between the two metrics

**Program Content**

**Lesson(s):**
Corporate Finance – Measuring Business Performance – Economic Profit

**Topics:**
- Economic Profit
- Financial Statement Adjustments
- Comparison of Economic Profit & Free Cash Flow

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**
Prior to studying this tutorial, you should have a sound knowledge of the free cash flow (FCF) approach to measuring performance as described in the following tutorial:
Corporate Finance – Measuring Business Performance – Free Cash Flow

**Estimated Completion Time**
75 minutes

**Program Level**
Intermediate

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
Corporate Finance – Acquisition Analysis

**Description**
The most important element in any acquisition process is the expected synergies to be realized through the acquisition. The more synergies that can be reasonably expected, the higher the price an acquirer will be willing to pay for the company to be acquired.

This tutorial looks at the importance of synergy in determining the ultimate value of an acquisition. It describes how acquisitions can be quantified and valued using a free cash flow or an economic profit approach. In both cases, synergy is discussed as the primary driver of value in the analysis of acquisition candidates, and the need to quantify the synergies properly is addressed.

**Objectives**
On completion of this tutorial you will be able to:
- Outline the reasons why a company may want to engage in an acquisition
- Quantify an acquisition using a free cash flow (FCF) approach
- Quantify an acquisition using an economic profit approach, and recognize how both economic profit and FCF yield the same answer with respect to acquisition valuation

**Program Content**
**Lesson(s):**
Corporate Finance – Acquisition Analysis

**Topics:**
- Fundamentals of Acquisition Analysis
- Quantifying the Value of an Acquisition – FCF Approach
- Quantifying the Value of an Acquisition – Economic Profit Approach

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**
Mergers & Acquisitions
Corporate Finance – Measuring Business Performance – Free Cash Flow
Corporate Finance – Measuring Business Performance – Economic Profit

**Estimated Completion Time**
75 minutes

**Program Level**
Intermediate

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
Corporate Governance – An Introduction

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<tr>
<th>Description</th>
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<tr>
<td>Corporate governance is a broad term to describe the rules, processes, and laws by which companies are directed and controlled for the benefit of company shareholders and other stakeholders. Good corporate governance contributes to sustainable economic development by enhancing the performance of companies and improving their access to outside sources of funds. This tutorial describes the roles and responsibilities of company boards of directors (and their sub-committees) in promoting effective corporate governance. It also looks at some of the key issues, such as director remuneration and institutional investor engagement, that are crucial to good corporate governance. Well-known examples of corporate governance failures are also highlighted.</td>
<td>Lesson(s): Corporate Governance – An Introduction</td>
</tr>
<tr>
<td><strong>Objectives</strong>&lt;br&gt;On completion of this tutorial, you will be able to:&lt;br&gt;• explain the importance of good corporate governance&lt;br&gt;• outline the key issues in corporate governance</td>
<td>Topics:&lt;br&gt;• Overview of Corporate Governance&lt;br&gt;• Key Issues in Corporate Governance</td>
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<td>Prior to studying this tutorial, you should have a basic knowledge of finance.</td>
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<tbody>
<tr>
<td>None required</td>
<td>Self-study</td>
<td>Specialized Knowledge and Applications</td>
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</table>
Corporate Valuation – An Overview

Description
The ultimate purpose of any firm is the creation of wealth or value for its owners (shareholders). Value creation is the key to the well-being of every organization. Therefore, if firms are to achieve the ultimate goal of maximizing value, then understanding valuation is extremely important. This tutorial introduces the concept of corporate valuation and describes in detail the concepts of equity value and enterprise value which are commonly used as measures of a company’s valuation.

Objectives
On completion of this tutorial you will be able to:
- Identify the purpose of corporate valuation and distinguish between various valuation methodologies
- Calculate key valuation and financial performance measures
- Normalize the income statement for non-recurring items

Program Content
Lesson(s):
Corporate Valuation – An Overview

Topics:
- Overview of Corporate Valuation
- Key Valuation & Financial Performance Measures
- Normalizing Financials

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites
Prior to studying this tutorial, you should have a basic knowledge of financial statements and financial statement analysis.

Estimated Completion Time
60 minutes

Program Level
Intermediate

Advanced Preparation
None required

Delivery Method
Self-study

Field of Study
Specialized Knowledge and Applications
### Corporate Valuation – Public Comparables Analysis

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<th>Description</th>
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| Public comparables analysis is a valuation technique used by finance practitioners and professionals when attempting to derive the relative value of a company compared to publicly traded peers. It is one of two methods to determine the relative value of a company – the other, acquisition comparables analysis, is based on precedent transactions in a given industry and is covered in detail in another tutorial. In this tutorial, you will learn how to perform the mechanics of public comparables analysis. This includes determining the companies in a particular peer group, sourcing public information and calculating multiples. | **Lesson(s):**
Corporate Valuation – Public Comparables Analysis

**Topics:**
- Overview of Public Comparables
- Mechanics of Calculating a Public Comparable
- Equity & Enterprise Value Multiples
- Analyzing Multiples |

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<tr>
<th>Objectives</th>
<th>Prerequisites</th>
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| On completion of this tutorial you will be able to:
- describe the use of public comparables in corporate valuation, including the criteria and methodology used in choosing a public comparables group list
- perform the mechanics of spreading public comparables
- calculate equity and enterprise value multiples for companies in a peer group
- analyze public comparables and multiples | **Corporate Valuation – An Overview** |

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<th>Target Audience</th>
<th>Estimated Completion Time</th>
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| New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders | 75 minutes |

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<th>Program Level</th>
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<td><strong>Corporate Valuation – An Overview</strong></td>
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<tr>
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<th>Delivery Method</th>
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<tr>
<td>Specialized Knowledge and Applications</td>
<td>Intermediate</td>
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</table>
## Corporate Valuation – Acquisition Comparables Analysis

### Description
Acquisition comparables analysis is a valuation technique used by finance practitioners and professionals when attempting to derive the relative value of a company based on precedent transactions in a given industry. In this tutorial, you will learn how to perform the mechanics of acquisition comparables analysis. This includes determining the list of comparable precedent transactions, sourcing public information and calculating multiples and premiums. Additionally, you will analyze acquisition multiples and derive implied valuation ranges.

### Objectives
On completion of this tutorial you will be able to:
- describe the use of acquisition comparables in corporate valuation, including the criteria and methodology used in determining an acquisition comparables list
- perform the mechanics of spreading acquisition comparables
- undertake a premiums paid analysis
- analyze acquisition multiples and impute appropriate valuation ranges

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Program Content

#### Lesson(s):
- Corporate Valuation – Acquisition Comparables Analysis

#### Topics:
- Overview of Acquisition Comparables
- Mechanics of Calculating an Acquisition Comparable
- Premiums Paid Analysis
- Analyzing Acquisition Multiples

### Prerequisites
- Corporate Valuation – An Overview
- Corporate Valuation – Public Comparables Analysis

### Estimated Completion Time
75 minutes
# Corporate Valuation – Discounted Cash Flow (DCF) Analysis

## Description
Discounted cash flow (DCF) analysis is a valuation technique used by finance practitioners and professionals when attempting to derive the intrinsic value of a company based on projected cash flows. In this tutorial, you will learn how to perform the mechanics of discounted cash flow analysis. This includes determining a discount rate, calculating projected cash flows, computing terminal value, and valuing a company based on DCF analysis.

## Objectives
On completion of this tutorial you will be able to:
- describe the theoretical basis of a discounted cash flow (DCF) analysis, including the advantages and other considerations
- estimate and calculate a discount rate (typically, the weighted average capital of cost) used to present value cash flows
- calculate the terminal value of a company through two popular methodologies (exit multiple and perpetuity growth)
- perform a discounted cash flow valuation
- summarize valuation ranges with comparables analyses and DCF

## Target Audience
- New or recent recruits to banking and financial organizations
- Operations and support staff
- Finance and accounting staff
- Dealers and Traders

## Program Content
### Lesson(s):
- Corporate Valuation – Discounted Cash Flow (DCF Analysis)

### Topics:
- Overview of DCF Analysis
- Weighted Average Cost of Capital (WACC)
- Discounting Cash Flows & terminal Value
- Deriving a Discounted Cash Flow Valuation
- Summarizing Valuation Ranges

## Prerequisites
- Corporate Valuation – An Overview
- Corporate Valuation – Public Comparables Analysis
- Corporate Valuation – Acquisition Comparables Analysis

## Estimated Completion Time
75 minutes

## Program Level
Intermediate

## Advanced Preparation
None required

## Delivery Method
Self-study

## Field of Study
Specialized Knowledge and Applications

## Author
Training the Street
Corporate Valuation – Merger Consequences Analysis

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Merger consequences analysis is often referred to as an affordability analysis because it is used to determine what an acquirer could pay for a possible target. In this tutorial, you will learn how to perform the mechanics of a merger consequences analysis. This includes determining the proposed transaction’s impact on EPS (accretion/dilution) and credit statistics.</td>
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<tr>
<th>Objectives</th>
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<tbody>
<tr>
<td>On completion of this tutorial you will be able to:</td>
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<tr>
<td>- recognize the importance of affordability analysis by evaluating the possible accretion/dilution and the impact on the acquirer’s credit rating</td>
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<tr>
<td>- describe the fundamentals of purchase accounting, especially the creation of goodwill</td>
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<tr>
<td>- calculate the EPS impact of a transaction and the possible impact on credit statistics</td>
</tr>
<tr>
<td>- evaluate whether a transaction is accretive or dilutive by comparing the acquirer’s price/earnings (P/E) multiple to the offer P/E multiple</td>
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<tr>
<td>- outline other common complexities and considerations that arise in merger consequences analysis</td>
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<th>Program Content</th>
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<tr>
<td>Lesson(s):</td>
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<tr>
<td>Corporate Valuation – Merger Consequences Analysis</td>
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| Topics: |
| - Overview of Merging Consequences |
| - Fundamentals of Purchase Accounting |
| - Transactions Adjustments |
| - Relative P/E’s |
| - Other Analyses & Considerations |

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<td>Corporate Valuation – An Overview</td>
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<th>Field of Study</th>
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<tr>
<td>Specialized Knowledge and Applications</td>
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</table>
Corporate Valuation – Leveraged Buyout (LBO) Analysis

Description
Leveraged buyout (LBO) analysis is used to determine the purchase price of a company by a financial buyer using high levels of debt financing. A transaction’s feasibility is conditioned upon various stakeholders being satisfied with their potential returns commensurate with the risks taken.

In this tutorial, you will learn how to perform the mechanics of an LBO analysis. This includes determining the contemplated transaction’s implications for each of the stakeholders.

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

• identify the three primary LBO stakeholders (selling shareholders, equity investors, and debt holders), and outline their contrasting points of view
• explain the concept of leverage and how it can boost investment returns
• understand the various ways in which private equity investors create value and enhance investment returns
• calculate the internal rate of return (IRR) of an LBO investment from the perspective of the private equity investor
• determine the key financing parameters for banks, bond holders, and other capital providers

Program Content
Lesson(s):
Corporate Valuation – Leveraged Buyout (LBO) Analysis

Topics:
• Overview of an LBO
• Funding the Acquisition
• Deleverage & Maximizing Value
• Measuring Success for the Financial Buyer
• Putting the Dynamics of LBO’s into Perspective

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites
Corporate Valuation – An Overview

Estimated Completion Time
75 minutes

Program Level
Intermediate

Advanced Preparation
None required

Delivery Method
Self-study

Field of Study
Specialized Knowledge and Applications
## Corporate Social Responsibility (CSR) – An Introduction

### Description

CSR refers to those actions whereby business seeks to contribute to sustainable economic development. In its commitment to sustainability, a business recognizes that, in addition to serving its shareholders’ interests in the pursuit of economic value, it must also understand the legitimate concerns of other stakeholders such as employees and the wider community.

Changing attitudes on the part of consumers and investors mean that CSR is no longer seen as an expensive luxury, but can in fact result in net savings for the business. This tutorial covers the fundamentals of corporate social responsibility, with particular focus on the banking industry.

### Objectives

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

- define corporate social responsibility (CSR)
- list some of the business case factors behind the adoption of CSR
- outline the elements of the GRI reporting guidelines
- explain how CSR affects the banking industry in particular

### Program Content

**Lesson(s):**
Corporate Social Responsibility (CSR) - An Introduction

**Topics:**
- Overview of CSR
- Building a Business Case for CSR
- Sustainability Reporting
- CSR and the Banking Industry

### Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and traders

### Prerequisites

Prior to studying this tutorial, you should have a basic knowledge of finance.

### Estimated Completion Time

60 minutes

### Program Level

Introductory

### Advanced Preparation

None required

### Delivery Method

Self-study

### Field of Study

Specialized Knowledge and Applications
<table>
<thead>
<tr>
<th>Credit Derivatives – An Introduction</th>
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<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>Credit derivatives are instruments that allow one party to transfer an asset's credit risk to another party without transferring ownership of the underlying asset. Credit derivatives have a wide range of structures and can be used for both credit risk management and for speculation. This tutorial explains what credit derivatives are and examines a basic credit derivative transaction. The evolution of the trillion-dollar credit derivatives market and the risks involved in dealing with credit derivatives are also presented.</td>
</tr>
<tr>
<td><strong>Objectives</strong></td>
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<tr>
<td>On completion of this tutorial you will be able to:</td>
</tr>
<tr>
<td>1. define a credit derivative</td>
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<tr>
<td>2. outline the basic structures of credit derivatives</td>
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<tr>
<td>3. describe the risks associated with credit derivative transactions</td>
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<td>Credit Derivatives – An Introduction</td>
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<td><strong>Topics:</strong></td>
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<tr>
<td>1. Definition of a Credit Derivative</td>
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<td>2. Evolution of the Market</td>
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<td>3. Risks of Credit Derivatives</td>
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<tr>
<td>Bonds - An Introduction</td>
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<td>Derivatives - An Overview</td>
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<td>Specialized Knowledge and Applications</td>
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Credit Derivatives – Basket Default Swaps

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<tr>
<th>Description</th>
<th>Program Content</th>
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<tbody>
<tr>
<td>Credit default swaps (CDS) are the most common type of instrument used in the credit derivatives market. While most credit default swaps are single name, basket credit default swaps, in which the underlying consists of a basket of underlying credits, are growing in popularity. This tutorial focuses on basket CDS products, starting with the standard and most common basket CDS, the first to default (FTD) swap. Other variations, such as Nth to default baskets, are then described. The tutorial also discusses the pricing, hedging and other issues affecting these instruments.</td>
<td>Lesson(s): Credit Derivatives – Basket Swap Structures</td>
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<tr>
<td>On completion of this tutorial you will be able to:</td>
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<tr>
<td>• Describe the mechanics of basket default swaps, with particular emphasis on first to default (FTD) basket swaps</td>
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<tr>
<td>• Outline the features of Nth to default basket swaps and other variations</td>
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<tr>
<td>• Understand the pricing, hedging, and other issues associated with basket default swaps</td>
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<td>New or recent recruits to banking and financial organizations</td>
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<td>Operations and support staff</td>
<td>Credit Derivatives - Types</td>
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<td>Credit Derivatives - Credit Default Swaps</td>
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<td>Specialized Knowledge and Applications</td>
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</table>
Credit Derivatives – Credit Default Swap Valuation

Description
The pricing and valuation of credit default swaps has evolved over time and today adopts a pricing method based on calculated arbitrage-free market price relationships. This method involves using zero-coupon discount factors, recovery rates and default probabilities to price a default swap.

In this tutorial, you’ll learn how to calculate zero-coupon discount factors and default probabilities and use these together with recovery rates to price a CDS. You will also learn how to determine the mark-to-market value of the swap and measure its corresponding price sensitivity.

Objectives
On completion of this tutorial you will be able to:
- Link credit spreads observed in the market to implied default rates
- Use assumed survival rates and default probabilities to value a risky bond
- Value credit default swaps and express CDS spreads against government and swap curves
- Anticipate CDS mark-to-market value sensitivity to changing credit spread levels

Program Content
Lesson(s):
Credit Derivatives – Credit Default Swap Valuation

Topics:
- Implied Credit Losses
- Survival and Default
- Pricing a Default Swap
- Price Sensitivities

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites
Credit Derivatives – Types
Credit Derivatives – Pricing Methods

Estimated Completion Time
180 minutes

Program Level
Advanced

Advanced Preparation
None required

Delivery Method
Self-study

Field of Study
Specialized Knowledge and Applications
### Credit Derivatives – Types

**Description**
The credit default swap is the most popular form of credit derivative and was the first structure to be used in the credit derivatives market. As the market has developed and increased in sophistication, other structures have been created. This tutorial introduces these structures and gives a brief description of their specific applications.

**Objectives**
On completion of this tutorial you will be able to:
- Describe the different types of credit derivative structures available
- State the uses and payoffs of the various structures

### Program Content

**Lesson(s):**
Credit Derivatives – Types

**Topics:**
- Credit Default Swaps
- CDS Indexes
- Total Rate of Return Swap (TRORS)
- Credit Options
- Collateralized Instruments

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Prerequisites
Credit Derivatives – An Introduction

### Estimated Completion Time
60 minutes

### Program Level
Intermediate

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
Credit Derivatives – Synthetic CDOs

Description
Synthetic collateralized debt obligations offer many advantages compared to their traditional counterparts. These include reduced capital market placement and total cost of issuance.

In this tutorial, you will learn how synthetic CDOs are structured and the key determinants for valuing them. This tutorial also provides an introduction to single tranche collateralized debt obligations (STCDOs) and correlation trading.

Objectives
On completion of this tutorial you will be able to:
- Describe the structure of synthetic CDOs and list their advantages
- Identify the main drivers in synthetic CDO tranche valuation
- Distinguish between synthetic CDO variations

Program Content
Lesson(s):
Credit Derivatives – Synthetic CDOs

Topics:
- Synthetic CDO Structures
- Valuation of Synthetic CDO Tranches
- Correlation Trading & Single Tranche CDOs

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites
Securitization – An Introduction
Securitization - CDOs - An Introduction
Securitization - CDOs - Structures & Ratings
Credit Derivatives - Credit Default Swaps

Estimated Completion Time
90 minutes

Program Level  Advanced
Advanced Preparation  None required
Delivery Method  Self-study
Field of Study  Specialized Knowledge and Applications
Credit Management

**Description**
Firms that plan to offer credit terms to customers need to address the issues such as assessing credit worthiness, trade terms, credit period, collecting payments etc., before the credit decision can be made. These issues will be discussed in this tutorial.

**Objectives**
On completion of this tutorial you will be able to:
- Explain the fundamentals of credit management
- Calculate the relevant ratios to determine the viability of a proposal
- Outline the procedures involved in the credit control process

**Program Content**

**Lesson(s):**
Credit Management

**Topics:**
- Terms of Sale
- Credit Agreements
- Credit Analysis
- The Credit Decision
- Collection Policy

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**
Corporate Finance - An Introduction

**Estimated Completion Time**
65 minutes

**Program Level**  Introductory

**Advanced Preparation**  None required

**Delivery Method**  Self-study

**Field of Study**  Specialized Knowledge and Applications
Credit Risk Modeling – An Introduction

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<tr>
<th>Description</th>
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<tr>
<td>In recent years, credit losses due to the bankruptcy of corporate giants such as Enron in the US and Swissair in Europe have been regularly featured in the news. However, credit loss is not solely confined to the corporate world. Even countries can default on their debts. These events, along with other factors such as the development of the new capital adequacy framework, have resulted in financial institutions increasing their focus on credit risk management. Much of the spotlight has been on credit risk measurement in particular. Credit risk measurement refers to the quantification of an institution's exposure to credit risk (defaults and credit rating downgrades). Credit risk models enable institutions to carry out this quantification process.</td>
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<td>On completion of this tutorial you will be able to:</td>
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<td>- Identify the characteristics of credit risk models and explain how they differ from market risk models</td>
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<td>- Understand the output of credit risk models</td>
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<td>- Explain the different approaches to credit risk modeling</td>
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<tr>
<td>Lesson(s): Credit Risk Modeling – An Introduction</td>
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<tr>
<td>Topics:</td>
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<tr>
<td>- Overview of Credit Risk Modeling</td>
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<td>- Portfolio Loss Distributions</td>
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<td>- Approaches to Credit Risk Modeling</td>
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<td>Credit Risk – An Introduction</td>
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<td>VAR – An Introduction</td>
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<td>Probability Distributions &amp; Hypothesis Testing</td>
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<td>Credit Analysis – An Introduction</td>
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<td>Specialized Knowledge and Applications</td>
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Credit Risk Modeling – CreditMetrics™

Description
The rapid expansion of the credit market has created a need for improved credit risk measurement and management techniques. Financial institutions are continually looking for better tools to evaluate and manage credit risk. CreditMetrics, first launched by J.P. Morgan Investment Bank in 1997, adopts a portfolio-based approach to credit risk management. It evaluates credit risk by predicting movements in the credit ratings of the individual investments in a portfolio.

This tutorial outlines the functions and features of the CreditMetrics risk management model.

Objectives
On completion of this tutorial you will be able to:
- identify the features and functions of CreditMetrics
- describe how CreditMetrics calculates distributed values for single-credit, two-credit and multiple-credit portfolios

Program Content
Lesson(s):
Credit Risk Modeling – CreditMetrics™
Topics:
- Introduction to CreditMetrics
- Distribution of Values for Single-Credit Portfolios
- Distribution of Values for Two-Credit Portfolios
- Distribution of Values for Multiple-Credit Portfolios

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites
Credit Risk Modeling - An Introduction

Estimated Completion Time
60 minutes

Program Level
Advanced

Advanced Preparation
None required

Delivery Method
Self-study

Field of Study
Specialized Knowledge and Applications
Credit Risk Modeling – CreditRisk+

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| CreditRisk+ is a statistical credit risk model that estimates the distributed risk of default across all the items in a credit portfolio. It was launched by Credit Suisse First Boston (CSFB) in 1997 to provide a forward-looking approach to credit risk management. This tutorial outlines the CreditRisk+ methodology and its applications. | **Lesson(s):** Credit Risk Modeling – CreditRisk+  
**Topics:**  
- Introduction to CreditRisk+  
- CreditRisk+ Data Requirements  
- CreditRisk+ Methodology  
- Applications of CreditRisk+ |

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| On completion of this tutorial you will be able to:  
- Identify characteristics of CreditRisk+  
- Define data inputs required by CreditRisk+  
- Summarize stages in the CreditRisk+ methodology  
- Describe applications of CreditRisk+ | |

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Operations and support staff  
Finance and accounting staff  
Dealers and Traders | Credit Risk Modeling – An Introduction |

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Credit Risk Modeling – KMV & Comparison Models

**Description**
Moody’s credit risk methodology, MKMV, is based on the Merton asset value model for assessing the credit risk of a corporation. MKMV produces default probabilities known as Expected Default Frequencies (EDF) for each obligor it evaluates. The EDF figure can then be used to estimate the standalone credit risk of an obligor or the value at risk (VAR) in a portfolio.

This tutorial introduces the EDF methodology and shows how EDF figures translate to actual credit risk values. In addition, the three main credit risk models are compared.

**Objectives**
On completion of this tutorial you will be able to:
- Explain the KMV framework and the Expected Default Frequency (EDF) methodology
- Identify the software and risk factor models used in MKMV
- Compare the three leading credit risk models: KMV Portfolio Manager™, CreditMetrics™, and CreditRisk+

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<tr>
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<tr>
<td><strong>Lesson(s):</strong></td>
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<tr>
<td>Credit Risk Modeling – KMV &amp; Comparison Models</td>
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<tr>
<td><strong>Topics:</strong></td>
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<tr>
<td>- The MKMV Framework</td>
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<td>- MKMV - Software and Risk Factor Models</td>
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<td>- Credit Risk Models Compared</td>
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### Derivatives – An Overview

**Description**

Financial derivatives are instruments whose value is based on or derived from another financial instrument or variable (referred to as the 'underlying'). By linking their payoffs to changes in the value of the underlying assets, derivatives enable market participants to trade in the price fluctuations of the underlying without the necessity of trading directly in that asset.

Although generally viewed as a recent innovation, primitive derivatives have existed in one form or another for thousands of years; Thales, regarded by many as the first philosopher in the Greek tradition, is often credited as creating the first known derivative contract approximately 2,500 years ago. Today, the industry continues to grow at a rapid pace with both exchange-traded and OTC derivatives volumes increasing year-on-year, and new, more exotic structures being developed on ongoing basis. As this tutorial will demonstrate, the explosion in both the size of the derivatives market and the variety of instruments available is proof of their widespread application in the financial world.

**Objectives**

On completion of this tutorial you will be able to:

- describe the different types of derivatives and the market for these instruments
- list the different players in the derivatives market, and outline some of the applications of derivatives

**Target Audience**

New or recent recruits to banking and financial organizations  
Operations and support staff  
Finance and accounting staff  
Dealers and Traders

**Program Content**

**Lesson(s):**  
Derivatives – An Overview

**Topics:**

- Fundamental of Derivatives
- Derivatives Applications & Risks

**Target Audience**

New or recent recruits to banking and financial organizations  
Operations and support staff  
Finance and accounting staff  
Dealers and Traders

**Prerequisites**

Financial Markets – An Introduction

**Estimated Completion Time**

90 minutes

**Program Level**  
Introductory

**Advanced Preparation**

None required

**Delivery Method**

Self-study

**Field of Study**

Specialized Knowledge and Applications
### Duration & Convexity

#### Description
For market participants that buy a bond, collect the coupon payments and hold the bond to maturity, market volatility is not a major concern (ignoring the possible reinvestment risk for their coupon payments); interest is received according to a predetermined rate and schedule, and the principal is returned at maturity. However, non-‘buy-and-hold’ investors that buy and sell bonds prior to maturity are exposed to many risks, most significantly interest rate volatility (bond prices and yields/interest rates are inversely related). Duration and convexity – the subject of this tutorial – are important concepts used in measuring the price volatility of a bond, or its price sensitivity with respect to a change in its yield. Being aware of these concepts helps investors to protect themselves from bond price risk.

#### Objectives
On completion of this tutorial you will be able to:
- use the Taylor approximation formula to estimate the change in the price of a bond for a small change in yield
- measure the price volatility of a bond using the concept of duration and modified duration
- employ the properties of duration to construct a portfolio of bonds to immunize future obligations against interest rate risk
- calculate the degree of non-linearity of the price-yield curve by means of the convexity equation

#### Program Content
**Lesson(s):**
Duration & Convexity

**Topics:**
- Taylor Approximation Formula
- Duration
- Risk Immunization
- Convexity

#### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

#### Prerequisites
Bond Prices & Yields

#### Estimated Completion Time
90 minutes

#### Program Level
Intermediate

#### Advanced Preparation
None required

#### Delivery Method
Self-study

#### Field of Study
Specialized Knowledge and Applications
### Equities – An Introduction

**Description**
The purpose of a stock market is to facilitate the exchange of equity securities between buyers and sellers, thus providing a marketplace. For hundreds of years, stock market trading was very distinct and defined. Trading generally took place at a physical location, usually a stock exchange, within specified trading hours. However, equity markets have undergone profound changes in recent years – the emergence of alternative (non-exchange) execution venues, the amalgamation of stock exchanges, both within and across borders, and the growth in online trading have all contributed. Despite some high profile downturns, equity markets remain the best source of long-term profit potential for both institutional and individual investors.

This tutorial provides an introduction to equity markets, from the basics, such as the differences between common and preferred stock, to understanding stock price quotations. Other topics covered include the various classification systems for stocks and the functioning of the stock market itself.

**Objectives**
On completion of this tutorial you will be able to:
- describe the key features of common and preferred stock, and the differences between the two
- explain the different systems used to classify stocks
- understand that the stock markets provide both a primary and secondary market for equities

### Program Content

**Lesson(s):**
Equities – An Introduction

**Topics:**
- Overview of Equities
- Classification of Stocks
- Stock Markets

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Prerequisites
Financial Markets – An Introduction

### Estimated Completion Time
90 minutes

### Program Level
Introductory

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
**Equities – Issuing**

**Description**
The term 'IPO' has been a buzzword for a number of years now, however it is just one of a number of potential sources of funds available to companies. Other sources include the lending markets (long- and short-term), the issuance of debt securities, private equity, the use of retained earnings, and so on. For many, however, in particular young or fast-growing companies, the raising of equity through IPOs to finance new projects or to take advantage of profitable growth opportunities is vital.

This tutorial describes how companies can raise funds on the equity markets. It looks in detail not only at IPOs, but also at how firms can make secondary share offerings to raise further capital. As you will see, the implications of each approach can be profound, both in financial terms and in terms of a company’s public profile.

**Objectives**
On completion of this tutorial you will be able to:
- explain why corporations decide to go public and distinguish between the different methods for issuing stock
- describe how companies that have already issued stock can make follow-on or secondary offerings to new investors or existing shareholders

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Program Content**

<table>
<thead>
<tr>
<th>Lesson(s):</th>
</tr>
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<tr>
<td>Equities – Issuing</td>
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**Topics:**
- Primary Market Offerings
- Secondary Offerings

**Prerequisites**
Equities – An Introduction

**Estimated Completion Time**
60 minutes

**Program Level**
Introductory

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
### Equities – Returns-Based Valuation

**Description**
Research analysts typically focus on market multiples and discounted cash flow (DCF) techniques to derive estimates of valuation for a company. In times of economic uncertainty, however, with volatile markets and opaque forecasts, it can be extremely challenging to derive reliable estimates using these techniques.

In this tutorial, we examine alternative ‘returns-based’ valuation techniques, which can be used to determine how efficiently a company is using its capital resources. In particular, the concept of EVA as a method of calculating shareholder value creation is explored in detail. We demonstrate how EVA can be reconciled to the DCF valuation technique and compare the differences between accounting returns and cash returns used for discounting. Finally, we highlight what adjustments should be made to enterprise value in deriving a single stock price target.

**Objectives**
On completion of this tutorial you will be able to:
- Outline the differences between return on equity (ROE) and return on invested capital (ROIC)
- Understand and apply Economic Value Added (EVA) as a technique for assessing shareholder value creation
- Identify the differences between cash returns versus accounting returns on invested capital
- Convert enterprise value into a single stock price target

**Program Content**

**Lesson(s):**  
Equities – Returns-Based Valuation

**Topics:**
- ROE & ROIC
- Economic Value Added
- Cash Returns & Accounting Returns
- Enterprise Value & The Single Stock Price Target

### Target Audience
New or recent recruits to banking and financial organizations  
Operations and support staff  
Finance and accounting staff  
Dealers and Traders

### Prerequisites
Equities – Research & Valuation  
Corporate Valuation – Discounted Cash Flow (DCF) Analysis

**Estimated Completion Time**
75 minutes

### Program Level
Intermediate

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
**Description**

Fundamental analysis of stock markets has a broad scope, incorporating both a qualitative and quantitative assessment of companies, in attempt to derive an intrinsic value for the stocks. While a qualitative assessment is essential, it naturally incorporates factors that are difficult or impossible to quantify.

This tutorial focuses on the quantitative side of things. Ratio analysis, the subject of the first part of the tutorial, is one form of quantitative assessment. It provides a way of summarizing a large volume of financial accounting information into simple measurements. The second part of this tutorial looks at stock valuation models, beginning with the oldest and simplest method of valuing stocks - the dividend discount model - which equates the fundamental value of a stock to the present value of the stock’s expected future dividends. The divided discount model is regarded by many analysts these days as conservative and outmoded, although much of the intuition from the model is also embedded in other valuation models. Two of these - the discounted cash flow model and residual income model - are also covered in this tutorial.

**Objectives**

On completion of this tutorial you will be able to:

- separate a company's return on equity into a number of key financial metrics in order to identify where within the firm superior/inferior return is being earned
- describe the different models used to estimate the fundamental value of a stock

**Program Content**

**Lesson(s):**
Equities – Research and Valuation

**Topics:**
- Primary Financial Ratios
- Valuation Methods & Analysis

**Target Audience**

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**

Equities – An Introduction

**Estimated Completion Time**

75 minutes

**Program Level** Intermediate

**Advanced Preparation** None required

**Delivery Method** Self-study

**Field of Study** Specialized Knowledge and Applications
# Equity Derivatives – An Introduction

## Description

An equity derivative is a derivative instrument 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 and stock index futures and options, warrants and convertibles, structured and synthetic equity derivatives.

## Objectives

On completion of this tutorial you will be able to describe the structures and applications of:
- Stock options and futures
- Convertibles and warrants
- Stock index options and futures
- Synthetic equity derivative structures, including contracts for difference
- Structured equity derivative products

## Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

## Program Content

**Lesson(s):**
Equity Derivatives – An Introduction

**Topics:**
- Stock Options and Futures
- Convertibles and Warrants
- Stock Index Options and Futures
- Synthetic Equity Derivative Structures
- Structured Equity Derivative Products

## Prerequisites

Options – An Introduction
Forwards & Futures - An Introduction

Estimated Completion Time
60 minutes

## Program Level

Intermediate

## Advanced Preparation

None required

## Delivery Method

Self-study

## Field of Study

Specialized Knowledge and Applications
**Equity Derivatives – Equity Index Swaps**

**Description**
An equity index swap is a contractual agreement between two parties to exchange cash flows or streams of payment, with one stream linked to the performance of an equity index and the other stream linked to an interest rate index. These swaps provide a way of synthetically investing in a stock market index and replicating cash investments in the underlying, resulting in a reduction in costs.

This tutorial discusses the structure of equity index swaps, along with the associated cash flows. It also describes the role of a swap dealer, the pricing of equity swaps and other related issues.

**Objectives**
On completion of this tutorial you will be able to:
- Describe the mechanics and structure of an equity index swap
- Calculate the payments associated with the different legs of an equity swap
- Define the role of the equity swap dealer and recognize how equity swaps are priced
- Identify the risks involved in equity index swaps and distinguish between equity swap variants

**Program Content**
**Lesson(s):**
Equity Derivatives – Equity Index Swaps

**Topics:**
- Structure & Uses of Equity Index Swaps
- Equity Index Swaps Payments
- Role of The Swap Dealers & Pricing
- Risks & Variations of Equity Index Swaps

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**
Prior to studying this tutorial, you should have a sound understanding of swaps and equity derivatives as outlined in the following tutorials:
- Swaps - An Introduction
- Equity Derivatives - An Introduction

**Estimated Completion Time**
90 minutes

**Program Level**
Intermediate

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
Equity Derivatives – Types

**Description**
The equity derivatives market has witnessed substantial growth in recent years, with increased participation by hedge funds, commodity traders and asset managers, as well as by conservative investors, who mainly trade listed derivatives. Hedge funds are the drivers of product innovation, with new instruments such as contracts for difference (CFDs), volatility futures, correlation options and dividend swaps being traded in the market.

In this tutorial, you will learn about three different types of equity derivatives: contracts for difference (CFDs), equity index futures, and equity index options. The tutorial explains their mechanics, uses, and benefits.

**Objectives**
On completion of this tutorial you will be able to:
- identify the reasons for the strong growth of equity derivatives in recent years
- describe the mechanics and uses of contracts for difference (CFDs)
- describe the mechanics and uses of index futures
- describe the mechanics and uses of index options

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Prerequisites</th>
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</thead>
</table>
| New or recent recruits to banking and financial organizations  
Operations and support staff  
Finance and accounting staff  
Dealers and Traders | Equity Derivatives – An Introduction |

<table>
<thead>
<tr>
<th>Program Content</th>
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<tbody>
<tr>
<td><strong>Lesson(s):</strong></td>
</tr>
<tr>
<td>Equity Derivatives – Types</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Topics:</th>
</tr>
</thead>
</table>
| • Market Overview  
• Contracts for Difference (CFDs)  
• Equity Index Futures  
• Equity Index Options |

**Estimated Completion Time**
75 minutes

Program Level  Intermediate
Advanced Preparation  None required
Delivery Method  Self-study
Field of Study  Specialized Knowledge and Applications
# Estimating Volatility

## Description
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.

Volatility reached unprecedented levels in many markets in 2008 and huge losses were incurred by many market participants. This tutorial looks at the concept of volatility and how it is assessed and estimated, with particular emphasis on the market volatility of 2008.

## Objectives
On completion of this tutorial you will be able to:
- recognize the significance of market volatility and some indicators of this volatility
- outline the main methods for estimating volatility

## Program Content
**Lesson(s):**
Estimating Volatility

**Topics:**
- Overview of Volatility
- Approaches to Volatility Estimation

## Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

## Prerequisites
Options – An Introduction

**Estimated Completion Time**
60 minutes

## Program Level
Intermediate

## Advanced Preparation
None required

## Delivery Method
Self-study

## Field of Study
Specialized Knowledge and Applications
Exchange-Traded Funds (ETFs)

**Description**
Although stock market indexes have been around since the 19th century, the concept of index investing is far more recent. The concept was boosted significantly by the launch of exchange-traded funds (ETFs) in the early 1990s. After a relatively slow start, ETFs have subsequently grown to become a worldwide phenomenon.

In line with increases in both the number and size of ETFs, the complexity and sophistication of the funds has also grown. For the first 10 years or so of their existence, ETFs were based almost exclusively on stock indexes. Sector-based ETFs then emerged, while diversification into new asset classes – such as fixed income, real estate, and commodities – gathered pace. The next generation included products such as leveraged ETFs and actively-managed ETFs.

This tutorial covers the fundamentals of ETFs, including their creation, features, and market development. It also describes many of the different types of ETF available in the marketplace, including those we’ve just mentioned.

**Objectives**
On completion of this tutorial you will understand how to:
- describe the main characteristics of ETFs, including the creation process for these funds
- understand the different structures and types of ETF that are available in the market

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Program Content**
**Lesson(s):**
Exchange-Traded Funds (ETFs)

**Topics:**
- Overview of ETFs
- Types of ETF

**Prerequisites**
Financial Markets – An Introduction
Investment – An Introduction

**Estimated Completion Time**
75 minutes

**Program Level**
Introductory

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
## Financial Markets – An Introduction

### Description
Money may not (except metaphorically) make the world go round, but it certainly goes round the world. Recent years have seen the global growth of sophisticated financial markets. These markets, and the institutions associated with them, bring people together; agents (such as investors) with surplus cash looking to generate returns deliver it to those who would like it now (such as borrowers). There are many ways of achieving this, as we will find out in this tutorial.

This tutorial introduces the major financial markets. Who needs them? What products do they offer? Where are they? How do they operate? How are they changing? Broadly speaking, it examines the people involved (such as investors or borrowers), the products offered (such as bonds or shares) and where, either physically or virtually, markets for the products exist.

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

- describe the scale and breadth of international financial markets
- identify the key participants in these financial markets
- describe the different products and characteristics of the major financial markets
- explain the dynamic nature of changes in these areas

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Program Content

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<td>Market Participants</td>
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<tr>
<td>Products</td>
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<td>Market Practice &amp; Marketplaces</td>
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</table>

### Prerequisites
No prior knowledge is assumed for this tutorial.

### Estimated Completion Time
90 minutes

### Program Level
Introductory

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
## Financial Planning

**Description**

Financial planning is vital for every firm because:
- It outlines the firm's goals and provides benchmarks against which future performance can be measured.
- It identifies the interaction between the firm's investment and financing decisions.
- The firm must cope with changing business conditions.

This tutorial outlines the financial planning process and shows how models can be used to forecast a firm's future financial performance.

**Objectives**

At the end of this tutorial you should be able to:
- explain what financial planning is
- identify the main components of a typical financial plan
- explain the role of modeling in financial planning

**Program Content**

**Lesson(s):**

Financial Planning

**Topics:**
- What is Financial Planning?
- Components of a Financial Plan
- Forecasting
- Use of Models in Financial Planning

**Target Audience**

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**

Corporate Finance - An Introduction

**Estimated Completion Time**

100 minutes

**Program Level**

Introductory

**Advanced Preparation**

None required

**Delivery Method**

Self-study

**Field of Study**

Specialized Knowledge and Applications
### Fixed Income – Credit Risk

#### Description
Increasingly, agents and investors in fixed income have set their sights beyond the traditional government bond markets towards the more lucrative returns available when credit risk is allied to interest rate risk. In recent years, developments have led to the emergence of credit as a truly independent asset class, with its own derivative markets and idiosyncrasies. As involvement has grown, investors have become more sophisticated, and analysis and products have become more complex.

This tutorial extends the analysis of risks facing fixed income investors beyond merely interest rate risk, and into the sphere of credit risk. It describes the credit characteristics of differing forms of debt issuance, market evaluation of credit risk, and the roles of rating agencies in the credit universe.

#### Objectives
At the end of this tutorial you should be able to:
- describe how the credit exposure on some bonds affects their return characteristics relative to ‘riskless’ debt
- explain how credit seniority and simple covenants affect the credit risk of an issue
- explain how market prices give an indication of credit evaluation
- outline the roles, methodologies, and challenges faced by the major rating agencies
- describe how credit has evolved into a distinct asset class

#### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

#### Program Content
**Lesson(s):**
Fixed Income – Credit Risk

**Topics:**
- Credit Exposure
- Rankings & Risk
- Credit Spreads & Evaluation
- Rating Agencies
- Credit as an Asset Class

#### Prerequisites
Bonds – An Introduction

**Estimated Completion Time**
90 minutes

**Program Level**
Intermediate

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
Forwards & Futures – An Introduction

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| The idea of a ‘price in the future’ is arguably the most fundamental concept in the evolution of derivatives. One of the keys to risk management lies in the ability to fix a price today that will apply to the purchase or sale of something in the future.  

This tutorial introduces the concept of forward pricing. It illustrates the way in which forward prices can be manifested as either individual customized forward transactions, or else as standardized futures contracts. An overview of the differences between futures and forwards is given, as well as the scope of their usage. |

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<th>Objectives</th>
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| On completion of this tutorial you will be able to:  
1. describe the concept of ‘prices in the future’  
2. explain how the ‘primitive derivative’ is generally either a forward transaction or a futures contract, and understand the similarities and differences between them  
3. identify the key participants in the futures and forwards markets, and describe their roles |

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| Prices in the Future  
Transaction Types  
Market Participants |

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| New or recent recruits to banking and financial organizations  
Operations and support staff  
Finance and accounting staff  
Dealers and Traders |

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<td>Derivatives – An Overview</td>
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<td>Specialized Knowledge and Applications</td>
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</table>
Forwards & Futures – Hedging (Part I)

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<tr>
<td>The elimination of future price risk lies at the heart of derivatives, whether in the form of forward trades or futures contracts. This tutorial explains the basic principle behind hedging using ‘prices in the future’ and shows how this principle is applied across many markets. It also outlines the differences between, and relative attractions of, using either futures contracts or OTC forwards when hedging a position. The additional difficulties of hedging interest rate risk are covered in a subsequent tutorial.</td>
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<tr>
<td>On completion of this tutorial you will be able to:</td>
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<tr>
<td>- explain how futures contracts and forward trades are used to hedge an existing or anticipated asset position</td>
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<td>- compare and contrast hedging using futures with hedging using forwards</td>
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<tr>
<td>- outline some of the different hedging approaches used in different markets</td>
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<td>Lesson(s):</td>
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<tr>
<td>Forwards &amp; Futures – Hedging (Part I)</td>
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<tr>
<td>Topics:</td>
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<tr>
<td>- Simple Hedges</td>
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<td>- Futures or Forwards</td>
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<td>- Hedging Other Major Assets</td>
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<tr>
<td>Futures Markets</td>
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<th>Field of Study</th>
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<tr>
<td>Specialized Knowledge and Applications</td>
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</table>
### Description
The use of futures hedging for both short and long-term interest rate risks is extremely widespread. Of the five most liquid exchange-traded contracts in the world, the most actively traded futures contract was the Eurodollar contract quoted on the CME.

This tutorial focuses on the hedging of interest rate risk, both for shorter-dated and longer-dated instruments. It examines the construction of hedges using bond and money market futures, and outlines some of the particular issues unique to these markets.

### Objectives
On completion of this tutorial you will be able to:
- identify the different long-term interest rate risks faced by market participants
- explain how long-term interest rate risks can be managed, particularly through hedging using bond and swap futures
- identify the different short-term interest rate related risks faced by market participants, and explain how these risks can be managed, either through OTC FRA transactions or through the use of money market futures contracts

### Target Audience
- New or recent recruits to banking and financial organizations
- Operations and support staff
- Finance and accounting staff
- Dealers and Traders

### Program Content
**Lesson(s):**
Forwards & Futures – Hedging (Part II)

**Topics:**
- Bond Futures
- Hedging Using Futures
- Short-Term Hedging

### Prerequisites
Forwards & Futures – Hedging (Part I)

### Estimated Completion Time
75 minutes

### Program Level
Intermediate

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
# Hong Kong Equity Market

## Description

Hong Kong is seen as the gateway to Mainland China; a commercial dynamo, strategically located in a region renowned for high levels of growth, and with close trading and business links to the rest of the Asian region. The Hong Kong equity market is an important source of capital for local companies and increasingly for companies incorporated in the People’s Republic of China (PRC), with the result that it has managed to attract a significant amount of investment interest from overseas. This tutorial provides a detailed introduction to the various aspects of equity securities traded in Hong Kong, including the history and development of the market, the different securities traded and trading locations, leading stock indexes, listing requirements and procedures, and trading operations.

## 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 Hong Kong market
- describe the listing, trading, and settlement procedures for equities in Hong Kong

## Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

## Prerequisites

- Equities – An Introduction
- Equities – Issuing

## Estimated Completion Time

60 minutes

## Program Content

**Lesson(s):**

- Hong Kong Equity Market

**Topics:**

- Market Overview
- Listing, Trading & Settlement Procedures

## Program Level

Introductory

## Advanced Preparation

None required

## Delivery Method

Self-study

## Field of Study

Specialized Knowledge and Applications
# Hong Kong Anti Money Laundering

## Description

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 tutorial surveys the money laundering situation in Hong Kong 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.

## 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
- identify the roles of Hong Kong and international bodies in the fight against money laundering, and your personal obligations under the law and regulations
- recognize the difficulties in identifying terrorist financing and the corresponding offenses

## Program Content

### Lesson(s):

- Hong Kong Anti-Money Laundering

### Topic:

- The Money Laundering Process
- Combating Money Laundering
- Legal & Regulatory Obligations
- Curbing Terrorist Financing

## Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and traders

## Prerequisites

No prior knowledge is assumed for this tutorial.

## Estimated Completion Time

90 minutes

## Program Level

Introductory

## Advanced Preparation

None required

## Delivery Method

Self-study

## Field of Study

Specialized Knowledge and Applications
**Interest Rate Risk – Identification & Measurement**

### Description

Historically banking was seen as a simple business, but things have changed in recent times. As new products and services appear in the industry, they are affected by interest rates in different ways. For much of the 20th century, interest rates in major economies were docile creatures. There was little variation in absolute rates, and the term structures (yield curves) were mildly positive. More recent decades saw a dramatic change. Rates and curves became much more volatile, and yield curves would move from positive to negative (or vice versa) in short periods of time.

This tutorial looks at the issues surrounding the identification of this type of risk and the subsequent measurement of it.

### Objectives

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

- identify the key sources of interest rate risk for a banking business
- describe how gap and duration measurements are used to quantify the extent of interest rate risk from different perspectives

### Program Content

**Lesson(s):**

Interest Rate Risk – Identification & Measurement

**Topics:**

- Identifying Interest Rate Risk
- Measuring Interest Rate Risk

### Target Audience

- Senior managers
- New recruits to banking and financial organizations
- All risk management personnel
- Treasury department staff
- Operations and support staff
- Finance and accounting staff
- IT staff
- Compliance and regulatory staff

### Prerequisites

Risk – Measurement & Management

### Estimated Completion Time

75 minutes

### Program Level

Intermediate

### Advanced Preparation

None required

### Delivery Method

Self-study

### Field of Study

Specialized Knowledge and Applications
Interest Rate Risk – Management

Description
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.

This tutorial looks at the structures banks put in place to manage interest rate risk and the various approaches to such management – from ‘passive’ responses such as the imposition of limit systems to ‘active’ responses involving hedging rate risk via derivatives.

Objectives
On completion of this tutorial, you will be able to:
- describe how most banks attempt to centralize the process of managing interest rate risk through a treasury function, which adopts both passive and active approaches to handling this risk
- outline how derivative instruments are used to hedge interest rate risk

Program Content
Lesson(s):
Interest Rate Risk – Management

Topics:
- Overview of Managing Interest Rate Risk
- Hedging Interest Rate Risk

Target Audience
Senior managers
New recruits to banking and financial organizations
All risk management personnel
Treasury department staff
Operations and support staff
Finance and accounting staff
IT staff
Compliance and regulatory staff

Prerequisites
Interest Rate Risk – Identification & Measurement
Derivatives – An Overview

Estimated Completion Time
50 minutes

Program Level
Intermediate

Advanced Preparation
None required

Delivery Method
Self-study

Field of Study
Specialized Knowledge and Applications
## Islamic Banking & Finance – Key Principles

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>Islamic banking and finance has emerged as a viable alternative to conventional banking in recent years. The commitment to Shariah – 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 Shariah law, 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 aims to provide an overview of the key principles of Islamic banking and finance and to simplify some of the terminology used in the market.</td>
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<th>Objectives</th>
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</table>
| On completion of this tutorial, you will be able to:  
• describe the basic principles of Islamic finance and its historical development  
• outline the main aspects of Islamic corporate governance and regulation  
• explain the main types of Islamic financial product |

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<thead>
<tr>
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| **Lesson(s):**  
Islamic Banking & Finance - Key Principles |
| **Topics:**  
• Principles of Islamic Banking  
• Corporate Governance & Regulatory Requirements  
• Types of Product |

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| New or recent recruits to banking and financial organizations  
Operations and support staff  
Finance and accounting staff  
Dealers and traders |

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<tbody>
<tr>
<td>Prior to studying this tutorial, you should have a good knowledge of conventional (non-Islamic) banking products.</td>
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<td>Specialized Knowledge and Applications</td>
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Money Markets – Interest Rates

<table>
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<th>Description</th>
<th>Program Content</th>
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<tr>
<td>You will almost certainly know quite a bit about interest rates already from your experience with everyday financial matters. An interest rate is the price at which money is lent or borrowed for a stated period. It represents the return or cost associated with the use of money for the specified period. In the money markets, interest rates are usually expressed as a percentage per annum that is charged or received for the use of funds.</td>
<td><strong>Lesson(s):</strong> Money Markets – Interest Rates</td>
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<tr>
<td>This tutorial will look at interest rates in more detail, examining the different types of rates in the market, the effect of maturity and the interaction of interest rates with the economy as a whole.</td>
<td><strong>Topics:</strong></td>
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<tr>
<td>Objectives</td>
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<tr>
<td>On completion of this tutorial you will be able to:</td>
<td>• Interest Rate Basics</td>
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<tr>
<td>• state how an interest rate is defined and explain why different rates are charged to different borrowers</td>
<td>• Interest Rates &amp; the Yield Curve</td>
</tr>
<tr>
<td>• explain the basic term structure of interest rates</td>
<td>• Interest Rates &amp; the Economy</td>
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<tr>
<td>• analyze the relationship between interest rates and the economy</td>
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Money Markets – Repurchase (Repo) Agreements

**Description**
A repo is a bilateral contract to sell and buy back securities. It has many uses in the market and is becoming increasingly popular among market professionals and their customers. We will look at the most common structures used in this market and how they are constructed.

We will also look at the calculations used for the proceeds of the deals, consider why the market for repos has increased so much in popularity, and how the market has sought to clarify the detail on these deals by the adoption of standard market documentation.

**Objectives**
On completion of this tutorial you will be able to:
- Define a repurchase agreement, its uses, and advantages
- Describe the development of the repo market
- Characterize the key features of repurchase agreements
- Classify types of repurchase agreement
- Calculate repurchase agreements
- Document repurchase agreements

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Program Content**

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<td>Money Markets – Repurchase (Repo) Agreements</td>
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**Topics:**
- Repurchase Agreements
- Development of the Repurchase Market
- Calculating Repurchase Agreements
- Features of Repurchase Agreements
- Types of Repurchase Agreement
- Executing Repurchase Agreements
- Documenting Repos

**Prerequisites**
Bonds - An Introduction
Money Markets - An Introduction
Interest Calculations

**Estimated Completion Time**
90 minutes

**Program Level**
Intermediate

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
Money Markets Calculations – Short-term Instruments

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Money market instruments are a very important subset of the capital markets. They offer short-term investors liquidity and (usually) high credit quality, but at a lower yield than is available in the bank deposit market. There are interest bearing and discount instruments to suit varied requirements, but structural conventions in the market make straight comparisons difficult.</td>
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<td>Money Markets – Short-Term Instruments</td>
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<tr>
<td><strong>Topics:</strong></td>
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<tr>
<td>• Interest Bearing Money Market Instrument</td>
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<td>• Discounted Money Market Instruments</td>
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<tbody>
<tr>
<td>On completion of this tutorial you will be able to:</td>
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<tr>
<td>• interest bearing money market instruments such as standard deposits, certificates of deposit, and repurchase agreements</td>
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<tr>
<td>• discount instruments such as discount notes, commercial paper, and treasury bills</td>
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<td>Interest Calculations</td>
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<td>Time Value of Money</td>
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<td>NPV &amp; IRR</td>
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NPV & IRR

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<tr>
<td>When investing, borrowing, or making other economic decisions, it is important to be able to compare alternative opportunities using an objective yardstick, regardless of the pattern of the cash flows that result from each opportunity. The purpose of this tutorial is to provide a framework for analyzing alternative investments. Using the fundamental concepts of present value and discounting, it is possible to evaluate most kinds of financial assets and liabilities in the common framework of net present value, or NPV. While NPV is not the only relevant evaluation measure, it is usually the starting point in measuring different alternative investments, and the one to which most other measures of investment value relate.</td>
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<tr>
<th>Objectives</th>
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<tbody>
<tr>
<td>On completion of this tutorial you should be able to:</td>
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<tr>
<td>• Determine the best set of cash flows from different investment alternatives by calculating the net present value (NPV) of the investment opportunities</td>
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<tr>
<td>• Calculate the internal rate of return (IRR) on an investment and use this in conjunction with NPV to decide between investment alternatives</td>
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<tr>
<td>• Explain how reinvestment assumptions affect a decision based on IRR</td>
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<tr>
<td>• Understand the concepts of the payback period and the discounted payback period as alternatives to NPV and IRR</td>
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<td>• Net Present Value (NPV)</td>
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<td>• Internal Rate of Return (IRR)</td>
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<td>• NPV &amp; IRR as Decision Rules</td>
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<td>• Payback Period</td>
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<td>New or recent recruits to banking and financial organizations</td>
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Options – Exotic Options

**Description**

The widespread acceptance of the Black-Scholes pricing formulas in the 1970s led to the beginnings of a growth trend in option products that has continued to the present day. New markets and products represent new profit opportunities, and instruments were quickly developed covering a wide number of asset classes. However, the natural commoditization of products quickly reduced profit margins, with the result that financial intermediaries sought non-standard, ‘exotic’ areas where rewards might be greater.

This tutorial outlines the appetite for the growth of ‘exotic’ options. Rather than attempting to describe an exhaustive list of structures (almost an impossible task due to the fecundity of investment bankers’ imaginations), the tutorial illustrates the non-standard ways in which an instrument can be developed. Some of the pricing and risk management issues are also examined.

**Objectives**

Completion of this supplementary tutorial will enable you to:

- outline the key ways in which an option can differ from the 'vanilla' standard of European and American calls and puts
- describe the most common forms of non-standard option
- explain how the non-standard nature of the product affects the ease with which it can be priced and managed

**Program Content**

**Lesson(s):**

Options – Exotic Options

**Topics:**

- Overview of Exotic Options
- Exotic Components
- Pricing Exotic Options

**Target Audience**

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**

Options – An Introduction
Options – Introduction to Option Valuation
Options – Future Asset Prices & Volatility
Options – Replication, Risk-Neutrality, & Black-Scholes
Options – Beyond Black-Scholes

**Estimated Completion Time**

90 minutes

**Program Level**

Advanced

**Advanced Preparation**

None required

**Delivery Method**

Self-study

**Field of Study**

Specialized Knowledge and Applications
**Options – An Introduction**

**Description**
Options have an ancient history; they can be found in ancient Babylon and Greece, and more recently in Holland and Chicago. The long history can be attributed to the fact that the uses of options are both straightforward and fundamental; options are building blocks in finance. A combination of options with other products allows almost infinite customization possibilities.

This tutorial provides a basic overview of options. It covers the defining properties of options, the role of options in the panoply of financial instruments, the widespread nature of option use, and the many differing forms that options can take. It will also touch upon the complex issue of option valuation; more advanced concepts on option valuation can be found in subsequent tutorials.

**Objectives**
The main topics covered are
- Explain the basic terminology associated with the option markets
- Demonstrate how options are fundamental building blocks for financial practitioners
- Explain how options are found in many different markets and many different forms

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Program Content**
**Lesson(s):**
Options – An Introduction

**Topics:**
- Option Fundamentals
- Options as Building Blocks
- Option Types & Markets

**Prerequisites**
Derivatives - An Overview

**Estimated Completion Time**
60 minutes

**Program Level**
Introductory

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
**Options – Barrier Options**

**Description**
Market participants are aware of the benefits of using options in their hedging and investing activities, but, when buying options, they are resistant to shelling-out cash on an instrument that may ultimately have no value. Barrier options can help in this regard.

The most common forms of barrier option are simple ‘knock-in’ or knock-out' structures where an option either comes into existence (or else is extinguished) if the price of some reference asset moves above or below a ‘barrier’ level. Since the existence of the barrier always reduces the possibility of exercise, the barrier option will be cheaper than a vanilla call or put. However, the pricing and trading of these instruments can be far from straightforward. This tutorial describes the different forms of barrier option, how they are used, and how they are priced and managed.

**Objectives**
The main topics covered are

- describe the key features and types of barrier option
- explain why barrier options are useful
- outline the pricing mechanisms for barrier options
- describe how and when the sensitivities of these instruments differ from ‘vanilla’ alternatives

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Program Content**

**Lesson(s):**
Options – Barrier Options

**Topics:**
- Introduction to Barrier Options
- Using Barrier Options
- Pricing Barrier Options
- Risks of Barrier Options

**Prerequisites**
Options – Replication, Risk-Neutrality, & Black-Scholes
Options – Beyond Black-Scholes
Options – Greeks (Part I)
Options – Greeks (Part II)
Options – Exotic Options

**Estimated Completion Time**
90 minutes

**Program Level**
Advanced

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
**Options – Beyond Black-Scholes**

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<tbody>
<tr>
<td>The Black-Scholes approach to option pricing, while a massive advance on what little had been seen before, contains serious shortcomings. For example, the market assumptions are somewhat unrealistic, and the pricing formulas can only value a limited number of instruments. This tutorial examines alternative numerical methods which allow option practitioners to value a wider range of instruments, and can also incorporate different price evolution assumptions.</td>
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<tr>
<td>On completion of this tutorial you will be able to:</td>
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<tr>
<td>- Describe how the binomial pricing model generates an option price through discrete changes in a future asset price, and how this procedure can be used to calculate American option prices.</td>
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<td>- Explain how numerical procedures have evolved beyond the binomial pricing model.</td>
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<td>- Describe how Monte Carlo simulations can be used to calculate values for options which are outside the scope of simple Black-Scholes or lattice models.</td>
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<tr>
<td>Topics:</td>
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<tr>
<td>- Binomial Option Pricing</td>
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<tr>
<td>- Extensions to Basic Numerical Methods</td>
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<tr>
<td>- Monte Carlo Simulation</td>
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<td>Options – Replication, Risk-Neutrality, &amp; Black-Scholes</td>
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<td>Specialized Knowledge and Applications</td>
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## Options – Introduction to Option Valuation

### Description
Option valuation can be (ultimately) a very complex process - considerations include the option pricing factors, the way in which an option pays out, the market processes of underlying assets, and the relationships between multiple assets. It is at this point that the subject enters the esoteric realms of advanced mathematics. However, before embarking on any complex valuation, there are a number of fundamental foundations.

This tutorial examines these matters and also outlines the way in which prices can be 'enforced' by arbitrage possibilities. This absence of 'free lunches' is fundamental to most financial markets pricing, but in particular options.

### Objectives
The main topics covered are:

- Explain when an option is 'in' or 'out' of the money
- Show how an option price is broken into two components: intrinsic value and time value
- Describe the major influences on option values
- Outline the upper and lower boundaries of option prices and explain the factors affecting the exercise decision
- Describe the 'put-call' parity relationship

### Program Content

#### Lesson(s):
Options – Introduction to Option Valuation

#### Topics:
- Option Moneyness
- Components of Option Value
- Factors Affecting Option Value
- Option Price Limits & Exercise Decisions
- Put-Call Parity & No-Arbitrage

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Prerequisites
Options – An Introduction

### Estimated Completion Time
75 minutes

### Program Level
Intermediate

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
**Options – Replication, Risk-Neutrality, & Black-Scholes**

**Description**
Although options in financial markets have a long history, it is only recently that option pricing has been seen as having a sound theoretical basis. This tutorial introduces the Black-Scholes pricing model for options, one of the most famous in modern finance. It examines the foundations of the approach, particularly the key issues of replication and risk-neutrality, and gives examples of both the basic pricing formula and the simple extensions that followed soon after. It also highlights some potential shortcomings with the approach.

**Objectives**
Completion of this supplementary tutorial will enable you to:
- Explain the concepts of the riskless portfolio and risk-neutrality
- Price simple European options using the basic Black-Scholes 'family' of option pricing models
- List the shortcomings of the Black-Scholes approach

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Program Content**

**Lesson(s):**
Options – Replication, Risk-Neutrality, & Black-Scholes

**Topics:**
- The Riskless Portfolio
- The Black-Scholes Approach to Option Pricing
- Beyond Black-Scholes

**Prerequisites**
Options – Introduction to Option Valuation
Options – Future Asset Prices & Volatility

**Estimated Completion Time**
75 minutes

**Program Level**
Advanced

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
Project Finance – An Introduction

Description
Project finance is a financing method used to fund capital-intensive projects, especially those involving power generation, public infrastructure, and extractive industries. It differs from corporate finance deals in that the project is separated from its sponsors who set up a bankruptcy-remote special purpose vehicle (SPV) to hold the project assets.

This tutorial provides a broad overview of the project finance market, showing a typical project finance deal and the main players involved. The costs, benefits, and risks associated with project finance are also described.

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

- explain what project finance is and its role in funding large scale projects
- outline the key players in a project finance deal
- describe the costs and benefits of project finance for sponsors

Program Content
Lesson(s):
Project Finance – An Introduction

Topics:
- Overview of Project Finance
- Project Finance Participants & Structures
- Project Risk

Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites
Lending – An Introduction

Estimated Completion Time
75 minutes

Program Level
Introductory

Advanced Preparation
None required

Delivery Method
Self-study

Field of Study
Specialized Knowledge and Applications
## Project Finance – Deal Structuring

### Description
Project finance deals are complex transactions involving a large number of participants. Most project finance is raised through a group of bank lenders, known as a syndicate, who pool their resources to extend credit to the project SPV. This structure enables lenders to share the considerable risk of project finance, which is non-recourse in nature. Some finance deals may also involve a bond issue, which is typically placed and underwritten by a strong, reputable bank with a global outreach. Project sponsors will also contribute funds to a project finance deal in the form of equity or subordinated debt/mezzanine finance.

This tutorial looks at how loans are raised for project finance deals, and outlines the costs and benefits of this approach for borrowers. Other sources of project finance are also described.

### Objectives
On completion of this tutorial you will be able to:

- outline the key stages in a project finance deal
- describe the different forms of project debt

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Program Content
**Lesson(s):**
Project Finance – Deal Structuring

**Topics:**
- Stages in a Project Finance Deal
- Types of Project Debt

### Prerequisites
Project Finance – An Introduction

### Estimated Completion Time
90 minutes

### Program Level
Introductory

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
## Risk Management – An Introduction

### Description

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. Risk management has become ever more important as the complexity of banking has increased and regulators attempt to more closely match capital with risk profiles. From a regulator’s point of view, the most desirable aspect of banking is survivability rather than profitability – and the key to survivability is risk management.

This tutorial looks at the links between risk, return, and survival, in addition to outlining the main types of risk that banks face and the key elements of an effective framework for the management of these risks.

### Objectives

On completion of this tutorial you will be able to:

- explain how a bank is a ‘risk factory’ and how regulators are concerned about survival in the face of these risks
- describe the fundamentals of the risk management process in a bank
- outline the major categories of risk that banks must address

### Program Content

<table>
<thead>
<tr>
<th>Lesson(s):</th>
<th>Risk Management – An Introduction</th>
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<tbody>
<tr>
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### Target Audience

- New or recent recruits to banking and financial organizations
- Operations and support staff
- Finance and accounting staff
- Dealers and Traders

### Prerequisites

- Financial Markets – An Introduction

### Estimated Completion Time

- 75 minutes

### Program Level

- Introductory

### Advanced Preparation

- None required

### Delivery Method

- Self-study

### Field of Study

- Specialized Knowledge and Applications
## Risk Management for Senior Executives

### Description
This tutorial is designed to identify the most important aspects of bank risk management processes and show how senior executives are central both to the construction of an appropriate framework and to the leadership that generates a risk management culture.

Note that the tutorial is emphatically not a detailed description of individual risk management issues – as a senior executive, you may be comfortable with most of these issues already (if not, the detailed information is located in separate, specific tutorials). The approach in this tutorial is to provide an overview of where the key risks arise and the core management issues contained in these risks.

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

- how risks arise in banking; certain risks are specific to financial institutions, while others are generated by any large organization
- why it is not clear that quantitative techniques alone give sufficient guidance to senior executives when assessing the extent of various risks
- what the key roles and responsibilities of senior executives are in ensuring that an institution conducts its business in accordance with the appropriate risk tolerance parameters
- how the viewpoint of regulators often contrasts with that of banks, and places an increasing burden on banks’ risk management teams

### Program Content
**Lesson(s):**
Risk Management for Senior Executives

**Topics:**
- What is Risk Management?
- Where Does the Risk Come From? (Identify)
- How Much Risk is There? (Measure)
- How is Risk Navigated? (Manage)
- Why are Banks Regulated?

### Target Audience
Senior executives in the banking industry

### Prerequisites
Not applicable

### Estimated Completion Time
75 minutes

### Program Level
Intermediate

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
### Risk – Measurement & Management

#### Description
Banks in recent years had been feeling increasingly sanguine about their ability to deal with risk. However, the events between 2007 and 2009 eradicated any complacency in the area. The complexities and subtleties of financial risk generated some unpleasant surprises, despite the extensive advances in the quantitative and qualitative work performed in the area. This tutorial examines the foundations of both risk measurement and management, and analyses the increasing need for banks to pay attention to the regulatory context.

#### Objectives
On completion of this tutorial you will be able to:
- explain how risk measurements are used in and across different business areas and outline the major difficulties faced in measuring risk
- describe the organizational challenges facing a bank as it deals with risk management and measurement issues and outline the key processes of risk management
- explain how regulatory risk management affects the process for an individual bank

#### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

#### Program Content
**Lesson(s):**
Risk – Measurement & Management

**Topics:**
- Risk Management
- Managing Risk
- Regulatory Context

#### Prerequisites
Risk Management – An Introduction

#### Estimated Completion Time
75 minutes

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## Securitization – An Introduction

### Description
The process of securitization collects together financial assets, such as mortgages, into a single pool. The returns generated by a collection of such assets are more predictable than returns on individual assets. Securities backed by the pool can then be issued to investors and the returns on such securities are linked to the returns on the assets.

This tutorial examines in detail the main elements of the securitization process, providing information on a variety of topics including the main players involved in the process, the construction of the securities, and the motivations for a securitization.

### Objectives
The main topics covered are:
- define ‘securitization’ and explain how the process evolved
- describe the process of securitization and the roles of the different players involved
- explain how the resultant securities are constructed
- explain the motivations involved in the securitization of a pool of assets

### Program Content

<table>
<thead>
<tr>
<th>Lesson(s):</th>
<th>Securitization – An Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics:</td>
<td>Fundamentals of Securitization</td>
</tr>
<tr>
<td></td>
<td>The Securitization Process &amp; Participants</td>
</tr>
<tr>
<td></td>
<td>Constructing the Securities</td>
</tr>
<tr>
<td></td>
<td>Benefits of Securitization</td>
</tr>
</tbody>
</table>

### Target Audience
- New or recent recruits to banking and financial organizations
- Operations and support staff
- Finance and accounting staff
- Dealers and Traders

### Prerequisites
- Bonds - An Introduction

### Estimated Completion Time
- 90 minutes

### Program Level
- Intermediate

### Advanced Preparation
- None required

### Delivery Method
- Self-study

### Field of Study
- Specialized Knowledge and Applications
## Securitization – Asset-backed Securities (ABS)

### Description
Although the residential mortgage-backed securities (RMBS) market accounts for the majority of securitized transactions, the basic securitization technique is asset-independent. This tutorial looks at how securitization has evolved to face the challenges presented by different asset classes. In addition to descriptions of some of the major classes outside of RMBS, the tutorial also examines how the markets for the associated securities operate and how valuation techniques have been developed to cope with the idiosyncrasies associated with securitization.

### Objectives
At the end of this tutorial you will be able to describe:
- Explain how the securitization technique has extended beyond its roots in the US residential mortgage market
- Describe the various asset-independent structures of securitization
- Identify the key factors in a securitization that are examined by investors, rating agencies, or other analysts
- Explain how measurements of value have evolved beyond simple fixed interest paradigms

### Program Content
#### Lesson(s):
Securitization - Asset-backed Securities (ABS)

#### Topics:
- Overview of the ABS Market
- Asset Independent Structures
- Key Factors
- Pricing & Performance

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Prerequisites
Securitization – An Introduction
Securitization – Mortgage-Backed Securities (MBS)

### Estimated Completion Time
120 minutes

### Program Level
Intermediate

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
### Securitization – CDOs – An Introduction

#### Description
A collateralized debt obligation (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. Various forms of credit enhancement are used and CDO tranches are rated by the main credit rating agencies. CDOs represented the fastest growing segment of the securitization market in the years leading up to the global financial crisis of 2007/9.

This tutorial explains how CDOs are issued and structured, and outlines the common issuer and investor motivations for entering CDO deals.

#### Objectives
On completion of this tutorial you will be able to describe the structures and uses of:
- identify the main features of collateralized debt obligations
- differentiate between the variants of collateralized debt obligations
- explain issuer and investor motivations in relation to collateralized debt obligations

#### Program Content

<table>
<thead>
<tr>
<th>Lesson(s):</th>
<th>Securitization – CDOs – An Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics:</td>
<td>Basics of Collateralized Debt Obligations</td>
</tr>
<tr>
<td></td>
<td>CDO Structures</td>
</tr>
<tr>
<td></td>
<td>Issuer &amp; Investor Motivations</td>
</tr>
</tbody>
</table>

#### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

#### Prerequisites
Securitization – An Introduction

#### Estimated Completion Time
60 minutes

#### Program Level
Intermediate

#### Advanced Preparation
None required

#### Delivery Method
Self-study

#### Field of Study
Specialized Knowledge and Applications
Securitization – Commercial Mortgage-Backed Securities

**Description**
Mortgage-backed securities can be classified as residential or commercial mortgage-backed securities (CMBS). This tutorial focuses on the CMBS market, which is more varied and complex than its residential mortgage-backed equivalent. The CMBS market grew tremendously in the years leading up to the global financial crisis, as investor appetite for real estate products increased and interest rates remained relatively low. CMBS products were pivotal in distributing risk across a wide variety of investors.

This tutorial will cover the mechanics and structures of CMBSs, the analysis of CMBS collateral, and the rating of CMBSs. As with the RMBS market, the CMBS market in the US developed much earlier, and has traditionally been the innovator of new products. In this tutorial, descriptions refer to the US CMBS market, unless otherwise stated.

**Objectives**
On completion of this tutorial you will be able to describe the structures and uses of:
- outline the structure of commercial mortgage-backed securities and describe the dynamics of the commercial mortgage-backed securities market
- analyze the collateral characteristics of a commercial mortgage-backed security (CMBS)
- outline the rating process for CMBS transactions

<table>
<thead>
<tr>
<th>Program Content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lesson(s):</strong></td>
</tr>
<tr>
<td>Securitization – Commercial Mortgage-Backed Securities</td>
</tr>
<tr>
<td><strong>Topics:</strong></td>
</tr>
<tr>
<td>• Mechanics &amp; Structure of CMBS Transactions</td>
</tr>
<tr>
<td>• Analyzing CMBS Collateral</td>
</tr>
<tr>
<td>• CMBS Ratings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>New or recent recruits to banking and financial organizations</td>
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<tr>
<td>Operations and support staff</td>
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<tr>
<td>Finance and accounting staff</td>
</tr>
<tr>
<td>Dealers and Traders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securitization – Mortgage-Backed Securities</td>
</tr>
<tr>
<td>Securitization – European Mortgage-Backed Securities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimated Completion Time</th>
</tr>
</thead>
<tbody>
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<td>75 minutes</td>
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<tr>
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<thead>
<tr>
<th>Delivery Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-study</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialized Knowledge and Applications</td>
</tr>
</tbody>
</table>
Securitization – Mortgage Backed Securities (MBS)

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This tutorial focuses on mortgage-backed securities, both in the United States and elsewhere on the globe. It examines the scale of the markets and the key characteristics as regards the underlying collateral and the construction of the subsequent securities. In particular, it highlights the areas of prepayment risk and the sequential repayment of different classes of mortgage-backed securities.</td>
</tr>
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</table>

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<thead>
<tr>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>The main topics covered are</td>
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<tr>
<td>• identify the major features of mortgage-backed security markets in the United States and across the globe</td>
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<tr>
<td>• explain the characteristics of mortgage collateral pools</td>
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<td>• describe how subsequent securities are differentially structured in order to balance investor appetite with collateral risk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lesson(s):</strong></td>
</tr>
<tr>
<td>Securitization – Mortgage Backed Securities (MBS)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The Growth of The MBS Market</td>
</tr>
<tr>
<td>• The Collateral Pool</td>
</tr>
<tr>
<td>• Security Types</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Target Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>New or recent recruits to banking and financial organizations</td>
</tr>
<tr>
<td>Operations and support staff</td>
</tr>
<tr>
<td>Finance and accounting staff</td>
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<tr>
<td>Dealers and Traders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Securitization – An Introduction</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Estimated Completion Time</th>
</tr>
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<tbody>
<tr>
<td>90 minutes</td>
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<th>Program Level</th>
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<th>Delivery Method</th>
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<td>Self-study</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialized Knowledge and Applications</td>
</tr>
</tbody>
</table>
## Singapore Equity Market

### Description
Singapore is one of the key financial centers in Asia, being recognized in particular as the leading global foreign exchange trading hub outside London, New York, and Tokyo. It is also a major wealth management center in the Asia-Pacific region.

Leading financial institutions and other market participants regard Singapore as a springboard to capture regional opportunities. Located at the heart of Southeast Asia, it is strategically well placed to serve the fast-growing markets of the Asia-Pacific region.

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 securities traded, leading stock indexes, listing requirements and procedures, and trading operations.

### 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 Singapore market
- describe the listing, trading, and settlement procedures for equities in Singapore

### Program Content
**Lesson(s):**
Singapore Equity Market

**Topics:**
- Market Overview
- Listing, Trading & Settlement Procedures

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Prerequisites
- Equities – An Introduction
- Equities – Issuing

### Estimated Completion Time
60 minutes

### Program Level
Introductory

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
## Structured Products – An Introduction

**Description**

Over the past two decades or so, investors have been given access to an ever widening universe of potential assets to invest in. The development of structured products (SPs) had allowed investors to take views on different asset classes in a more precise way than merely ‘buying’ or ‘selling’ an instrument. This tutorial describes the concept of structured products and examines the development of the market. Investor motivations, the basics of construction, and key risks are all investigated.

**Objectives**

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

- explain the basics of structured products (SPs)
- describe how the market for SPs has developed
- outline the lifecycle of a typical structured product
- understand why investors might use SPs as opposed to other instruments
- show how a simple SP is constructed and outline the key risks associated with SPs

**Program Content**

**Lesson(s):**

Structured Products – An Introduction

**Topics:**

- Overview of Structured Products
- Market Development
- Lifecycle of a structured Product
- Key Product Considerations for Investors
- Product Construction & Risks

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>New or recent recruits to banking and financial organizations</td>
<td>Bonds – An Introduction</td>
</tr>
<tr>
<td>Operations and support staff</td>
<td>Options – An Introduction</td>
</tr>
<tr>
<td>Finance and accounting staff</td>
<td></td>
</tr>
<tr>
<td>Dealers and Traders</td>
<td></td>
</tr>
</tbody>
</table>

**Estimated Completion Time**

75 minutes

**Program Level**

Intermediate

**Advanced Preparation**

None required

**Delivery Method**

Self-study

**Field of Study**

Specialized Knowledge and Applications
## Structured Products – Major Types

### Description
The first decade of this century saw an enormous expansion in the array of structured products available to investors. While common elements are utilized across asset classes, such as various forms of exotic option and structures referencing multiple assets, the fecundity of imagination shown by investment bankers and product investors is such that these various components can be rearranged into an almost infinite number of structures. This tutorial explores the most popular types of structured product and some of the structures that are specific to particular asset classes.

### Objectives
On completion of this tutorial, you will be able to:
- describe the common elements utilized in structured products across different asset classes
- outline the major structures used in specific asset classes

### Target Audience
- New or recent recruits to banking and financial organizations
- Operations and support staff
- Finance and accounting staff
- Dealers and Traders

### Program Content
**Lesson(s):** Structured Products – Major Types

**Topics:**
- Key Elements of Structured Products
- Asset-Specific Structures

### Prerequisites
- Structured Products – An Introduction

### Estimated Completion Time
- 60 minutes

### Program Level
- Intermediate

### Advanced Preparation
- None required

### Delivery Method
- Self-study

### Field of Study
- Specialized Knowledge and Applications
### Swaps – Applications

#### Description
Swaps are derivative products that are used to alter the exposure of investment portfolios or any series of cash flows. They represent an efficient way for institutions to manage their interest rate risk or gain desired investment exposure.

In this tutorial, we will look at the various uses of interest rate swaps. We will also identify the major players in the swap market and outline their key roles and responsibilities.

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

- describe the uses of interest rate swaps
- outline the roles and responsibilities of the major players in the swap market

#### Program Content

**Lesson(s):**
Swaps – Applications

**Topics:**
- Uses of Swaps
- Swap Market Players

#### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

#### Prerequisites
Swaps – An Introduction

#### Estimated Completion Time
60 minutes

#### Program Level
Intermediate

#### Advanced Preparation
None required

#### Delivery Method
Self-study

#### Field of Study
Specialized Knowledge and Applications
Swaps – Applications for Corporates

**Description**
Financial and non-financial corporates often tap the capital markets to raise money. In borrowing money, corporates seek sources that provide the lowest cost of funds and the type of borrowing (fixed or floating) that best match their business's cash flow.

In this tutorial, you will learn about the different types of corporate borrowers and understand the factors that influence the rates at which they borrow. The tutorial also explains their business goals and the use of derivatives with respect to their capital generation activities.

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

- define the business goals and objectives of corporates, financial institutions, and other borrowers
- describe how these market participants use swaps to achieve their goals and objectives

**Program Content**

**Lesson(s):**
Swaps – Applications for Corporates

**Topics:**
- Types of Corporate Borrower
- Swap Applications

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**
Swaps – An Introduction
Swaps – Applications

**Estimated Completion Time**
75 minutes

**Program Level**
Intermediate

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study** Specialized Knowledge and Applications
Swaps – Asset Swaps – An Introduction

**Description**
Asset swap is a generic term for the repackaging of an interest-bearing security using one or more interest rate swaps. The asset swap adds value for investors because it allows the repackaging of bonds issued under different market conditions, giving them par prices and floating rate coupons more or less at the current market rate. The result is a synthetic security that presents the characteristics uniquely sought by the investor.

In this tutorial, we will explain the structure of asset swaps and outline some of their uses and applications.

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

- Define an asset swap
- Differentiate between the different types of asset swap
- Outline the different uses of asset swaps

**Program Content**

**Lesson(s):**
Swaps – Asset Swaps – An Introduction

**Topics:**
- Asset Swap Basics
- Uses & Applications of Asset Swaps

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**
Swaps - An Introduction

**Estimated Completion Time**
50 minutes

**Program Level**
Intermediate

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
## Swaps – Constant Maturity Swaps

### Description

Constant maturity swaps (CMS), a variation of interest rate swaps, are relatively new in the derivatives market. The basic CMS structure offers the exchange of two floating rate coupon streams, one based on a par swap rate or government bond yield and the other based on a short-term rate (such as Libor). These instruments are an ideal product for investors looking to take a view on the shape of the implied forward curve.

In this tutorial, we describe the structure of constant maturity swaps and explain how these instruments are priced. Concepts related to their pricing, such as sensitivities and convexity adjustments, are also included.

### Objectives

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

- Identify opportunities to use constant maturity swaps profitably
- Target market conditions that make constant maturity swaps an ideal client product
- Identify the important sources of mark-to-market sensitivity for constant maturity swaps
- Apply convexity adjustments while pricing constant maturity swaps

### Program Content

**Lesson(s):**

Swaps – Constant Maturity Swaps

**Topics:**

- Structure of a Constant Maturity Swap
- Pricing a Constant Maturity Swap
- Price Sensitivities
- Convexity Adjustment

### Target Audience

New or recent recruits to banking and financial organizations  
Operations and support staff  
Finance and accounting staff  
Dealers and Traders

### Prerequisites

Swaps – An Introduction  
Swaps – Pricing & Valuation (Part I)  
Swaps – Pricing & Valuation (Part II)

### Estimated Completion Time

120 minutes

<table>
<thead>
<tr>
<th>Program Level</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Preparation</td>
<td>None required</td>
</tr>
<tr>
<td>Delivery Method</td>
<td>Self-study</td>
</tr>
<tr>
<td>Field of Study</td>
<td>Specialized Knowledge and Applications</td>
</tr>
</tbody>
</table>
## Swaps – Credit Exposure

### Description
This tutorial provides an insight into the credit issues that arise in the trading of interest rate and currency swaps. It focuses on the way in which future credit exposure can be generated, how estimations of the exposure can be made, and how the future exposure can be reduced through different forms of credit enhancement. It also briefly addresses the issues raised by the management of these exposures.

### Objectives
On completion of this tutorial you will be able to describe the structures and uses of:
- Describe how credit exposure is generated in an interest rate or currency swap, and how it is a function of the movement in the underlying market variables
- Outline the complexities involved in measuring the level of credit exposure
- Explain how credit exposure can be reduced
- Describe how credit exposure is priced and managed by different institutions, and the difficulties that these processes generate

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Program Content

#### Lesson(s):
Swaps – Credit Exposure

#### Topics:
- Fundamentals of Credit Exposure
- Measuring Exposure
- Netting & Credit Enhancement
- Pricing & Management

### Prerequisites
Swaps - An Introduction
Swaps - Currency Swaps
Swaps - Pricing & Valuation (Part I)
Swaps - Pricing & Valuation (Part II)

### Estimated Completion Time
75 minutes

### Program Level
Intermediate

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
### Swaps – Currency Swaps

#### Description
Currency swaps were first used in the 1970s. Along with interest rate, equity and commodity swaps, these instruments have changed the face of finance. At the surface level, they have allowed risks to be managed and capital markets accessed in ways that were unimaginable before. At a deeper level, they facilitate the understanding and measurement of risks across enterprises so that those enterprises can operate more effectively.

In this tutorial, we will describe the different types of currency swaps and explain how they are priced.

#### Objectives
On completion of this tutorial you will be able to describe the structures and uses of:
- Describe the basic features and characteristics of currency swaps
- Price different types of currency swaps

#### Program Content

<table>
<thead>
<tr>
<th>Lesson(s):</th>
<th>Swaps – Currency Swaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Introduction to Currency Swaps</td>
</tr>
<tr>
<td></td>
<td>- Types &amp; Pricing of Currency Swaps</td>
</tr>
</tbody>
</table>

#### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

#### Prerequisites
Swaps - An Introduction

#### Estimated Completion Time
60 minutes

#### Program Level
Intermediate

#### Advanced Preparation
None required

#### Delivery Method
Self-study

#### Field of Study
Specialized Knowledge and Applications
## Swaps – Differential Swaps

### Description

A differential swap – also known as diff swap, index differential swap, cross currency interest rate swap or quanto swap – is a variation of an interest rate swap, distinguished by the fact that at least one (and possibly both) of the payment rates refers to a currency different from that of the notional principal. By using a differential swap, a counterparty can exploit the interest rate differential between two currencies without directly incurring any exchange rate risk.

This tutorial looks at differential swaps in detail, examining their features and characteristics and showing how to price these structures.

### Objectives

On completion of this tutorial you will be able to describe the structures and uses of:

- Describe the features and characteristics of differential swaps
- Outline the main considerations in the pricing of differential swaps

### Program Content

**Lesson(s):**

Swaps – Differential Swaps

**Topics:**

- Basics of Differential Swaps
- Pricing Differential Swaps

### Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Prerequisites

Swaps - Pricing & Valuation (Part I)
Swaps - Pricing & Valuation (Part II)

### Estimated Completion Time

60 minutes

### Program Level

Intermediate

### Advanced Preparation

None required

### Delivery Method

Self-study

### Field of Study

Specialized Knowledge and Applications
Swaps – In-Arrears Swaps

Description

An in-arrears swap is a variation of a traditional interest rate swap. The difference between the two relates to the floating rate payment. With a traditional swap, floating rate payments are based on the level of the reference index at the start of the interest period. With an in-arrears swap, floating rate payments are based on the level of the reference index rate at the end of the interest period.

In-arrears swaps are used to speculate on changes in the shape of the yield curve and are particularly well suited to steep yield curve environments.

This tutorial looks at how in-arrears swaps are structured and describes in detail how they are priced. Other topics, such as price sensitivities and hedging, are also covered.

Objectives

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

- Structure an in-arrears swap
- Price an in-arrears swap
- Identify the three sources of mark-to-market sensitivity for in-arrears swaps
- Explain hedging of an in-arrears swap
- Calculate the convexity adjustment required for in-arrears swaps
- Target market conditions that make in-arrears swaps an ideal client product

Program Content

Lesson(s):
Swaps – In Arrears Swaps

Topics:
- Structure of an In-Arrears Swap
- Pricing an In-Arrears Swap
- Pricing Sensitivity
- Hedging an In-Arrears Swap
- Understanding Convexity Adjustments
- Favorable Market Conditions

Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

Prerequisites

Swaps – An Introduction
Swaps – Pricing & Valuation (Part I)
Swaps – Pricing & Valuation (Part II)

Estimated Completion Time

180 minutes

Program Level

Advanced

Advanced Preparation

None required

Delivery Method

Self-study

Field of Study

Specialized Knowledge and Applications
### Swaps – Forward, Amortizing, & Zero Coupon Swaps

#### Description
Forward, amortizing and zero-coupon swaps are variations of the traditional interest rate swap structure that are often used in combination with one another. Forward swaps are used to take a view on forward interest rates, amortizing swaps are used to match the underlying principal to an amortizing loan, while zero-coupon swaps are useful if the floating rate receiver has a short-term cash flow deficit.

In this tutorial, you will learn about how each of these swap types is used, structured and priced.

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

- Identify opportunities to use the swaps profitably with clients
- Target market conditions that make the swaps ideal client products
- Identify pricing requirements
- Price the swaps based on market conditions
- Identify all sources of mark-to-market sensitivities

#### Program Content

**Lesson(s):**
Swaps – Forward, Amortizing & Zero Coupon Swaps

**Topics:**
- Forward Swaps
- Amortizing Swaps
- Zero-Coupon Swaps

#### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

#### Prerequisites
Swaps - An Introduction
Swaps - Pricing & Valuation (Part I)
Swaps - Pricing & Valuation (Part II)

#### Estimated Completion Time
180 minutes

#### Program Level
Advanced

#### Advanced Preparation
None required

#### Delivery Method
Self-study

#### Field of Study
Specialized Knowledge and Applications
**Swaps – An Introduction**

**Description**
Since currency swaps were first used in the 1970s, and interest rate, equity and commodity swaps were first used in the 1980s, these instruments have changed the face of finance. Swaps have a wide range of structures and can be used for both asset and liability management and for speculation. Understanding swaps, their pricing and their uses is fundamental to an understanding of today's financial world. This tutorial describes the basic structure of a swap and explains how these instruments are traded. The tutorial also looks at swap market conventions.

**Objectives**
On completion of this tutorial you should be able to:
- outline the basic structure and features of an interest rate swap
- identify the fundamental characteristics of the swap market and the key trading conventions in this market

**Program Content**

<table>
<thead>
<tr>
<th>Lesson(s):</th>
<th>Swaps – An Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics:</td>
<td>Basics of Swaps</td>
</tr>
<tr>
<td></td>
<td>Swaps Trading</td>
</tr>
</tbody>
</table>

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**
Derivatives - An Overview
Interest Calculations

**Estimated Completion Time**
60 minutes

**Program Level**
Introductory

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications
## Swaps – Overnight Indexed Swaps

### Description

An overnight indexed swap (OIS) is a special type of fixed-to-floating interest rate swap. The floating rate is linked to a published overnight interbank call money index. The term of an OIS typically ranges from two days to two years, but can extend beyond this if required. Overnight indexed swaps are used primarily to manage the interest rate risk on overnight rates. They are also used to speculate on movements in these rates. The importance of these swaps is derived from their impact on activity at the shortest end of the yield curve – the overnight (O/N) rate. This allows market participants to manage overnight interest rate risk, promoting better leverage and liquidity, mitigating credit risk and lowering transaction costs and capital charges.

This tutorial looks at overnight indexed swaps in detail, examining their features, markets, and characteristics, and showing how to price these structures.

### Objectives

On completion of this tutorial you will be able to describe the structures and uses of:

- Define an overnight indexed swap and outline its main features
- Calculate the cash flow on an overnight indexed swap

### Program Content

**Lesson(s):**

Swaps – Overnight Indexed Swaps

**Topics:**

- Basics of Overnight Indexed Swaps
- Pricing an Overnight Indexed Swap

### Target Audience

- New or recent recruits to banking and financial organizations
- Operations and support staff
- Finance and accounting staff
- Dealers and Traders

### Prerequisites

- Swaps – An Introduction
- Swaps – Pricing & Valuation (Part I)
- Swaps – Pricing & Valuation (Part II)

### Estimated Completion Time

60 minutes

### Program Level

Intermediate

### Advanced Preparation

Intermediate

### Delivery Method

Self-study

### Field of Study

Specialized Knowledge and Applications
The Lending Cycle

<table>
<thead>
<tr>
<th>Description</th>
<th>Program Content</th>
</tr>
</thead>
</table>
| The lending cycle refers to the period from the time a loan is first negotiated to when it is fully paid off. The lending cycle could be as short as one month or as long as 40 years. The tutorial takes a detailed look at the various stages of the lending cycle. It covers topics such as loan origination, negotiation and structuring, documentation, disbursement/drawdown, administration, and review. The focus is primarily on commercial/corporate lending, but retail and real estate loan examples are also provided where appropriate. | Lesson(s): The Lending Cycle
Topics:
• Stages of the Lending Cycle |

<table>
<thead>
<tr>
<th>Objectives</th>
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</thead>
<tbody>
<tr>
<td>On completion of this tutorial you will be able to describe:</td>
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<tr>
<td>• describe the various stages in the lifecycle of a typical loan</td>
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</table>

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<thead>
<tr>
<th>Target Audience</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>New or recent recruits to banking and financial organizations Operations and support staff Finance and accounting staff Dealers and traders</td>
<td>Lending – An Introduction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimated Completion Time</th>
<th>Program Level</th>
<th>Advanced Preparation</th>
<th>Delivery Method</th>
<th>Field of Study</th>
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<tbody>
<tr>
<td>60 minutes</td>
<td>Introductory</td>
<td>None required</td>
<td>Self-study</td>
<td>Specialized Knowledge and Applications</td>
</tr>
</tbody>
</table>
### Trade Finance – An Introduction

#### Description

Many of the products we buy and consume on a daily basis are traded internationally. In some cases, these items will have been transported half-way across the world before arriving in our shopping baskets. However, cross-border transactions present a number of potential difficulties for the parties – importers (buyers) and exporters (sellers) – involved. In addition to dealing with the practical problems arising from the movement of, and payment for, goods from one country to another, importers and exporters are simultaneously subject to numerous risks related to differing legislation, customs, and practices in these countries.

This tutorial provides an overview of international trade finance, including the main risks associated with cross-border trade, the various payment methods used by importers/exporters, the key commercial documents, and the role of banks in international trade.

#### Objectives

On completion of this tutorial you will be able to:

- outline the main risks associated with international trade
- describe the main methods of payment used to settle cross-border trades
- list and describe the main commercial documents used in international trade
- explain the role of banks in both facilitating payments and providing funding for international trade

#### Program Content

**Lesson(s):**

Trade Finance – An Introduction

**Topics:**

- Risks of International Trade
- Methods of Payment
- Key Commercial Documents
- Role of Banks in Trade Finance

#### Target Audience

New or recent recruits to banking and financial organizations
Operations and support staff
Other financial market professionals who need to better understand the fundamentals of international trade finance

#### Prerequisites

Financial Markets – An Introduction

#### Estimated Completion Time

75 minutes

#### Program Level

Introductory

#### Advanced Preparation

None required

#### Delivery Method

Self-study

#### Field of Study

Specialized Knowledge and Applications
### Syndicated Lending

**Description**

The syndicated loan market in its current form was originally developed in the US in the 1980s as a means of financing leveraged buyouts (LBOs). Since then, the global syndicated lending market has since grown significantly, rising to USD 4.5 trillion in 2007. For lenders, syndicating a loan agreement splits the lending risk among a number of participants. It also allows for a diversification of the lending portfolio from both a geographical and sectoral point of view. For borrowers, syndicated loans are an efficient way to raise larger amounts of capital and extend their banking relationships.

This tutorial looks at the fundamentals of syndicated lending, including the syndication process, players involved, fees, and the history of the syndicated lending market.

**Objectives**

On completion of this tutorial, you will be able to:
- understand the basic principles of syndicated lending
- outline the syndication process and the players involved
- describe the secondary market for syndicated loans

**Program Content**

**Lesson(s):**
- Syndicated Lending

**Topics:**
- Overview of Syndicated Lending
- The Syndicated Lending Process
- The Secondary Market for Syndicated Loans

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Prerequisites</th>
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| New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and traders | Lending – An Introduction |

| Estimated Completion Time | 75 minutes |

<table>
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<tr>
<th>Program Level</th>
<th>Introductory</th>
</tr>
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<tbody>
<tr>
<td>Advanced Preparation</td>
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<td>Delivery Method</td>
<td>Self-study</td>
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<tr>
<td>Field of Study</td>
<td>Specialized Knowledge and Applications</td>
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</table>
### Time Value of Money

#### Description
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. Similarly, a cash flow today has a value in the future known as the future value. Present value and future value are determined by the interest rate and the time period elapsed. They are crucial concepts in finance. For example, the price of a bond is the sum of the present value of all the cash flows expected to be generated by the bond in the future, the mark-to-market value of an interest swap is the sum of the present values of all the cash inflows and outflows from the swap in the future, and the value of an option is the present value of the expected payoff of the option at the exercise date.

This tutorial describes the concepts of present value and future value, and the relationship between them. It is essential for understanding the way in which securities and derivatives are priced, and how decisions are made in financial markets.

#### Objectives
On completion of this tutorial you should be able to:
- Calculate the future value of an investment for a given present value and a given interest rate
- Recognize the relationship between the present value, future value, and discount factor
- Calculate the value of a perpetuity and an annuity
- Use the present value and future value formulas to solve for an unknown rate or number of periods, and distinguish between nominal and real interest rates

#### Program Content

<table>
<thead>
<tr>
<th>Lesson(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Value of Money</td>
</tr>
</tbody>
</table>

#### Topics:
- Future Value
- Present Value
- Perpetuities & Annuities
- Present Value & Future Value – Other Considerations

#### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

#### Prerequisites
Interest Calculations

#### Estimated Completion Time
60 minutes

#### Program Level
Introductory

#### Advanced Preparation
None required

#### Delivery Method
Self-study

#### Field of Study
Specialized Knowledge and Applications
Understanding Financial Reports

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</table>
| Those without a financial background commonly misunderstand the reality of financial reports and tend to assume that they are statements of unquestionable fact. In practice, financial reports are very often subjective in nature in that they allow latitude to those who prepare them. Different accounting treatments allow companies to 'window dress' their financial performance, thereby portraying a healthier picture of their financial position and performance. 

The focus of this tutorial is to examine the primary financial statements in context with other sources of information and beyond the pure mechanics of their creation. Only with a rounded view of the spectrum of available information can an interested party make an informed view on a company. |

<table>
<thead>
<tr>
<th>Program Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson(s):</td>
</tr>
<tr>
<td>Understanding Financial Reports</td>
</tr>
</tbody>
</table>

| Topics: |
| Interpreting the Basic Financial Statements |
| Notes & Supplementary Information |
| Analyst Reports |

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<thead>
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<tr>
<td>On completion of this tutorial you will be able to:</td>
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<tr>
<td>- Identify some fundamental considerations underpinning the use of financial statements</td>
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<td>- Recognize the significance of the notes to financial statements and other supplementary information</td>
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<tr>
<td>- Understand the value of analyst and industry reports</td>
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<tbody>
<tr>
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<tr>
<td>Operations and support staff</td>
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<tr>
<td>Finance and accounting staff</td>
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<td>Dealers and Traders</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting – An Introduction</td>
</tr>
<tr>
<td>Analysis of the Balance Sheet</td>
</tr>
<tr>
<td>Analysis of the Income Statement</td>
</tr>
<tr>
<td>Analysis of the Cash Flow Statement</td>
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</table>

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<th>Estimated Completion Time</th>
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<td>Introductory</td>
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<th>Delivery Method</th>
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<tr>
<td>Self-study</td>
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<th>Field of Study</th>
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<tbody>
<tr>
<td>Specialized Knowledge and Applications</td>
</tr>
</tbody>
</table>
## US Equity Market

### Description
The fortunes of the US stock market are felt worldwide, with the market inextricably linked to global equity market performance and significantly influencing the overall global economy. It is by far the most important market of its kind, containing not only the largest stock market in the world (the New York Stock Exchange) but also the world-famous NASDAQ, an electronic stock market that lists more companies and, on average, trades more shares per day than even the NYSE. This tutorial examines not only the NYSE and the NASDAQ, but the US equity market as a whole.

### 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 US market
- Describe the listing, trading, and settlement procedures for equities in the US

### Target Audience
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

### Program Content

<table>
<thead>
<tr>
<th>Lesson(s):</th>
<th>US Equity Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic:</td>
<td>Market Overview</td>
</tr>
<tr>
<td></td>
<td>Listing, Trading, &amp; Settlement Procedures</td>
</tr>
</tbody>
</table>

### Prerequisites
Equities – An Introduction
Equities – Issuing

### Estimated Completion Time
90 minutes

### Program Level
Introductory

### Advanced Preparation
None required

### Delivery Method
Self-study

### Field of Study
Specialized Knowledge and Applications
Warrants – An Introduction

**Description**
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 both an important source of funding for a variety of borrowers, in addition to being a highly lucrative investment market for many unit trusts. The market is noted for its ability to develop new and innovative features, as it strives meet the requirements of diverse groups of investors around the world.

In this tutorial, you will learn about the different types of warrants. You'll also learn about how warrants compare with other similar types of securities.

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

- define a warrant and calculate its leverage
- describe a traditional warrant and understand the advantages and disadvantages of warrants for issuers and investors
- describe the different types of covered warrant
- explain how warrants compare to and differ from other derivatives

**Program Content**

**Lesson(s):**
Warrants – An Introduction

**Topics:**
- Warrants Terminology
- Traditional Warrants
- Covered Warrants
- Warrants, Convertible Bonds and Options

**Target Audience**
New or recent recruits to banking and financial organizations
Operations and support staff
Finance and accounting staff
Dealers and Traders

**Prerequisites**
Equity Derivatives – An Introduction
Options – An Introduction

**Estimated Completion Time**
90 minutes

**Program Level**
Intermediate

**Advanced Preparation**
None required

**Delivery Method**
Self-study

**Field of Study**
Specialized Knowledge and Applications