



**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 – 2<sup>ND</sup> SEMESTER FINAL EXAMINATION - MAY 2011  
INTERNATIONAL FINANCE II [CFI 4202]  
TIME ALLOWED: 3 HOURS**

**INSTRUCTIONS**

1. Answer QUESTION ONE and any other three.
2. Start the answer to each full question on a fresh page of the answer sheet.
3. Questions may be written in any order, but must be legibly numbered.
4. Write legibly.

**INFORMATION FOR CANDIDATES**

The businesses in this question paper are intended to be fictitious

The paper contains SIX (6) questions.

All questions carry equal marks [25 marks]

### **Question One (Compulsory)**

Twine SA, a mining company based in Mexico, has contacted Dynatrade Plc, a company in the UK, proposing a four-year joint venture to mine copper using a new technique developed by Dynatrade. Dynatrade would supply machinery at a cost of 800 million pesos, and 10 supervisors at an annual salary of £40 000 each at current rates. In addition, Dynatrade would also pay half of the 1 000 million pesos per year (at current rates) local labour costs and other expenses. Salaries for supervisors and local labour and other expenses will be increased in line with inflation in the UK and Mexico respectively.

Inflation in Mexico is currently 100% per year while that in the UK is 8% per year. The Mexican government has put in place measures that it hopes will reduce inflation each year by 20% of the previous year's inflation rate. The current exchange rate is 140 pesos per pound and future exchange rates may be estimated using the purchasing power parity theory. The terms of the joint venture entitle Dynatrade to a 50% share of Twine's copper production, with current market prices pegged at £1 500 per 1 000kilogram. Twine's production is expected to be 10 million kilograms per year, and copper prices are expected to rise by 10% per year (in pounds) for the foreseeable future. At the end of the four years Dynatrade would be given the choice to pull out of the joint venture or to negotiate another four-year joint venture, on different terms.

Dynatrade's cost of capital for its UK mining operations is 16% per year but it considers a 2% reduction in the cost of capital for this venture to be appropriate due to diversification effects. Corporate tax is 20% per year in Mexico while in the UK it is 35% per year, paid one year in arrears in both cases. A tax treaty exists between the two countries, and all foreign tax paid is allowable against any UK tax liability. A 25% straight line write-down allowance is available on machinery in both countries. Cash flows may be assumed to occur at the end of each year, except for the immediate cost of the machinery. The machinery is expected to have a negligible terminal value at the end of the four years.

### **Required**

- (a) Calculate the project's NPV and decide whether Dynatrade should accept it or not. State all assumptions you make. [16 marks]

(b) State **FOUR** non-financial considerations that should be taken into account when accepting or rejecting the project. [4 marks]

(c) Briefly discuss the effect of high inflation on the joint venture in the event that the Mexican government fails to control inflation. [5 marks]

**Total [25 marks]**

### **Question Two**

(a) Discuss the internationalization process according to the following theories:

(i) Life Cycle Theory [3 marks]

(ii) Incremental Theory [4 marks]

(iii) Transaction Cost Theory [3 marks]

(iv) Market Imperfections Theory [3 marks]

(b) Identify and explain **FOUR** strategies for managing country risk for a Multinational Corporation (MNC).

[12 marks]

**Total [25 marks]**

### **Question Three**

(a) Critically examine the strategic role of the Eurocurrency markets from the perspective of a multinational corporation. [8 marks]

(b) Discuss the circumstances under which the capital expenditure of a foreign subsidiary might have a positive net present value in local currency terms but be unprofitable from the parent firm perspective. [8 marks]

(c) Discuss the concept of real options in international capital budgeting. In your answer, highlight two such real options. [9 marks]

**Total [25 marks]**

### **Question Four**

(a) Discuss the difference between performing the capital budgeting analysis from the parent firm's perspective as opposed to the project perspective. [6 marks]

- (b) Critically examine the role of market segmentation in determining the capital structure of an MNC. [8 marks]
- (c) Explain how an MNC may use its financing decisions to manage the following risks:
- (i) Confiscation risk [4 marks]
  - (ii) Commercial political risk [3 marks]
  - (iii) Currency Inconvertibility risk [4 marks]
- Total [25 marks]**

### Question Five

- (a) Salt Lakes, a US-based MNC, owns Cashel Orchard plantations in Zimbabwe and it is worried that the Zimbabwean government will expropriate its plantations in the next 12 months. The Zimbabwean government has however promised to compensate Salt lakes to the tune of US\$10m in the event of expropriation paid at the end of the year. If expropriation fails to occur within the 12 months, it will not occur in the foreseeable future. At the end of the year, the plantation will be worth US\$30m. Mr.Gambaguru, a Zimbabwean businessman, has offered Salt Lakes \$12,8m for the plantation now.

#### Required

- (i) Using a discount rate of 22%, calculate the probability of expropriation at which Salt Lakes is indifferent between selling now and holding onto its plantation. [6 marks]
  - (ii) Interpret the results in (i) above. [3 marks]
- (b) Consider an MNC in the US that is appraising a project in South Africa. The South African Treasury can borrow USD in the Eurobond market at a sovereign spread of 2%. The US Treasury can borrow at 5% p.a. The credit spread for the MNC is 3%. Assuming that the risk on the South African project is the same as the average investment undertaken by the MNC, calculate the risk-adjusted cost of debt for the South African project. [4 marks]

(c) You are further given that the equity beta of the MNC in (b) above is 0.9, the South Africa-to-US country beta is 0.6, and the equity risk premium required by a US investor on South African investments is 6%.

Calculate:

- (i) The offshore beta for the MNC [3 marks]
- (ii) The adjusted cost of equity for the MNC [5 marks]
- (iii) The adjusted weighted average cost of capital assuming a target debt ratio of 40% and a marginal tax rate of 30%. [4 marks]

**Total [25 marks]**

### Question Six

- (a) Outline the fundamental steps in international cash management. [8 marks]
- (b) Discuss the benefit of the following international working capital management strategies:
  - (i) Cash pooling [3 marks]
  - (ii) Payment netting [3 marks]
- (c) Explain **THREE** potential problems in funds repositioning. [6 marks]
- (d) A US-based MNC is considering whether to borrow USD in the local market or to borrow ZAR in the South African market. The USD borrowing rate is 8% p.a while the ZAR rate is 12% p.a. The South African rand is expected to depreciate by 3.5% against the USD in a year. Recommend the best borrowing option for the MNC. [5 marks]

**Total [25 marks]**