SYLLABUS

Portfolio Management

This paper is concerned with the theory and practice of investment management and covers investment objectives for various classes of portfolio; portfolio theories and investment strategy; portfolio construction and the monitoring of investment performance.

Candidates are expected to be familiar with the fundamental characteristics of all the main types of investment employed in portfolio management but will not be asked questions on investment analysis and valuation methods for individual securities. These topics have already been covered in the Securities and Investment paper. A familiarity with, and an understanding of, the international dimension as it applies to portfolio management will be required.

The paper will be a three hour paper and will be divided into three parts:

SECTION A: (30% of marks)
A number of compulsory short answer questions covering the entire syllabus

SECTION B: (40% of marks) - Exercise in Portfolio Management
A compulsory question composed of a number of parts testing candidates' understanding of the theoretical and practical aspects of portfolio management in respect of a sample portfolio with defined objectives

SECTION C: (30% of marks)
Four essay questions of which candidates will be expected to answer two

A. PORTFOLIO MANAGEMENT OBJECTIVES

Setting investment objectives for a portfolio

a) The major investors. Objectives of UK pension funds, charitable funds, life assurance and composite insurance funds, investment and unit trusts, private clients. Candidates will be expected to have an appreciation of the objectives of the major types of overseas funds managed in London

Sharpe, Alexander & Bailey, Ch. 22, 24
Rutterford, Ch. 12, 13
Frost & Hager, Ch. 6
Blake, Ch. 14, pp 312-318
Solnik, Ch. 17

b) Matching investment assets with portfolio liabilities

- the role of the actuary or other investment advisor relative to the role of investment manager
- Fundamental suitability of assets in terms of matching liabilities

Sharpe, Alexander & Bailey, Ch. 24
Rutterford, Ch. 12, 13
Frost & Hager, Ch. 6

Constraints on investment strategy

legal constraints
fiscal constraints
tax status of investors
importance of tax characteristics of investments

- Trustee Investment Act
- Trust Law relating to Pension Funds and Charities
- Department of Trade rules for unit trusts and insurance companies
- Employee Retirement Income Security Act in the US and similar acts in other markets

Other constraints:
- Yield requirements
- Asset/geographical/industrial sector exclusions
- Constraints on size of holdings/size of company
- Risk

Time horizons
- short term and long term liabilities
- portfolio liquidity requirements
- marketability of investments

Sharpe, Alexander & Bailey, Ch. 22
Rutterford, Ch. 12, 13
Frost & Hager, Ch. 6

B. THEORIES OF PORTFOLIO MANAGEMENT

Risk:

- the balancing of risk with reward; setting risk objectives
- methods of analysing portfolio risk
- currency risk
- individual securities: specific and market risk

Sharpe, Alexander & Bailey, Ch. 7, 8
Frost & Hager, Ch. 6
Elton & Gruber, Ch. 4, 5, 7, 12
Blake, Ch. 14
Solnik, Ch. 4

The Efficient Market Hypothesis

a) Forms of the efficient market hypothesis

Rutterford, Ch. 10
Elton & Gruber, Ch. 17
Blake, Ch. 11

b) Evidence
- UK
- US

The Investment Analyst No. 48, Sept 77
The UK Stock Market and the efficient market model, Henfrey, Albrecht & Richards
Rutterford, Ch. 10
Elton & Gruber, Ch. 17

Portfolio Theory and the Capital Asset Pricing Model

a) Portfolio Theory b) CAPM c) Distinction between the CAPM and portfolio analysis d) Implications for the management of different portfolios	*Elton & Gruber, Ch. 4, 5, 13* *Sharpe, Alexander & Bailey, Ch. 7, 8, 10* *Blake, Ch. 13, pp 273-305* *Rutterford, Ch. 8, 9*

The Arbitrage Pricing Model

Elton & Gruber, Ch. 16
Sharpe, Alexander & Bailey, Ch. 11, 12
Blake, Ch. 13, pp 306-308
Solnik, Ch. 7, pp 226-240

C. PORTFOLIO MANAGEMENT PRACTICE

The concept of constructing an optimal portfolio - the efficient frontier a) the risk/return trade-off b) choosing between passive and active management strategies	*Elton & Gruber, Ch. 4, 5* *Sharpe, Alexander & Bailey, Ch. 7, 8, 24* *Blake, Ch. 14, pp 318-318* *Solnik, Ch. 17*

Passive management strategies

a) immunized portfolios: methods of immunizing bond portfolios; single and multiple liabilities; convexity; immunisation risk b) index funds: choosing the best method of indexation, problems relating to the compilation and maintenance of index funds c) accessing overseas investment markets through passive strategies	*Frost & Hager, Ch. 6.2-6.4* *Elton & Gruber, Ch. 21, pp 543-548* *Sharpe, Alexander & Bailey, Ch. 16, pp 468-479* *Blake, Ch. 14, pp 320-325* *Solnik, Ch. 10, pp 351-353*

d) cash matching

Active management strategies

Elton & Gruber, Ch. 21, p 543 plus Appendices B&C

a) searching for market inefficiency; strategies for adding value over index performance b) combining a core fund with satellite active management portfolios; speciality management	*Sharpe, Alexander & Bailey, Ch. 16, pp 479-485* *Blake, Ch. 14, pp 338-339* *Solnik, Ch. 10, pp 353-356*

c) the use of stock index futures and options; options on futures; currency hedging for overseas portfolios — *Sharpe, Alexander & Bailey, Ch. 20, pp 704-708*
Chicago Mercantile Exchange (S & P 500 Futures)
Elton & Gruber, Ch. 23
Blake, Ch. 8
Solnik, Ch. 14

d) bond switches — *Sharpe, Alexander & Bailey, Ch. 16, pp 482-485*
Blake, Ch. 14, pp 332-338

Asset allocation

This section considers asset allocation in an international context and across different types of asset — *Sharpe, Alexander & Bailey, Ch. 26, pp 965-980, Ch. 16, pp 486-487*
Blake, Ch. 14, pp 325-331
Solnik, Ch. 4

a) portfolio diversification — *LIFFE publications and Stock Index Options & Futures*
Elton & Gruber, Ch. 12
Solnik, Ch. 4

b) methods of evaluating and comparing investment markets; eg. multi-scenario projections, risk premiums, the reverse yield gap — *Solnik, Ch. 7, 10*

c) portfolio insurance - hedging portfolios with capital protection strategies — *Sharpe, Alexander & Bailey, Ch. 20, pp 704-708*
Elton & Gruber, Ch. 22, pp 594-597
Blake, Ch. 16, pp 391-395

d) asset allocation in passive portfolios — *Rutterford, Ch. 13*

e) transaction and other cost considerations — *Solnik, Ch. 4, pp 116-120*
Sharpe, Alexander & Bailey, Ch. 24, pp 896-902

D. INVESTMENT PERFORMANCE ASSESSMENT

Form of assessment

a) ascertaining appropriate measures for analysing investment performance; comparisons with investment objectives/peer group/indices — *Elton & Gruber, Ch. 24*
Blake, Ch. 15
Sharpe, Alexander & Bailey, Ch. 25
Solnik, Ch. 16

b) frequency of performance measurement and time horizon over which performance should be judged	*Sharpe, Alexander & Bailey, Ch. 25* *Solnik, Ch. 16*
c) taking account of relevant portfolio characteristics	*Rutterford, Ch. 13* *Solnik, Ch. 16*

Investment performance calculations

a) time-weighted and money-weighted investment returns	*Elton & Gruber, Ch. 24, pp 631-632* *Sharpe, Alexander & Bailey, Ch. 25, pp 917-921*
b) total return and its components	*Frost & Hager, Ch. 6* *Elton & Gruber, Ch. 24, pp 645-658* *Solnik, Ch. 16, pp 552-560*
c) contribution to performance from (i) market selection, (ii) stock selection and (iii) currency	*Elton & Gruber, Ch. 22, pp 661-671* *Sharpe, Alexander & Bailey, Ch. 25, pp 938-943* *Solnik, Ch. 17, pp 552-558*
d) risk adjusted performance	*Elton & Gruber, Ch. 24* *Sharpe, Alexander & Bailey, Ch. 25, pp 923-938*

Readings

J. Rutterford, Introduction to Stock Exchange Investment, 2nd Edition, Macmillan Press, 1993
D. Blake, Financial Market Analysis, McGraw Hill, 1990
W. Sharpe, G. Alexander and J. Bailey, Investments, Fifth Edition, Prentice Hall, 1995
A. J. Frost & D. P Hager, A General Introduction to Institutional Investment, Heinemann, 1986
E. Elton & M. Gruber, Modern Portfolio Theory and Investment Analysts, John Wiley, Fifth Edition, 1995
Professional Investor, IIMR
B. Solnik, International Investments, Addison Wesley, Third Edition, 1996