

## SP - Banking Principles

### Aim

The aim of the Banking Principles subject is to instil in successful candidates the key principles of banking and to introduce students to banking risks and to quantification of the main risks in banking: capital risk, liquidity risk, credit risk, market risk and operational risk.

### Competences

On successful completion of this subject, a student will be able to:

- 1 show a good knowledge of banking products, business models and risks.
- 2 show a good understanding of banking regulations.
- 3 apply profit testing techniques to banking products.
- 4 quantify the main risks faced by banks: credit risk, market risk and capital risk.
- 5 show a good understanding of why banks hold capital and how it is measured.
- 6 show a good understanding of why banks hold liquidity and how it is measured.

### Links to other subjects

Each of Subjects CS1, CS2, CM1, CM2, CB1, CB2 and CP1 provides principles and tools that are built on in SP - Banking Principles.

Having already studied any of SP5 Investment and Finance Principles, SP6 Financial Derivatives Principles, SP9 Enterprise Risk Management or SA7 Investment and Finance Advanced would be an advantage, but is not necessary.

Topics in this subject are further built upon in SA - Banking Applications.

This subject offers complementary knowledge and a broader skillset for Associates studying other subjects at Advanced level, such as SA7 Investment and Finance Advanced, or Associates interested in capital and market risk management within SA2 Life Insurance Advanced or SA4 Pensions and other Benefits Advanced.

This subject is well suited for Associates and students interested in SP9 Enterprise Risk Management Specialist Principles and for Associates and students contemplating careers in the banking industry, including in Data Science.

## Syllabus topics

| Topic                                       | Weighting |
|---------------------------------------------|-----------|
| 1 Overview of banking                       | 12.5%     |
| 2 Banking regulations                       | 10%       |
| 3 Banking risk management                   | 10%       |
| 4 Product pricing                           | 12.5%     |
| 5 Credit risk measurement                   | 12.5%     |
| 6 Market and interest rate risk measurement | 12.5%     |
| 7 Operational risk measurement              | 10%       |
| 8 Capital measurement                       | 10%       |
| 9 Liquidity measurement                     | 10%       |

These weightings are indicative of the approximate balance of the assessment of this subject between the main syllabus topics, averaged over a number of examination sessions.

The weightings also have a correspondence with the amount of learning material underlying each syllabus topic. However, this will also reflect aspects such as:

- the relative complexity of each topic, and hence the amount of explanation and support required for it.
- the need to provide thorough foundation understanding on which to build the other objectives.
- the extent of prior knowledge which is expected.
- the degree to which each topic area is more knowledge or application based.

## Skill levels

The use of a specific command verb within a syllabus objective does not indicate that this is the only form of question which can be asked on the topic covered by that objective. The Examiners may ask a question on any syllabus topic using any of the agreed command verbs, as are defined in the document "Command verbs used in the Associate and Fellowship written examinations".

Questions may be set at any skill level: Knowledge (demonstration of a detailed knowledge and understanding of the topic), Application (demonstration of an ability to apply the principles underlying the topic within a given context) and Higher Order (demonstration of an ability to perform deeper analysis and assessment of situations, including forming judgements, taking into account different points of view, comparing and contrasting situations, suggesting possible solutions and actions and making recommendations).

In SP Banking Principles, the approximate split of assessment across these three skill types is expected to be consistent with the IFoA norm of 25% Knowledge, 50% Application and 25% Higher Order skills.

## **Detailed syllabus objectives**

### **1 Overview of banking (12.5%)**

#### **Demonstrate knowledge and understanding of the operations of a banking institution**

- 1.1 Demonstrate understanding of the business model of a banking institution
- 1.2 Demonstrate understanding that actuarial techniques and skills can be applied in banking
- 1.3 Demonstrate understanding of the role that banks play in the economy
- 1.4 Demonstrate understanding of the ways in which the performance of banks varies over economic cycles
- 1.5 Describe different types of banks
- 1.6 Describe various activities carried out by banks
- 1.7 Demonstrate understanding and knowledge of a bank's sources of revenue
- 1.8 Demonstrate understanding and knowledge of a bank's cost base
- 1.9 Demonstrate understanding of a bank's financial statements
- 1.10 State and define the main types of capital that a bank may hold
- 1.11 Outline various sources of funds that banks use to fund their operations
- 1.12 State and define types of financial and non-financial risks faced by banks

### **2 Banking regulations (10%)**

#### **Demonstrate knowledge and understanding of international banking regulations that affect banks globally and nationally**

- 2.1 Demonstrate understanding of the Basel Accord (1998)
- 2.2 Demonstrate understanding of the Basel II regulations (2006) and their implications for banking operations
- 2.3 Demonstrate understanding of the Basel III regulations (2010) and their implications for banking operations
- 2.4 Demonstrate understanding of the final revisions to the Basel III regulations (effective 1 January 2023) and their implications for banking operations
- 2.5 Demonstrate understanding of how supra-national and national bodies regulate and supervise banks in their jurisdiction
- 2.6 Demonstrate understanding of international accounting standards that affect banks

### **3 Banking risk management (10%)**

#### **Demonstrate knowledge and understanding of the role of risk management in a banking operation**

- 3.1 Discuss the role of high-level risk management in a banking operation
- 3.2 Demonstrate high-level understanding of the main risks in a banking operation
- 3.3 Discuss the impact on banking operations of the aggregation of risk
- 3.4 Explain and discuss the process of controlling risks in a banking operation
- 3.5 Demonstrate how risk modelling may be used in banking risk management
- 3.6 Demonstrate understanding of how risks in a banking operation may be mitigated and/or managed

### **4 Product pricing (12.5%)**

#### **Demonstrate knowledge and understanding of the assessment of product pricing and profitability in a banking operation**

- 4.1 Demonstrate knowledge and understanding of the ways in which banks manage product pricing
- 4.2 Demonstrate knowledge and understanding of the pricing of deposit products offered by banks
- 4.3 Demonstrate knowledge and understanding of the pricing of loan products offered by banks
- 4.4 Demonstrate knowledge and understanding of the use of discounted cashflow models to assess the pricing and profitability of banking products
- 4.5 Show knowledge and understanding of factors that influence the pricing of investment banking products
- 4.6 Demonstrate knowledge and understanding of managing overall profitability

### **5 Credit risk measurement (12.5%)**

#### **Demonstrate knowledge and understanding of credit risk measurement in a banking operation**

- 5.1 Describe and explain the credit risk measurement process for banking book exposures, including:
  - Qualitative factors: retail and non-retail exposure
  - Quantitative factors: internal and external ratings
  - Credit risk parameters
  - Default events and measures (retail and non-retail)
  - Product credit risk measurement
  - Credit risk terminology
  - Prudential standards: parameters and models
  - Expected credit losses under IFRS 9
  - Model development

- 5.2 Describe and explain various approaches to measuring credit risk
- 5.3 Describe and explain trading book credit exposures

## **6 Market and interest rate risk measurement (12.5%)**

### **Demonstrate knowledge and understanding of the measurement of interest rate risk and market risk in a banking operation**

- 6.1 Describe and discuss the measurement and management of interest rate risk in a banking operation
- 6.2 Describe sources of interest rate risk in the banking book of a banking operation
- 6.3 Demonstrate knowledge and understanding of interest received and paid by a banking operation
- 6.4 Demonstrate understanding of the measurement of interest rate risk in the banking book of a banking operation
- 6.5 Describe and discuss the measurement and management of market risk in a banking operation
- 6.6 Demonstrate understanding of the measurement of market risk in the trading book of a banking operation
- 6.7 Demonstrate understanding of measures used to address the limitations of Value-at-Risk methodologies
- 6.8 Describe the hedging and proprietary trading activities of a banking operation
- 6.9 Demonstrate knowledge and understanding of the potential impact of market risk in the pension fund of a banking operation

## **7 Operational risk measurement (10%)**

### **Demonstrate knowledge and understanding of operational risk measurement in a banking operation**

- 7.1 Demonstrate understanding of operational risk loss event types in banking, including conduct risk
- 7.2 Demonstrate understanding of measuring operational risk loss experience in a banking operation
- 7.3 Demonstrate understanding of the measurement of operational risk in a banking operation
- 7.4 Demonstrate understanding of the Basel III standardised approach for measuring operational risk in a banking operation (which will replace current approaches from 1 January 2023)
- 7.5 Demonstrate knowledge of how a bank complies with anti-money laundering (AML) regulations and of regulations around sanctions and politically exposed persons

## **8 Capital measurement (10%)**

### **Demonstrate knowledge and understanding of bank capital and its measurement**

- 8.1 Demonstrate knowledge and understanding of why a banking operation needs to hold capital
- 8.2 Demonstrate knowledge and understanding of the various amounts of capital that banks must hold
- 8.3 Discuss key considerations as to how much capital a banking operation should hold

## **9 Liquidity measurement (10%)**

### **Demonstrate knowledge and understanding of bank liquidity and its measurement**

- 9.1 Outline and describe key elements of liquidity risk and liquidity risk measurement
- 9.2 Describe the process of modelling cash inflows and outflows in liquidity risk management
- 9.3 Discuss ascertaining behavioural tenor
- 9.4 Discuss Basel III liquidity risk metrics