

May/June Examination Period 2023

ECN377 International Financial Strategy

Duration: 2 hours

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Answer ALL questions

You are permitted to bring 20 x A4 pages of notes into your examination (i.e. 10 double-sided pieces of paper). These can be typed or handwritten and can include graphs and images. They can include material from any source.

Your notes must be stapled together and include your student ID number and the module code on the first page. You must submit your notes at the end of the examination with your answer booklet.

Calculators are permitted in this examination. Please state on your answer book the name and type of machine used. Complete all rough workings in the answer book and cross through any work that is not to be assessed.

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Examiner: Manolis Noikokyris

Question 1

- a) Explain the theory of comparative advantage and discuss why this theory might not be realistic today.

[10 marks]

- b) Suppose that at first, no trade takes place between countries X and Y. Consider that both countries produce the same two products, apples, and oranges, and have output per unit of production as depicted in Table 1.

Table 1		
	Country X	Country Y
Output per unit of production (a mix of land, labour, capital, and technology)		
Apples (tons)	5	2
Oranges (tons)	2	4

Now assume that free trade is allowed. What should each country do to gain from trading with the other country according to the theory of comparative advantage? Explain your answer. Round your answer to two decimal points.

[5 marks]

- c) Explain why multinational corporations from emerging markets might have lower systemic risks in comparison to multinational corporations from developed markets.

[5 marks]**Question 2**

- a) An Italian company, which uses the euro currency (EUR), purchased machinery from a U.K. company worth 850,000 British pounds (GBP). The payable is due in 180 days and will be paid in British pounds. Refer to Table 2 to find the currency and market quotes collected by the treasury division of the Italian company. The market rates and the WACC in Table 2 are expressed in yearly rates (per annum). To obtain the 180-day equivalent rates, assume for simplicity that there is no compounding of interest.

Table 2	
Current spot rate (EUR per 1 GBP)	EUR 1.13 / GBP
180-day forward exchange rate quote (EUR per 1 GBP)	EUR 1.18 / GBP
Italian company's WACC (Weighted Average Cost of Capital) per annum	10.00%
180-day euro investment rate per annum	4.00%
180-day euro borrowing rate per annum	6.00%
180-day U.K. investment rate per annum	7.00%
180-day U.K. borrowing rate per annum	8.00%

- i) The Italian company considers dealing with its foreign exchange exposure using either a forward contract or a money market hedge. Briefly explain each hedging strategy and calculate the value of the payables in euros for the Italian company under both hedging techniques. Round your answer to two decimal points.

[6 marks]

- ii) Using the exchange rate and interest rate data in Table 2, what should the Italian company's weighted average cost of capital be so that the forward and the money market hedging techniques would have the same outcome? Round your answer to two decimal points.

[4 marks]

- b) The balance sheet of the German subsidiary of a U.K. company as of March 31st, is given in Table 3.

Table 3	
Balance Sheet European subsidiary (thousands)	
Assets	Statement (in euros-EUR)
Cash	100,000
Accounts receivable	25,000
Inventory	5,000
Net plant & equipment	120,000
Total	EUR 250,000
Liabilities & Net Worth	
Accounts payable	120,000
Bank loans	60,000
Common stock	20,000
Retained earnings	50,000
Total	EUR 250,000

The exchange rate for translating the European subsidiary's balance sheet into pound sterling (GBP) is 1.13 euros (EUR) per 1 GBP on March 31st. Assume that the euro depreciated against the pound between March 31st and April 1st, and on April 1st the exchange rate is EUR 1.18 per 1 GBP. All inventory and plant and equipment were acquired when the exchange rate was EUR 1.08 per 1 GBP. Common stock was also issued when the exchange rate was EUR 1.08 per 1 GBP.

- i) Assuming no change in the balance sheet between these two days (i.e., March 31st and April 1st), and using the current rate method of translation, show the exposed assets and liabilities and calculate the gain or loss from translation. Round your answer to two decimal points.

[7 marks]

- ii) Using the balance sheet hedge, show how this company can minimise translation exposure under the current rate method. Explain your answer.

[3 marks]

Question 3

- a) Explain why the cost of capital for a multinational enterprise might be higher than that of a comparable domestic firm.

[10 marks]

- b) A German manufacturer of electrified vehicles, who uses the euro currency (EUR), borrows 10,000,000 U.S. dollars (USD) from a U.S. bank for one year at 9.20% interest rate. The current spot rate is USD 1.06 per 1 EUR. Calculate the interest rate cost of this debt for the German firm in domestic currency (euro) terms, if the euro appreciates by 5% against the U.S. dollar and if the euro depreciates by 5% against the U.S. dollar. Round your answer to two decimal points.

[10 marks]

- c) Explain the two basic approaches used by nations to structure their tax systems in order to tax the income generated by multinational corporations: the worldwide and the territorial approaches.

[10 marks]

Turn over

Question 4

- a) Discuss whether the foreign subsidiaries of multinational firms should conform to the capital structure norms of the host country or to the norms of the country of the parent company. **[15 marks]**
- b) A company from the United States (U.S.) has two international subsidiaries (one in Country A and one in Country B). The foreign subsidiaries are wholly owned by the U.S. company, and both distribute 70% of their earnings to the U.S. parent company as dividends. The corporate tax rate is 35% in the U.S., 30% in Country A and 28% in Country B. Country A imposes a 10% withholding tax on all dividends distributed to foreign investors. The foreign earnings before taxes from the subsidiary in Country A are 3,000,000 U.S. dollars, and from the subsidiary in Country B they are 2,500,000 U.S. dollars. The U.S. company averages the tax credits and liabilities of the two foreign units. Briefly explain this method of multinational tax management. Calculate the excess foreign tax credits and/or deficits from each subsidiary and explain if any additional U.S. taxes would be due. Round your answer to two decimal points. **[15 marks]**

End of Paper

End of Examination/ Manolis Noikokyris