Asset Pricing

Module Code: AFE7017-A
Academic Year: 2018-19
Credit Rating: 10
School: School of Management
Subject Area: Accounting, Finance and Economics
FHEQ Level: FHEQ Level 7 (Masters)

Pre-requisites:
Co-requisites:

Contact Hours

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>12</td>
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<tr>
<td>Tutorials</td>
<td>12</td>
</tr>
<tr>
<td>Directed Study</td>
<td>74.5</td>
</tr>
<tr>
<td>Examinations DO NOT USE</td>
<td>1.5</td>
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</table>

Availability Periods

<table>
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<tr>
<th>Occurrence</th>
<th>Location/Period</th>
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<tbody>
<tr>
<td>BDA</td>
<td>University of Bradford / Full Year (Sept - Aug)</td>
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Module Aims

Asset Pricing provides students with a detailed understanding of the theoretical frameworks that lie behind the main asset pricing models in financial economics. It also critically reviews that empirical evidence that evaluates the ability of these models to reflect real-world financial market prices. Students who complete this module will be able to understand the strengths and limitations of the models that they will use in their future financial careers.

Outline Syllabus
Introduction to Utility Theory; Risk aversion; Mean-Variance Decision Making; The CAPM and Empirical Tests of the CAPM; The Consumption CAPM; Factor models (Fama and French, 1993 and Carhart et al. 1997); Estimation of factor models with the two-step Fama-MacBeth (1973) procedure for identifying risk premia in asset prices; Rolling betas as risk factors; Estimating robust, one way and two-way clustered adjusted standard errors (Petersen, 2009); Market Anomalies; Event Study Methodology; Environmental valuation. Use of Bloomberg for downloading relevant data and STATA/R software to estimate relevant asset pricing models.

Module Learning Outcomes

On successful completion of this module, students will be able to...

1. Critically discuss the relationship between investor preferences, risk aversion and equilibrium models of asset pricing;
   1a. Critically discuss the relationship between investor preferences, risk aversion and equilibrium models of asset pricing;
   1b. Critically discuss relationship between Markowitz portfolio theory and the Capital Asset Pricing Model (CAPM);
   1c. Compare and contrast the fundamental asset pricing models, CAPM, CCAPM, SDF, FF three factor model and also factor models.
   1d. Apply skills developed through the use of STATA/R software for estimation of multiple regressions, panel data regressions and two-step Fama-MacBeth cross-sectional regressions.

2. Undertake empirical tests of the CAPM/SML, critically evaluate your results, and explain the theoretical difficulties that underlie tests of the CAPM/SML framework;
   2a. Undertake empirical tests of the CAPM/SML, critically evaluate your results, and explain the theoretical difficulties that underlie tests of the CAPM/SML framework;
   2b. Undertake Event Studies to assess the existence and statistical significance of market anomalies and critically evaluate your results;
   2c. Explain the Consumption CAPM and the macrofinancial puzzles that arise from this framework;
   2d. Estimation of the asset pricing models with real data and critically analyse the any biases in the estimated models.

3. Work constructively within groups;
   3a. Work constructively within groups;
   3b. Produce accurately written work to a deadline;
   3c. Apply advanced mathematical skills in a financial context; particularly matrix algebra, differentiation and optimisation, and continuous-time mathematical finance;
   3d. Apply advanced spreadsheet/ R techniques in a finance context.

Learning, Teaching and Assessment Strategy

Lectures will be used to present the key theoretical arguments and proofs (1a,1b,1c,2c,2d), to ensure that students understand the main mathematical techniques that are applied in financial theory (3c), and to demonstrate the application of spreadsheet techniques within a financial theory context (2a,2b,3d). Directed Study will be based around weekly question sheets that will be covered in the following week’s tutorials, background reading of both the textbook and relevant academic literature, writing a 3,000 word group assignment, and revision time for a one-hour closed-book examination. The tutorial questions, and their coverage in the tutorials themselves, will provide formative assessment of students understanding of the key theoretical arguments and proofs (a,1b,1c,2c, 2d), their ability to apply mathematical and spreadsheet skills (2a, 2b, 3c, 3d) and their ability to apply their knowledge within a practical setting through discussion (3e). Background
reading will be used to help student understanding in all areas. The group assignment will be used to summatively assess spreadsheet skills in a financial context (2a, 2b, 3d), the ability to apply quantitative results to practice (3e), group-working (3a) and writing-to-deadline skills (3b). The examination will be used primarily to summatively assess students understanding of financial theory (1a, 1b, 1c, 1d, 2c, 2d) and the relevant mathematics (3c).

### Mode of Assessment

<table>
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<tr>
<th>Type</th>
<th>Method</th>
<th>Description</th>
<th>Length</th>
<th>Weighting</th>
<th>Final Assess'</th>
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<tr>
<td>Summative</td>
<td>Examination - closed book</td>
<td>Closed book examination</td>
<td>1.5 hours</td>
<td>50%</td>
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<tr>
<td>Summative</td>
<td>Coursework</td>
<td>Group Coursework (3000 words); Supplementary: Individual coursework (1000 words)</td>
<td>0-3000 words</td>
<td>50%</td>
<td>No</td>
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**Legacy Code (if applicable)**

MAN4260M

**Reading List**

To view Reading List, please go to [rebus:list](#).