## DO NOT REMOVE THE QUESTION PAPER FROM THE EXAMINATION HALL

#### UNIVERSITY OF LONDON

CENTRE FOR FINANCIAL AND MANAGEMENT STUDIES

MSc Examination Postgraduate Diploma Examination Postgraduate Certificate Examination

> 91DFMM442 FMM442

FINANCE FINANCE AND FINANCIAL LAW FINANCIAL MANAGEMENT

#### Finance in the Global Market

## Specimen Examination

This is a specimen examination paper designed to show you the type of examination you will have at the end of the year for **Finance in the Global Market**. The number of questions and the structure of the examination will be the same but the wording and the requirements of each question will be different. Best wishes for success in your final examination.

The examination must be completed in **THREE** hours.

Answer **THREE** questions, at least **ONE question** from **Section A** and at least **ONE question** from **Section B**. The third question may be selected from *either* section.

The examiners give equal weight to each question and you are advised to distribute your time approximately equally between the three questions. The examiners wish to see evidence of your ability to use technical models and of your ability to critically discuss their mechanisms and application.

Candidates may use their own electronic calculators in this examination provided they cannot store text; the make and type of calculator **MUST BE STATED CLEARLY** on the front of the answer book.

#### PLEASE TURN OVER

Answer **THREE** questions, at least **ONE** question from each section, and answer **ALL** parts of multipart questions.

#### **Section A**

*Answer at least ONE question from this section.* 

- 1. Answer *ALL* parts of the questions
  - a) As a market trader you are looking for an arbitrage opportunity. Using the following cross rates given by the banks you are working with, determine whether there is a triangular arbitrage opportunity for the US\$ 1 million that you would like to invest.
    - Sberbank quotes: RUB 64.42 / USD (= 64.42 Russian Ruble per US dollar)
    - Garanti Bank quotes: TRY 4.48 /USD (= 4.48 Turkish Lira per US dollar)
    - Yapi Kredi Bank quotes: RUB 14.39 /TRY (=
       14.39 Russian Ruble per Turkish Lira) (30 marks)
  - b) Choose *three terms* from the list below and explain how they are used in global finance.
    - Direct and indirect quotations
    - Bid and ask quotations
    - A currency swap transaction
    - A currency options
    - High frequency trading (HFT)

(30 marks)

c) Explain why liquidity and the balance between informed and noise traders are two important elements of market microstructure.

(40 marks)

(30 marks)

- **2.** Answer *ALL* parts of the questions
  - a) As a currency trader you have been given the opportunity to borrow to invest five million in US dollars or equivalent to that in British pounds. Use the following exchange rate and interest rate quotes and analyse whether a covered interest arbitrage opportunity exists or not. Show all calculations.
    - One year US dollar interest rate: 2%
    - One year British pound interest rate: 0.5%
    - Spot rate of British pound: USD 1.3058 / GBP (1.3058 US dollars per British pound)
    - One year forward rate of British pound: USD 1.3335/GBP (1.3335 US dollars per British pound)

- b) The Indian rupee (INR) has recently weakened due to rising oil prices. However, with impending trade wars, India's position looks more positive than its export reliant neighbours. Its economy is on a positive track so far and the high interest rates seem to stay in the medium term. As an investor in the EU you would like to benefit from the high interest rate offered by India. Assuming that you can borrow € 1 million (EUR) and you are offered the following quotes, state whether profit can be made by carry trade. If so, explain the steps and calculate the amount of profit you would make.
  - Current Spot exchange rate = INR 80.47 / EUR (80.47 rupee per Euro)
  - One year interest rate in India = 6%
  - One year interest rate in the EU = 1.6%
  - Expected Spot rate in one year = INR 82 / EUR (82 rupee per Euro) (30 marks)
- c) Before the crisis in 2001 the low US dollar interest rates encouraged Turkish home owners to get mortgages denominated in US dollars rather than Turkish lira. As the Turkish lira was pegged to the US dollar it seemed a good strategy to borrow at a lower rate. Critically discuss potential problems with this strategy.

  (40 marks)
- **3.** Answer *ALL* parts of the questions.
  - a) The table below shows retail prices of Apple's smartphone, iPhone X in three countries. Use the cross-rate table and state which country's currency is relatively (i) under-valued, and (ii) over-valued. Be sure to show your workings. (15 marks)

Country	iPhone X: Price in Local Currency
UK	£999.00
Australia	A\$ 1,579.00
Japan	¥112,800

Currencies	GBP £	US \$	AUD \$	JPY ¥
United Kingdom (1GBP£)	N/A	1.3173	1.7828	148.2
United States (1US\$)	0.7591	N/A	1.3528	112.36
Australia (1AUD\$)	0.5609	0.7392	N/A	83.16
Japan (1JPY¥)	0.0067	0.0089	0.0120	N/A

- b) Briefly explain the real exchange rate and its importance in the context of global finance.
- c) Critically assess the validity of the purchasing power parity (PPP) hypothesis/theory. (65 marks)

# **4.** Answer *ALL* parts of the questions

- a) Orion Ltd is a conference organiser in the UK and was recently commissioned to organise a conference in Barcelona in 12 months' time by one of its most prominent customers FNC Pharmaceuticals. The cost of the conference arrangement is €450,000. The contract between the two companies stipulated that €100,000 will be paid up front with remaining amount to be paid after the conference. Orion's credit line is for €360,000 and Orion obtains the following rates:
  - Current spot exchange rate = EUR 1.1324 /GBP (1.1324 Euro per British pound)
  - Expected spot rate in one year = EUR 1.1812 / GBP (1.1812 Euro per British pound)
  - Current one year forward rate = EUR 1.1527 / GBP (1.1527 Euro per British pound)
  - One year British pound deposit rate = 0.50%
  - One year Euro borrowing rate = 2.30%

#### Required

- i) Show how Orion Ltd can use the forward market to hedge the foreign exchange risk. (5 marks)
- ii) Show how Orion Ltd can use the money market to hedge the foreign exchange risk. (15 marks)
- iii) Briefly analyse which hedging technique, (i) or (ii) is preferable for Orion Ltd with regard to this contract. (20 marks)
- b) According to a survey on risk management, about half of the nonfinancial companies listed on U.S. exchanges did not hedge their exposure to foreign exchange rates (source: CFO News Letters, 2013). Critically assess their non-hedging policy.

#### **Section B**

Answer at least **ONE** question from this section

5. Explain why some countries might prefer to adopt one of the two extreme types of exchange rate regime ('hard peg' or a' floating rate') instead of intermediate regimes such as

adjustable pegged rates. Discuss whether such a tendency has been evident. (100 marks)

- **6.** Answer *BOTH* parts of the question.
  - a) Briefly explain the specific role of the following terms in the context of global finance: (i) depository receipts, (ii) Eurobonds and (iii) a special purpose vehicle. (45 marks)
  - b) CNBC (29 January 2018) reported that "sixteen Chinese firms went public, collectively raising \$3.4 billion on U.S. exchanges in 2017". Critically discuss possible motives and challenges for such global initial public offerings. (55 marks)
- 7. Many countries offer tax incentives to multinationals in order to attract foreign direct investment. Such policies allow multinationals to benefit from tax arbitrage. Assume that ZKSY plc is a UK based firm and considers to expand internationally. Acting as a tax consultant, prepare a report advising how ZKSY plc might use various taxation strategies. Your report should include the wider issues that ZKSY plc must consider, in addition to examples from Europe and the US. (100 marks)
- 8. Hawaiian Holdings (HA) and American Airlines Groups (AAL) are air transportation operators and their shares are listed in the Nasdaq Stock Market. HA mainly provides services between Hawaii and the US mainland. AAL is one of the largest airline groups, operating an extensive international and domestic network with 350 destinations in more than 50 countries. The key corporate data for the two firms are as follows:

	НА	AAL	
Annual sales (\$ in billions/the most recent)	2.69	42.79	
Recent Sales Growth Rate %	9.8	5	
P/E (Ratio)	5.39	9.52	
Beta	1.29	1.39	
Market Capitalisation (\$ in billion)	1.87	17.38	
Total Debt to Total Asset (%)	19.26	48.77	
Return on Asset	12.33	3.74	
Return on Equity	44.62	49.74	

(Source: MarketWatch.com)

# Required

Consider the firms' characteristics summarised above and critically assess the following statement; "Multinational Enterprises (MNE's) are at a competitive advantage as typically these have a lower cost of capital than their domestically based counterparts."

(100 marks)

**END OF PAPER**