

# Capital Market Foundations Certificate®

The international certification  
for financial markets professionals



---

## PRESENTATION

---

The Capital Market Foundations (CMF) Certificate® offers a benchmark of essential knowledge in financial markets for professionals worldwide.

The CMF Certificate® validates fundamental knowledge of financial markets in all main areas:

- Organisation and players
- Asset classes and markets
- Cash, derivative and structured products
- Risk Management essentials
- Financial Mathematics essentials

### CMF CERTIFICATE® OBJECTIVES

- Promote competencies in financial markets through a demanding certification
- Give HR professionals a truly operational tool for employee evaluation
- Enable homogenous development of core competencies across an entire organisation worldwide

---

## EXAM DESCRIPTION

---

The CMF Certificate® can be compared in its principles with TOEFL® or GMAT®: there is no failing grade, but an overall evaluation with a maximum grade of 800 points.

This gives financial institutions an opportunity to adapt their requisites according to employees' jobs and maturity.

The CMF Certificate® requires a demanding preparation, whichever function is currently occupied by the candidate. **The exam consists in an MCQ of 100 questions:**

- **Basic knowledge:**  
30% of questions worth 15% of the score
- **Indepth questions:**  
40% of questions worth 40% of the score
- **Understanding (exercises):**  
30% of questions worth 45% of the score

---

## TARGETTED PROFESSIONALS

---

The CMF Certificate® specifically targets financial market professionals:

- Job starters whose employer wants to confirm their know-how
- Employed staff who want to develop their competencies and make their profile more attractive
- Collaborators changing position who want to update their knowledge

---

## AREAS COVERED BY THE CMF CERTIFICATE®

---

- Financial markets players
- Financial markets fundamentals
- Influences of macroeconomics on financial markets
- Financial markets mechanisms
- Derivative products as risk management and speculation tools
- Structured products
- Trading book management
- Market and credit risks
- Risk management essentials
- Financial Mathematics essentials

---

## CONTACT

---

Do not hesitate to contact us if you need further information regarding the CMF Certificate®

### Europe / US

E-mail: [info-uk@first-finance.com](mailto:info-uk@first-finance.com)  
Hotline: +44 (0)20 7868 5277

### Asia

E-mail: [info-asia@first-finance.com](mailto:info-asia@first-finance.com)  
Hotline: +852- 3602-3130

### Part I : ECONOMIC ENVIRONMENT

#### Economic Environment

- Role of the financial markets
- Role of money
- Economic policy
- Main economic indicators

#### Major trends and crises

- Major trends and volatility
- Financial crises

#### Main economic players

- Governments
- Central Banks
- Banks and Asset managers
- Households
- Corporates

#### Buy-side key players

- Definition
- Non-financial companies
- Retirement funds
- Insurers and mutual societies
- Asset managers

#### Sell-side : Organisation of a Corporate and Investment Bank (CIB)

- Overview
- Functions involving direct client contact
- Functions in direct contact with the markets
- Support functions

### Part II : FINANCIAL PRODUCTS AND MARKETS

#### Fundamental Notions

- Asset classes
- Transaction dates
- Spot and forward
- On-balance sheet / Off-balance sheet
- Vanilla and exotic derivatives
- Structured products
- Discounting and yield to maturity

#### Exchanges

- How a stock market operates
- How a listed derivatives market operates
- Order management and different types of order

#### OTC Markets

- Main products traded over the counter (OTC)
- Size of the OTC markets
- How the main markets work
- Legal/administrative restrictions and regulations

#### Securities

- Primary, grey and secondary markets
- Corporate actions
- Securities market participants
- Investment funds
- Securities lending/borrowing

#### Options

- Profit and loss on options
- Put-call parity
- Factors influencing the value of options
- Managing an option portfolio – the Greeks

- Using options
- Option strategies
- Exotic options

#### Equity

- Ordinary shares
- Other types of shares
- Convertible bonds
- Stock market indices and the free-float factor
- ETFs
- The main equity derivatives
  - . Futures, forwards and options
  - . Warrants
  - . Contracts for differences (CFD)
  - . Equity swaps and dividend swaps
- Equity valuation

#### Money Market instruments

- Market participants
- Money market interest rate conventions
- Spot instruments
  - . Unsecured loans
  - . Repo market
  - . Sell & Buy Back
  - . Short-term securities
- Central bank transactions

#### Short Term Interest Rate Derivatives

- Foreign exchange swaps
- Forward/forward transactions
- Forward Rate Agreements (FRA)
- LIBOR Futures
- OIS (overnight index swaps)

#### Swaps and other interest rate derivatives

- Principle
- How an interest rate swap works
- How an interest rate swap is used
- How a swap is traded
- Related products
  - . Cross currency interest rate swaps (CIRS)
  - . Quanto swaps
  - . Constant Maturity Swaps (CMS)
  - . Swaps in arrears
  - . Asset swaps
- Options on interest rate swaps (swaptions), caps and floors

#### Fixed Income

- Overview
- Non-standard issues
- Fixed-rate government bonds
- Futures on government bonds
- Bond valuation principles
- Interest rate risk
- Term structure of interest rates

#### Credit Products

- Credit risk
  - . Rating agencies
  - . Default probabilities
  - . Recovery rate
  - . Credit spread
- Credit derivatives
  - . Credit Default Swaps (CDS)
  - . Total Return Swaps (TRS)
  - . Credit indices
- Securitisation
  - . General definition
  - . Basic scenario
  - . Types of securitisation
  - . Correlation risk

#### Foreign Exchange

- Overview
- External value of currency
- Market participants
- General principles
- Forward exchange
- Foreign exchange swaps
- Foreign exchange options

#### Commodities

- Commodity markets
  - . Soft commodities
  - . Hard commodities
  - . Emerging commodities
  - . Carbon certificates
- Instruments
  - . Futures contracts
  - . Commodity swaps
  - . Energy swaps
  - . Commodity options
- Valuation of storable and non-storable commodity derivatives

#### Structured products

- Classification
- Structured product vehicles
- Example of a guaranteed product: Bull Note
- Example of a product offering an improved return: Reverse Convertible Bonds
- Auto-calls
- CPPI

#### Islamic Finance

- Principles and organisation
- Products
  - . Mudaraba
  - . Murabaha
  - . Salam
  - . Sukuk
  - . Bai al-Arban

### Part III : FINANCIAL MATHEMATICS

Time value of money

Introduction to interest rate

Day count conventions for accrued interest

Net Present Value calculation

FRA and Forward FX valuation

Fixed Income valuation