

### UNIVERSITY OF BRADFORD

## PORTFOLIO MANAGEMENT

#### **MAN4264M**

Thursday 16<sup>th</sup> January 2014

16:00 - 17:30 hours

Main

This is a **CLOSED BOOK** examination

Answer any **TWO** questions

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#### Question 1

(a) If you were to design the perfect investment, you would probably want its attributes to include high returns coupled with low risk. The reality, of course, is that this kind of investment is next to impossible to find. Not surprisingly, people spend a lot of time developing methods and strategies that come close to the "perfect investment".

In the above context, discuss critically how portfolio theory will affect the management of your portfolio.

(30 marks)

(b) The returns on shares Daisy and Poppy vary depending on the state of economic growth.

State of economy	Probability of economic state occurring	Return on Daisy if economic state occurs (%)	Return on Poppy if economic state occurs (%)
Boom	0.15	45	18
Growth	0.70	20	17
Recession	0.15	-10	16

### Required

(i) Calculate the expected return and risk of shares Daisy and Poppy. Show your workings.

(10 marks)

(ii) What are the covariance and the correlation coefficient between returns on Daisy and Poppy on Poppy? Show your workings.

(10 marks) (Total 50 marks)

#### Question 2

The 'Beta' of a security is much employed in the fields of both theoretical and applied (empirical) finance.

#### Required

What is the 'Beta' of a security, how is calculated, and what econometric problems are encountered when attempting to estimate it?

(50 marks)

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#### Question 3

"There is little evidence that active fund management can deliver superior investment returns for the consumer" *Office of fair Trading*, 1997.

Discuss the above quotation with respect to the performance of Fund Managers. What evidence exists to support the quotation, and what methods are used to analyse the success, or otherwise, of Fund Managers?

(50 marks)

#### Question 4

JJ owns a chain of shoe shops. The company has been approached by HARTMAN plc, which owns a large chain of fashion boutiques, with a view to a take-over of JJ. HARTMAN is prepared to make an offer in cash or a share-for-share exchange. The most recent accounts of JJ are shown below. JJ's accountant has estimated the future free cash flow( FCF) to be £5 million each year forever (starting from 2013).

Shareholders require a return of 10% after taxes.

JJ has recently had a professional valuer to estimate the current resale value of its assets. The valuer's estimates are:

	£m
Freehold land and premises	20.0
Equipment	0.9
Stock	6.0

The current resale values of the remaining assets are considered to be in line with their book values. A company which is listed on the stock exchange and which is in the same business as JJ has a P:E ratio of 11 times.

Assume a rate of corporate tax of 30%.

- 1). Calculate the value of a share in JJ using the following methods:
  - a) Net Asset Value
  - b) P:E ratio
  - c) Discounted Cash Flow

(30 marks)

2). Discuss the advantages and disadvantages of these three valuation methods.

(20 marks)

(Total 50 marks)

# Profit and Loss Account for the year ended 30 September 2012

Turnover Profit before interest and tax Interest Profit before taxation Corporation tax @30% Net profit after taxation Dividend Retained profit		£m 25.0 7.5 (0.5) 7.0 (2.1) 4.9 (2.0) 2.9	
Balance Sheet as at 30 September 20			•
Fixed assets	£m		£m
Freehold land and premises at cost	12.0		
Less accumulated depreciation	<u>(1.0)</u>		11.0
Equipment at cost	2.0		
Less accumulated depreciation	<u>(0.8)</u>		<u>1.2</u> 12.2
Current assets			12.2
Stock at cost	7.0		
Debtors	1.5		
Bank	1.0		
	8.5		
Creditors due within one year:			
Trade creditors	(4.9)		
Dividends	(2.0)		
Corporation tax	<u>(2.1)</u>		
	(9.0)		
Net current assets			<u>(0.5)</u>
Total assets less Current liabilities			11.7
Creditors due after one year:			()
20% secured loan stock (bonds)			<u>(2.5)</u>
Net Assets			9.2
Share capital and reserves			
Ordinary shares – par value £1			4.0
Reserves			<u>5.2</u>
Shareholders' funds			<u>9.2</u>

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