



Institute
and Faculty
of Actuaries

Fellowship Qualification

Investment and Finance (SP5) Specialist Principles

Syllabus for the 2024 Examinations

April 2023

Investment and Finance (SP5)

Syllabus for the 2024 Examinations

This syllabus includes information to support the study of this subject. It will guide you through what you need to learn, application of learning as well as the skills that you need to develop. Information regarding the assessment of this subject is also included.

This syllabus includes:

- Aim of the subject
- How this subject links across the Qualifications
- Subject topics and topic weightings
- Subject objectives
- Assessment information

Aim

Understand and apply the key principles of evaluating investments, including the appropriate selection and effective risk management of a portfolio of investments that meet the needs of a particular investor.

Links across the qualification

Associateship Qualification

Investment and Finance Specialist Principles (SP5) draws from a number of subjects in the Associate Qualification to provide key underpinning knowledge and skills, forming the foundation for SP5.

These subjects cover many of the technical concepts of asset or liability valuation, the nature of liabilities for different types of institutions and the basics of how economies work:

- Business Finance (CB1)
- Business Economics (CB2)
- Economic Modelling (CM2)
- Actuarial Practice (CP1)

SP5 develops those concepts with a specific focus on investment management and investment products aimed at meeting the needs various types of investors.

Fellowship Qualification

Investment and Finance Principles (SP5), Investment and Derivatives Principles (SP6) and Investment and Finance Advanced (SA7) are considered a trio of subjects for the actuarial work specific to Investment and Finance. Concepts introduced in SP5 are developed in Investment and Finance Specialist Advanced (SA7) via more complex 'real world' problems. SP6 focusses in detail on the technical aspects of derivatives and their use.

Topics and Topic Weightings

1. The economic, regulatory and legislative framework for investment management [10%]
2. Specialist investment products [15%]
3. Valuing investments [10%]
4. Monitoring and managing investment risks [10%]
5. Investor characteristics, including behavioural finance and taxation [10%]
6. Appropriate investment strategies [15%]
7. Portfolio management and risk control [15%]
8. Analysing portfolio performance [15%]

Objectives

1 The economic, regulatory and legislative framework for investment management [10%]

Explore the environment in which investment management takes place, including various global financial markets, different macroeconomic, regulatory, legislative and taxation environments and what influences these markets.

1.1 Understand the influences on commercial and economic environment

- Central banks.
- Main investor classes.
- Government policy.

1.2 Understand the legislative and regulatory framework for investment management and the securities industry and its impact on:

- Corporate governance
- Role of the listings authority
- Environmental, social and governance factors
- Ethical issues
- Competition and fair trading controls
- Monopolies regulators
- Investment restrictions in investment agreements
- Provision of financial services
- Institutional investment practices
- Development of international accounting standards

2 Specialist investment products [15%]

Explore a range of investment products or asset classes, their characteristics and suitability for a given investor.

2.1 Understand the characteristics of the following specialist financial instruments:

- Financial instruments available for short-term lending and borrowing
- Corporate debt and credit derivatives
- Swaps and swaptions
- Private debt
- Asset-backed securities, securitisation
- Venture capital
- Hedge funds

- Currency
- Infrastructure
- Commodities
- Insurance-linked securities
- Structured products
- New ways of investing in old asset classes

2.2 Understand the main types and features of derivative contracts and their uses

- How they are traded
- Their payoffs
- How they can be used by an investment manager

3 Valuing investments [10%]

How to value various types of investments across various situations using different methods.

3.1 Understand and apply the key principles of fundamental analysis of equities and bonds

- Factors affecting equity prices
- Credit analysis of bonds
- Role of credit rating agencies

3.2 Determine the value of individual investments in different situations, including:

- Fixed income analytics and valuation (including interest rate swaps and futures)
- Arbitrage pricing and the concept of hedging
- Empirical characteristics of asset prices
- Fixed income option pricing
- Evaluating a securitisation
- Evaluating a credit derivative

4 Monitoring and managing investment risks [10%]

Methods to monitor and manage the various risks that arise in investment products, including ways to control exposure to risk and the use of mean-variance portfolio theory.

4.1 Understand methods by which an institution can monitor and control its exposure to risks, including:

- Asset/liability mismatching risk
- Market risk
- Credit risk (including counterparty risk)
- Operational risk
- Liquidity risk
- Relative performance risk
- Sustainability risk

4.2 Apply principles of mean-variance portfolio theory to investment scenarios with particular reference to

- Opportunity set
- Efficient frontier
- Indifference curves
- The optimum portfolio

5 Investor characteristics, including behavioural finance and taxation [10%]

Explore the various types of investor, what their objectives and motivation might be including the influence of behavioural finance and taxation on their motivations.

- 5.1 Understand the key findings of behavioural finance and how these might apply to different types of investor
- 5.2 Identify the main steps involved in financial planning
- 5.3 Understand the typical ways in which investment returns are taxed and the effect of the taxation basis on investor behaviour

6 Appropriate investment strategies [15%]

Use of relevant actuarial techniques to determine an investment strategy that could be appropriate for a particular type of investor, taking into account their objectives and constraints.

- 6.1 Propose how actuarial techniques may be used to develop an appropriate investment strategy, including:
 - Asset pricing models
 - Asset/liability modelling
 - Liability hedging
 - Dynamic liability benchmarks

7 Portfolio management and risk control [15%]

Explore different styles of portfolio management, their objectives and how they could be applied to solve investor requirements.

- 7.1 Understand the principal portfolio management techniques
 - Active management 'styles' (value, growth, momentum, rotational)
 - Equity portfolio management techniques
 - Bond portfolio management techniques
- 7.2 Understand how, why and when an institutional investor may make use of:
 - Financial futures and options, including over-the-counter contracts
 - Interest rate and currency and inflation swaps
 - Forward foreign exchange contracts for currency hedging
- 7.3 Understand the use of multifactor models in practical investment management and risk control
- 7.4 Understand why making significant changes to the investment allocation of a substantial portfolio could be problematic
- 7.5 Understand transition management and related asset allocation techniques (including overlay strategies) to realign portfolios
- 7.6 Understand the roles and responsibilities of the custodian
- 7.7 Assess portfolio construction considering value at risk, tracking error and risk budgets
- 7.8 Understand measurement, comparison and attribution of risk

8 Analysing portfolio performance [15%]

Understand and apply relevant techniques to calculate portfolio performance and compare the results to various benchmarks.

- 8.1 Analyse Investment performance and understand the limitations of measurement techniques including:
 - Portfolio risk and return analysis

- Equity price
- Net present value
- Net asset value
- Return on capital

8.2 Understand the construction and use of investment indices

8.2.1 Main indices in the international stock markets

8.2.2 Problems in constructing indices of unlisted or illiquid assets

8.2.3 Uses of investment indices

8.3 Understand investment portfolio performance and the limitations of performance measurement

8.3.1 Performance of an investment portfolio relative to:

- A published market index
- A benchmark portfolio
- Other portfolios, such as a peer group

8.3.2 The contribution of sector selection and individual stock selection.

8.3.3 Risk-adjusted performance measures

Assessment

The assessment of this subject will consist of one examination.

Candidates can expect to answer a number of questions of varying marks, using Microsoft Word to construct and type their answers. The duration of this examination is three hours and twenty minutes and is timed and online. This time includes reading time.

Candidates will be expected to be able to apply knowledge and skills from across the syllabus topics to scenarios and questions proposed by the examiners and produce coherent solutions and actions, including:

- Analysis of complex problems in terms of actuarial, economic and financial factors to a level where appropriate analytical techniques may be used.
- Assess the implications and relevance of such factors, integrating the results into a coherent whole.
- Evaluate the results critically in a wider context, drawing appropriate conclusions.
- Propose solutions and actions, or a range of possible solutions and actions, based on this evaluation.

Topic weighting

The topic weighting percentage noted alongside the topics is indicative of the volume of content of a topic within the subject and therefore broadly aligned to the volume of marks allocated to this topic in the examination. For example if a topic is 20% of the subject then you can expect that approximately 20% of the total marks available in the examination paper will be available on that topic.

Candidates for assessment should ensure that they are well prepared across the entire syllabus and have an understanding of the principal terms used in general investment and finance. The examination can be composed of questions drawing from any part of the syllabus within any examination sitting and using any command verb. This includes knowledge, techniques, principles, theories, and concepts as specified. Candidates should not rely on past papers alone and should ensure they have covered the entire syllabus as part of their learning and development of this subject. A list of command verbs used in the examinations is included on the IFoA website.

In each examination, candidates will be expected to demonstrate, through their answers, that they have knowledge of, can apply and use higher order skills in this subject:

- Knowledge will be demonstrated through answering questions that assess your understanding of that knowledge as well as through questions that ask you to apply relevant knowledge to scenarios.
- Application will be demonstrated through answering questions which assess that you can identify and apply relevant concepts and skills to solve problems (both numerical and non-numerical).
- Higher order skills will be demonstrated through questions that will assess that you can use relevant knowledge, concepts and skills to solve problems, draw appropriate conclusions, and make meaningful and appropriate comments on those conclusions.

As a guide, in the examination of this subject, you can expect that approximately 10% of the total number of marks for this examination be allocated to the demonstration of knowledge, 60% to application and 30% to higher order.

Qualifications Handbook, Examinations Handbook and Assessment Regulations

Please ensure you read and have understood the Examinations Handbook and Assessment Regulations ahead of your exam as well as the Qualifications Handbook. These are all available on the IFoA website.

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