



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

MAY – JULY 2015 TRIMESTER

FACULTY OF COMMERCE

MBA REGULAR PROGRAMME

CFI 612: INTERNATIONAL FINANCE DERIVATIVE

Date: JULY 2015

Duration: 3 Hours

INSTRUCTIONS: Answer ALL FOUR Questions

- Q1. a) Currency forecasting is of crucial importance to multinational companies. Forward exchange rates allow investors to contract to buy and sell currencies in the future.

Required:

Explain the Intuition Behind Interest Rate Parity. **(10 marks)**

- b) USD forward Rate
On 6 April, the GBP/USD spot rate 1.5070 1.5080
Three months Eurocurrency interest rates for
GBP were $5\frac{15}{16} - 5\frac{13}{16}$
USD were $3\frac{1}{4} - 3\frac{1}{8}$

Using the above information, estimate the quote you would receive for buying and selling USD three months forward. **(15 marks)**

[The Eurocurrency market is in amounts of £1,000,000 each]

Q2. As part of a long term risk assessment exercise, you have obtained the following interest rate and inflation forecasts from your bank.

Inflation data:	2005	2006	2007	2008	2009
Kenya annual inflation	12%	13%	14%	14%	14%
Uganda annual inflation	15%	16%	17%	17%	17%
Interest rate data					
Kenya annual interest rate	15%	16%	17%	17%	17%
Uganda annual interest rate	17%	17%	17%	17%	17%

The spot rate for KES/USH at close of business on 31 December 2004 was 15.

Required:

- a) Calculate the KES/USH spot rates as at 31 December in each of years 2005 to 2009 implied by the forecast data provided on:
- i) Inflation rates **(10 marks)**
 - ii) Interest rate (adjusted for days count convention) **(10 marks)**
- b) What other factors should be considered and how are they taken into account when producing a long term forecast for KES/USH spot rates? **(5 marks)**

Q3. Your company has a £15 million deposit that is due to mature in four months time on 15 December 2011. This amount has been earmarked for investment in new plant for which payment is due in March 2012 your bank has warned you that there is a strong possibility that interest rate may fall before the funds are reinvested in December and you have decided to hedge the reinvestment rate to protect your position.

Market information available today, 15 August 2011.

3 months LIBOR
Today $6\frac{27}{32} - 25\frac{1}{32}$

FRA
4V7 7.05%

LIFFE 3 – month sterling futures	
December	92.95
Unit trading	£500000
Initial margin	£750
Tick size	0.01%

December interest rate options (3 month contract)		
Strike price	Calls % pa	Puts % pa
7.5%	0.41	0.02
7.0%	0.09	0.15
6.5%	0.01	0.47

Required:

- a) Which of the interest rate option contracts quoted above would give the best hedge result if three months LIBOR were to fall to 5.75% by 15 December 2011? **(5 marks)**
 - b) Assuming that on 15 December 2011 the outturn LIBOR rate is 5.75% evaluate the three alternative hedge structures, FRAs, Future and Options and tabulate the resultant (comparable) cash flows. **(12 marks)**
 - c) What other factors would you take into account when drawing up a hedging strategy for your company? **(8 marks)**
- Q4. "The interest rate Swaps emerged in the 1980s and have arguably had a more far reaching and fundamental impact on financial risk management than any other financial innovation".

Two companies are able to borrow at rates as follows:

	Floating	Fixed
Big Ltd	LIBOR + 0.5%	6%
Small Ltd	LIBOR + 1.5%	8%

Required:

- a) Define an interest Rate Swap and discuss how they are utilized to reduce the cost of borrowing. **(5 marks)**
- b) Construct a IRS to show how the above companies could cooperate to their mutual benefit while both are raising external funding. Assume that Big Ltd requires floating rate to finance and Small Ltd

requires fixed rate finance. Illustrate your answer by including a flowchart showing the cash flows involved. **(15 marks)**

- c) What are the pros and cons of arranging a IRS through a bank as intermediary rather than with a counterparty directly. **(5 marks)**

END