



## **Boston University Study Abroad London**

### **European Capital Markets CAS EC 346 (*Elective A*) [Semester Year]**

#### **Instructor Information**

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#### **Course Description**

This course is designed to introduce you to global financial markets with an emphasis on the European dimension. You will learn about various international financial markets such as the foreign exchange market, the Eurocurrency market and Eurobond market. In addition, you will study a range of financial instruments such as bills and bonds, forwards, futures and options. The course will also mention topical issues such as European Monetary Union and International Financial Crisis. A number of specific case studies are included in the course to illustrate how finance operates in the real world.

#### **Hub Learning Outcomes**

##### **Quantitative Reasoning 1 (QR)**

1. Students will demonstrate their understanding of core conceptual and theoretical tools used in quantitative reasoning, such as statistics, computing, and mathematics.
2. Students will interpret quantitative models and understand a variety of methods of communicating them, such as graphs, tables, formulae, and schematics.
3. Students will communicate quantitative information symbolically, visually, numerically, or verbally.
4. Students will recognize and articulate the capacity and limitations of quantitative methods and the risks of using them improperly.

#### **Hub Aligned Objectives**

Understand the functioning and linkages between modern financial markets such as the foreign exchange market, money and capital markets, primary and secondary markets and derivatives markets. **(QR1)**

Apply and understand the concepts of arbitrages, hedging and speculation using both equations and numerical examples in different financial markets. **(QR3)**

Understand, interpret and depict data in both tabular and graphical forms, including correct labelling of axes and scaling of axes on diagrams and clear visual representation and presentation of data in tables. (QR3)

Analyse the different implications of government policy and how it impacts the functioning of markets using examples of foreign exchange intervention, money market operations and quantitative easing. (QR4)

Understand how to apply key formulas to calculate prices of different securities in financial markets using specific examples involving foreign exchange, Treasury bills and bonds and derivative instruments. (QR2)

Understand the importance of the contract specification, margining process and cash settlement in the management of derivative contracts such as futures and options. (QR2 and QR4)

### **Additional Course Specific Objectives**

Understand the linkages between various markets, for example, the link between the primary market and the secondary market and the link between spot prices and futures prices.

Analyse how developments in one market can spread into different markets, for example, how foreign exchange intervention can affect money markets and how changes in monetary policy can affect the capital markets.

### **Reading**

The **main text** to be used on this course is:

**Keith Pilbeam (2018), Finance and Financial Markets (F&FM), Palgrave Macmillan.**

Additional readings and case study material; may be posted on the course webpage:

<http://learn.bu.edu>

### **Course Requirements**

YOU MUST BRING TO EVERY SESSION THE FOLLOWING:

1. A calculator - **NOT on mobile/cell phone!**
2. A copy of that day's Financial Times (supplied by Boston University).

You will also benefit from reading the Economist magazine (weekly).

### **Ways to learn the material and achieving the learning objectives on this course:**

- 1) You are expected to attend all classes, listen to the lecture material, participate in class discussion and do all in-class exercises.
- 2) You are expected to do all the required reading that is assigned from the book plus other case material or articles and links placed on Blackboard, including articles from Bloomberg, Reuters and the Financial Times.
- 3) You are expected to do all of class self-test exercises that are assigned and then check your solutions against those provided.
- 4) You are expected to be able to communicate and interpret data in various formats such as

the use of tables of data and graphs of data, including presenting it in visually interesting fashion.

- 5) For each session of the course we have the Financial Times which has real time data on developments in the Financial Markets that we can look at during the course. It also has commentary and analysis which can be used as a basis for class discussion. Every Monday of the course we also have the benefit of the FTFM Supplement (Financial Times Financial Markets) which helps focus our attention on the real world of finance and also shows how learning in finance is not just achieved in the classroom setting and solely by use of textbook material.
- 6) You must attend the City of London tour culminating in a trip to the Bank of England museum. This will give you a chance to see how the world of finance has changed over a long term horizon.

### **Assessment**

The assessment on this course is made up of three factors (weighting in brackets):

- 1) Quality of Class Participation plus Internet Project report (15%)
- 2) In class test - 1 hour [date] (35%)
- 3) Final exam [date], of 2 hours. The test covers the whole of the course with slightly more emphasis placed on the second part of the course. (50%)

### **Grading**

The following table explains the grading system that is used by most faculty members on Boston University's Study Abroad London Programmes.

<u>Grade</u>	<u>Honour Points</u>	<u>Usual %</u>
A	4.0	93-100
A-	3.7	89-92
B+	3.3	85-88
B	3.0	81-84
B-	2.7	77-80
C+	2.3	73-76
C	2.0	69-72
C-	1.7	65-68
D	1.0	60-64
F	0.0	Unmarked

### **Grading Criteria**

**'Incomplete'** or **I** grades are not permitted because of the obvious difficulty in making up missed work once the student has left the country. All work must be completed on time. We also do not allow **'Audits'** (AU), **'Withdrawals'** (W), or **'Pass/Fail'** (P) grades.

The grades reflect the quality of the work. Lecturers and students should use the following criteria for an understanding of what each grade means.

**A** This exceptional grade is assigned only to work that has persistently outstanding quality in both substance and presentation. The student must demonstrate a sustained capacity for independent thought and extensive study, producing rigorous and convincing analyses in well-ordered prose.

**A-** Awarded to work that is clearly focused and analytical, and based on wide reading. The student

must cover all the principal points of a question and systematically develop a persuasive overall thesis, allowing for one or two venial omissions or inapt expressions.

**B+, B, B-** This range of grades indicates that the student has shown some evidence of original thought and intellectual initiative. The student has cited sources beyond the class materials, and shown a degree of originality in perception and/or approach to the subject. The work will show thoughtful management of material, and a good grasp of the issues. The differences between a B+, a straight B and a B- may reflect poor presentation of the material, or mistakes in punctuation, spelling and grammar.

**C+, C, C-** Work in this grade range is satisfactory, but uninspiring. If the work is simply a recitation of the class materials or discussions, and shows no sign of genuine intellectual engagement with the issues, it cannot deserve a higher grade. Should an essay fail to provide a clear answer to the question as set, or argue a position coherently, the grade will fall within this range.

Quality of presentation can lift such work into the upper levels of this grade range. Work of this quality which is poorly presented, and riddled with errors in grammar, spelling and punctuation, will fall into the lower end of the range. To earn a C grade, the work must demonstrate that the student is familiar with the primary course material, be written well enough to be readily understood, be relevant to the assignment, and, of course, be the student's own work except where properly cited.

**D** A marginal pass can be given where some but not all the elements of the course have been completed satisfactorily.

**F** The failing grade indicates the work is seriously flawed in one or more ways:

- Obvious lack of familiarity with the material
- So poorly written as to defy understanding
- So brief and insubstantial that it fails to properly address the subject
- Material presented is not relevant to the assignment
- Demonstrates evidence of plagiarism (see following section in Academic Conduct Code)

Please refer to the Academic Handbook for further details and for policies on plagiarism:  
<https://www.bu.edu/london/files/2016/09/ACADEMICHANDBOOKAY201617.pdf>

*\* Final Grades are subject to deductions by the Academic Affairs Office due to unauthorised absences.*

## **ATTENDANCE POLICIES**

### *Classes*

All Boston University London Programme students are expected to attend each and every class session, seminar, and field trip in order to fulfil the required course contact hours and receive course credit. Any student that has been absent from two class sessions (whether authorised or unauthorised) will need to meet with the Directors to discuss their continued participation on the programme.

### *Authorised Absence*

Students who expect to be absent from any class should notify a member of Academic Affairs and complete an Authorised Absence Approval Form 10 working days in advance of the class date (except in the case of absence due to illness for more than one day. In this situation you should

submit the Authorised Absence Approval Form with the required doctor's note as soon as possible). The Authorised Absence Approval Request Form is available from:

<https://www.bu.edu/london/report-absence/>

**Please note: Submitting an Authorised Absence Approval Form does not guarantee an authorised absence**

You may apply for an authorised absence only under the following circumstances:

- **Illness (first day of sickness):** If you are too ill to attend class, you must phone the BU London Student Affairs Office (who will in turn contact the lecturer).
- **Illness (multiple days):** If you are missing more than one class day due to illness, you must call into to the BU London Student Affairs Office each day the student is ill. You must also provide the Student Affairs office with a completed Authorised Absence Approval Form and a sick note from a local doctor excusing your absence from class.
- Important placement event that clashes with a class (verified by internship supervisor)
- Special circumstances which have been approved by the Directors (see note below).

**The Directors will only in the most extreme cases allow you to leave the programme early or for a significant break.**

*Unauthorised Absence*

Any student to miss a class due to an unauthorised absence will receive a **4% grade penalty** to their final grade for the course whose class was missed.

This grade penalty will be applied by the Academic Affairs Office to the final grade at the end of the course. As stated above, any student that has missed two classes will need to meet with the Directors to discuss their participation on the programme as excessive absences may result in a 'Fail' in the class and therefore expulsion from the programme.

*Religious Holidays*

Boston University's Office of the University Registrar states:

'The University, in scheduling classes on religious holidays and observances, intends that students observing those traditions be given ample opportunity to make up work. Faculty members who wish to observe religious holidays will arrange for another faculty member to meet their classes or for cancelled classes to be rescheduled.'

*Special Accommodations*

You will need to contact the Office of Disability Services to request accommodations for the semester that you are abroad. You are advised by BU-ODS not to expect the same accommodations as you receive on campus.

BU London can only uphold special accommodations if we have received the appropriate documentation from the BU-ODS. We cannot accept letters from other universities/centres.

All disabilities need to be known to the ODS in Boston if they are to be used as a reason for requiring a change in conditions, i.e. reduced internship hours or special accommodations for the internship schedule.

*Lateness*

Students arriving more than 15 minutes after the posted class start time will be marked as late.

Any student with irregular class attendance (more than two late arrivals to class) will be required to meet with the Associate Director for Academic Affairs and if the lateness continues, may have his/her final grade penalised.

### **Course Timings and Material**

**Contingency Class Date: [date]** You are obligated to keep this date free to attend classes should any class dates need to be rescheduled.

**INTERNET PROJECT - by Session 7** TO THE PROFESSOR, YOU MUST HAND IN YOUR INTERNET PROJECT. I EXPECT YOU TO REVIEW 5 FINANCE SITES ON THE WEB TELLING ME WHAT YOU LIKE ABOUT THE SITES AND DISLIKE ABOUT THEM. APPROXIMATELY 150 WORDS PER SITE. THE SITES MUST BE DIFFERENT TO THOSE ALREADY CITED ON BUSINESSECONOMICS.COM

**Final Exam: [date].** You MUST bring a calculator to the final exam. *Calculators on mobile/cell phones are not permitted!*

Exam times and locations will be posted on the BU London website and in the Student Newsletter two weeks before exam dates.

### **SESSION 1: INTRODUCTION TO THE FOREIGN EXCHANGE MARKET**

- 1.1 Introduction
- 1.2 Exchange rate definitions
- 1.3 Characteristics and participants in the foreign exchange market
- 1.4 The Spot and Forward exchange rates
- 1.5 Hedging in the foreign exchange market
- 1.6 Arbitrage in the foreign exchange market
- 1.7 Speculation in the foreign exchange market
- 1.8 Nominal, real and effective exchange rates
- 1.9 Conclusions
- 1.10 Class discussion of forex issues

### **SESSION 2: FORWARD EXCHANGE RATES AND COVERED INTEREST PARITY**

- 2.1 A simple model of the determination of the spot exchange rate
- 2.2 The difference between sterilized and non sterilized foreign exchange intervention
- 2.3 Covered interest parity (CIP) and the determination of the forward exchange rate
- 2.4 Conclusions
- 2.5 Class discussion of arbitrage issues concerning CIP.

### **Main Reading Sessions 1 and 2:**

Pilbeam (F&FM) chapter 11

### **CASE STUDY 1: Intervention in the foreign exchange market by the Peoples Bank of China**

### **SESSION 3: PURCHASING POWER PARITY AND UNCOVERED INTEREST PARITY**

- 3.1 Introduction
- 3.2 Purchasing Power Parity (PPP) theory and the law of one price
- 3.3 Absolute and relative PPP
- 3.4 Empirical evidence on PPP
- 3.5 Summary of empirical evidence on PPP
- 3.6 Explaining the poor performance of Purchasing Power Parity Theory
- 3.7 Uncovered Interest Parity (UIP)

- 3.8 The economics of the carry trade
- 3.9 Conclusions
- 3.10 Class discussion of differences in clearing between goods and asset markets.

**Main Reading:**

Pilbeam (F&FM) chapter 12 pp.275-291

**CASE STUDY 2: Hedge Funds usage of the Carry Trade**

**SESSION 4: MONEY MARKET OPERATIONS & INTERNATIONAL MONEY MARKET**

- 4.1 Difference between bills and bonds
- 4.2 Expansionary and contractionary open market operations in theory and practice
- 4.3 The term structure of interest rates and the yield curve
- 4.4 Theories of the yield curve
- 4.5 The origins and development of the eurodollar market
- 4.6 The characteristics of the eurodollar market
- 4.7 The creation of eurodollar deposits and Eurodollar loans
- 4.8 The TED spread
- 4.9 Euromarkets and currency and country risks
- 4.10 Euromarkets and Government Regulation and Policy and LIBOR scandal
- 4.11 Conclusions
- 4.12 Class discussion of linkage between domestic and international money markets.

**Main Reading:**

Pilbeam (F&FM) chapter 4 pages 67-75 & 83-87, chapter 5

**CASE STUDY 3: The LIBOR rigging scandal.**

**CASE STUDY 4: The behaviour of the TED spread before, during and after the financial crisis.**

**SESSION 5: THE INTERNATIONAL BOND MARKET**

- 5.1 Domestic bonds, Eurobonds and Foreign bonds
- 5.2 Structure of the market
- 5.3 A Eurobond issue
- 5.4 The role of the Credit Rating Agencies (CRAs)
- 5.5 Features of a typical Eurobond
- 5.6 Regulation and taxation
- 5.7 The role of the lead manager, underwriters and selling group
- 5.8 Conclusions
- 5.9 Class discussion of buyer beware and alternatives to using Credit Rating Agencies such as Credit Default Swap prices.

**Main Reading:**

Pilbeam (F&FM) chapter 6 and chapter 17 pages 391-403

**CASE STUDY 5: The behaviour of Bonds prices in the secondary market using the Financial Times.**

**SESSION 6: FUTURES MARKETS**

- 6.1 Futures contracts the basics
- 6.2 Stock index futures the S&P500 contract
- 6.3 Hedging, speculation and arbitrage

- 6.4 Reversing trades and open interest
- 6.5 Pricing of S&P500 stock index futures
- 6.6 Interest rate futures
- 6.7 Conclusions
- 6.8 Class discussion of uses of futures contracts by companies and the advantages of exchange traded futures contracts in relation to counterparty risk and importance of initial and variation margin.

**Main Reading:**

Pilbeam (F&FM) chapter 13

**CASE STUDY 6: Using stock index futures to protect a pension fund from stock market falls.**

**SESSION 7 OPTIONS: THE BASICS**

- 7.1 Basic terminology
- 7.2 Call and Put option examples
- 7.3 The margining process
- 7.4 European and American Options
- 7.5 Options on individual stocks
- 7.6 The Straddle payoff
- 7.7 Conclusions
- 7.8 Class discussion of contract specification in cases of both futures and options contracts and why it is that option writers are prepared to put up with a very asymmetrical pay-off structure.

**Main Reading:**

Pilbeam (F&FM) chapter 14

**SESSIONS 8 & 9 OPTIONS: MORE ADVANCED ISSUES**

- 8/9.1 The intuition behind option pricing as captured in the Black-Scholes formula.
- 8/9.2 Intrinsic value and time value
- 8/9.3 In the money and out of the money options
- 8/9.4 The behaviour of time value as the share price changes
- 8/9.5 Determinants of call option premium
- 8/9.6 The VIX index.
- 8/9.7 Conclusions
- 8/9.8 Class discussion of tables of data relating to real option premiums and differing types of option strategies employed by traders and their graphical representation.

**Main Reading:**

Pilbeam (F&FM) chapter 15 pages 353-355 and for VIX index pages 364-365

**CASE STUDY 7: How the VIX index can be used as a proxy for financial market uncertainty or as a “fear gauge” and its behaviour during the financial crisis.**

**SESSION 10 Bank of England Trip**

The aim of the walking tour of the City of London and visit to the Bank of England museum is to learn about the history of City of London as a global financial centre and the historical development of its financial institutions. This includes the Lloyds of London insurance market, its stock market and global banking functions as well as trading in derivative instruments. This historical perspective is reinforced by the visit to the Bank of England museum where you can learn about the evolution of money, banking, securities and the role played by the Bank of England in the development of the UK financial system. This includes its role as the operator of monetary policy designed to achieve its inflation target, lender of last resort and its role as regulator of the UK banking system.