National University of Science and Technology

Think in Other Terms

FACULTY OF COMMERCE
DEPARTMENT OF FINANCE
BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE: PART IV
FINAL EXAMINATION – APRIL 2014
INTERNATIONAL FINANCE II [CFI 4202]
TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1) Answer **ALL** Questions in **SECTION A** and any other **THREE (3)** questions in **SECTION B**.

2) Start the answer to each full question on a fresh page of the answer booklet.

3) All rough work must be crossed out and attached to the end of the answer booklet.

4) Read questions carefully and address all parts of the question.

5) Questions may be written in any order, but must be legibly numbered.

ADDITIONAL INFORMATION FOR CANDIDATES

1) The paper contains SIX (6) questions.

2) Marks for each question are shown in parentheses brackets **( )** and square brackets **[ ]** at the end of each part of the question and full question respectively.

3) Marks in Section A are shown in brackets (Total **40 marks**) and all questions in Section B carry **equal marks** [20 marks].

This paper consists of 7 printed pages

SECTION A (Answer ALL Questions)

1.1 Part of the growth of multinational business over time is due to the realization that specialization by countries can increase production efficiency, making trade essential when a country focuses on the products it produces best. This is an example of which theory of international business? **(2 marks)**

a. product cycle theory
b. competitive advantage theory
c. imperfect markets theory
d. comparative advantage theory
e. none of the above

1.2 Suppose the home tax rate is high for the parent company and the host country taxes imposed on the subsidiary are low. Which of the following statements is true? **(2 marks)**

a. capital budgeting projects would look better from the parent's point of view than the subsidiary's point of view.
b. capital budgeting projects would look worse from the parent's point of view than the subsidiary's point of view.
c. capital budgeting projects would look worse from the subsidiary's point of view than the parent's point of view.
d. both a and c
e. none of the above

1.3 Suppose the parent company obtains excessive remittances on the subsidiary by charging it high administrative fees. Which of the following statements is probably true? **(2 marks)**

a. capital budgeting projects would look better from the parent's point of view than the subsidiary's point of view.
b. capital budgeting projects would look worse from the parent's point of view than the subsidiary's point of view.
c. capital budgeting projects would look worse from the subsidiary's point of view than the parent's point of view.
d. both a and c.
e. none of the above.

1.4 Suppose a parent company projects the euro to appreciate over the life of a capital budgeting project for its European subsidiary. Which of the following statements is probably true? **(2 marks)**

a. capital budgeting projects would look better from the parent's point of view than the subsidiary's point of view.
b. capital budgeting projects would look worse from the parent's point of view than the subsidiary's point of view.
c. capital budgeting projects would look worse from the subsidiary's point of view than the parent's point of view.
d. both a and c.
e. none of the above.

1.5 Which of the following would have a positive effect on the cash flows received by a parent company from a foreign subsidiary? **(2 marks)**
   a. blocked funds
   b. an increase in the relative inflation rate of the host country
   c. host government incentives
   d. both b and c
   e. all of the above

1.6 Which of the following would have a negative effect on the cash flows of a foreign subsidiary? **(2 marks)**
   a. blocked funds
   b. a currency depreciation of the host currency
   c. host government incentives
   d. all of the above
   e. none of the above

1.7 When adjusting project assessment for risk, which of the following is used to generate a probability distribution of net present value (NPV) based on a range of possible values for one or more input variables? **(2 marks)**
   a. risk-adjusted discount rate
   b. sensitivity analysis
   c. simulation
   d. both b and c
   e. none of the above

1.8 One of the arguments for exchange rate risk irrelevance is that if a U.S.-based MNC is well diversified across numerous countries, its value will not be affected by exchange rate movements because of offsetting affects. This identifies which argument? **(2 marks)**
   a. purchasing power parity argument
   b. investor hedge argument
   c. interest rate parity argument
   d. currency diversification argument
   e. none of the above

1.9 The exposure of the MNC's consolidated financial statements to exchange rate fluctuations is what type of exposure? **(2 marks)**
   a. economic
   b. translation
   c. transaction
   d. none of the above
   e. all of the above

1.10 A U.S.-based multinational expects to receive 200,000 Australian dollars (A$) in 90 days. It wants to hedge the position with a money market hedge.

Interest rates for 90 days are 3% in the U.S. and 2% in Australia. How much should the MNC borrow approximately? **(2 marks)**

a. $194,175
b. A$200,000
c. A$194,175
d. A$196,078
e. none of the above

1.11 A withholding tax affects the cash flows of the parent and the subsidiary. **(1 marks)**

a. True
b. False

1.12 The parent's perspective should always be used to decide whether a capital budgeting project should be undertaken. **(1 mark)**

a. True
b. False

1.13 Once the relevant cash flows for a project have been estimated, they should be discounted at the MNC's cost of capital. **(1 marks)**

a. True
b. False

1.14 The net present value (NPV) from the parent's perspective is based on a comparison of the present value of the cash flows received by the parent to the initial outlay by the parent. **(1 mark)**

a. True
b. False

1.15 From the viewpoint of the parent, the joint impact of inflation and exchange rate fluctuations on a subsidiary's net cash flows may produce a partially offsetting effect. **(1 mark)**

a. True
b. False

1.16 Multinational capital budgeting problems should not include debt payments in the measurement of cash flows, because all financing costs are captured by the discount rate. **(1 mark)**

a. True
b. False

1.17 Which of the following is *not* a technique to optimize cash flows? **(2 marks)**

a. accelerating cash inflows
b. maximizing currency conversion costs
c. managing blocked funds

d. managing intersubsidiary cash transfers
e. all of the above are techniques to optimize cash flows

1.18 When deciding how to restructure operations to reduce economic exposure, which of the following questions should an MNC not consider? **(2 marks)**

a. Should the firm attempt to increase or reduce sales in new or existing foreign markets?
b. Should the firm increase or reduce its dependency on foreign suppliers?
c. Should the firm establish or eliminate production facilities in foreign markets?
d. Should the firm increase or reduce its level of debt denominated in foreign currencies?
e. The MNC should consider all of the above questions when deciding how to restructure.

1.19 A parent company wishes to compute the net present value (NPV) of a capital budgeting project for its German subsidiary. The initial investment by the parent is $5,000,000. The project will last three years. Estimated remittances to the parent by the German subsidiary are expected to be €2,000,000, €3,000,000, and €2,000,000, in years 1, 2, and 3, respectively. The current spot rate of the euro is $1.03. Exchange rates for the euro are expected to be $1.05, $1.07, and $1.01 in years 1, 2, and 3, respectively. An appropriate discount rate for this project is 12%. What is the NPV of this project? Should the project be undertaken? **(5 marks)**

a. NPV = $2,000,000; undertake project
b. NPV = $871,788; undertake project
c. NPV = $721,788; undertake project
d. NPV = $871,788; do not undertake project
e. NPV = $721,788; do not undertake project

1.20 Over the next year, an MNC expects British pound (£) inflows of £10,000, outflows of £15,000, and a British pound exchange rate of $1.50. It expects Swiss franc (Sf) inflows of Sf30,000, outflows of Sf20,000, and a Swiss franc exchange rate of $0.75. The company expects Mexican peso (p) inflows of P1,000,000, outflows of P1,500,000, and a Mexican peso exchange rate of $0.20. What is this MNC's transaction exposure? **(5 marks)**

a. -£5,000, +Sf10,000, -P500,000
b. +£5,000, -Sf10,000, +p500,000
c. -$7,500 on pounds, +$7,500 on francs, +$100,000 on pesos
d. -$7,500 on pounds, +$7,500 on francs, -$100,000 on pesos
e. none of the above

[TOTAL 40 MARKS]

SECTION B (Answer ANY THREE Questions)

QUESTION TWO

IBM purchased computer chips from NEC, a Japanese electronics concern, and was billed ¥250 million payable in three months. Currently, the spot exchange rate is ¥105/$ and the three-month forward rate is ¥100/$. The three-month money market interest rate is 8 percent per annum in the U.S. and 7 percent per annum in Japan. The management of IBM decided to use the money market hedge to deal with this yen account payable.

(a) Explain the process of a money market hedge. **(2 marks)**

(b) Conduct the cash flow analysis of the money market hedge. **(8 marks)**

(c) How can risk sharing be used if the actual three months exchange rate turns out to be ¥99/$ when the firms had agreed on a neutral zone ranging from ¥104 to ¥106, taking the current spot rate as the base rate. **(10 marks)**

[TOTAL 20 MARKS]

QUESTION THREE

a) As part of its international short-term treasury management strategy, how can a centralized cash management system be beneficial to an MNC? **(3 marks)**

b) Silva Limited Company based in Zimbabwe is considering placing 40% of its excess funds in a one-year South African Rand deposits and the remaining 60% of the funds in a one-year Botswana Pula deposits. The one-year South African interest is 15% p.a. and the Botswana one-year interest rate is 13% p.a. The possible percentage changes in two currencies for the next year are forecasted as follows.

Currency	Possible % change in Spot Rate over the investment horizon	Probability of that % change in Spot Rate occurring
Rand	-2%	20%
Rand	1%	60%
Rand	3%	20%
Pula	1%	50%
Pula	4%	40%
Pula	6%	10%

Given the information above:

i. Determine the possible effective yields of each of the currencies if the funds are invested separate markets. **(6 marks)**

ii. Determine the possible effective yield of the portfolio investment and the probability associated with each of the possible portfolio yield. **(9 marks)**

iii. Given the one year Zimbabwean deposit interest rate is 12%, what is the probability that the portfolio's effective rate will be lower than the yield achieved from investing in Zimbabwe? **(2 marks)**

[TOTAL 20 MARKS]

QUESTION FOUR

a) Explain an MNC's strategy of diversifying projects internationally in order to maintain low level of country risk. **(6 marks)**

b) J. Miller Company is planning a project in the United Kingdom. It would lease space in a mall to sell expensive sportswear manufactured in the US. The project will end in three years when all earnings would be remitted to J Miller, with no additional corporate tax incurred beyond those imposed by the British government. The assumed project's required rate of return is 18% and the working capital required in each of the years is \$200,000. The pre-tax earnings are expected to be £300,000 for each of the three years. The British pound is expected to be worth \$1.60 at the end of three years, when the after-tax earnings are to be converted to dollars and remitted to the US. The following forms of country risk must be considered.

- The British economy may weaken (probability=30%), which may cause the expected pre-tax earnings to be £200,000.
- The British corporate tax rate on income earned by US firms may increase from 40% to 50% (probability = 20%).

Given that these two forms of country risk are independent:

i. Calculate the expected value of the project's net present value (NPV) and determine the probability that the project will have a positive NPV. **(12 marks)**

ii. Comment on the salvage value of the firm at the end of three years. **(2 marks)**

[TOTAL 20 MARKS]

QUESTION FIVE

Most multinational companies often use optimal cash flows as a centralized cash management technique to maximize effective usage of funds for and on behalf of all their subsidiaries. Explain how this can be achieved using the following optimal cash flows techniques.

a) accelerated cash inflows **(5 marks)**
b) minimizing currency conversion costs **(5 marks)**
c) managing block funds **(5 marks)**
d) managing inter-subsidiary cash transfers **(5 marks)**

[TOTAL 20 MARKS]

END OF EXAMINATION PAPER