

University of Pune
Department of Management Sciences (PUMBA)
Executive MBA
External Exam December 2012

305 (F) International Financial Mgmt.

Answer any five questions.

All questions carry equal marks

Marks: 50

1. Dorchester Ltd., is an old-line confectioner specializing in high-quality chocolates. Through its facilities in the United Kingdom, Dorchester manufactures candies that it sells throughout Western Europe and North America (United States and Canada). With its current manufacturing facilities, Dorchester has been unable to supply the U.S. market with more than 225,000 pounds of candy per year. This supply has allowed its sales affiliate, located in Boston, to be able to penetrate the U.S. market no farther west than St. Louis and only as far south as Atlanta. Dorchester believes that a separate manufacturing facility located in the United States would allow it to supply the entire U.S. market and Canada (which presently accounts for 65,000 pounds per year). Dorchester currently estimates initial demand in the North American market at 390,000 pounds, with growth at a 5 percent annual rate. A separate manufacturing facility would, obviously, free up the amount currently shipped to the United States and Canada. But Dorchester believes that this is only a short-run problem. They believe the economic development taking place in Eastern Europe will allow it to sell there the full amount presently shipped to North America within a period of five years. Dorchester presently realizes £3.00 per pound on its North American exports. Once the U.S. manufacturing facility is operating, Dorchester expects that it will be able to initially price its product at \$7.70 per pound. This price would represent an operating profit of \$4.40 per pound. Both sales price and operating costs are expected to keep track with the U.S. price level; U.S. inflation is forecast at a rate of 3 percent for the next several years. In the U.K., long-run inflation is expected to be in the 4 to 5 percent range, depending on which economic service one follows. The current spot exchange rate is \$1.50/£1.00. Dorchester explicitly believes in PPP as the best means to forecast future exchange rates. The manufacturing facility is expected to cost \$7,000,000. Dorchester plans to finance this amount by a combination of equity capital and debt. The plant will increase Dorchester's borrowing capacity by £2,000,000, and it plans to borrow only that amount. The local community in which Dorchester has decided to build will provide \$1,500,000 of debt financing for a period of seven years at 7.75 percent. The principal is to be repaid in equal installments over the life of the loan. At this point, Dorchester is uncertain whether to raise

the remaining debt it desires through a domestic bond issue or a Eurodollar bond issue. It believes it can borrow pounds sterling at 10.75 percent per annum and dollars at 9.5 percent. Dorchester estimates its all-equity cost of capital to be 15 percent. The U.S. Internal Revenue Service will allow Dorchester to depreciate the new facility over a seven-year period. After that time the confectionery equipment, which accounts for the bulk of the investment, is expected to have substantial market value.

Dorchester does not expect to receive any special tax concessions. Further, because the corporate tax rates in the two countries are the same--35 percent in the U.K. and in the United States--transfer pricing strategies are ruled out.

Should Dorchester build the new manufacturing plant in the United States?

2. A treasurer of a multinational company in July realizes that the company needs to raise \$10 million of commercial paper in November for a period of 90 days. Commercial paper of comparable quality is currently yielding 6.50%, a cost which the treasurer finds acceptable. To protect itself against the possibility that interest rates may rise before it makes the issue, the treasurer decided to hedge the exposure using January Eurodollar futures contract. January Eurodollar futures contract are currently trading at 94.00. You are required to
 - a. State how should the treasurer hedge the exposure through Eurodollar futures contract? How many contracts are required to hedge?
 - b. If the January futures contract in November closes at either 95.00 or 93.00, calculate the cost of CP to the company.

3. A trader has gone long on 5 Brent crude futures for December settlement at \$26.32 per barrel. The minimum contract size for Brent futures contract is 100,000 barrel. The initial margin is \$150,000 and the maintenance margin is \$130,000. The futures closes at the following prices on the next ten trading days:

Day 1	\$116.19
Day 2	\$116.30
Day 3	\$116.45
Day 4	\$116.48
Day 5	\$116.34
Day 6	\$116.21
Day 7	\$115.98
Day 8	\$115.87
Day 9	\$115.90
Day 10	\$115.95

The trader will take out the profit out of the margin account whenever he gets the opportunity to do so.

You are required to

- a. Prepare the margin account showing all the cash flows.
 - b. Find the profit/loss for the trader after 10 trading days
4. A Swiss company, Chef, requires 10 year fixed interest dollars while a US company, AmInc, requires 10 year fixed interest Swiss francs. They can borrow in the US dollar and Swiss franc bond markets at the rates set out in the table :

	Swiss franc bonds	US dollar bonds
Chef	6 3/8 %	4 3/8%
AmInc	7 1/8 %	4 1/2 %

A currency swap is suggested. In order to undertake the swap

- Chef wants to end up with dollars at 4 1/8 %
 - AmInc wants to end up with Swiss francs at 7%
 - Intermediary bank wants to make 12.5 basis points p.a. in dollars
 - A ten year basis table is set out in the table below
 - Can these targets be achieved with a swap
 - If they can then describe the necessary swap
 - What would be the swap rates if the intermediary bank was to absorb any residual currency risk to which the counterparties might be left exposed by the swap
5. Comment on the reasons for the global economic turbulence
 6. Explain the different instruments of the internal techniques of hedging
 7. Write short notes on any two:
 - a. Fixed exchange rate mechanism
 - b. Revolving letters of credit
 - c. Buyers Credit and supplier's credit
 - d. Factoring and Forfaiting