

Module Details	
Module Title	Derivatives Pricing and Valuation
Module Code	AFE7507-B
Academic Year	2022/3
Credits	20
School	School of Management
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Lectures	11
Online Lecture (Synchronous)	11
Seminars	11
Directed Study	157

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims	
The aims of Derivative Pricing and Valuation are to develop a critical understanding of the fundamental position of derivatives in corporate finance as well as their price and role in risk management. The module considers the nature of fixed-income securities and risky assets in pricing their derivatives and the impact of derivative pricing on company valuation.	

Outline Syllabus	
Fixed Income: Securities and markets, term structure and volatility of interest rates, bond management	
Derivatives: Forwards, futures and swaps, arbitrage pricing, payoff, role in risk management	
Derivatives: options, characteristics, strategies, payoff and profit	
Derivatives: plain vanilla option pricing models, binomial, Black-Scholes, greeks	
Derivatives: Exotic option pricing	
Derivatives: Interest rate and fixed income derivatives, pricing models	
Derivatives: Corporate valuation	

Learning Outcomes

Outcome Number	Description
01	Critically evaluate the pricing method and role of derivatives in corporate finance.
02	Illustrate effectively derivative pricing methods through estimation and computation.
03	Identify and evaluate the factors affecting the pricing of derivatives on fixed-income securities and risky assets, as well as on the underlying instruments themselves.
04	Critically analyse the key characteristics of derivative instruments, the pricing determinants and their role in risk management.
05	Construct effective risk management strategies for moderating the risk associated with price and interest rate uncertainty.
06	Make rational judgments on the use of derivatives in managing exposure and corporate valuation.
07	Manage complex issues systematically, access and analyse data and information, and evaluate its relevance and validity.
08	Work effectively in teams to resolve problems and achieve objectives.

Learning, Teaching and Assessment Strategy

The module uses a mixed approach to support learning and achievement comprising a series of face-to-face and recorded lectures and of face-to-face seminars, delivered every teaching week over the duration of the semester. The lectures, covering 22 hours of taught material, are designed to instill the core learning outcomes and examine the ways theory can explain real-world events and practice. Where possible, live lectures are recorded to be made available on CANVAS to facilitate student asynchronous learning. The lecture material is supplemented by the module study book published on CANVAS, which presents key learning material, the list of readings and alternative learning opportunities. Seminars are designed to engage students on various learning activities and to offer opportunities to achieve a deeper, critical evaluation of the subject. Enrolled students are expected to be well prepared by having engaged with the relevant material and ready to respond to previously set learning activities. More practical skill-based learning is motivated through access to Bloomberg Laboratory and the use of Excel? and R.

The summative assessment is a composite piece of individual course-work, designed to test all the learning outcomes (1-8). Since it draws on the various learning opportunities, it acts as an incentive for students to actively engage with the online learning activities.

Mode of Assessment

Type	Method	Description	Weighting
Summative	Coursework - Written	Individual Coursework	100%

Reading List

To access the reading list for this module, please visit <https://bradford.rl.talis.com/index.html>

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

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