



**National University of  
Science and Technology**

Think in Other Terms



**FACULTY OF COMMERCE**  
**DEPARTMENT OF FINANCE**  
**MASTER OF SCIENCE IN FINANCE AND INVESTMENT PART ONE**  
**BULAWAYO AND HARARE COHORTS**  
**FIRST SEMESTER EXAMINATION – NOVEMBER 2015**  
**GLOBAL FINANCIAL MARKETS [CFI 5115]**  
**TIME ALLOWED: THREE HOURS**

**INSTRUCTIONS TO CANDIDATES**

1. Question 1 is compulsory and is worth 40 marks.
2. Answer any 3 more questions (each question is worth 20 marks).
3. Write neatly and legibly.

**INFORMATION FOR CANDIDATES**

1. This paper contains SIX (6) questions.
2. This paper contains FIVE (5) printed pages.
3. Candidates may write on the question paper but shall not write in the answer booklet during reading time.

## QUESTION ONE

- a) Making use of evidence from the recent financial crisis, explain how economies are affected by financial crises? [8 Marks]
- b) How has de-regulation augment the globalization of financial markets? [6 Marks]
- c) Robinson (1952, p. 86) wrote that "where enterprise leads finance follows." Discuss this assertion by tagging the role finance plays in economic growth noting demand following and supply leading perspectives. [10 Marks]
- d) Making reference to any two measures of financial inclusion, explain the chief weaknesses of the same. [8 Marks]
- e) State two reasons why the bond market ill-defined currently in Zimbabwe?[2 Marks]
- f) What are the key difference between equity and debt markets? [6 Marks]

## QUESTION TWO

- a) Technology has greatly changed the way transactions are effected in financial markets. Identify a computer based trading software that is used in executing trade in any well known global financial center and explain:
  - 1) How it operates [2 marks]
  - 2) How trading and settlement is done [3 marks]
  - 3) How volumes and efficiency of trading have improved over time [3 marks]
- b) State three reasons why euro CDs offer a higher yield than Domestic CDs [3 marks]
- c) Explain three key attributes of transaction costs determination. [6 marks]
- d) State three ways used to classify transactions costs? [3 Marks]

## QUESTION THREE

- e) Assume that it is March 1, 2006 and we are holding a \$1,000 face value bond with a 6% YTM and a 7% coupon paid semi-annually. The bond matures December 31, 2010. Coupon payment dates are December 31 and June 30. Calculate the clean & the dirty price of the bond. [3 marks]
- f) Estimate the Current yield of a bond whose par value is \$100 000, 4% coupon paid semi-annually and 6 years remaining to maturity. What is the net yield of this bond assuming a tax rate of 40%? [1;1 marks]
- g) Explain the process of going public for corporates and describe the role of the underwriter and the lead under writer. [3 marks]
- h) Company X has 2 000 000 issued shares while company Y has 6 000 000.

On day 1, the market value per share is \$2 for X and \$3 for Y

On day 2, the management of company Y decide, at a private meeting, to make a cash takeover bid for X at a price of \$3 per share. The takeover will produce operating savings with a present value of \$3.2 million.

On day 4, Company Y publicly announces an unconditional offer to purchase all shares of company X at a price of \$3 per share with settlement on day 15. Details of the large savings are not announced and are not public knowledge.

On day 10 company Y announces the details of the savings that will be derived from the takeover.

**Required:-**

Ignoring taxes and the time value of money between day 1 and 15, and assuming the details given are the only factors having an impact on the share price of X and Y, determine the day 2, day 4 and day 10 share price of X and Y if the market is

- (i) semi- strong form efficient and
- (ii) strong form efficient,

In each of these separate circumstances take the purchase consideration decided upon on day 2 and publicly announced on day 4 as one newly issued share of Y for each share of X [3;3 marks]

i) Briefly explain each of the following terms:

- 1) Alternative trading system (ATS)
- 2) Electronic Crossing network (ECN)
- 3) Dark Pools
- 4) Continuous market
- 5) Order driven market
- 6) Quote driven market

[6 Marks]

**QUESTION FOUR**

- a) Explain the Functional and Structural approach to financial systems. [4 Marks]
- b) You are given the following information.

Initial Endowment	\$1 million
Endowment to be received at the beginning of period 1	\$1 million
Interest rate (borrowing & lending)	15% per period

Answer the following questions taking into account the assumptions used in the text:

- i. What is your maximum immediate consumption opportunity? [1 Mark]
  - ii. What is your maximum consumption opportunity at the beginning of period 1? [1 Mark]
  - iii. How would you invest or borrow to have a consumption level of \$1 500 000.00 in Period 0? What would be your consumption at the beginning of period 1? [1;1 Marks]
  - iv. How would you invest **OR** borrow to have a consumption level of \$ 1 500 000.00 at the beginning of period 1? What could you consume in period 0 in that situation? [1;1 Marks]
  - v. Draw a graph of your maximum consumption opportunities and show your consumption level for both periods if you consume \$1 500 000 in period 0. [3 Marks]
- c) Explain how financial structure relates to:
- i. Financial development [3 Marks]
  - ii. Economic development [4 Marks]

### QUESTION FIVE

- j) If the spot rate is \$0.07 for the Mexican peso and \$0.70 for the Canadian dollar, perform a triangle arbitrage and quantify the benefits thereof if USD 100 is available. [5 Marks]
- k) The spot rate of the New Zealand dollar is \$0.50, the one-year U.S. interest rate is 9 percent, and the one-year New Zealand interest rate is 6 percent. Estimate the forward premium for the New Zealand Dollar in percentage form. Estimate the one year forward rate. [2; 1Marks]
- l) AUK car dealer buys a BMW from a German distributor. What rate does the bank quote the car dealer who needs to purchase Deutschemarks for Sterling given the following information?
 

US\$/DM	1.5695 – 1.5705	
£/US\$	1.8715 – 1.8725	[3 Marks]
- m) The UK dealer needs to buy DM 6.5 million. How many pounds does the firm have to sell to the bank if the Sterling/Deutschemark exchange rate is as in a)? [1 Mark]
- n) What are the theoretical underpinnings of the finance-growth nexus? [8 Marks]

### QUESTION SIX

- a) Define Euroclear, Clearstream and Fungibility [3 Marks]
- b) You expect to receive ZAR1 000 000.00 in 3 months time but you are worried about adverse movements (a strengthening \$) in exchange rates and want to hedge against this.

You gather the following information from the money, futures and option foreign exchange markets.

Spot exchange rate \$1.7640 per ZAR

Three month forward rate	\$1.7540 per ZAR
Forecast Spot exchange rate three months from now	\$1.7400 per ZAR
Zimbabwe 3-month borrowing interest rate	8% p.a.
Zimbabwe 3-month deposit interest rate	6% p.a.
South Africa's 3-month borrowing interest rate	10% p.a.
South Africa's 3-month deposit interest rate	8% p.a.

3 months put option in the OTC (i.e. bank) market for ZAR1 000 000.00; Strike price \$1.78 (nearly at the money) has a premium of 1.5%. A 3 months put option in the OTC (i.e. bank) market for ZAR1 000 000.00; Strike price \$1.71 (out of the money) has a premium of 1% whilst the contract size is ZAR 62 500

Quoted spot buying price for October futures	\$1.7310 per ZAR
Quoted spot selling price for October futures	\$1.7420 per ZAR

Assuming that you can close or cancel a 3 months short position at a price of \$1.6890 per ZAR and a long position at a price of \$1.6600 per ZAR and that the forecast spot rate for October turned out to be the actual spot rate in October, which hedging alternative is the best?

[6 Marks]

Explain 2 channels in which financial development alleviate poverty

[6 Marks]

Detail one measure of financial development and state one weakness of the same.

[4;1 Marks]

**END OF EXAMINATION**