

# AF4

## Advanced Diploma in Financial Planning

### Unit AF4 – Investment planning

October 2013 examination

#### SPECIAL NOTICES

All questions in this paper are based on English law and practice applicable in the tax year 2013/2014, unless stated otherwise in the question, and should be answered accordingly.

It should be assumed that all individuals are domiciled and resident in the UK unless otherwise stated.

#### Instructions

- Three hours are allowed for this paper.
- **Do not begin writing until the invigilator instructs you to.**
- **Read the instructions on page 3 carefully before answering any questions.**
- Provide the information requested on the answer book and form B.
- You are allowed to write on the inside pages of this question paper, but you must **NOT** write your name, candidate number, PIN or any other identification anywhere on this question paper.
- The answer book and this question paper must **both be handed in personally by you** to the invigilator before you leave the examination room. **Failure to comply with this regulation will result in your paper not being marked and you may be prevented from entering this examination in the future.**



# Unit AF4 – Investment planning

## Instructions to candidates

### Read the instructions below before answering any questions

**Three hours** are allowed for this paper which carries a total of 160 marks as follows:

- Section A: 80 marks
  - Section B: 80 marks
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- You are advised to spend approximately 90 minutes on Section A and 90 minutes on Section B.
  - You are strongly advised to attempt **all** questions to gain maximum possible marks. The number of marks allocated to each question part is given next to the question and you should spend your time in accordance with that allocation.
  - Read carefully all questions and information provided before starting to answer. Your answer will be marked strictly in accordance with the question set.
  - You may find it helpful in some places to make rough notes in the answer booklet. If you do this, you should cross through these notes before you hand in the booklet.
  - It is important to show all steps in a calculation, even if you have used a calculator.
  - If you bring a calculator into the examination room, it must be a silent, battery or solar-powered, non-programmable calculator. The use of electronic equipment capable of being programmed to hold alphabetic or numerical data and/or formulae is prohibited. You may use a financial or scientific calculator, provided it meets these requirements.
  - Tax tables are provided at the back of this question paper.
  - Answer each question on a new page and leave six lines blank after each question part.

**Subject to providing sufficient detail you are advised to be as brief and concise as possible, using note format and short sentences on separate lines wherever possible.**

## SECTION A

This question is compulsory and carries 80 marks

## Question 1

David Graham, recently retired, is a basic-rate taxpayer. He has cash savings with Ambrosian, a UK Building Society. He needs investment income to supplement his pension and is unhappy with elements of economic policy, in particular low interest rates. He realises that yields from UK cash deposits are so low that he must look elsewhere for the extra income he requires. Historically the majority of his assets have been held in cash as he has been concerned about the risk to which he may be exposed by investing in equity markets.

David spends part of the year in Uruguay and is considering investing in a Uruguayan peso one-year fixed rate account offered by Banco Anacondo. Ambrosian Building Society also has a fixed-rate account over the same term (Table 1).

Despite holding most of his assets in cash savings, he does make the occasional investment into individual shares. He has noticed that the values of some of his shares have fluctuated widely. He has drawn your attention to two of these shares, Brilliant Lighting plc and Asialink plc (Table 2).

He is considering selling some of his shares and using the proceeds towards purchasing either an Investment Trust or Unit Trust. He has picked out two possibilities, Old Century Income Investment Trust, and Saturn Income Unit Trust.

Table 1

Account	Amount Invested (£)	Account Type	Interest Rate per annum %	Predicted Inflation Rate per annum %	Gross Maturity (£)
Ambrosian	250,000	1 year fixed	-	2	253,750
Banco Anacondo	250,000	1 year fixed	7	4	-

Table 2

Share	Value October 2010 (£)	Value October 2013 (£)	Current Share price (pence)	Earnings per share 2011/12 (pence)	Earnings per share 2012/13 (pence)	Dividend per share 2012/13 (pence)	Gearing
Brilliant Lighting plc	15,000	46,000	75	12	14	3	0
Asialink plc	15,000	23,000	220	14	12	6	15%

**Questions**

To gain maximum marks for calculations you **must** show **all** your workings and express your answers to **two** decimal places.

- (a) Identify **six** reasons why the Government and Bank of England might wish to keep interest rates low. (6)
- (b) State and explain briefly **four** risk factors that David should consider before depositing cash savings outside the UK. (8)
- (c) (i) Calculate, **showing all your workings**, the annual interest rate for Ambrosian Building Society. (3)
- (ii) Calculate, **showing all your workings**, the predicted inflation-adjusted maturity value of the Ambrosian Building Society account. (3)
- (iii) Calculate, **showing all your workings**, the predicted inflation-adjusted maturity value for the Banco Anacondo account, and state, purely on the basis of the inflation-adjusted return, which account David should choose. (4)
- (d) (i) Define **unsystematic risk** and give **one** example of what actions David could take to protect himself against this risk with regards to his share portfolio. (3)
- (ii) Define **systematic risk** and give **one** example of what actions David could take to protect himself against this risk with regards to his share portfolio. (3)
- (e) Outline to David why investors sometimes behave irrationally as explained by behavioural finance. (7)
- (f) One of David's shares, Asialink plc, has its manufacturing base in the UK, but earns all its returns in India.
- Explain briefly to David the likely effect on the company and its share price if UK £ sterling weakens against the rupee. (4)

Questions continue over the page

- (g) David has asked you to help him to decide which of his shares in Table 2, to retain.
- (i) Calculate, **showing all your workings**, the 2012/2013 price-earnings ratio for each share. (6)
  - (ii) Calculate, **showing all your workings**, the dividend cover for each share. (6)
  - (iii) On the basis of your answers to (g)(i) and (ii) above and the information given in Table 2, recommend which share he should retain, giving your reasons. (8)
- (h) (i) Outline the criteria which an Investment Trust must satisfy to gain HM Revenue & Customs approval under the Income and Corporation Taxes Act 1988. (7)
- (ii) Explain why approval under the Income and Corporation Taxes Act 1988 is important to Investment Trust managers. (2)
- (i) State **five** benefits and **five** drawbacks of investment trusts for David compared to unit trusts. (10)

**Total marks available for this question: 80**

**Section B questions can be found on pages 8 - 11**

## SECTION B

**Both questions in this section are compulsory  
and carry an overall total of 80 marks**

**Question 2**

Peter has accumulated some capital. He has very recently invested £11,000 through a discount broker in a stocks and shares ISA, where the underlying fund is the Growsmore Global Adventurous Unit Trust.

He feels that the balance of the investment amount should be treated more cautiously. A friend has told him about gilts and suggested that he should invest in these, as they are backed by the UK government. Peter has never invested in gilts before; he would like your advice in this area.

Peter is concerned about the recent changes to financial regulation and markets. He has read that the FSA has been abolished and asks you to clarify the new arrangements.

**Questions**

*To gain maximum marks for calculations you **must** show **all** your workings and express your answers to **two** decimal places.*

- (a) Peter is relying on his Growsmore stocks and shares ISA to meet the cost of replacing his car in six years' time, which he estimates will be £18,000.

Calculate, **showing all your workings**, the percentage net annual return that the fund must achieve to meet his objective. **(5)**

- (b) Explain to Peter:

(i) The impact that the duration of a gilt has on its volatility. **(4)**

(ii) How the length of the period to redemption may affect the potential returns. **(3)**

(iii) Why gilts may not necessarily be a low risk investment in an environment of quantitative easing and low interest rates. **(9)**

- (c) Peter has been told that gilt yield curves can be used to indicate future market expectations.

Identify the **three** main yield curves and explain the expected interest and inflation rate changes indicated by these curves. **(9)**

- (d) Identify the **three** new regulatory bodies and explain to Peter their objectives and responsibilities. **(10)**

**Total marks available for this question: 40**



**Question 3 can be found on pages 10 – 11**

**Question 3**

Following losses during the credit crunch of 2007 to 2009, John Smith has reduced his equity holdings and has since taken a more cautious approach to investing. He is now considering increasing his equity exposure and has come to you for advice on restructuring his portfolio (Table 1).

**Table 1**

<b>Asset Class</b>	<b>Value October 2012 (£)</b>	<b>Value October 2013 (£)</b>	<b>Benchmark weight APCIMS Growth %</b>	<b>Index Change Oct 2012 to Oct 2013 %</b>
UK Equities	45,000	50,000	50	12
World Equities	20,000	25,000	30	14
Gilts	67,500	70,000	7.5	3
Cash	72,500	75,000	2.5	0.5
Commercial Property	20,000	20,000	2.5	1
Hedge	0	0	7.5	- 0.5
Total	225,000	240,000	100	

As part of his UK equity holdings, John has 5,000 shares of his employer Locost Insurance (see Table 2), which have underperformed recently and he is thinking of selling them and reinvesting in either an actively managed fund or a FTSE All-Share index tracker fund.

**Table 2**

	<b>Share Price October 2012 (pence)</b>	<b>Share Price October 2013 (pence)</b>	<b>Beta</b>	<b>Expected Return %</b>
Locost Insurance	130	105	0.7	6

**Questions**

To gain maximum marks for calculations you **must** show **all** your workings and express your answers to **two** decimal places.

- (a) (i) Calculate, **showing all your workings**, the percentage return that the UK equity asset class produced within the overall benchmark return since October 2012. (2)
- (ii) Calculate, **showing all your workings**, the percentage return that the UK equity asset class produced in John's portfolio since October 2012. (3)
- (iii) Had John's portfolio achieved the benchmark return on his UK equities, calculate, **showing all your workings**, what his portfolio would be valued at in October 2013 and comment on the impact this would have had on his portfolio. (7)
- (b) Identify to John the **three** stages of top-down portfolio construction. (3)
- (c) Describe briefly **four** main elements of:
- (i) fundamental analysis; (4)
- (ii) technical analysis. (4)
- (d) (i) State **two** advantages of investing in a FTSE All-Share index tracking fund compared to an actively managed fund. (2)
- (ii) Explain briefly why an index tracking fund may not match exactly the index it is tracking. (3)
- (e) Using the theory of the Capital Asset Pricing Model and assuming a risk free rate of 1%, calculate, **showing all your workings**, the expected equity market return for Locost Insurance. (4)
- (f) State **four** assumptions that underlie Modern Portfolio Theory and for each assumption give **one** example of how the events of the credit crunch in 2007 to 2009 exposed the limitations of these assumptions. (8)

**Total marks for this question: 40**

The tax tables can be found on pages 13 – 17

## INCOME TAX

RATES OF TAX	2012/2013	2013/2014
Starting rate for savings*	10%	10%
Basic rate	20%	20%
Higher rate	40%	40%
Additional rate	50%	45%
Starting-rate limit	£2,710*	£2,790*
Threshold of taxable income above which higher rate applies	£34,370	£32,010
Threshold of taxable income above which additional rate applies	£150,000	£150,000
Child benefit charge from 7 January 2013:		
1% of benefit for every £100 of income over	£50,000	£50,000

\*restricted to savings income only and not available if taxable non-savings income exceeds starting rate band.

### MAIN PERSONAL ALLOWANCES AND RELIEFS

Income limit for Personal Allowance §	£100,000	£100,000
Personal Allowance (basic if born after 5 April 1948) §	£8,105	£9,440
Personal Allowance (if born between 6 April 1935 and 5 April 1948) §	£10,500	£10,500
Personal Allowance (if born before 6 April 1938) §	£10,660	£10,660
Married/civil partners (minimum) (if born before 6 April 1935) at 10% †	£2,960	£3,040
Married/civil partners (if born before 6 April 1935) at 10% †	£7,705	£7,915
Income limit for age-related allowances	£25,400	£26,100
Blind Person's Allowance	£2,100	£2,160
Enterprise Investment Scheme relief limit on £1,000,000 max	30%	30%
Seed Enterprise Investment relief limit on £100,000	50%	50%
Venture Capital Trust relief limit on £200,000 max	30%	30%
§ the Personal Allowance reduces by £1 for every £2 of income above the income limit irrespective of age (under the income threshold).		
† where at least one spouse/civil partner was born before 6 April 1935.		
Child Tax Credit (CTC)		
- Child element per child (maximum)	£2,690	£2,720
- family element	£545	£545
Threshold for tapered withdrawal of CTC	£15,860	£15,910

## NATIONAL INSURANCE CONTRIBUTIONS

Class 1 Employee	Weekly	Monthly	Yearly
Lower Earnings Limit (LEL)	£109	£473	£5,668
Primary threshold	£149	£646	£7,755
Upper Accrual Point	£770	£3,337	£40,040
Upper Earnings Limit (UEL)	£797	£3,454	£41,450

Total earnings £ per week	CLASS 1 EMPLOYEE CONTRIBUTIONS	
	Contracted-in rate/contracted-out (money purchase)	Contracted-out rate (final salary)
Up to 149.00*	Nil	Nil
149.01 – 770.00	12%	10.6%
770.01 – 797.00	12%	12%
Above 797.00	2%	2%

\*This is the primary threshold below which no NI contributions are payable. However, the lower earnings limit is £109 per week. This £109 to £149 band is a zero rate band introduced in order to protect lower earners' rights to contributory State benefits e.g. Basic State Pension.

Total earnings £ per week	CLASS 1 EMPLOYER CONTRIBUTIONS		
	Contracted-in rate	Contracted-out rate	
		Final salary	Money purchase
Below 148.00**	Nil	Nil	Nil
148.01 – 770.00	13.8%	10.4%	13.8%
770.01 – 797.00	13.8%	13.8%	13.8%
Excess over 797.00	13.8%	13.8%	13.8%

\*\* Secondary earnings threshold.

<b>Class 2 (self-employed)</b>	Flat rate per week £2.70 where earnings exceed £5,725 per annum.
<b>Class 3 (voluntary)</b>	Flat rate per week £13.55.
<b>Class 4 (self-employed)</b>	9% on profits between £7,755 - £41,450 2% on profits above £41,450.

## PENSIONS

TAX YEAR	LIFETIME ALLOWANCE	ANNUAL ALLOWANCE
2006/2007	£1,500,000	£215,000
2007/2008	£1,600,000	£225,000
2008/2009	£1,650,000	£235,000
2009/2010	£1,750,000	£245,000
2010/2011	£1,800,000	£255,000
2011/2012	£1,800,000	£50,000
2012/2013	£1,500,000	£50,000
2013/2014	£1,500,000	£50,000

### ANNUAL ALLOWANCE CHARGE

20% - 45% member's tax charge on the amount of total pension input in excess of the annual allowance.

### LIFETIME ALLOWANCE CHARGE

55% of excess over lifetime allowance if taken as a lump sum.

25% of excess over lifetime allowance if taken in the form of income, which is subsequently taxed under PAYE.

## INHERITANCE TAX

### RATES OF TAX ON DEATH TRANSFERS

**2012/2013    2013/2014**

Transfers made after 5 April 2013

- Up to £325,000	Nil	Nil
- Excess over £325,000	40%	40%
- Lifetime transfers to and from certain trusts	20%	20%

*\*For deaths after 5 April 2013, a lower rate of 36% applies where at least 10% of deceased's net estate is left to charity.*

### MAIN EXEMPTIONS

Transfers to

- UK-domiciled spouse/civil partner	No limit	No limit
- non-UK-domiciled spouse/civil partner (from UK-domiciled spouse)	£55,000	£325,000
- UK-registered charities	No limit	No limit

Lifetime transfers

- Annual exemption per donor	£3,000	£3,000
- Small gifts exemption	£250	£250

Wedding/civil partnership gifts by

- parent	£5,000	£5,000
- grandparent	£2,500	£2,500
- other person	£1,000	£1,000

100% relief: businesses, unlisted/AIM companies, certain farmland/building

50% relief: certain other business assets

Reduced tax charge on gifts within 7 years of death:

- Years before death	0-3	3-4	4-5	5-6	6-7
- Inheritance Tax payable	100%	80%	60%	40%	20%

## CAR BENEFIT FOR EMPLOYEES

The charge for company car benefits is based on the carbon dioxide (CO<sub>2</sub>) emissions. There is no reduction for high business mileage users.

#### For 2013/2014:

- Cars that cannot emit CO<sub>2</sub> have a 0% charge.
- The percentage charge is 5% of the car's list price for CO<sub>2</sub> emissions of 75g/km or less.
- For cars with CO<sub>2</sub> emissions of 76g/km to 94g/km the percentage is 10%.
- For cars with CO<sub>2</sub> emissions of 95g/km to 99g/km the percentage is 11%.
- Cars with CO<sub>2</sub> emissions of 100g/km have a percentage charge of 12% and thereafter the charge increases by 1% for every complete 5g/km to a maximum of 35% (emissions of 215g/km and above).

There is an additional 3% supplement for diesel cars not meeting Euro IV emission standards. However, the maximum charge remains 35% of the car's list price.

**Car fuel**    The benefit is calculated as the CO<sub>2</sub> emissions % relevant to the car and that % applied to a set figure (£21,100 for 2013/2014) e.g. car emission 100g/km = 12% on car benefit scale. 12% of £21,100 = £2,532.

1. **Accessories** are, in most cases, included in the list price on which the benefit is calculated.
2. **List price** is reduced for capital contributions made by the employee up to £5,000.
3. **Car benefit** is reduced by the amount of employee's contributions towards running costs.
4. **Fuel scale** is reduced only if the employee makes good **all** the fuel used for private journeys.
5. **All car and fuel benefits** are subject to employers National Insurance Contributions (Class 1A) of 13.8%.

## PRIVATE VEHICLES USED FOR WORK

	2012/2013 Rates	2013/2014 Rates
<b>Cars</b>		
On the first 10,000 business miles in tax year	45p per mile	45p per mile
Each business mile above 10,000 business miles	25p per mile	25p per mile
<b>Motor Cycles</b>	24p per mile	24p per mile
<b>Bicycles</b>	20p per mile	20p per mile

## MAIN CAPITAL AND OTHER ALLOWANCES

	2012/2013	2013/2014
Plant & machinery (excluding cars) 100% annual investment allowance (first year)	£25,000	£250,000
Plant & machinery (reducing balance) per annum	18%	18%
Patent rights & know-how (reducing balance) per annum	25%	25%
Certain long-life assets, integral features of buildings (reducing balance) per annum	8%	8%
Energy & water-efficient equipment	100%	100%
Zero emission goods vehicles (new)	100%	100%
Qualifying flat conversions, business premises & renovations	100%	100%
<b>Motor cars:</b> Expenditure on or after 01 April 2013 (Corporation Tax) or 06 April 2013 (Income Tax)		
CO <sub>2</sub> emissions of g/km:	95 or less*	96-130
		131 or more
Capital allowance:	100%	18%
	first year	reducing balance
		reducing balance
*If new		
Research & Development:	Capital expenditure	100%

## MAIN SOCIAL SECURITY BENEFITS

	2012/2013	2013/2014	
	£	£	
Child Benefit	First child	20.30	20.30
	Subsequent children	13.40	13.40
	Guardian's allowance	15.55	15.90
Employment and Support Allowance	Assessment Phase		
	Age 16 – 24	Up to 56.25	Up to 56.80
	Aged 25 or over	Up to 71.00	Up to 71.70
	Main Phase		
	Work Related Activity Group	Up to 99.15	Up to 100.15
	Support Group	Up to 105.05	Up to 106.50
Attendance Allowance	Lower rate	51.85	53.00
	Higher rate	77.45	79.15
Retirement Pension	Single	107.45	110.15
	Married	171.85	176.15
Pension Credit	Single person standard minimum guarantee	142.70	145.40
	Married couple standard minimum guarantee	217.90	222.05
	Maximum savings ignored in calculating income	10,000.00	10,000.00
Bereavement Payment (lump sum)	2,000.00	2,000.00	
Widowed Parent's Allowance	105.95	108.30	
Jobseekers Allowance	Age 16 - 24	56.25	56.80
	Age 25 or over	71.00	71.70
Statutory Maternity, Paternity and Adoption Pay	135.45	136.78	



**CAPITAL GAINS TAX**

<b>EXEMPTIONS</b>	<b>2012/2013</b>	<b>2013/2014</b>
Individuals, estates etc	£10,600	£10,900
Trusts generally	£5,300	£5,450
Chattels proceeds (restricted to five thirds of proceeds exceeding limit)	£6,000	£6,000

**TAX RATES**

Individuals:		
Up to basic rate limit	18%	18%
Above basic rate limit	28%	28%
Trustees and Personal Representatives	28%	28%
Entrepreneurs' Relief* – Gains taxed at:	10%	10%
Lifetime limit	£10,000,000	£10,000,000
*For trading businesses and companies (minimum 5% employee or director shareholding) held for at least one year.		

**CORPORATION TAX**

	<b>2012/2013</b>	<b>2013/2014</b>
Full rate	24%	23%
Small companies rate	20%	20%
Small companies limit	£300,000	£300,000
Effective marginal rate	25%	23.75%
Upper marginal limit	£1,500,000	£1,500,000

**VALUE ADDED TAX**

	<b>2012/2013</b>	<b>2013/2014</b>
Standard rate	20%	20%
Annual registration threshold	£77,000	£79,000
Deregistration threshold	£75,000	£77,000

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